

ACTORS INTERPRETATIONS AND CHANGE PROCESS:

*The Case of University of Ghana's Strategic
Vision of becoming a 'World Class University'*

EMMANUEL INTSIFUL



**Thesis submitted in partial fulfillment of the requirement for the
Degree of Master of Philosophy in Higher Education**

Department of Education, Faculty of Educational Sciences

UNIVERSITY OF OSLO

NOVEMBER, 2015

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2015

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Trykk: Reprosentralen, Universitetet i Oslo

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Dedication

This study is dedicated to four important personalities in my life:

My father Samuel K. Intsiful.

My mother Patricia Akua Beniwaa Intsiful.

My Fiancee; "the love of my life" Diana Adjoa Brantuoh.

My Thesis supervisor, Professor Peter Maassen.

As I travelled on this journey, your prayers, love, care, moral support, encouragement were my source of strength in different but very important ways. All that I am and will ever be, I owe it to you.

"If you cannot fly, then run, if you cannot run, then walk, if you cannot walk, then crawl, but whatever you do, you have to keep moving forward" – **Martin Luther King Jr**

Abstract

Over the past few decades, it has been argued that, the changes in governance modes in higher education institutions is partly inspired by the New Public Management (NPM) ideas. This has made universities solely responsible for defining their own legitimate goal and position itself through setting strategies. In the year 2010, the University of Ghana (UG) which is the largest university in the country agreed upon a strategic vision for the university emphasizing the notion of becoming a 'World Class University' (WCU). This notion has a certain meaning within the literature in the sense that, amongst other things in the Shanghai Jiao Tong University's (SJTU) ranking, it is being identified with top research universities. At the same time, some scholars have argued that the notion does not fit or refer to universities in Africa.

Using an interdependency management as a perspective allows us understand how leaders and academics at UG initiate, mutually coordinate and depend on each other to allow for change to occur without university leadership imposing on the academics and vice versa. Hence, this master's thesis investigates how university leadership and academics interpret the WCU strategic vision at the UG and to what extent are organizational change processes at the University of Ghana the result of the implementation of the university's WCU strategy.

The analysis is based on the researcher's own constructed model with an insight from interdependency management. This enabled the study to categorize and assume that, academic interpretation of UG's WCU is towards academic excellence, as management interpretation emphasizes relevance and problem solving. Using semi-structured interview and document analysis aided the study to answer the research questions. The findings of this study reveal that, whereas management interpreted UG's WCU of becoming relevant, academics' interpretation of UG's WCU moved away from the assumption of academic excellence to using their research activities to impact and affect the development of society.

Hence the dominant interpretation of the two core actors was emphasizing the need to strengthen and improve the relationship between the university and the Ghanaian society implying that, the intention is to make the university more relevant in its academic activities. Despite the relative short time of UG's WCU strategy, our indicators of the four sectors of change (research, academic programme, human resource policies and internal governance) gave somewhat a clear indication of the direction of organisational change emphasizing the

strengthening of relevance and problem solving i.e becoming responsiveness and having a better link/connection with the Ghanaian society.

Acknowledgement

The attainment of the M.Phil degree as a rite of a transition process to be a scholar would not have been possible without significant contributions from several persons whom I must acknowledge and thank. The journey has been mentally demanding and stressful but at the same time I say *Ebenezer* 'This is how far the faithful God have brought me' and I know greater things are ahead.

My heartfelt appreciation, goes to my thesis supervisor Professor Peter Maassen, your support, advise, constructive criticisms, patience, insightful discussions has brought me this far. You were wholeheartedly dedicated and committed to my success. Your directions has really given me a valuable experience that I will always cherish. Your voice is all over this work.

Special acknowledgement to my siblings for their support, motivation and love. My elder brother, Patrick Intsiful. Abigail Intsiful, Jerry John Intsiful and Ezekiel Intsiful. Also my nephews and nieces. Your prayers and words of encouragement has seen me through. I say thank you, You kept me going when the road was tough and daunting.

I also wish to acknowledge my second family, Mr Kennedy Brantouh, Mrs Rejoice Brantouh and Esther Afua Brantouh. Your prayers, support and words of encouragement shaped me in various ways when I was embarking on this tedious journey. God bless you all.

I wish to thank Friends like Enoch Kofi Nyarkoh, Osbert Nuotuo, Frederick Otubah who have all played vital roles in their own capacity in my life. God bless you all.

My heartfelt appreciation to the Norwegian Government for offering me full scholarship for my entire 2-year study. I am also most grateful to Michelle (scholarship advisor) for the support.

Speacial thanks and appreciation to Dr Tatiana Fumasoli, Jens Jungblut (PhD Candidate), not forgetting Mari Elisabeth Mjoen (Programme Coordinator) for your unflinching support.

Finally, I thank the Divine Creator for making it all happen; I lifted up my eyes unto the heavens and from there came my strength.

Abbreviations

IP	Intellectual Property
NAB	National Accreditation Board
NCTE	National Council for Tertiary Education
NPM	New Public Management
ORID	Office for Reserach, Innovation and Development
PVC	Pro Vice Chancellor
RU	Reserach University
SJTU	Shanghai Jiao Tong University
TDTC	Technology Development Transfer Centre
UG	University of Ghana
VC	Vice Chancellor
WCU	World Class University
WC	World Class

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CHAPTER ONE: INTRODUCTION OF THE STUDY

1.1 Introduction

The notion of ‘World Class University’ (WCU) was coined in 2003 by Shanghai Jiao Tong University (SJTU) and has been used widely over the last decade. However, it is very interesting that in the year 2010, the University of Ghana (UG) which is the largest university in the country agreed upon a strategic vision for the university emphasizing the notion of becoming a ‘World Class University’ (WCU). In general World Class University, according to the literature, among other things, emphasized in the Shanghai Jiao Tong University’s (SJTU) annual ranking of World-Class Universities, Altbach (2013), Altbach & Balan (2007), and Salmi (2009), refers to highly ranked top research universities in the world. These top research universities are mostly characterized as being decoupled from their national boundaries and are at the apex of the global ranking systems and the global knowledge economy.

In this regard the question emerges, what does this WCU vision at the University of Ghana actually mean in practice, since is not prescribed by University of Ghana leadership but left open for interpretation, operationalization and further implementation. Using an interdependency management perspective (Braun, Benninghoff, Ramuz & Gorga, 2014) allows us to understand how leaders and academics at UG initiate, mutually coordinate and depend on each other to allow for change to occur without university leadership imposing on the academics and vice versa. This study focuses on how the WCU vision is interpreted within the university and the indications of what these interpretations means for organisational change in the university.

For the benefit of this study, it has been assumed that, there are two possible interpretations. First the academics’ interpretation which is argued to be focused on academic excellence, i.e. the path towards realizing the WCU vision will consist of more curiosity driven research and high quality graduate programmes. Second the leadership’s interpretations is expected to be centered on relevance, and problem solving, i.e. having a better link to society in order to ensure the institution’s survival and maintain its legitimacy. In the African context, as a number of studies show (Cloete, Maassen & Bailey, 2015), only recently the major universities have become more focused on their strategic development, research productivity and related issues. In this context this study of a specific African university (University of Ghana) with a relatively clear but not specified vision is of relevance not only to Ghanaian

higher education, but also for getting a better understanding of the change dynamics of major universities in Sub-Saharan Africa (SSA) in general.

1.2 Research Objectives

This study has been inspired by the researcher's curiosity and observations of how various relevant actors interpret specific strategic visions and the consequences (change process) of such interpretations. The University of Ghana adopted a world class university template as its strategic vision in the year 2010. It is against this strategic vision that, this study aims to move beyond the rhetoric of the University of Ghana wanting to become a "World Class University" and understand how various relevant actors inside the university interpret this strategic vision. It also aims to move a step further to understand and examine to what extent are organizational change processes at the University of Ghana the result of the implementation of the university's WCU strategy. In an attempt to understand organisational changes (consequences), the study focused on the university's academic core (research and academic program), internal governance and human resources policies.

1.3 Statement of the Problem

Despite the widespread notion of organizational strategy in some higher educational literature, the concept is at the same time somewhat contested in the literature. This could be attributed to the fact that considering the highly institutionalized nature of universities, as noted by Maassen and Potman (1990), there are doubts that the notion of strategic visions which is transplanted from the field of business to universities, will lead to the desired results.

A first argument against the view of the university as a strategic institution is derived from Weick's (1976) characterization of universities as loosely coupled organizations. Taking a step further from the above theory, (Musselin, 2007) argues that the unclear and ambiguous technology based on Weick's characterization makes strategic planning at the organisational level difficult. This can be explained by the high level of autonomy and self-regulation the professional staff has in the decision making process and the execution of their tasks (Bonaccorsi & Daraio, 2007). Secondly, Fumasoli and Lepori, (2011) assert that, universities are old and slowly evolving organizations whose essential institutional nature hinders strategy. This to some extent helps one to interpret university strategy and mission statement

as window dressing, which is not linked to the day-to-day decision making (Krücken & Meier, 2006).

From the above characterization of the university in terms of strategic application and change process, it will be difficult if not impossible for university leaders to impose a command-and-control system; this is predicated on the fact that university leaders depend on the cooperation of academics in knowledge production, and academics depend on university leaders to create the circumstances under which they can function effectively. Again, the organizational units articulate their own interests in both strategy formulation and implementation. This is because universities have traditionally organized their activities around the various disciplines; each unit has its own norms, values and belief systems, which lead to different goals and priorities (Becher & Trowler, 2001). As a result of the hierarchical and strengthened structure of university leadership, any attempt by leadership to impose overarching strategic visions on behalf of the whole organization will inevitably become ambiguous and vague (Cohen, March & Olsen, 1972) as cited in (Frølich, Stensaker, Scordato & Botas, 2014).

From the above, looking at the tensions between the two levels (university leadership and academics), how can these levels function effectively in a mutually dependent way? How do these levels interpret the strategic vision of the UG WCU template? In the academic literature we can find various meanings attributed to the WCU notion by different scholars. For example, some scholars, like Birnbaum (2007), criticized the WCU notion as alien and not useable as a university strategy. At the same time, Altbach and Balan (2007) promote the use of the WCU template, even though they claim that it does not fit or cannot be used by universities in Africa. Finally, what are the consequences of the interpretations of the UG strategic vision? It is against this backdrop that the interest of this study arises. Hence the overall research problem or statement of the problem addressed in this study can therefore be formulated as follows: *How is the institutional 'World Class University' (WCU) strategy interpreted in the University of Ghana and how has the WCU strategy affected organizational change process?*

1.4 Research Questions

Based on the overall research problem, this study seeks to address the following research questions:

1. How is the institution's "World Class University" strategy interpreted by central managerial and academic actors at the University of Ghana (UG)?
2. To what extent are organizational change processes at the University of Ghana the result of the implementation of the university's WCU strategy?
 - 2a) To what extent are organizational change processes with respect to the institutional research profile at the University of Ghana the result of the implementation of the university's WCU strategy?
 - 2b). To what extent are organizational change processes with respect to academic programmes at the University of Ghana the result of the implementation of the university's WCU strategy?
 - 2c). To what extent are organizational change processes at the University of Ghana with respect to human resource policies the result of the implementation of the university's WCU strategy?
 - 2d). To what extent are organizational change processes with respect to internal governance at the University of Ghana the result of the implementation of the university's WCU strategy?

1.5 Significance of the Study

The growing complexity of societal dynamics coupled with the increasingly important role of a university has warranted the changes in governance which are perceived as necessary. The introduction of NPM which has led to a strengthening of the university leadership, makes universities' leadership structure more hierarchical, and grants the leadership power to determine where resources need to be allocated and above all to set the strategic goals determining the future direction of the university. At the same time the academics are still in control of the core activities of knowledge production and transmission. It is against this background that this study is significant in contributing to the understanding of how

university leadership and academics interpret strategic visions and the change processes as a result of such interpretations with specific reference to the University of Ghana.

Again, various studies reviewed with regard to institutional strategic visions concentrated on key areas, such as patterns of decisions and actions as a result of strategic visions, strategies adopted by management as a result of strategic visions, and the skepticism with regard to strategic vision formulation and implementation. However, moving beyond the strategic vision rhetoric and examining how various relevant actors interpret strategic vision and the change process is what makes this study potentially interesting and relevant.

From the above, this study can be used by institutional leaders, academics, policymakers and other stakeholders in both the private and public higher education domain in getting a better understanding of how various relevant actors within the university contribute to strategic visions and change processes both at the University of Ghana. This can be argued to be of relevance also for other Ghanaian universities.

1.6 Limitations of the Study

This study by virtue of it being a qualitative study coupled with the fact that the researcher used a purposive sampling method leads to two limitations. First, is the inability of the researcher to generalize the interpretations of the strategic vision of the WCU template across the whole population of UG, and second, the sampling technique used may have left out other relevant actors who could have been useful and important for the study.

This being a master's thesis, the data collection process was constrained by practical reasons, such as limited time to interview more stakeholders. The researcher also intended to interview external stakeholders in order to have a fair and balanced interpretation of the strategic vision. This is based on the fact that the current university governance structure incorporates external stakeholders from civil society organizations, representatives of government, policy think tanks and representatives of industries. If this had been done on a wider scope devoid of the above constraints the interpretations and results might have been different.

In examining organizational change processes, one can have in mind that these are complex and that the introduction of the strategic WCU vision does not automatically lead to new practices over night. This is premised on the fact that within a five year period, it would be

premature if not impossible to draw causal links, since change process in higher education could be incremental and might sometimes be difficult to observe.

The researcher wants to place on record that the strategic vision was initiated by university leadership before subsequent deliberation and wider consultation among internal and external stakeholders. Some stakeholders interviewed felt a bit suspicious because they feared the researcher may be working as an agent for the university leadership. This may be because most of the respondents holding positions were appointed by the university leadership, hence saying something to oppose such strategic vision might lead to witch hunting, internal politics and power play. Hence, most respondents felt a little reluctant to provide in-depth answers to certain questions.

1.7 Structure of the Study

The study comprises six major chapters, with sub-divisions on each part. Chapter one entails the introduction of the study, research objectives, research problem and questions, significance of the study, limitations of the study, and the structure of the study. Chapter two focuses on the role of universities in contemporary Africa, the background and context of the study, the changes in governance as well as the attributes of NPM in the Ghanaian higher education system, the development of UG's vision of becoming a 'World Class University'.

Based on the literature reviewed, chapter three discusses in brief the notion of WCU, explores the categorisation of the WCU strategic vision and the subsequent change processes from an interdependency management perspective and presents the underlying study's analytical framework, whereas chapter four deals with the research design and methodology. Furthermore, the study emphasized the philosophical assumptions underpinning the study, the tools that have been utilized to collect the data in answering the research questions, issues of validity and reliability and ethical considerations of the study.

Chapter five presents and makes a thorough analysis of the data collected, regarding the interpretations of the UG's WCU template by managerial and academic actors and the consequences (change process) of such interpretations. Key concepts from the framework are discussed: interpretations of the WCU strategic vision; academic excellence and relevance interpretations. Organizational change process, such as academic core (research, academic

programmes), internal governance and human resource policies indicators are presented in order to know the direction of change process based on the assumptions of change. Finally, chapter six discusses the findings and makes recommendations based on the findings; furthermore it presents the implication of the findings of the study. Suggestions for further research are also presented at the end of this chapter.

CHAPTER TWO: BACKGROUND AND CONTEXT OF THE STUDY

2.1 Introduction

In order to better understand how the leadership/management of the University of Ghana (UG) and other relevant institutional actors interpret the university's vision of becoming a 'World Class University' (WCU) coupled with the consequences (change process) of this interpretations with regard to internal governance, research, academic program (academic core) and human resource policies. It will be prudent not only to understand the context within which UG operates, but also how the development of this WCU vision came about. In this chapter, the empirical setting of this case study is described in detail. This will help to understand the environment within which UG operates and invariably, help us not only to interpret the findings correctly but again provide us with a fair understanding of what led to the development of the WCU strategy. This will help in appreciating why and how universities change and, why and how polices or strategies fail or are implemented successfully (Gornitzka, 1999).

2.2 University as an Indispensable Tool for Development in Africa

From its onset, African higher education established in pre and immediate post-colonial era was confronted with many challenges (Teffera and Altbach, 2004). These challenges became worse in the 1970s. During this period, the importance of higher education, which had been highly regarded as an indispensable tool of development in Africa in the immediate post independent years, was played down by significant policy makers. It was argued by external forces, spearheaded by the World Bank, that it was more beneficial to invest in primary and vocational education instead of universities (Singh and Manuh, 2007). It was argued that returns from investing in universities were low and therefore people should rather be given university education abroad (Zezeza & Olukoshi, 2004). This argument led to the subsequent neglect of the universities resulting in critical situations at the universities in Sub-Saharan Africa (SSA).

However, during the early 2000s, there were some influential voices calling for the revitalization of higher education and linking universities to socio-economic development (Sawyer, 2004). The World Bank (WB) as an international development organization has recognised knowledge as key in the socio-economic development of nations. The WB,

influenced by Castells' (1991) paper, 'The University System; Engine of development in the new world economy' started embracing and recognising the role of higher education in the knowledge economy and for the development of developing countries (World Bank, 2002) of which Ghana is not an exception.

Higher education in the context of sub-Saharan African (SSA) is also seen as a vital tool in helping solve or eradicating the myriad challenges that society faces. Kofi Annan, the then secretary general of the United Nations, strongly promoted the importance of universities for development in Africa (quoted in Bloom *et al.* 2006, p. 6):

The university must become a primary tool for Africa's development in the new century. Universities can help develop African expertise; they can enhance the analysis of African problems; strengthen domestic institutions; serve as a model environment for the practice of good governance, conflict resolution and respect for human rights, and enable African academics to play an active part in the global community of scholars.

In keeping with the rising profile and the potential development of research universities in contemporary times, there are also calls by various governments in developing countries to increase funding for universities in order to strengthen the core activities of teaching and research (MacGregor, 2009b). For universities to compete in the global knowledge economy, increasing research activities should emerge on the policy agenda of institutions (Altbach & Balan, 2007). Maassen & Cloete (2010) reveal that the clarion calls for the role of African universities are hidden in two different notions, the first is the instrumental notion of development and the second is the engine of development which is based on strengthening the research capacity and innovation.

The instrumental perspective does not imply the production of new scientific development but an important role for the university in national development through satisfying the demands of government of the day. The focus of most universities' agenda is on reducing poverty, diseases and, increasing agricultural production and consultancy services. These priorities are according to Maassen & Cloete (2010) strongly driven by donors, whose policies in effect are not in line with Castells' notion of the engine of development. The 'university as an engine of development' notion emphasises that a university possesses the requisite knowledge that can provide an adequate foundation for the dynamics in the global knowledge society, when it comes to training key personnel and production of use oriented knowledge (ibid).

The chief executive officer (CEO) of the Southern African Regional Universities Association, Piyushi Kotecha, argued that in recent decades, higher education had assumed growing importance for both personal development and for driving social and economic development: ‘Now more than ever before, higher education in developing nations is being expected to take on the mantle of responsibility for growth and development, where often governments fail’ (cited in MacGregor, 2010). In order for SSA universities to contribute to the myriad challenges and also achieve excellence as a move to becoming part of the global knowledge economy, university leaders need to be proactive and take the lead even if governments do not initiate such policies.

2.3 Overview of Higher Education System in Ghana

Ghana, formerly known as the Gold Coast and located in West Africa, shares boundaries with Cote d’Ivoire, Burkina Faso and Togo and covers an area of 238,538 square kilometers. It is the first Sub-Saharan country to gain independence on March 6, 1957. Administratively, it is divided into ten regions and sub-divided into 216 districts. Alongside the thirteen research institutes and government agencies are universities and other tertiary institutions which perform the important task of undertaking research and training human resources. By the end of 2012, Ghana had nine (9) public universities, six (6) public specialized/professional colleges, fifty-four (54) private universities/university-colleges, ten (10) polytechnics. All of these institutions are supposed to undertake research and harness innovation to complement the efforts of the research institutions and together feed into the country’s developmental agenda (Draft ESPR, 2012). Demand for higher education is growing. In public institutions alone, enrolment into tertiary institutions has continued to expand, surpassing the target of 174,574 in 2012 and 185,268 in 2013 with an addition of 32, 275 students enrolled in private institutions in the same year (Draft Education Sector Performance Report, 2012).

2.3.1 The National Council for Tertiary Education

The universities are supervised by two separate but collaborative bodies. These bodies are the National Council for Tertiary Education (NCTE) and the National Accreditation Board (NAB). NCTE was established by Act 454 of 1993 (Website of NCTE). It replaced the National Council for Higher Education (NCHE) which was established in 1962. The role of the Council is mainly monetary (website of NCTE). Specifically, NCTE is tasked to advise

the Minister of Education on the development of institutions of tertiary education in Ghana, their financial needs and purposes of annual education budgets. It is also mandated to advise governing councils of these institutions, including suggesting suitable measures for generating funds for the institutions. In addition to the monetary functions, the Council recommends national standards and norms for these tertiary institutions. These include standards and norms on staff, costs, accommodation and time utilization for approval by the minister. Generally, the NCTE is “devoted to providing leadership in the direction, functions, role and relevance of tertiary education in Ghana” (website of NCTE).

2.3.2 The National Accreditation Board

The National Accreditation Board (NAB) was established in 1993 by the Government of Ghana under PNDC Law 317, (Website of NAB). The legislation was, however, replaced by the National Accreditation Board Act 744 in, 2007. The mandate of the NAB is to contribute to the “furtherance of better management of tertiary education” as the quality assurance body at the tertiary level (White Paper on the Reforms to the Tertiary Education System 1991). It is the mandate of the board to ensure that the country’s tertiary education system becomes responsive to a fast changing world and make its graduates progressively competitive in the world of work. The NAB supervises all programmes and subjects introduced in all tertiary institutions, both public and private, to ensure that they are within the accepted standards and norms. In addition, the NAB approves the establishment of any tertiary institution in the country. It has the mandate to prevent the establishment of institutions or close down existing ones if they fail to meet national standards.

2.4 New Public Management in Ghanaian Higher Education

The current changes in governance relations between the state and UG are an indication that New Public Management (NPM) ideas have been widely applied across the varied sectors of Ghana’s public sector as a panacea to institutional performance. One key sector that has been transformed by the ideas of NPM is the higher education sector. Similar to other sectors, Ghana’s higher education sector has witnessed a number of pro-market based reforms implemented in a bid to bring them towards efficiency, efficient and economy. According to Daniel (1997), in the past, government was overly generous by providing for ‘everything’ on university campuses.

To reverse this situation, government introduced some sweeping reforms into the tertiary sector as part of public sector reform initiatives of the 1980s and 1990s. Public sector reform marked the introduction of ‘cost sharing’ to ease the pressure on the public purse; it led to the introduction of student loans. Secondly, in a bid to increase institutional efficiency and accountability, there was a restructuring of Governing Councils of higher education institutions (HEIs). Further, HEI’s internal communications within were enhanced. Other policy reforms recommended and implemented were the encouragement given to institutions to engage in income generating activities (IGA) and further suggested ways of executing IGAs. Effah (2005) has observed that the presence of private participation in Ghana’s tertiary landscape has not only broadened options for Ghanaians, but has instilled some healthy competition, innovation and management efficiency into the tertiary system.

Another feature of NPM being implemented in the UG is in the area of performance management. This time round, University leaderships and office bearers are modeled in the image of a typical Chief Executive Officer (CEO) of the pro-private sector. Especially the Vice Chancellorship position are recruited on a competitive basis by the Governing Council and hired for a fixed term of four years. However, contract may be renewed subject to performance and applicant’s age. To some extent this has made university management more proactive by setting out strategic visions for the University of Ghana. An outline on how they will implement such visions is one of the key requirements for the selection process of university leadership.

2.5 Reforms

In Sub-Saharan Africa (SSA) and more specifically in the context of Ghana there is a continual public outcry about the lack of relevant knowledge and skills at the higher educational levels to meet the needs and demands of not only the job market but contributing to socio-economic development. This outcry has characterised every educational reform since Ghana achieved independence in 1957. Gondwe and Walenkamp (2011) in their report on the alignment of higher professional education with the needs of the local labour market referred to this outcry as ‘a Historical Legacy’. Again in a working draft of the National Employment Policy (2009), the Ministry of Employment and Social Welfare asserts that:

Yet the fact that our educational system continues to pour unskilled, semi-skilled and unemployable young graduates into a job market with comparably few job opportunities, shows there is a need for sober reflection and deeper thoughtfulness on the kind of policy interventions which will be needed to overcome the challenges.

In 2007, another educational reform was introduced to ensure the ‘formation of well balanced individuals with the requisite knowledge, skills, values, aptitudes and attitudes to become functional and productive (Government White Paper on Educational Reforms, 2007: p.5). The reform also aimed at developing Ghana as a knowledge based, scientific and technologically driven society. In terms of tertiary education, there was the emphasis on enhancing research and postgraduate programmes.

Various educational policies and reforms have also emphasised the need for the universities to provide relevant knowledge to society (Government White paper on Educational Reforms, 2007). Such policies and reforms have emphasised the need to strengthen the link between the universities and industries. All the universities therefore have the agenda to strengthen their links with industries; though in reality, it appears difficult because of what appears to be the lack of interest especially at the level of the industries. Another reason, one will argue, is the lack of a coherent policy to stimulate such relationships. It is in this view that society is mounting pressure on universities to be active players in providing solutions not only to grand challenges facing society but helping to make impact in national development. With Ghana currently ascribed as a lower middle income country by the World Bank (2014), there is more emphasis on “practice-oriented with focus on solving practical problems” , technology, and approaches that are “skills-driven or acquisition of employable skills” (National Council for Tertiary Education, December, 2014). Additional focus included “technology development, innovations” and what must be learnt to respond to industry’s needs and learners’ interests. The report further indicated that “engagement with industry means bringing the world of work into the classroom and placing practical knowledge and research results at the disposal of industry. Blending academic pursuits with practical goals of promoting societal and economic wellbeing of the population is one of the hallmarks of today’s universities” (ibid).

2.6 University of Ghana: Historical Profile

The University of Ghana (UG) which is deeply rooted in the colonial past as a British colony University was established in 1948 as the University College of the Gold Coast and was

affiliated to the University of London (with its students being awarded degrees by the University of London) to offer courses in the liberal arts, social science, basic science, agriculture and medicine based on the recommendation of the Asquith Commission which was set up in 1943 to look at the establishment of a University in the British colonies. UG gained its full university status in 1961 by the enactment of Act 79 which allowed the university to be autonomous and award its own degrees.

UG's academic programmes include undergraduate (Bachelor) programmes and, post-graduate degree programmes. The student population of UG as at 2012/2013 academic year, stood at 38,586 of which 58.54% were male and 41.46% were female. Post-graduate students 5,056 out of the total student population and 31,755 as undergraduate students. The sub-degrees students stood at 1775 (ibid). This makes UG not only the oldest public university in Ghana but also the largest in terms of student populations. The current faculty strength of UG stands at 951 (UG, 2009).

The government through an act of parliament has granted each university the autonomy to decide for itself and plan ahead. This, in essence, means that the fate and future directions of UG are to a large extent decided by its leadership and other relevant actors. With government support regarding funding of the UG declining from 90% to 55% over the last five years (VC speech, 2014), the UG is being tasked to secure funds to make up for the difference themselves.

As the oldest public university in Ghana, a number of other university colleges and institutes have affiliation with UG in the areas of teaching and awarding degrees and diplomas. Currently, there are 16 of such institutes and colleges which hold affiliation with the University of Ghana and at the international level, UG is a member of the International Association of Universities (IAU), the Association of Commonwealth Universities (ACU), the Association of African Universities (AAU), the League of World Universities, the Council for International Education Exchange (CIEE), the International Student Exchange Programmes (ISEP) and the Commonwealth Universities Student Exchange Consortium (CUSAC).

2.7 Developments towards the “World Class University” strategic vision

There is little doubt that globalization is affecting deeply higher education worldwide. As Torres and Morrow claim (2000, p. 44), “perhaps no place has been more subject to these processes of internationalization and globalization than university”. The effect of

globalisation, marketisation and commoditisation of higher education, the demand for better education in Ghana has increased, largely through increased private participation. Again, the above mentioned developmental role of universities, NPM regime in the Ghanaian HE landscape which has led to strengthening of the leadership structure at the same time government granting individual universities the autonomy coupled with reforms aimed to impact on society. This to some extent has also impacted on management of UG and other relevant actors in order to contribute to the changing dynamics in the society and also improve its academic activities. The UG being the oldest and in many instances serving as a role model to other universities in setting the pace, envisioning to transform UG to a 'World Class University' with the main of contributing to national development and also being part of the global knowledge economy.

It is against this backdrop that the Vice Chancellor of the University of Ghana, Professor Ernest Aryeetey in August 2010, said the university envisions to become a centre of excellence in becoming a "World Class University": this is a manifestation that it is "not possible for higher education institution's to opt out of the global environment, since its effects is unavoidable" (Altbach, Reisberg & Rumbley, 2009, p.7). In a speech read in the 2011/2012 academic year the vice chancellor reiterated that "in order for universities to remain relevant, universities must be thought leaders who initiate change and guide society as well as respond to changes in society by rethinking new ways and strategies of doing things".

The 21st century is bringing new opportunities and new threats. The embedding of democracy in Ghana allows the University to plan its future in a more predictable economic and political environment. As the world shrinks and international communication intensifies, the University of Ghana automatically becomes part of a global knowledge economy. Hence, the university must look to its evolving role and reputation not only in Ghana but in Africa and the world at large. This requires that the University articulates its vision, makes decisions necessary to turn that vision into reality and implement those decisions in a manner that is both effective and reflective.

As part of this vision, a strategic document was launched where stakeholders were invited. Within this strategic document, the UG highlighted nine priority areas that it will focus as part of its vision to become a WCU. 1) Research 2) Teaching and learning 3) Internal stakeholders

4) gender and diversity 5) Institutional processes 6) Financial performance 7) Asset management 8) Monitoring and evaluation and 9) External stakeholders (UG strategic document, 2014). This strategic vision of becoming a World Class University has led to some changes. In line with this, UG has revised its mission statement in order to reflect the current strategic policy.

The purpose of the university was to provide for and promote university education, learning and research (Effah & Hofman, 2010). Its roles were not confined to serving national interests. At its inception, the university was to give high quality international education to many African countries (Effah & Senadza, 2008). In the year 2010, UG revised its mission statement to “develop world-class human resources and capabilities to meet national development needs and global challenges through quality teaching, learning, research, and knowledge dissemination.” (UG website). The above explains why the researcher chose UG as the focus of the study in order to unearth how various relevant actors interpret the strategic visions of becoming a WCU template and the and examine the extent organizational change processes are the result of actor’s interpretations of University of Ghana WCU strategy.

CHAPTER THREE: LITERATURE REVIEW AND ANALYTICAL FRAMEWORK

3.1 Introduction

For the purpose of the study, the literature review is undertaken with the aim of understanding and interpreting the relevant literature and deriving from the literature the building blocks of the analytical framework. The analytical framework will be presented at the end of the chapter. However, what the World Class University (WCU) notion may mean is not the focus of the underlying study, since it is interested first, in the way the WCU vision that has been introduced as an important strategic aim or frame is interpreted by various actors and second in the consequences (in the sense of organizational change process) of the interpretation of this vision.

The literature review is organized around five sections. The first section discusses in brief the notion of WCU. Secondly, a discussion of university governance before and after NPM regime, Clark's notion of university structure and interdependency management, this is essential because it lays the foundation of understanding how university governance has changed overtime and why interdependency management is essential in the NPM system. The study moved a step further to understand and discuss the categorisation and variations of relevance, based on academic and management interpretations. Furthermore, a discussion on organisational changes focuses on academic core, human resource policies and internal governance using interdependency management perspective. Finally, an analytical model constructed by the researcher which is derived from the literature review served as a framework is presented and used to explain the interpretation and possible effects of UG's WCU strategy.

The societies in which universities are operating are changing fast. Hence universities are pressured to change in accordance to changes in society but the pressure is not very clear and transparent; there are all kinds of interpretations of the changes needed. From an interdependency management perspective, it can be argued that, it is not the university management in general or the Vice Chancellor (VC) only that determines the direction of the organisation, nor the academics. Hence there has to be some kind of inter-action and balance when it comes to the impact on university change by leadership and by academics.

3.1.1 Brief Reflection of the ‘World Class University’ Notion

With regards to definition, World Class University (WCU) is a slippery concept, in the sense that it means different things to different universities, external stakeholders and scholars, and there is no single definition of the notion of a world class university. At the same time, also terms such as ‘Research University’, ‘Elite University’ and ‘Flagship University’ are associated with this WCU notion. Despite the deemed subjective and ambiguous nature, the concept of WCU appears both established and widely discussed in higher education discourse. ‘Everyone wants a world-class university; no country feels it can do without one’. The problem is that no one knows exactly what a world-class university is, and no one has figured out how to get one. Everyone, however, refers to the concept (Altbach, 2004, p.5).

Douglass (2014) emphasized that a WCU is supposed to have highly ranked research output, a culture of excellence, great facilities, a brand name that transcends beyond national borders. The term WCU was coined in 2003 by SJTU, which uses in its annual WCU ranking a methodology that focuses on objective indicators such as academic and research performance of faculty, alumni and staff to identify the top 500 universities in the world. It also takes into consideration publication citations, and exclusive international awards (such as Nobel Prizes and field medals). Notwithstanding, the serious methodological limitations and criticisms surrounding any ranking exercise (Salmi and Saroyan, 2007), ‘world class universities’ are recognized in part for their superior academic output. They produce well qualified graduates who are in high demand in the labour market; they conduct leading-edge research and publish in top scientific journals; and in the case of science and technology oriented institutions, they contribute to technical innovations through patents and licensing (Salmi, 2011).

Attaining the status of a World Class University is not by mere self-declaration. However, the globalised world has allowed and made various universities adopt these templates; this could be explained from the global scripts perspective that emphasises the need for universities to adapt to global challenges in a more standardized approach by de-emphasising or downplaying country-specific unique characteristics and regulations (Hazelkorn, 2008). From Hazelkorn’s assertion universities are encouraged to develop more general competencies that will enable them to compete for world class excellence (Salmi, 2009).

Hazelkorn and Samli's arguments confirm the assertion and caution by Birnbaum (2007) that putting too much stress on attaining world-class status may harm an individual university or an academic system. It may divert energy and resources from more important – and perhaps more realistic goals to something that focuses on building a research-oriented and elite university at the expense of expanding access or serving national needs. In the same regard, Birnbaum (2007) advised that *“Before developing more elite universities, we might focus attention on strengthening what we now refer to as second or third tier institutions. Using the metaphor created by the philosopher Daniel Dennett, educational policies should be built using cranes rather than skyhooks. A crane stands on solid ground. A skyhook, on the other hand, posits some kind of supernatural force that can raise things with no earthly support at all. Cranes require time and great effort, but they work. Skyhooks can be set up quickly and require little effort, but they don't work”*.

There is, no doubt, the expectation among many actors about contributions of WCU as emphasised by Salmi (2008) above. These contributions are assumed to be vital for the creation of innovation and the production of new knowledge for the socio-economic development of a nation's economy (Cloete et al, 2015). However, as Olsson and Cooke (2013, p.18) in an OECD/IHERD report assert:

Top research universities in industrialized countries usually dominate the global ranking tables. In contrast, their counterparts in middle and low income countries have, if anything, more important missions because they are the engines of local and regional knowledge development and natural leaders of their own academic systems. As these systems become increasingly complex and the need to nurture knowledge networks for research grows more essential, the success of these institutions becomes even more crucial for national development policy.

Research universities (RU) according to Altbach (2013) comprise a small percentage or number of the higher education (HE) sector. In the United States, 220 universities are considered as RU, which comprises around 5% of the entire 4000 or more HE system. In the United Kingdom 25 out of 100 universities are considered as RU representing 25% of the HE system; and in China 3% representing 100 RU out of over 3000 institutions country wide (ibid). In the context of SSA, how are universities faring in the current context of world class and rankings? A review by the SJTU ranking for 2015 shows that there are only four African universities in the top 500: University of Cape Town and Witwatersrand (201-300) and Stellenbosch University and KwaZulu-Natal (401-500). In a different ranking system The

Times Higher Education (THE) places UCT at 103, SU in the range 251-275, Witwatersrand University at 251-275 and Alexandria University (Egypt) at 301-400. In all five universities from Africa made it to the top 500 universities in the two main ranking systems.

The limited number of universities present in the SJTU and THE ranking systems could be attributed to Africa's low performance on the global research and science stage (Cloete et. al, 2015). Following Altbach and Balan's work, *World class Worldwide* (2007) focuses on how research universities have been transformed in Asia and Latin America. In their analysis, the two scholars excluded Africa, giving reasons for their exclusion, they write "we believe that Africa's academic challenges are sufficiently different from those of the nations represented here that comparisons would not be appropriate" (Altbach & Balan 2007, p. vii). However, they did not provide any claim for their assertion (Maassen 2012). This could imply that African universities are not performing well in terms of research. In essence, what Altbach and Balan also insinuated was that, with regards to Latin America and Asia, the concept WCU has become an important concept as a result of the transformation of RU, whereas the WCU does not refer to Africa or fit in the African context. However, in a sharp contrast to their assertion, UG, which is one of the flagship universities in Africa envisions to becoming a WCU, how can the vision be interpreted by relevant actors and what are the consequences of the implementation of WCU strategy in the UG?

Having discussed developments with respect to the WCU notion in the HE environment in brief above, we now move to the internal aspect of the organization and how the internal structures can help to interpret such external developments and the consequences of such interpretations. Before that, it is vital to understand the changes of governance in the university. This will help us to fully appreciate the current structure and provide a better understanding of the new 'management form' i.e. 'interdependency management'.

3.2 Governance of University during Pre NPM and Post NPM regime

In order to have a better understanding about the current mode of governance, which is characterized by strengthened leadership within universities, one needs to have a fair idea of what transpired in the past and the rationale behind such changing modes of governance. The issue of governance in HEI's is one of the most contested issues (de Boer & File, 2009). While there are several definitions of governance, this study adopts the definition of Maassen (2003, p.32): "governance is about the frameworks in which universities and colleges manage

themselves and about the processes and structures used to achieve the intended outcomes- in other words how HEIs operate”.

Traditionally, universities have been characterised as decentralised organisations with strong autonomy of the academic unit (understructure), and thus, it was assumed that internal governance was mostly based on shared decision making process with limited leeway by university leadership (Fumasoli & Lepori, 2011). This collegial model was premised on the idea that academic staffs are more likely to understand the academic goals and aspirations of the university and how to achieve them (Evans, 1999). Decisions are made based on long negotiations among the academics. Hence, academics decided on a range of issues, such as where to invest resources, research priorities, set guidelines for human resource recruitments, decide on academic programmes, and determine a wide range of issues which are guided by norms and values. A drawback in this model, according to Berdahl (1999), is placing so much emphasis on the protection of autonomy to the detriment of responsiveness to societal needs and demands. However, in the last decades, traditional university governance became a target of fierce criticisms. It was branded as inefficient, non-responsive to societal needs and above all by its inability to address the quality of standards of its core functions (Amaral, Meek & Larsen 2003).

Recent public sector reforms which also include HEI's hold the idea that productivity and quality could be best improved by transforming the public bureaucracy by means of New Public Management (Paradeise, Reale, Bleiklie & Ferlie, 2009). The idea of strengthening self-management in universities is related to the need to become more efficient and responsive to the diverse needs of society. This has also led to governments acting as referees who watch over the game and only intervene when the laws are violated. Amaral, Jones & Karseth (2002) noted that the changing modes of governance have led to a movement towards the strengthening of university leadership/central administration (middle structure), limiting the power of the academics (understructure). This has granted university leadership the power to initiate strategic vision and change process. The leadership, now, negotiates with donors and ministries to decide on or direct where the resources of the university should be invested.

At the same time, the academics have not lost all their powers, they still hold on to their core functions. From this perspective, one can assume that the academic self regulation is to some extent driven (but not controlled or determined), by the strategic vision of university leadership. Hence, academics also use such vision statements as a frame to contribute to

institutional change process. Having discussed in brief the university governance during pre and post NPM regime, we now focus our attention to how the formal structures within the university handle the strengthened university leadership structure and the dominance of the academics in the core knowledge areas.

3.2.1 Clark's Notion of Organisational Structure in the University Setting

Greenberg (2011) refers to formal structures between individuals and groups concerning the allocation of tasks, responsibilities and authority within an organization. In general Clark (1983b) identified three structural levels of authority in an academic system: 1) under structure, consisting of the operational units of higher education institutions concerned with the functional preoccupations of universities, that is, teaching and research. These units typically assume the form of faculties, schools, departments or research units. 2) The middle structure, including university leadership/management and central administration. Maassen (2003) argued that as a result of NPM inspired governance structure the middle structure is mainly about setting and giving strategic direction, planning, controlling and to some extent directing the affairs of the university. Finally, the super structure which embodies superior actors and agencies (state, ministry of education). The three levels are important for understanding the decision structure within a university. However, two of these three levels, the middle structure and understructure- jointly form the organisational structure of the university.

For the purpose of this study, the middle structure and understructure are not only of special interest but also the interaction of the two levels to ensure that decision making or strategies formulated are understood and implemented to realize the mission and vision of the university. In this the study follows Clark's approach that change needs to be understood in terms of the different logics inherent in both structures, and that in 'bottom-heavy' structures such as universities, change cannot be forced from the top (university leadership) onto the bottom (the academics). This is premised on the fact that the universities generally do not work through organised procedures that are delegated down from university leadership to academics which is the opposite in the case of the business world. From the above, the question that is worth considering in terms of interpretation and change is who really has the power to rule or initiate? Or simply put who has the autonomy to rule and bring about change as a result of strengthened leadership and continuous dominance of the academics in the core activities?

3.2.2 Interdependency Management as a ‘New Form of Management’

The recent strengthening of university leadership as a result of NPM inspired reforms, has granted university management more autonomy to set and decide priorities of allocation of the resources. At the same time academics also continue to dominate, control and are responsible for the core activities. Concurrently, the tensions in the middle structure and understructure will be reduced if there is mutual coordination and dependence (Braun, Benninghoff, Ramuz & Gorga 2014). In essence, the NPM which has led to more powerful, strengthened and professional leadership has the autonomy to introduce strategic visions (for instance WCU in our case), decide on where and how funds should be invested and create new positions. All these, in a way, influence the conditions and to some extent determine what academics do and, again influence the responsibility of the academics in terms of teaching, research and services.

It is therefore, probably best to understand university governance under the NPM regime as “interdependency management”; where management and academics find a balance and develop an interdependency relationship. The interdependency perspective allows for a better understanding of how various relevant actors interact, interpret strategic visions and its consequences in a much more mutual way, without the leadership imposing on the academics any vision and change process despite the strong and hierarchical formal governance structure. Hence, this perspective provides an insight into how university leadership and academics mutually interact and work towards achieving a set of goals. From this perspective, how does each of these relevant actors interpret strategic visions coupled with their roles in bringing about organizational change?

3.3 Categorisation of Various Interpretations for University Strategies

Universities are pressured to adapt in accordance with changes in society. Universities, contributing to such changes, interpret these changes in different ways in order to fit into the dynamics of the society. Hence the university has a dual complex task of acting and thinking to be part of the larger global arena, while at the same time, acting and adapting itself to the needs and demands of the local environment in which it operates. In other words, the university needs to balance academic excellence with social and economic relevance in order not only to survive, but to also remain competitive and enhance its legitimacy. From an interdependency management perspective, the study on UG draws on how both leadership and

academic actors tend to interpret its WCU vision and consequences of such interpretations as a way of adapting and contributing to the dynamics in society.

3.3.1 Interpretation of Academic Excellence

The term excellence is being used as a key term in most university strategies. To excel means to surpass and to be pre-eminent. Hence achieving 'excellence' has become one of the core goals of universities in formulating and implementing strategies. The term connotes certain distinctive characteristics such that those who exhibit excellence in research activities stand out from the rest. It is in this regard that universities consider academic excellence as one of the key elements in their strategic visions. According to Altbach (2013), universities that exhibit academic excellence are institutions committed to the creation and dissemination of knowledge, in a range of disciplines and fields, and featuring the appropriate laboratories, libraries, and other infrastructures that permit teaching and research at the highest possible level. He emphasized that, with regard to the role of the research university, there has been a shift from viewing it as an ivory tower to its relevancy of the wider community; where much of its knowledge production is carried out in collaboration with support from third party sources (Altbach, 2007a).

In addition, the emergence of knowledge economy agendas has made it imperative not only for universities to be part of the global order, but to be visible and create a competitive niche. However, world-class universities, according to Altbach (2007), are underpinned by excellence in research that is recognized by peers and advances the frontiers of knowledge. As society changes and various policy makers recognize the role of research, universities envision increasing their research activities in order to contribute to the global knowledge economy and also help solve societal challenges. As part of the contribution of the changing society, university leadership and academics interpret these in various ways. Academic excellence in this section encompasses serving as a drive to global reputation, serving as a bridge between university and serving as a source of innovation. These are discussed below.

3.3.2 Excellence as a Drive to Global Reputation

Top ranked universities operate not only as symbols of national achievement and prestige but also as engines of the new knowledge-based economy (Castells, 1991; Marginson, 2004). Consequently, top national universities are being restructured and incentivised by their

governments or leaderships and various actors to adopt institutional policies and strategies that optimize their positional rankings, especially the Shanghai Jiao Tong University's (SJTU) Annual Ranking of World-Class Universities which is seen as a relatively credible ranking, amongst other things, since it has used the same indicators since its start in 2003. Although 'sometimes' useful in improving the services provided by universities, rankings have a way of exacerbating the already intense competition for leading researchers and research talents.

The growing emphasis on institutional stratification and research concentration have cemented the influential role of ranking themselves and further intensified competitive pressures (Marginson & Wende, 2007). For example, the annual ranking of world-class universities per SJTU (2008) is that higher education is about; scientific research (not teaching, community building, democracy, or solutions to local or global problems), winning Nobel prize (or Fields Medal) in popular big-sciences or the ability to recruit such winners, and highly-cited faculty in top-rated journals.

Academic research studies that satisfy the gold standards for publishing in highly reputable journals generate useful reputational effects – a wellspring of status and prestige (Goodall, 2006; Marginson, 2004). Status and prestige create decisive competitive advantage for HEIs whose fortune and fame in the knowledge-based economy rest upon attracting top talents and students, diverse funding sources and a network of support on a global basis (Beerkens & Wende, 2007; Clark, 2004b). Salmi (2009) also made the case that the superior results of these institutions—highly sought graduates, leading-edge research, and dynamic knowledge and technology transfer, could essentially be attributed to three complementary sets of factors at play in top research universities including a high concentration of talent (faculty members and students).

3.3.3 Excellence Serves as Bridging University and Industry Relations

Today, in most university vision statements it will be very difficult to find top national research universities that make no claim in advancing scientific and technological knowledge. The top rated institutions invariably state that a major part of their mission is to explore and exploit academic science that enhances industrial research and development (R&D) of knowledge-intensive transnational firms – the ones that nations seek to attract and keep as part of their business communities (Hershberg et al., 2007). Mathews and Hu (2007) documented

that, as a matter of practice, ‘winning’ high income economies in Asia consistently indicate their global competitiveness in terms of the number of transnational R&D headquarters they have attracted, the profit-margins made by multinational corporations (MNCs) or transnational corporations (TNCs) as well as the technology clusters that have evolved as a result of synergy among the new valued-adding players. Increasingly, the sophistication, level and propensity of relevant research within the domain of the popular big sciences (e.g., biotechnology, nanotechnology, etc.) can only be realized through fusion of academic science with industrial R&D (Berger & Diez, 2006)

Slaughter and Rhoades (2004) placed the research centres as a vital unit in the new circuits of knowledge that link the university with the industry and the government - with a view to turn academic and intellectual capital into revenues. The focal mechanism for enabling technology transfer has been the organized research units which fulfill research demands beyond the limits of the traditional teaching research-service joint production capacities. These autonomous research units were established for purposes of advancing and facilitating research and scholarship in areas that typically cut across traditional academic disciplines (Jansen, 2002) and raising institutional reputations (Geiger, 1990).

Industries and knowledge-intensive firms seek research centers’ expertise in three distinct categories, namely: (1) basic research; theoretical portion of the frontier types of grants that produce ‘useful new knowledge’ which usually require the participation of high-reputation scientists and institutions; (2) descriptive studies - a highly sophisticated descriptive work requiring academic analytical capabilities or access to a unique equipment or facility; example phrases in study titles include: “measurement of, characterization of, determination of kinetic parameters, acoustic analysis, molecular simulation, and parametric geometry modeling”; and (3) monitoring studies - where grant awards to support scientist, the lab, research scientists (and/or assistants) are aimed at learning any corporate relevant R&D breakthroughs or cultivating an on-going relationships with an expertise (Geiger, 1990).

3.3.4 Excellence as a Source to Innovation

Currently universities that want to be active players in the realm of advancing the frontiers of knowledge have placed more emphasis on applied scientific research and, to a large extent, are more driven by the application of knowledge to societal needs rather than advancement for

its own sake (blue sky research) (Newman, 1852/2008, p. 128). Lester (2005:7) defines innovation to mean “the ability to conceive, develop, and/or produce new products and services, to deploy new production processes, and improve on those that already exist” According to Lester (ibid), there is increasing worldwide recognition of the links between innovation, productivity and prosperity. The publication of the economic impact of research conducted in Russell Group universities (2012), focuses on the benefits of university research to new and existing businesses, and shows how research serves as a platform for economic growth in the United Kingdom (UK). The report describes almost 40 case studies highlighting successful research collaborations between Russell Group universities and a wide range of large and small companies. The case studies demonstrate how Russell Group research has:

- a) brought new knowledge and new perspectives to university-business partnerships, helping businesses to innovate
- b) informed the education and training of highly-skilled graduates and postgraduates, giving them the qualities which will be needed by UK businesses to stay ahead of the competition
- c) Shaped the development of new products and services within UK industry, and helped to improve businesses’ strategy, management, and productivity.

3.4 Management Interpretation

The second strand of interpretation of most national higher education institutions strategies’ is to be reactive to the needs and demands in the environmental setting in which they operate. This is predicated on the fact that universities are seen and recognised by policy makers, governments, funders and societies as institutions that are equipped intellectually to solve and contribute to socio-economic development. It is not surprising that most international organizations capture the immense role of universities.

UNESCO’s 1998 *World Declaration on Higher Education for the Twenty-first Century* states that: *Relevance in higher education should be assessed in terms of the fit between what society expects of institutions and what they do. This requires ethical standards, political impartiality, critical capacities and, at the same time, a better articulation with the problems of society and the world of work, basing long-term orientations on societal aims and needs,*

including respect for cultures and environmental protection. Higher education should reinforce its role of service to society, especially its activities aimed at eliminating poverty, intolerance, violence, illiteracy, hunger, environmental degradation and disease.

Hence, since management acts as an interface between the academics and society, university managements intend to capture the needs and dynamics of both society and industry in their strategic plans in order to maintain the resource flow, enhance legitimacy and survive.

3.4.1 Social and Economic Relevance

According to Chatterton and Goddard (2000), universities are responding to the changing society, amongst other things, by establishing new institutional management structures to meet more effectively the demands of various stakeholders. Such changes are occurring not only within the traditional teaching and research roles of universities and colleges, but also within their community services, enhancing the training of human resource that will be able to compete globally. One of the core functions of universities has always been impacting knowledge through students. The development of human capital is recognized as a key element in the development of growth as well as the competitiveness of firms, regions, and nations. According to the OECD (2001) human capital is seen as the knowledge, skills, competencies, and attributes in individuals that facilitate the creation of personal, social and economic well-being.

The advent of the knowledge economy places greater reliance on intellectual capabilities than on physical inputs (Powell & Snellman, 2004). In realizing the importance of lifelong learning in the emerging knowledge society, universities need to have and develop graduate programs intended to educate and prepare future academics and researchers, but also professionals that directly benefit the host nation and greater region (Douglas, 2014). The presence of professional master's and doctoral programmes and degrees does not feed into the current notion of a WCU, but one would argue they are an important component of universities that are comprehensive and vital to national economic development.

With the challenges of knowledge society, facing both developing and developed countries, the Humboldtian legacy of 'education through research' is far from evident today. Thus competency based HE that is focused on employability in the knowledge society, according to

the European Commission (2002) there is a need of education through research. At this point the Commission's report argues that

When taking a close look at the type of core competencies that appear central to employability (critical thinking, analysing, arguing, independent working, learning to learn, problem solving, decision-making, planning, coordinating and managing, co-operative working etc.), it appears quite clearly that the old Humboldtian emphasis on the virtues of research-teaching cross-fertilization remain surprisingly relevant in the current context. It is very striking that the list of 'employability' competencies overlaps quite largely with the competencies involved in the exercise of the modern research activity. (Commission of the European Communities, 2002, p. 40)

According to OECD (2007) and Pillay (2011) universities can contribute to human resource development through widening access to higher education, especially from remote areas, i.e. communities with traditionally low levels of participation in higher education and among non-traditional learners who combine work and study. Besides, they can improve the balance between the labour market and supply through creating improved labour market intelligence, supporting new enterprises in their curricular and enhancing links with local employers, for example with work based learning activities. It is observed by the OECD (2007, p. 153) that labour market mismatch can sometimes be attributed to: lack of labour intelligence and knowledge gaps between higher education institutions/graduates and employers; inadequate cooperation between higher education institutions and employers, and inadequate support for new enterprises. It is vital for universities aspiring to be relevant to have a close relationship with labour markets.

From management and academic interpretation around variations of relevance of UG's WCU vision from their perspective, the next question worth considering is how they translate such visions or goals into actions. The next section discusses this.

3.4.2 WCU as a Source of Engagement in Solving Grand Challenges in Society

Grand challenges of societies have over the past few years served as a source of pressure, which is creating increased demand for university engagement. Hence, universities in their bid to contribute to solving societal problems capture it in their strategic visions. This, according to, for example, Newcastle University (2006) is in recognition that humanity now faces a number of grand societal challenges which must be mastered in the 21st century if we are to safely reach the 22nd century. Society needs the outputs of research to help identify solutions to complex global issues such as access to energy, environmental change, the ageing

population and food security. However, solutions to complex problems such as these are well beyond the scope of any individual discipline. Chatterton and Goddard (2000) indicate a number of trends emerging that are increasing the third mission of universities. Among these is the growing awareness of the global nature of many problems such as environmental degradation, poverty and economic development which have created a number of interconnected local responses and that universities are well placed to explain these global issues on a local scale. Thus, higher education institutions are well positioned to play a major role in the social and environmental development of their regions.

In a report by the Russells Group (2012), it was argued that World-class universities are uniquely placed to tackle research challenges on this broader and, more multidisciplinary scale. A larger, more diverse, group of researchers creates a vibrant intellectual environment which encourages and facilitates the development and exchange of new ideas, and the ability to provide solutions. Scientists have been involved in attempting to position these challenges more highly on political agendas. In 2008, the US National Academy of Engineering launched a consultation on what it called the “Grand challenges for engineering”. These grand challenges are socio-technical problems facing humankind, demanding large scale solutions mixing scientific ingenuity with political will and social mobilisation. These “grand challenges”, such as energy security, better healthcare and access to water for all, require long term solutions built up from multiple actors contributing in diverse ways. Ackoff (1999) refers to this class of problems as ‘multi-disciplinary messes’ (p. 99-101, in Harding *et al.*, 2007).

Shifting our attention to sustainable environment, universities can also contribute to sustainable environmental development in their regions by:

a) Being a source of regional expertise through research and demonstration, b) Using their infrastructure such as science parks, incubators, laboratories and IT facilities, c) Being facilitators in bringing together diverse regional actors and elements of capacity to the sustainable process, d) Generating human capital in the region through their teaching and learning programmes in the areas of sustainable development, e) Providing demonstrations of good practice through their own on-campus management and development activities such as through strategic planning, building design, transportation initiatives, waste minimization, water and energy efficiency practices, responsible purchasing programmes and other green campus and good citizen initiatives. Developing teaching programmes to raise awareness and

skills in the student body to become involved in volunteering and community activity in the area of sustainable practices (Garlick et al. 2007; OECD 2007).

3.5 Notion of Organisational Change Process and Importance of Strategies

In line with the strengthened institutional leadership, a rise in the notion of organizational strategy has taken place in higher education in Ghana. This can be explained by referring to several factors. First, the decreasing levels of state control which in turn has granted an increasing degree of institutional autonomy require universities to define their position within the higher education system (Bonaccorsi & Daraio, 2007). In current times, universities are responsible for defining their own legitimate goals, instead of only responding to externally imposed tasks or assigned societal functions (Krücken & Meier, 2006). Another factor is that in several countries governments advocating New Public Management has asked universities to provide planning, often in form of a concrete strategy document (Maassen & Potman, 1990). Finally, higher education institutions are under pressure to be different by strategically constructing their portfolios (Bonaccorsi & Daraio, 2007). It is important to define what is meant by organizational strategy in this study. Following the definition by Fumasoli and Lepori (2011, p. 3), a strategy is conceived as:

“A pattern of decisions and actions aiming at realizing objectives that are relevant for the organization and which compose a coherent sequence developing in time and across relevant areas of activity. To be identified as a strategy, such patterns must be recognized and shared by organizational members as a collective pursuit of organizational goals. Actors’ rationalization of a pattern as an organizational strategy can occur before decisions and actions take place (as in strategy formulation, for example in the strategic plan), meanwhile or afterwards, as actors rationalize organizational events in a strategic perspective”.

Similarly some have proposed the idea that strategies in universities are of an interpretive nature, which means that through those strategies, the organizational actors can convey meaning that is intended to motivate stakeholders to act in favor of the organization. This could also mean that it is not only university leadership that is involved in interpreting a strategy, but also other relevant actors, such as provosts, deans, heads of departments, senior academics and other stakeholders.

This means that universities are perceived as integrated, goal-oriented organizations deliberately choosing their own actions and are capable of being held responsible for them

(Krücken & Meier, 2006). This gives institutional leaders the power to be proactive and adapt to the needs of the society.

The resultant effect of most public organization reforms is not only granting them autonomy but also affecting the way they are organized, controlled and funded. At the heart of the debate of strategic changes in the university is the question to what extent and in what meaning can universities be conceived as strategic actors. This question can be discussed from two main conceptual viewpoints. On the one hand, universities can be perceived as “as any kind of organisation” (Brunsson & Sahlin-Andersson, 2000) and on the other hand universities can be considered as unique organisations with special challenges with regard to acting as a strategic actor (Krücken & Meier, 2006).

In essence, one of the subsidiary notions or ideas behind strategies, for instance, the UG WCU vision, policies or reforms is whether change actually happens or not (Gornitzka, 1999). However, reforms or strategies do not lead automatically to new ways of doing things or practices. This is premised on the fact that change is too complex to be analysed especially given the fact that the strategic vision introduced in 2010- 2015 is relatively young, having in mind the heavy bottom nature of the university. Again, universities are organisations that change within their own institutional, national and global contexts and there are a lot of factors that influence changes in universities. Hence, examining relatively causal relations is in general difficult in this context.

In our study, organisational change describes any kind of change that is taking place within the University of Ghana. However, the study also recognizes that, since change is a process, it can emerge within the University of Ghana deliberately without being planned strategically. Following Gornitzka, Maaseen, Olsen & Stensaker (2007) organisational changes could be initiated by identifiable group of actors which could be strategically planned. This study advanced these arguments and uses the UG’s WCU strategy as a frame of reference where management and academics within their own circumstances mutually allow for, and initiate change from an interdependency management perspective.

This study acknowledges the conceptions of change above as carried out in studies like Esterhazy (2014) and Frølich et al., (2014) but we build on the understanding of how strengthened management/leadership and academics from an interdependency management perspective mutually allow for and initiate changes based on the consequences of the

interpretations the UG WCU strategy. This study focuses on four dimensions of consequences, i.e. academic core (research and academic programmes), internal governance and human resource policy from interdependency management perspective.

3.5.1 Academic core

Clark (1998, p. 3) refers to the academic core of the university as “the heartland which is still found in the traditional academic departments formed around disciplines, new and old, and some interdisciplinary fields of study”. A university’s core business is not only the discovery, dissemination, and application of new knowledge, but also the academic degree programmes that it offers; this is termed as the academic core (Maassen, 2012). In order to meet external demands as a result of environmental pressures, the universities’ functions are changing in order to match the current needs and demands of the society. According to Clark (1998), when an enterprising university evolves a strong steering core, and develops an outreach structure, he contends that its heartland is still the traditional academic department formed around disciplines and some interdisciplinary fields. The heartland is where the core activities and traditional values of teaching research and training of next generations of academics occur. In Cloete’s (2012) view, for a university to contribute to development and global knowledge economy, it needs to strengthen its academic core. Contributing to academic and research excellence which in essence means more research activities at the forefront of knowledge, the university’s academic core needs to be strengthened.

3.5.2 Academic Programme

Academic institutions have also moved quickly to expand and diversify the curriculum to meet new societal needs, whether it is the growth of medical education in the universities or the remarkable expansion of business schools. Academe has always been attuned to demands for new curricula, new initiatives, and in general to the interests of external forces. Academic programmes remain one of the products that universities offer to its customers or clients (students). This falls in line with what Gumpert (2000) termed as academic restratification. This is premised on the increased use value of a particular knowledge in the wider society. With external pressures and dynamics, changes in demographics of students entering universities, effect of globalisation and internationalization, Information Communication Technology (ICT), and the knowledge society has changed the production and application of knowledge.

For Lyotard, the main criteria of academic knowledge is no longer ‘is it true’, but ‘what use is it?’ (Lyotard, 1984, p.51) as cited in (Barnett, Parry & Coate 2001). This has caused some changes in academic fields and disciplines, since the performative shift, which is associated with increased emphasis on ‘efficiency’, ‘outputs’ and ‘use-value’, has played out differently across knowledge fields. As a result of the increasing hierarchal structure of university leadership and the continuous dominance of academics, how does change occur in terms of initiating new programmes, changing structure of courses or programmes to meet new societal demands?

Fumasoli et al. (2014) documents that as a result of the strengthened capacity of university executive structure, traditional substantive and procedural authority which were in the academic domain seems to have been replaced by complex governance structure currently holding the formal responsibilities with respect to core administrative and academic matters. This is in congruence with Braun et al (2014), (an empirical study at the University of Lausanne), that there is a growing involvement of rectorate (top level management) in programme policies where academics have enjoyed broad autonomy. This was made possible through the enactment of the new university act under the NPM regime. In making comparisons, the authors revealed that before the enactment of the university act, the rectorate only intervened on general study guidelines while the faculty council approved the study programmes. The new university law has brought about changes with regards to these aspects. The rectorate now has the autonomy to determine the number of credit hours allocated to each course or by prescribing the kind of assessment or evaluation method as well as the study programme. At the same time faculty has the right to propose these programs to the rectorate. The final decision rests on the rectorate. One fascinating issue about the findings of the University of Lausanne is that, it is possible for rectorate to impose new training programmes.

This could be attributed to the survival of the institution as the leadership of the university seeks to adapt to the current demands and trends of the industry and society in order to ensure continuous flow of resources. Hence, the change from Lausanne University seems to suggest that it is no longer just the academics which control the programmes but also university leadership. In a sharp contrast, Fumasoli et al (2014), in their flagship university findings, reveals that despite the increasing authority of central leadership, the content of the primary activities of education are still dominated by senior academics. Braun et al (2014) are of the

view that despite the new authority of the rectorate, faculties have some leeway in designing the curriculum according to the guidelines set by the rectorate.

3.5.3 Research

Taylor (2006, p.2) argues that research is an intensely personal activity which is strongly dependent on the ideas and imagination of individuals or groups of individuals. He continues that academic staff feels a fierce personal ownership of their research as it shapes and dictates their career development and their status with their peers. The individuality of academics is, thus, stressed here suggesting that research is an individual affair. However, Harle (2007), on the other hand argues that a university's ability to set and follow its own research priorities is vital to developing a strong and distinct research culture. Harle's argument favours the centralised research planning in a university for the purpose of building an effective university research culture. This is predicated on the fact that with the emergence of strong university leadership, there has been a centralized research management that prioritizes research areas based on the research agendas of the broad aims of the university.

At the same time, leadership develops the best fitting niche by outlining the aims and strategic research areas in order to increase their research activities. These strategic areas are to enhance research focus and also provide a clear direction in order to achieve the research aim of the university. The study conducted by Braun et al (2014) reveals that the rectorate identifies and supports five research priorities. These research domains are consolidated into what they call 'priority strategic objectives'. They further reveal that even though these research priorities are identified by the rectorate, there is a procedure for identifying such research domains which is from bottom up. This is exemplified by a statement from the study that the approval of research domains as 'priority strategic objectives' results from a bargaining process either bottom up or top down decisions between various actors: rectorate, research entrepreneurs, or 'research stars', deans and head of departments".

The various faculties which are headed by deans have not been sidelined as a result of strengthened steering core, but also they are tasked to produce a research development plan. The deans in turn deliberate with academics and various heads of departments to discuss the priority areas and the future direction of the faculty. However, these development plans by the various faculties need to be endorsed by the rectorate in order to feed into the main strategic

objective of the university in terms of strategic development at the various faculties (ibid), it was further revealed that the hard disciplines focus on research ‘excellence’ – that is scientific reputation, whereas the soft and applied disciplines focus on ‘demands’ of students and external environment (which are incorporated as research priority areas).

Fumasoli et al., (2014) in their preliminary findings of a study on five flagship universities in Europe reveals that despite the more centralised, formal and standardised university’s structural settings, academics are considered research elites who have a track record of attracting competitive research funds coupled with being productive in their research output. This is predicated on the fact that research councils use criteria such as the individual’s research projects, peer review process confirms the dominance of the academic profession itself (Bleike, 2012) and the continuous renewal of academic autonomy of academics of flagship universities (ibid). A more professionalised management is seen as a necessary condition for the institutions’ attempts to deal more adequately with both external and internal pressures and demands, since, according to Thorn (2002) as university-industry relationships become an important component of every-day activities, universities try to actively support collaboration and commercialization. Technology Transfer Offices (TTOs) can track potential industrial research opportunities, support commercialization processes (i.e. dealing with patents, licenses and contracts), and develop general guidelines for university-industry collaboration.

3.5.4 Human Resource Policies

The growing strengthened steering capacity of university leadership does not only affect internal governance and academic core activities but also has a profound impact on decision making power regarding the appointment of the human resource base which is the driving force in achieving the goals of any organisation. According to Manuh, Gariba & Budu (2007), the enhancement of the institutional research capacity by African universities and the possibilities to contribute meaningfully to society, are largely determined by their human resource base. For a university that strives to attain the status of a ‘World Class’ university, it must create a niche or a position for itself in a highly competitive environment, in addition to contributing effectively to the needs and solving the grand challenges of society, quality human resources are fundamental for universities, which need highly qualified individuals to produce and transmit scientific knowledge in order to be published in reputed journals,

embarking on curiosity driven research, applicable findings that will help solve both business and societal problems and in effect impact on national development

The above means that conscious efforts need to be in place when universities recruit and select academic staff in order to help achieve the mission and vision of a university. Reichert (2006) reveals that recruitment of promising professors can determine the research future of an institution and this should be seen to be the most strategic choice of an institution.

Fumasoli (2015) in her study of strategic human resource management among flagship universities in five European countries reveals that reforms have transformed the traditional practices held by the academic profession, where criteria for recruitment and career advancement were based on academic merits and university politics. She further asserts that, when it comes to human resources, reforms have attempted to centralize, standardize and formalize personnel policies. This means that a shift in the authority from professorial oligarchy to university leadership has been promoted (ibid). This should be visible in recruitment processes, which determine entry into academia and have been traditionally controlled by professors. Furthermore, she asserts that, not only university leadership has been strengthened both at levels of rectorate, deans and heads of departments, also the university administration has increasingly acquired importance in the implementation of procedures. The re-design of regulatory frameworks is expected to push universities to redefine and implement human resource management in order to support their organizational strategy (ibid). For instance, flagship universities aim to attract the best international researchers in order to maintain their status as globally leading institutions.

The growing complexity has led to the professionalisation of the administration, although this does not necessarily mean a growth of the administrative staff. There are indications that traditional administrative support functions (secretaries and clerks) are being replaced by professional administrators (Gornitzka & Larsen, 2001). Braun et al (2014) reveals that university leadership and faculty play a dual role in terms of appointment policy, whereas the former set the rules and guidelines regarding the position, the latter revolves around the rigorous process of selecting a suitable personnel based on the guidelines set by the rectorate. However, the final selection is done at discretion of the academics within the procedures and rules set by the rectorate. Again, the rectorate also makes sure and crosschecks the faculties' developmental plans to see if there is any deviation based on the criteria set.

In sum, it is significant to observe whether and how strategic management of human resources has been developed, or what has changed following the introduction of WCU at UG. Specifically, recruitment procedures/criteria for faculty members, number of research support grants for faculty members and number of professional staffs are prime goals.

3.5.5 Internal Governance

Within the higher education literature, it has been argued (Clark, 1983) that the university was traditionally organized in a flat, horizontal way, where decision making structures were collegial instead of hierarchically organized and academic instead of procedurally oriented. However, according to Amaral et al., (2003) the current focus on strong leadership is not part of the “natural” development of the university but in essence represents a management revolution in higher education. As the surrounding circumstances change, organizations face the prospect of either not surviving or adapting in response to these environmental pressures. As stated above, recent reforms have been argued to be a necessary catalyst for universities to be responsive to the demands of the society, strategically creating a niche in order to differentiate themselves (Fumasoli et al, 2014). The NPM inspired reforms introduced in the 1980’s and 1990’s altered the traditional university governance structure thereby moving away from the changes that resulted from the democratization of the university governance structure in the 1960s and 1970s (de Boer 2003).

The medium decision making level, thus the department or faculty level may be either slimmed, removed or is questioned for its relevance. The centralization process is expected to strengthen the power of the central level as the policy making body of the university (Tjeldvoll, 2000). The highest decision making body which is the board is expected to be given full responsibility for the overall policy aims and resource frames. Making clear objectives, criteria of accountability for the institution as a whole is expected to have become the responsibility of university leadership and central administration (ibid). However, a decentralization process may be intended in order to give more power (over decision making and resources) to the department at the basic level, in terms of executing the core functions in practice. As part of strengthening the production units, a centralization process is expected to take place within the local level. Smaller departments and centers are merged to make departments more effective production units (ibid). The centralization tendency in the current higher education governance structure seems to be as a result of deliberate design, either by

policy makers at the system level or university leadership and its professional support structure (Fumasoli, et al. 2014).

Hence there is a blend of both centralisation and decentralisation in the governance structure. Despite the strengthened leadership capacity, academics have not lost their traditional role in taking decisions within the university. This is espoused by Fumasoli et al (2014) that despite the centralised nature of the new leadership structure and management structures, functions are largely oriented towards external relevant stakeholders and other agencies in the external environment rather than forcing decisions on academics. Of importance to this study is examining changes with regard to UG organizational structure, number of external actors and internal actors as part of the decision making process following the WC strategy, and the role of the relevant actors, who really rules and the discretions of faculty in the internal governance of UG.

3.6 ANALYTICAL FRAMEWORK

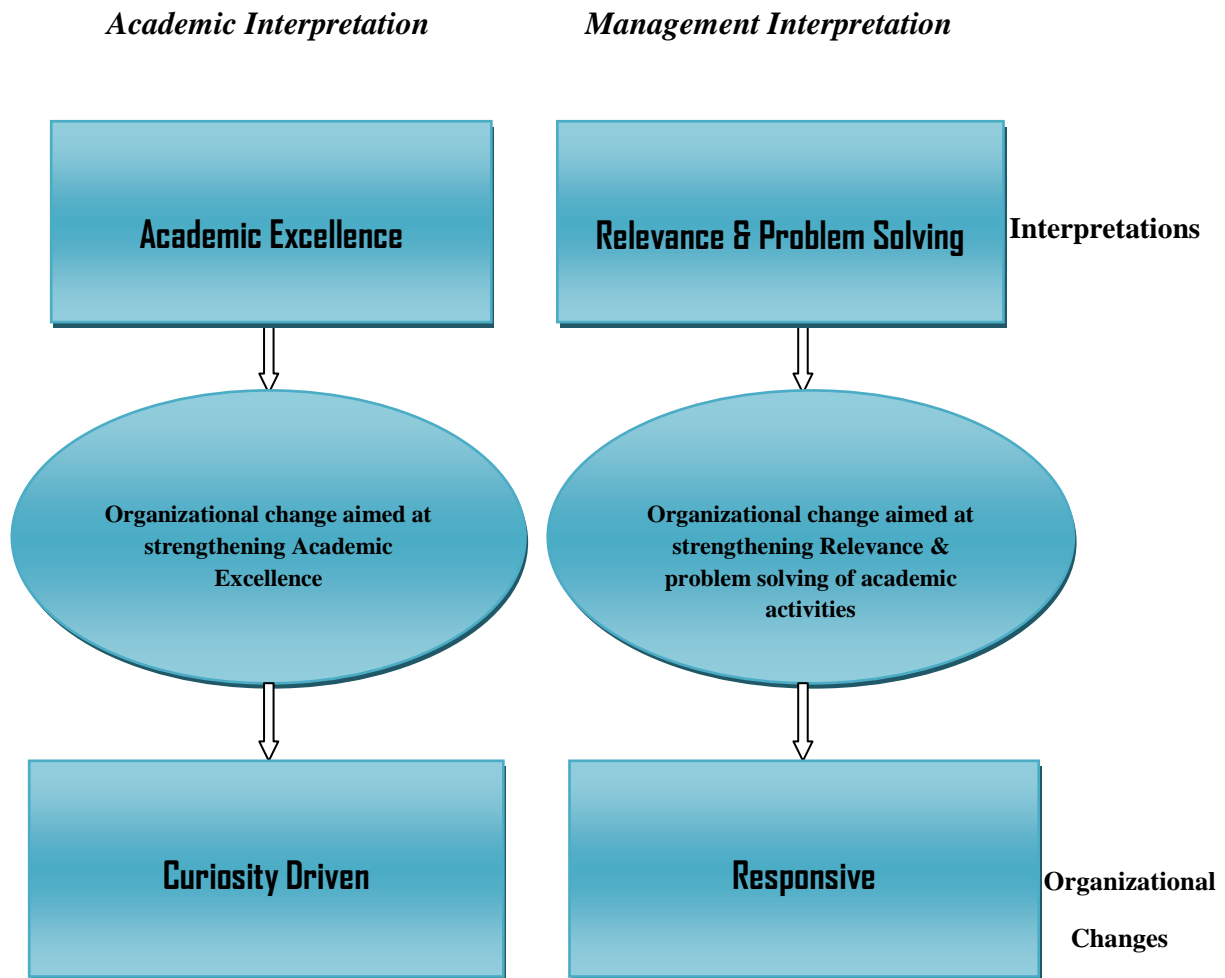
A theory is the systematic explanation for observations that relate to a particular aspect of life, and it explains observations by means of concepts (Barbie 2007, p.43). Qualitative researchers either emphasize a preference for treating a theory as something that emerges out of the collection and analysis of data or they are interested in the testing or application of theories in advance of data collection and analysis (Bryman, 2008, p.373). In this study, the employment of an analytical framework served as a lens that guided the collection of data and aided in interpreting data. Hence the analytical framework for this study links the statement of the problem, objective of the study, research question(s) and the choice of methods.

The interpretation and possible effects of UG's WCU strategy are presented in Figure 1; they are derived from the above literature review. The analytical framework for addressing the study's questions consists of four blocks; the upper layer depicts the categorization of academics' and management's interpretations of UG's WCU strategy which are assumed to be focused on academic excellence and societal relevance respectively. In the same vein, the lower layer represents the assumptions about how organisational changes or effects are the results of academic excellence and relevance interpretations. In the next sections the notion of academic and management interpretations of UG's WCU are elaborated and conceptualized.

Academic Interpretation

In this study it is assumed, based on the literature studies, that the UG academics interpret the institution’s WCU strategy as implying that UG wants them to increase their research activities at the forefront of knowledge. This assumption is related to the dominant interpretation of the World Class University notion as emphasized in the Shanghai Jiao Tong University’s (SJTU) annual ranking of World Class Universities, and in the academic literature, including Altbach (2013), Altbach & Balan (2007) and Salmi (2009) who all link the World Class University notion to academic excellence; the need for more basic research and allowing academics to define their own research problem in their knowledge area.

Figure 1: Interpretation and possible effects of UG’s WCU strategy



Management Interpretation

The UG management interpretation of the WCU notion is not linked to the concept of academic excellence, but it relates to the need to be more directly and effectively relevant to society. As a result of the strengthened hierarchical governance structure of UG, which is argued to be partly inspired by NPM, the management interpretation relates to the assumption that the university is committed to enhance social and economic relevance and problem solving as a way of realizing the expectations from society, and satisfying dynamic societal needs. In essence, management desires to look ahead and adapt quickly for aligning the institution's activities to societal and industrial needs in order to be relevant, maintain the legitimacy of the institution and ensure survival.

The upper part of the analytical model (fig 1) which represents academic and management interpretations is used in the study as a lens and a set of guidelines through which interviews with relevant actors and strategic documents are analysed based on how they (relevant actors) interpret the UG's WCU strategic vision.

Interdependency Management

Furthermore, from an interdependency management perspective, it is assumed that, not only the university leadership (Vice Chancellor & central administration) has the full power to interpret strategic visions despite the strengthened leadership structure. The academics remain relevant since they are in the helm of affairs in the core activities. They are involved in knowledge production, knowledge dissemination, and are crucial actors in ensuring that the universities' strategic goals are achieved. In essence, balancing the stronger hierarchical leadership structure with the continuous dominance of academics in the core functions of teaching, research with their beliefs system, there are bound to be varied and different kinds of interpretations with regards to the UG's WCU vision and the consequence of the interpretation. Hence, the adoption of the interdependency management (Braun et al., 2014) perspective as part of this study allows us to appreciate the new form of management and how various relevant actors interpret the University of Ghana's vision and its consequences.

Organisational Changes/Effects of academic excellence and relevance interpretation of WCU

In terms of analysing the organisational change processes it is assumed in this study that, the interpretation of the 'WCU strategy' as the independent variable affects the dependent

variable, that is, the organisational change process (academic core: academic programmes and research, internal governance, human resource policy) within the University of Ghana. Moving from how academics and management interpret UG’s WCU strategy i.e. academic excellence and relevance respectively, the second research question is focused on the extent to which organisational change processes at the UG are affected by the UG WCU vision interpretations by academics and management. In other words, it can be formulated as to what extent are organisational change processes triggered by academic and management interpretations of the UG WCU vision.

Organisational change aimed at enhancing or translating excellence into curiosity driven

In order to analyze organizational change aimed at strengthening academic excellence by conducting more curiosity driven research which is the interpretation assumed to be emphasized by academics, the study assumes that if academic interpretations of the WCU strategy are dominant then emphasis in the organizational change processes at UG will be on strengthening basic research activities and human resource policies that will aim at hiring professors that will enhance curiosity driven research activities. The indicators in tables 1 & 2 respectively will serve as a lens for analysing whether changes are taking place that are aimed at strengthening basic research activities.

Table 1 Organisational Changes: Research

Academic core: Research	Indicators
	Grants/Funding for research activities
	Collaborations
	Academic Publications (Peer reviewed)

In terms of research profile, table 1, with indicators served as lens for research questions 2a) To what extent are organizational change processes with respect to the institutional research profile at the University of Ghana the result of the implementation of the university’s WCU strategy? This was addressed through analyzing research profile documents coupled with interviewing academics and actors involved in research projects and management.

Table 2 Organisational Changes: Human Resource Policies

Sector: Human Resource Policies	Indicators
	Changes in recruitment procedures
	Changes in criteria for faculty members
	Reward/Incentive Systems

In the sector of *human resource policies*, indicators helped to address research question 2c). To what extent are organizational change processes at the University of Ghana with respect to human resource policies the result of the implementation of the university's WCU strategy? This element of organizational change was analyzed through human resource documents or reports and interviewing internal actors involved in human resource decisions.

Organisational Change aimed at enhancing or translating relevance into responsiveness

In order to analyze organizational change aimed at translating relevance to responsiveness which is the interpretation assumed to be emphasized by management, the study then assumes that, if management interpretations are dominant the emphasis should be on strengthening academic programs that are more relevant to the needs of society, problem oriented research and internal governance that incorporates external stakeholders in order to maintain relevancy. These indicators (tables 3 & 4) will serve as an analytical lens for analyzing whether changes can be identified that is aimed at strengthening relevancy and problem solving.

Table 3. Indicators for academic core: (a) Academic programmes

Academic core: Academic programmes	Indicators
	New Masters/PhD programs
	Changes in programme structure/curricula

The indicators presented in table 3 served as an analytical lens for addressing research question 2b) to what extent are organizational change processes with respect to academic programmes at the University of Ghana the result of the implementation of the university's WCU strategy? This was observed through programme profiles handbook, faculty/department documents and interviewing internal actors in charge of academic matters and management.

Table 4 Organisational Changes: Internal Governance

Sector: Internal Governance	Indicators
	Changes in decision making
	Changes in organizational structure
	Changes in governing bodies

The above indicators with respect to internal governance will be used for addressing research question 2d) To what extent are organizational change processes with respect to internal governance at the University of Ghana the result of the implementation of the university's WCU strategy? For this purpose the UG's organisational organogram, strategic documents and interviewing internal actors were used.

In sum, apart from the two possible assumptions regarding the direction of change as shown in the analytical model and explained above, another third possibility of the direction of change based on actors interpretations of the UG's WCU strategy is that, there might be a possibility that, the direction of change may be unclear/blurred, in the sense that, there could be combinations of interpretations as opposed to dominant interpretations by both actors.

CHAPTER FOUR: RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

The purpose of this study was to examine how relevant actors (management and academics) at the University of Ghana interpret the university's vision of becoming "World Class University". A further subsidiary aim was to move a step further to understand and examine to what extent are organizational change processes the result of actor's interpretations of University of Ghana WCU strategy. With regard to the focus on the organizational changes the dimension for this study included, research, academic program (academic core), internal governance and human resource policy. The study was guided by two main research questions and four sub-questions for question two.

1. How is the institution's "World Class University" strategy interpreted by central managerial and academic actors at the University of Ghana (UG)?
2. To what extent are organizational change processes at the University of Ghana the result of the implementation of the university's WCU strategy?

2a) To what extent are organizational change processes with respect to the institutional research profile at the University of Ghana the result of the implementation of the university's WCU strategy?

2b). To what extent are organizational change processes with respect to academic programmes at the University of Ghana the result of the implementation of the university's WCU strategy?

2c). To what extent are organizational change processes at the University of Ghana with respect to human resource policies the result of the implementation of the university's WCU strategy?

2d). To what extent are organizational change processes with respect to internal governance at the University of Ghana the result of the implementation of the university's WCU strategy?

To achieve the exploratory and descriptive purpose of this study, the researcher used a qualitative approach as a research strategy. Qualitative research is used when rich descriptions are required to better understand the phenomenon under investigation. This form of research goes beyond surveying data; since it allows for exploration and understanding of people's

(actors) experiences, perceptions and actions. Punch (2009), for instance, attests that qualitative methods enhance the study of a phenomenon, underlying motives and desires, to look at how people feel or think about an institution or a subject. This approach gave participants (actors) the opportunity to bring out their feelings, understandings and perceptions about how different actors interpret the UG strategic vision of World Class University template and the consequence of this strategic vision (WCU) in UG (internal governance, research, academic programmes and human resource policy). It also enabled various actors to express their feelings, understandings and perceptions about the role various actors have played in initiating such changes. Further, Creswell (2007) indicates that qualitative research helps when researchers want to understand the context in which participants make decisions about a problem or an issue, or to augment quantitative research to “tell us about why people responded as they did, the context in which they responded, and their deeper thoughts and behavior that governed their responses” (p. 40). Therefore, to capture these aspects this study selected qualitative research as its methodology.

The case study approach investigates a contextualized contemporary phenomenon within specified boundaries (Yin, 2014). Despite the fact that case study methodology has boundaries that are limited to the specific case under consideration, and that it is used to investigate a specific occurrence, it is a useful research design for ultimately illuminating a general issue (Stake, 2000). Therefore it is in this direction that this study used the case study approach instrumentally to explore and illuminate how various actors at UG interpret its strategic vision and the consequences of such interpretations. In this study, the bounded entity was the UG. The contextualized phenomenon was the WCU strategy in 2010 and the consequences that have occurred from 2010-2015. The key issue that was ultimately illuminated was how actors interpreted the strategic vision and the consequences of such interpretations.

University of Ghana was purposefully selected as the site for the investigation for four reasons: (a) since UG undertook such a strategy in 2010 to date (2015), little or no empirical investigations have analyzed how various actors interpret the WCU strategic vision and the organisational changes that has occurred within UG following such policy at the UG (b) in Ghana few studies have examined how various actors interpret this strategic vision and their consequences of interpretations, and (c) there is a dearth of literature in Africa and specifically on how various relevant actors interpret institutional policies or strategic visions (WCU) and changes process within the Ghanaian higher education.

This chapter describes the methodology and procedures used in the study. Specifically, the researcher describes the case study as a research design, the epistemological issues and assumptions associated with the investigation, the sample selection, instrumentation, data collection and analysis procedures, and the accuracy and trustworthiness of the data.

4.2 Research Design

Case study research designs are typically used to answer questions especially in situations where the investigator has little or no manipulative control. For the purpose of investigating how management and academics at UG interpret the WCU template and the consequence of such interpretations, case study research was chosen, as it allows us to examine contemporary phenomena at an early stage of research in their real-world context (Yin, 2003). The course of the research follows the five guiding points proposed by Yin (2003, pp. 20-27):

As outlined in the introduction and at beginning of this chapter, this study first addresses the research question of how various relevant actors interpret the strategic vision of UG and the consequences. The case study explores a phenomenon which is still relatively unexplored. Therefore, sound theoretical research propositions are hardly available (Yin, 2003). Secondly, Yin (2003) stipulates that one needs to design an analytical framework that guides the investigation. In chapter three, section 3.6, the study describes the analytical framework. The third point espoused by Yin is to have a unit of analysis. This sets the boundaries and scope of the analysis. In this case study, UG is considered to be embedded because even though only a single case is used, it involves units of analysis at more than one level. This is because attention is given to sub-units as well as the overall unit. The analytical framework works as the logic which links the data to the propositions and it forms a lens through which the case can be studied and compared. Finally, criteria for interpreting the findings are derived from an analytical framework.

According to Yin (2014), case study research can be either single or multiple-case investigations and can also have numerous levels of analysis. Single-case research design can be used in instances where there is an opportunity to analyze a phenomenon in a previously unexplored or sometimes inaccessible setting (ibid). This study was a single case research design with emphasis on understanding how various relevant actors interpret UG's strategic vision, coupled with examining the consequences within a single setting.

4.3 Philosophical Assumptions

Paradigms are a set of beliefs and perceptions. Paradigms in the human and social sciences help us understand phenomena. They advance assumptions about the social world, how science should be conducted, and what constitutes legitimate problems, solutions, and criteria of “proof” (Bryman, 2012). Epistemology which is the theory of knowledge; is concerned with the question of what is (or should be) regarded as acceptable knowledge in a discipline (Bryman 2012 p, 27). Positivists and interpretivists are two schools of thought under epistemology, positivists belonging to the natural sciences and the interpretivists to the social and human sciences. Ontology is concerned with the nature of social entities. Objectivism and constructivism, is connected to natural science and social science respectively.

This study is grounded in the interpretive paradigm. The interpretive paradigm is associated with qualitative process research strategies such as ethnography, phenomenology, and case study tradition (Prasad & Prasad, 2002). The increase in the interpretive approach stems mainly from a growing dissatisfaction with positivistic methods and procedures as a means of producing knowledge (Sandberg, 2005) and the limitations of the positivistic approach for understanding organizational phenomena (Denzin & Lincoln, 1994). From an ontological perspective, there is recognition of multiple socially constructed realities that are complex and indivisible into discrete variables. The researcher accepts the role of constructing and co-constructing meaning. In the process, the viewpoints, thoughts, feelings of the participants are interpreted and understood by the researcher as accurately as possible (Johnson & Christensen, 2000). To achieve this, the study ensured that the UG leadership/management, provosts, deans, heads of departments, head of research centers, academics and other relevant actors frames of reference, interpretations and perspectives were reflected in the choice of data sources, data collection (Rajagopalan & Spreitzer, 1996) and in the analysis of data. The intention is to capture the views of management, provosts, deans, heads of departments, academics and use these actors’ meaning to understand how they interpret the strategic vision of UG’s vision of becoming a “World Class University” and the consequences of such interpretations.

It is against this backdrop that the researcher used interviews to capture the perceptions and understanding of relevant actors involved in the interpretations of UG’s strategic vision and its consequences. Throughout the data collection and analysis process, this study kept

managerial and academic actors perspectives central. The assumption about the interpretative scheme is that human understanding and action rely on the interpretation of information and events experienced by the participants (Rabinow & Sullivan, 1979). It is from this interpretation that socially constructed meanings were assigned to the how various actors interpret UG's the strategic vision of becoming a WCU and its consequences.

4.4 Population, sample and sampling techniques

In terms of population, the target group was made up of top and middle level management (vice chancellor, pro vice chancellor - academics and students affairs, pro vice chancellor-research, innovation and development, registrar), provosts and deans. Head's of department, directors of research institutes and senior academics in this study were considered lower level management at the University of Ghana. The study used two methods of sampling; purposive and snowball sampling. Purposive sampling was the highly used whereas snowball sampling was used once. With regard to purposive sampling, Punch (2009) indicates that purposive sampling is used in a deliberate purposeful way with a focus in mind to be able to have access to people with vital information on the topic. Snowball method involves identifying a small number of individuals who possess the characteristics desired for the research. A recommendation was made by an interviewee to contact a head of a committee who interviewee thought would be in a better position to answer certain questions. These people when then used to get in touch with other respondents with the desired characteristics (Cohen, Manion & Morrisson, 2011). The sample of people interviewed was a total of ten respondents. The researcher will now discuss the people who were selected to participate in this study and the reasons thereof.

4.4.1 Recruiting Participants

The vice chancellor, two (2) pro-vice chancellors, registrar, provosts of colleges, deans of the faculties under which the selected departments fall and heads of the departments were selected. The vice chancellor, provosts and deans were included because the researcher recognised that as administrators of the universities, they would be able to provide relevant information for the research. The vice chancellor has a lot of influence on various decisions, policies and strategies the universities embarks upon. In fact, it could be argued that most of the strategic changes occurring at the UG have been spearheaded by the vice chancellor and his team. At the same time various departments, faculties, schools, institutions, centers and

academics are relevant actors and hence also form part in strategic vision formulation. The deans, heads of the selected faculties and departments and senior academics were selected because they are responsible for the core activities and still remain relevant. They play major roles in developing, leading, managing and implementing strategic visions and activities and in developing new programmes at the departmental levels.

4.6 Data Collection and Analysis

Before embarking on data collection, approval was first sought from the Department of Educational Research to conduct the study. Once the introductory letter was obtained, the next stage was to proceed with the data collection. The two main sources of data for this study were interviews and documents. First, the researcher wrote a letter to the university's registrar to be given access to a list of documents that needed to be reviewed. The researcher had a telephone call from the registrar's office approving the request made and also requested to re-direct the letter to the University of Ghana Public Affairs Directorate for access to the documents needed. There were also documents which were not on the list of the researcher but had emerged during the research. In terms of document analyses, Robson points out that documents are 'unobtrusive and non-reactive' (2002, p. 349). As he explains, the researcher does not need to directly contact the person producing the document, since it could trigger many challenges including intimidation from some respondents and also difficulties in meeting them. The documents below were also instrumental in identifying the interpretations and effects of UG's WCU strategy.

Title of Documents	Access
UG Strategic Plan 2014-2024	Hard Copy
Basic Statistics of University of Ghana	University website
Vice Chancellor Speech	University website
Research Report 2013	Hard Copy
Visitation Panel Report	University website
UG Strategic Plan 2000-2010	University website
University of Ghana SWOT analysis	University website
UG Handbook (Undergraduate and Post	University website

Graduate)- Humanities and Sciences	
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Table 1: Document used for Analysis

With regard to the interview aspect of the data collection, introductory letters were initially sent to the above mentioned interviewees through their secretaries. These secretaries informed the researcher of the day and time of appointment to meet the above mentioned interviewees at their various offices. A face-to face meeting was agreed, before the actual start of the interview, pleasantries exchanged and there were brief hearty discussions.

At the interview, the purpose of the study was explained, after which their consent and approval to have the interview record were sought. Clarifications to questions that participants were not clear with from the researcher’s interview guide was explained in detail. An in-depth interview with actors which was semi-structured allowed for open ended probes. The interview also allowed and encouraged actors to use their own terminologies and to steer the interview towards issues and concepts that best represented their experience (Gioia & Thomas, 1996) on how relevant actors (management and academics) of University of Ghana interprets the strategic vision of becoming a “World Class University”. Again, the semi-structured interview were an essential part of the study, since they shed light on the patterns of decisions and actions which need to be “recognized and shared by organizational members as a collective pursuit of organizational goals” (Fumasoli & Lepori, 2011, p. 3). This in effect aided in examining the consequences of the interpretations of UG’s vision.

Position	Level	Code
Top Management I	Institution	UG 01
Top Management II	Institution	UG02
Director of Research	Institution	UG03
Provost- Humanities	College	UG04
Provost- Sciences	College	UG05
Dean Graduate School	Faculty	UG06
Dean School of Business	Faculty	UG07
HOD- Sciences	Department	UG08
HOD- Social Sciences	Department	UG09

Research administrator	Faculty	UG10
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Table 2. Interview Overview

With regard to the interviews, all but one of the actors did not agree to be recorded on tape. The rest of the interviews were audio taped and transcribed verbatim. Alongside the interview, notes were also taken, clarifications were sought and supplementary questions were asked. Again, during the data collection period, two actors were re-interviewed in order to redefine the interpretation of the data, seek further explanation and clarification and ask follow-up questions. Interviewees were also encouraged to have a free discussion on the topic if it was needed.

4.7 Data Analysis

According to (Ary, Jacobs & Razavieh, 2002), data analysis is the process of organizing the interview transcripts, notes, documents, and other materials acquired during a study to present the information to others. In this study, the analysis focused on addressing the research questions posed in the research. Firstly, document analysis was conducted in an attempt to gain insight into how various actors interpret University of Ghana vision of becoming a World Class University and the consequences of such interpretations. Secondly, it also helped to validate findings of actor's interpretations through interviews and helped in raising more questions where there was a gap.

Data analysis is one of the most daunting tasks in the research process as the researcher attempts to make meaning out of the large corpus of data that has been gathered. Bryman (2012, p. 13) reiterates that unless the researcher reduces the amount of data collected, it is more or less impossible to interpret the material. Using qualitative research method, data analysis can take on a standardized form to organise raw data into categories using themes, concepts and other similar features. The technical term that has been commonly used is coding. Neuman (2000, p421) asserts that coding consists of two simultaneous activities: mechanical data reduction and analytical categorization of data into themes.

Neuman further illustrates the three stages that can be used in the process of coding based on Strauss (1987): open-coding, axial coding, and selective coding. Open-coding is the first stage after data collection, where a researcher attempts to find themes and organise the raw data into

different categories. At this point, it is worthwhile for one to discern the abstract concepts and specific details from the concrete data (ibid, p.422). The second stage is the axial coding, in which the researcher focuses on the actual data, organising ideas or themes basing on the initial coded themes obtained at the first stage. Miles and Huberman (1994: 62) as cited in Neuman (2000: 422) caution that, “codes should relate to one another in coherent, study-important way: and should be part of the governing structure.” The last stage of analysis is the selective coding. At this point, the researcher has already identified key themes from the data, she/he then starts to make comparisons and contrasts from the data, organising and reorganising specific themes and finally interpreting and elaborating the results. In short, data analysis involves examining, sorting, categorizing, evaluating, comparing, synthesizing and contemplating the coded data as well as reviewing the new and recorded data (ibid, p.426).

4.8 Study setting and unit of Analysis

The study was conducted at the University of Ghana as the prime case institution since it is the premier university and largest knowledge producer in the country, above all UG serves as a model for other sister universities in the country. Following the vision of becoming a World Class University, which was introduced in 2010 by university leadership, this study seeks to understand how various relevant actors interpret such visions and the consequences of such interpretations. This was predicated on the fact that, universities are characterized as heavy bottom structure (Clark, 1983) and loosely coupled (Weick, 1976), hence, interpretations of UG’s WCU strategy and its possible effects cannot be left at the doors of the university leadership, there is the need to seek the perceptions and interpretations of the lower levels in order to ensure acceptance and legitimacy of the strategy. It is against this backdrop that, even though, the researcher used the university as a major unit of analysis, the research also specifically targeted the interpretations and possible effects of the understructure which consists of departments, research centres, and faculties.

4.9 Validity and Reliability Concerns.

Validity refers to the ability of a researcher (and users of research results) to extend findings of a particular study beyond the specific individuals and settings in which the study occurred (Mertens 1998). Validity, according to Kleven (2009), has four types; internal validity, external validity, statistical validity and construct validity. Reliability, on the other hand, refers to the extent to which results are consistent over time and an accurate representation of

the total population under study (Joppe 2000). Neuman (2000, p. 170) emphasizes that qualitative researchers want to be consistent and not 'vacillating and erratic'. For reliability in this study, the researcher used different methods, which included interviews and document analysis in a consistent manner to examine how various relevant actors interpret UG's vision of becoming a World Class University and their consequences of such interpretations.

This study followed Yin's (2009) three principles of data collection in order to maintain validity and credibility. First, this study used multiple sources of evidence (documents, archival records, and interview transcripts). This principle allows for data triangulation, or developing "converging lines of inquiry" (p. 115) where conclusions are based upon several different sources of evidence. The second principle is to create a case study database, which is a mechanism to increase the reliability of the case study (Yin, 2009). A case study database includes case study notes (the researcher's notes and observations), case study documents, tabular data (such as charts), and narratives (interview transcripts), which become the basis of the case study report (Yin, 2009). Finally, this study maintained a chain of evidence, which is the direct connection between the case study report, the case study database, the sources of evidence, and the case study questions (Yin, 2009). Four tests for validity are common to all social science methods, including case studies: construct validity, internal validity, external validity, and reliability (Yin, 2009).

4.9.1 Construct validity

In a detailed study of this nature, it is very important that the events which are studied are not based on the researcher's own subjective intuition or guess, but rather should be based on or derived from analytical prepositions and literature reviews. It is against this background that the thesis used a detailed characterization of relevant actors' interpretations of the World Class University template based on the framework of academic and relevance interpretation from relevant literatures. Moreover, a number of indicators for change process are identified according to Fumasoli's (2011) approach to analyzing organizational strategies or consequences in higher education institutions. By doing the above, the researcher is of the view of increasing construct validity.

4.9.2 Internal validity

The underlying rationale of internal validity according to Kleven (2009) is related to the general question of the possibility of making inferences to unobservable events based on measurable operational events. It is in this regard that this study, for instance, is of the view that the consequences (organizational changes or effects) of interpretations of UG's WCU vision which is an unobservable event, can be explained from observing of different indicators like governance structures which are written down in actual strategic documents might have changed as a consequence of interpretations of the WCU strategy (Yin, 2014). Hence, a careful and detailed explanation of analytical propositions increases the confidence in the findings of the study. A variety of data sources are used in making it possible to triangulate the data and thereby, enhancing its validity. Triangulation was also used to enhance the trustworthiness of the analysis. Triangulation involves the use of multiple data points to determine themes from the data (Creswell, 2003). To obtain multiple data points, the study used interview sources and reviewed documents from multiple sources. A cross-referencing system was also used to relate findings emerging from interviews to documents. Through triangulation, the findings were reported with more confidence.

4.9.3 External Validity

The criteria of this type of validity question 'to what extent can the findings of this case study be generalized to a larger population'. Also, there is a difference between analytic generalization and statistical generalization. It must be noted that case studies are not generalizable to populations, this is because, the case is a "sample" and it is impossible to measure the statistical significance of the findings for the whole population (Yin, 2014). Instead, analytic generalization is mostly suitable. By interpreting the outcomes in the context of the integrative approach of interdependency management of interpretations of UG's vision of becoming a WCU and the consequences of such interpretations, the findings could be considered as forming a kind of working hypothesis which then can either be applied to reinterpreting the results of existing studies or defining new research focusing on other concrete situations (Yin, 2014). The analytic generalization thereby aims at expanding and generalizing concepts and theories (Yin, 2014).

4.9.4 Reliability

Reliability was established through documenting each step of the research process so that the study can be replicated in a different setting. Thus if later another researcher followed the same method or procedure, she/he should arrive at the same finding. Moreover, the aim of reliability is to minimize errors and biases in the study, which will be ensured by documenting the chains of thoughts that have led to certain decisions in the phase of the study design and data collection, and by staying in close consultation with an academic supervisor, interview guide, choice of process (Yin, 2014).

4.10 Ethical Considerations

According to Punch (2005), the focus of research is about people and their perspectives (data) on the study. In this respect, Bryman (2008, p.113) contends that ethical issues cannot be ignored, as they relate directly to the integrity of a piece of research and of the disciplines involved. Regarding the most important ethical issue, Bryman (2012) mentions, the four major principles to keep in mind as a researcher: harm to participant, lack of informed consent, invasion of privacy, and deception. These ethical issues were adhered to during the data collection period in various ways.

Before the actual data collection commenced, the researcher informed all respondents ahead of time for an interview by giving out an official letter from the Faculty of Educational Sciences and a cover letter identifying the researcher and also indicating a brief description of the purpose of the data collection and requesting for consent to conduct the interviews. The respondents agreed to take part in the interviews and confirmed their willingness by scheduling a time to meet them at their offices; hence, respondents who took part in the interview were entirely on voluntary basis without any form of intimidation or coercion. In terms of audio recording of interviews, consent was sought and approval was given by the participants; hence, they were aware that their responses were recorded.

In this regard, the researcher assured participants of using it solely for the purpose of the study and all information shall be kept confidential. In essence, it means participants' vital details like names and other sensitive bio-data are not revealed. Hence, these details will be protected and kept secret. This is done to adhere to the principle of confidentiality and privacy. What

this means is that in the findings and the analysis, no bio-data of respondents were used, and hence the codes were used.

In conclusion, interviews and documents were the most appropriate means of gathering data to answer the research questions posed in this case study therefore the study included a wide range of views and perspectives within each of these two means. It was also ensured that the sample, the data collection, and analysis were mapped closely to the research questions. In the end, this approach helped to answer the research questions posed in this study.

CHAPTER FIVE: PRESENTATION AND ANALYSIS OF THE FINDINGS

5.1 Introduction

The previous chapter presented the methodology that underpins this study, starting from the choice of research design, epistemological assumptions, data analysis, validity and reliability issues and the reason for using different methods to the consideration of ethics of the study. This chapter will do a presentation and discussion on the findings of the study. The analysis of the findings in relation to the research questions will be done in this chapter as a way of understanding the concepts that have been discussed earlier in the literature review and analytical framework. First, a summary of the outcome of the findings will be laid out before a discussion into the relationship between the findings and concepts from the literature review and analytical framework.

5.2 Interpretation of ‘World Class University’ strategic vision by managerial and academic actors at the UG context

As this study attempts to understand how managerial and academic actors at the University of Ghana interpret the strategic vision of becoming a ‘World Class University’ (WCU) which is in consonance with the first research question, a summary of the findings is vital in understanding how the various actors coupled with strategic document interpret this vision. It provides a descriptive account based primarily on informants’ responses to the interview guide and strategic document analysed. Data analysis reveals two main categories of academics and management interpretation of UG’s WCU that is related to academic excellence and relevance/problem solving respectively. This is done with the guide of the first research question, literature review and analytical framework. Hence the two main actor’s interpretations are presented as follows;

- A) UG Academic’s interpretation of WCU as academic excellence
- B) UG Management’s interpretation of WCU as relevance & problem solving

5.2.1 Academic Interpretation of UG WCU as Academic Excellence

The academics interpretation of UG’s WCU strategic vision placed emphasis on the notion of academic excellence. Academics interviewed interpret academic excellence as increasing research activities at the fore front of knowledge. This also means placing much emphasis on

basic research which will aid to produce top notch knowledge, that will also enhance UG to become research intensive university.

5.2.2 Excellence as a source of Global Reputation

Research universities as indicated by Altbach (2013) are academic institutions that are committed to the creation and dissemination of knowledge at the highest possible level. What this means is that academic/research excellence; that is bringing research activities at the forefront of knowledge should be one of the prime goals of the University of Ghana if it wants to become a WCU. It is in this direction that the relevant ideas that encompassed academic interpretation place much emphasis on research activities and research excellence which is in line with UG's goal of becoming a WCU. Respondents were unanimous in their responses. Hence, they now place much emphasis on becoming a research oriented university. Increasing research activities means enhancing or placing much emphasis on research productivity. A respondent interpreted this perspective as follows:

We are in a global world and if we (UG) want to be recognised and accepted internationally we need to increase our research activities; we need to add on to knowledge, be innovative and trigger arguments (UG 08).

The above respondent assertion confirms or is consistent with the work of Altbach (2007). He argues that research oriented universities are underpinned by research excellence that is recognised by peers and also advances the frontiers of knowledge. Expanding the frontiers of knowledge through reputable publishing houses is one of the key emphases some respondents asserted to. Following Altbach (2007a), he argues that through recognition of research excellence, universities become visible and create a niche for themselves. A respondent's comment gives a vivid explanation which is in congruence with Altbach assertion.

Increasing our research activities is key. Another vital aspect is to make our research activities known by publishing in well reputed or high impact journals, this will increase our visibility and improve our rankings (UG02).

From the above respondent view, one can draw a relationship between research excellence and visibility which in essence will, in the long term, create a competitive advantage for UG.

Respondents stressed the importance of increasing UG's research activities at the forefront of knowledge. They are of the view that with the current globalisation which is being propelled

by information communication technology, it will serve as an arena to be recognised internationally and increase their visibility through their research impact in renowned journals (Marginson, 2004). In a UG quarterly report, it was stressed that faculty members of WCU publish in the best international journals in all disciplines (UG quarterly report, 2012). Some respondents posit that in the current dispensation of knowledge economy, UG as a national university should set the pace in order to use their research to propel economic development and at the same time increase its visibility through ranking. This point is espoused by one senior academic respondent;

I have not come across any serious definition of what a world class university is. It is, however, becoming an increasingly standard practice to refer to Webometrics and look at the different league tables of the world's universities to see how they are regarded by their peers and the wider society. Will being among the top-ranked 500 universities make a university world-class? This will be a highly debatable proposition, particularly since there are many aspects of university development that are not captured in these rankings...For us at the University of Ghana, one of the main pillars of our strategy is to increase our research activities, publish in high impact journals and this will in effect lead to recognition and become relevant. (UG 05).

Even though some of the respondents doubted the methodologies of university rankings (Salmi & Saroyan, 2007), for instance as seen in the respondents assertion above, some respondents were of the view that, publishing in high impact journals may lead to increase in visibility and increase relevance in the long run, that will serve as a magnet in attracting talented students and faculty members (UG, 02, 03, 05). With regard to talented students, a respondent opined that attracting international students comes with dual benefits. On one hand, it means you are being heard outside the country and on the other hand, an increase in research productivity normally increases universities scores and makes it attractive to international students which will accrue additional income to the university (Beerkens & Wende, 2007; Clark, 2004). The VC speech below confirms the assertion above.

"I have noted that WCU attract students and faculty all over the world, I will believe that we have become a WCU when students completing degree programmes at good universities in Uganda, Kenya, Sierra Leone, Nigeria, United States, United Kingdom and many other places decide to come to the University of Ghana for their masters or PhD programmes, first for the reason that they are interested in Africa, and second for the fact that the degree from Legon will once again be highly regarded internationally." (Vice Chancellors speech, 2012)

5.2.3 Excellence as a Source of Innovation

As part of producing top notch frontier knowledge, most academics are of the view that, it will lead to innovation. Whereas some academics interviewed made emphasis that, they are in charge of research activities and they determine their own knowledge activities, surprisingly, most academics revealed that, in the context of UG, their research activities should to some extent impact certain areas of the Ghanaian society. Innovation, according to Lester (2005, p7), means “the ability to conceive, develop and/or to produce new products or services, to deploy new production, processes and improve on those that already exist”. This has in essence placed a shift from advancement of knowledge of its own sake to applied scientific knowledge (Newman/2008, p). Most respondents posited that engaging with industries in the long term will lead to innovation through research. This is because when you are in touch with industries, you get to know what they want, and as researchers, we will come out with something that will suit their needs and increase efficiency (UG, 05), through constant engagement our research could help change their modes and methods of operations (UG, 06). The above interpretations by both respondents emphasize the arguments made by Lester’s definition of innovation and the application of research.

Geiger (1990) argued that, in order to champion research activities, institutions need to place much emphasis on research centres/institutes. As part of respondents’ interpretation of research centres in their bid to impact their research applications; the West Africa Centre for Crop Improvement (WACCI) has set up their research activities. The goal of the centre is to improve food security in Africa. The approach is to train African plant breeders in Africa to develop superior varieties of crops, using both conventional and molecular techniques to deal with abiotic and biotic stresses. The objectives of WACCI are to:

Provide the necessary skills to direct and manage local plant breeding programmes to meet local needs, and to respond to indigenous demands; develop breeding techniques appropriate to address some of the unique breeding/crop improvement objectives for the sub-regions; and create a de facto network of functioning plant breeders and their local co supervisors from the sub-regions (Website of WACCI)

When a respondent was asked the role they play based on the interpretation given that research excellence serves as a source to innovation, the respondent emphasised that,

We create opportunities through research to develop improved local varieties of the staple foods grown, by smallholders in the sub - regions, using the advances in plant breeding science and molecular biology, and informed by farmers' stated preferences; Develop breeding techniques appropriate to address some of the unique breeding/crop improvement objectives for the sub- regions (UG, 06).

From the above, it can be said that (WACCI) as a research centre is involved in innovative ways in order to improve the already existing methods (Lester, 2005).

Another relevant research centre that is involved in innovation is the Noguchi Institute of Memorial Research. The mission of the institute is to become a centre of excellence for biomedical research into diseases of public health importance especially in Ghana whilst contributing to human resource development for scientific research and health service. The Institute was charged with a broad mandate. The institute does undertake certain consultancy work when approached by outside companies or government agencies. A leading researcher who also doubles as a senior member emphasised their role of improving on new vaccines.

One of the ways we are involved in helping to contribute with new vaccines is for instance, collaborating with World Health Organisations and other institutions to test for efficacy of anti malaria activity, to train technical people for diagnosis of polio and yellow fever for the sub-region. The research agenda of the institute is driven mostly by national health needs. Hence, innovation is the key, since through our research activities we develop new vaccines for other diseases (UG, 08)

At the faculty of Agriculture, respondents interpreted the role they play through innovation as a way of becoming a WCU. A dean of the faculty stressed that, due to the unpredictable rainfall pattern as a result of the adverse effect of climate changes, they collaborate with other departments and faculties to share ideas and come up with a holistic solution, for instance the respondent cited that, since Ghana has two seasons, dry and rainy seasons, they realized that most farmers mostly become unemployed during the dry season or drought periods.

In order to help them overcome such a situation, a respondent posited that; we are researching into varieties of crops that can withstand long period of droughts so that farmers can cultivate during the dry seasons. In the process, we have organized farmer groups and they are being educated on how to do dry season farming so that during the dry seasons they will still remain employed which in essence the university is contributing to reducing poverty through research excellence and innovation (UG, 06).

At the department of Animal Science, a respondent also revealed that, we aim at improving the nutritional quality of animal feeds for local farmers. Farmer groups were formed to be educated on how to improve the nutrient level of their feeds. Also, the department of agricultural mechanization and irrigation technology is equipping local farmers with the expertise in building irrigational facilities and an academic at the department whose specialty is in dam construction is helping farmers in that. We are involved in changing the modes of operations and that is the way to go (UG 06).

5.2.3 Excellence as a Source of Bridge between University and Industry

Academics were of the view that, innovation will lead to application of research result which will in turn lead to a link of academic activities and the industry. This is because, academics argued that in the UG context coupled with current changing societies; they are making strides in advancing scientific and technological knowledge. As emphasised by Hershberg et al. (2007), universities explicitly state as part of their missions to explore and exploit academic science that enhances industrial research and development. Following this line of thought it is not surprising that as part of its academic interpretation, the University of Ghana in its strategic plan has explicitly stated that, “in these changing times, the application of new technologies drawn from evidence based research in areas such as agriculture and manufacturing have transformed many economies” (UG strategic Plan 2014, p. 12). It is against this background that most respondents stressed the need to bridge the gap between the university and industries in Ghana.

However, respondents were divided on the issue of the non-proactive nature of industries to foster collaboration (UG 02, 05, 06). On the one hand, some respondents disagreed and emphasised that it is rather the university that needs to take the leading role in reaching out to the industries by engaging and dialoguing with the industries in order to know their needs and pursue demand driven research which will be beneficial for both parties (UG 01, 03, 07, 10), The above respondents views is championed by Berger & Diez (2006) that emphasize that relevant research of academics can only be realised through the fusion of academic science and with industrial research and development. Most respondents emphasised that the WCU template has given them a source of motivation which has become a ‘wake-up call’ for research centres and departments.

We interpret WCU from the engagement point of view. That is we need to be in touch with the society, the industries, corporate entities and every constituent, they are important for our survival and acceptance (UG, 04).

Respondents also enumerated the benefits of cooperation between the university and industries. As Ghana is transiting from a developing country to a lower middle income status, there should also be a shift from our reliance on natural resources to knowledge based activities (UG, 01). A respondent stated that; looking at the number of multinational firms in the country, we can create a competitive advantage by increasing our research activities to impact positively on firms (UG, 04). From a different perspective, a respondent also emphasized the monetary gains that will be realized from such cooperation through technology transfer (UG 06), (Slaughter & Rhodes, 2004).

Respondents were also of the view that initially much emphasis was not placed on research activities and its impact on the society. The University of Ghana was initially regarded as an ivory tower. *The world over universities drive development through research..., as the saying goes without research and development a nation perishes; so is it true that through research and development, the nation rises or develops.(UG 04).*

5.2.6 UG management interpretation of WCU as relevance & problem solving

Another interpretation of UG's WCU that was identified by management which is in contrast with academics interpretations is to be relevant which in essence means the need to be well connected to society and solving societal problems.

5.2.7 WCU as a Source of Human Resource development

As part of management interpretation of UG's WCU to be relevant to societal needs, one way of management emphasis on relevancy is to place emphasise on developing the students (human resource) the university develop. Some respondents assert that;

World Class University from the UG perspective sees it as a role the university is playing, and one of the roles is the products its trains. The world over, WCU are known for the quality of students. These students become ambassadors and promote the image of the university (UG 06).

When the University of Ghana began, one of the aspirations of WCU was generally to produce graduates who could achieve the same degree of learning and knowledge acquisition as they would have, had they gone to university in places like Edinburgh, Newcastle, Birmingham, Manchester, Reading, etc. In exceptional cases they could do as well as the

students of Oxford and Cambridge Universities (Vice Chancellor UG, extract from UG quarterly report, 2012).

However, respondents maintained that, training of workforce has been one of their core mandates since the establishment of the university but this strategy serves as a renewal of its legitimacy in a way to contribute and adapt to changing society. This is espoused by Chatterton and Goddard (2000) that enhancing the training of human resource that will be able to compete globally coupled with the fact that human capital is essential in the development and growth as well as competitiveness of a nation. A respondent is of the view that,

'WCU from UG perspective means that the University fulfils one of the requirements related to the core functions that includes producing human resource, and I must emphasise that not only just producing for producing sake but producing quality human resource who will be able to compete not only in Ghana but also graduates in other parts of the world. This is because producing quality human resource is key not only for our profile but in promoting economic and national development'. (UG02).

The above respondent's view of making UG a WCU through developing a human resource base is crucial in educating a larger share of qualified individuals according to their scholastic capabilities (expand access to higher education and improve equity). This will ensure that the future manpower and industries' demands for skills in the various regions and sectors in the Ghanaian economy will be met and, more importantly, also contribute to the gross domestic product performance. Most respondents emphasised that the university's strategic document captures and re-echoes the need to train the nation's manpower.

The university's mission statement emphasises the role of the institution in developing "world class human resources and capabilities to meet national developmental needs and global challenges". (UG strategic document, 2014 p. 9).

What I am saying is that you cannot dream of becoming a world class university if you do not start at the basics, you need to start from somewhere (...) you see it takes time and it is a gradual process before you think about other things..we have inadequate teachers, medical doctors, engineers and as a public university we need to respond to such calls since the main purpose of our establishment is in response to producing high quality manpower for national demands, we are on track but we have step up our game (UG, 04).

From the above respondent assertion, it is, however, not surprising that in order to keep itself within the dynamics of the environment in which the university operates this is captured in the

strategic plan of the University of Ghana which states that, in drawing up the strategy, it took into account “the rapidly changing environment” in which the university is operating and this environment “is characterised by questions relating to the role and relevance of tertiary education institutions in the country” (UG 2001, p.2). The main role of the university is framed in terms of the provision of human resources for the economy (ibid.):

The criteria and demands for manpower need to have undergone significant changes, and these changes have been driven by changes in the markets. Technologies are placing increasing capacity on human resources. We at the UG believe that for us to become a world class university one of the priorities is developing human resource (UG, 02).

We now operate in a fast changing environment where emphasis is placed on what one can do hence we need to place priority on the knowledge and skills we impart on students.(UG 04)

Respondents also made claims that training human resources also encompass providing access and ensuring equity, coupled with providing opportunities for the working class. This is in line with OECD (2007) and Pillay’s (2011) argument; they claim that access should be widened for students from remote areas, non-traditional learners who combine work and study. In becoming a WCU through contributing to human development in the country, most respondents are of the view that, they need to increase access and equity. With regard to access, the university has put in place quota schemes for students who reside within less privilege regions within the country and also for students who have excelled academically but lack financial means to pursue higher education,

We have established the Student Financial Aid Office that grant scholarship for students who have good academic records but do not have the financial means to go through the university education, this is in the right direction if we want to develop highly skilled labour towards national development, I am of the view that your brains will take you to places where money cannot afford, hence such schemes are there to make brilliant students dreams come true, we have sponsored pharmacists, medical doctors, engineers, and lots more professionals, through this we as a University are contributing to human resource base of the country.(UG, 01)

In ensuring equity, the affirmative action has been implemented in order to encourage females to pursue higher education. Respondents were of the view that in order to become a WCU, there is a need to increase access for the working class who wish to increase their knowledge but that will be impossible due to the demanding nature of their jobs and location. Therefore

the university established a distance learning institute six years ago across the ten regions of Ghana to address this challenge.

One thing we need to do is to help the working class upgrade their skills, competences and knowledge. If the country wants to develop, it depends on the level of highly skilled and knowledgeable labour force, and as a mandate that is bestowed on us, we are propelling the nation by developing human resource, this is the way to go and one of UG's aims of becoming a WCU. (UG 05)

The above view indicates the growing emphasis on lifelong learning in order to become more knowledgeable in this current dynamic environment coupled with the challenge of knowledge economy (Powell & Snellman, 2004). Respondents posit that the training they receive within their years of study is vital; however, there was consensus among the respondents that the university has been attuned to the current changes within the environment.

'Things are changing, what we used to do and teach five, ten years before has changed. The demand on the job market has changed; requirement for most industries are changing; the technologies are constantly changing. If we would want to produce labour force that will go out there and make an impact, create a strong base alumni we need to be in constant touch with the firms. So we co-operate this will ensure acceptance of the graduates we produce into the world of work and around the globe. (UG 06)

This implies that the approach which this studies is also carried out needs to be adapted and be in constant touch with the firms

In our college what we do is that we send students out during long vacations to learn and work with companies. A problem is given and they are required to solve them in a group and come out with solutions and ideas. It gives them a wide array of knowledge and a fusion of both what is learnt in the classroom and the laboratories and what is done in the real setting. And I think this is the way and the direction to go in training our human resource base and through that student can compete with graduates or students from around the world (UG02).

The above assertion contrast the observations made by the OECD's report (p.153), which emphasizes the lack of intelligence and inadequate cooperation between universities and employers leading to labour mismatch. However, in the case of the University of Ghana, respondents were of the view that, students are engaged in both theoretical and practical aspects of their programme of study in order to prepare them for the job market after completion.

5.2.5 WCU as a Source of Solving Grand Challenges/Problems in Society

One of the ways UG management interprets WCU is to engage and solve societal problems. This is because, management argues that, in contemporary times, society faces myriad of challenges and hence university needs to affect the development of society through academic activities. The New Castle University (2006) cautioned that for us to safely reach the 22nd century we must gain control of the 21st century problems. This can be done efficiently through research in order to help identify solutions to complex global issues such as access to energy, climate change, food security and disease prevention. Under the management interpretation, respondents also interpreted UG's vision as a source through which the country's grand challenges could be solved. They are of the view that through the university becoming more connected to society and collaborating with stakeholders, academics and researchers are able to acquaint themselves with the challenges society face and solve them through research.

Most respondents interviewed were of the view that:

What should characterise a WCU is the diverse nature of solving problem through joint collaboration with other faculty members with different disciplinary background (UG03).

The problems we are encountering now in the 21st century are very complex; hence, the university is seen as an instrument to solve the numerous problems (UG06).

As the backbone of our country's economy is agriculture, which contributes to about 55% of our GDP and of which majority of the population is involved in, we conduct research on new methods of farming, how to improve yields, how to add value to this raw goods...all these go a long way to increase the income of these farmers and reduce poverty (UG07).

As a developing country, we have being projected by the World bank to attain a lower middle income status soon, we face numerous complex problems, we are currently facing energy crisis, the recent flood that claimed more than 170 lives, environmental problem which results in diseases such as malaria, fever, cholera outbreak, we need to use our research to solve such problems, mind you..These problems are complex...it cannot be solved by only one or two department or faculty...and if we want to be world class university, these are the basic problems we should be able to tackle as a way of becoming a WCU. (UG07).

The above respondents' interpretations and expressions depict that there are various problems in the society. One fascinating issue deduced from respondents' perspectives about their interpretations is admitting that the onus of the myriad problems falls at the door step of the university. Again, it was revealed that such complex problems cannot be dealt with by a single department and need to be solved beyond the scope of individual discipline. This is in congruence with the Russell's Group papers (2012) report that universities are uniquely placed to tackle societal challenges in a broader multidisciplinary scale. This is predicated on the fact that different and diverse groups of researchers facilitate the development and exchange of new ideas and provide solutions within a vibrant and intellectual environment.

Some respondents were of the view that in order to solve societal problems, the atmosphere of the university needs to speak for itself. A respondent asserted that;

If we want to become a WCU, and as part of the WCU menu, we want to solve societal problems it must first reflect within our university, instill good disciplines in our students, our buildings, our roads within the university, our architectural designs and plans, the way we manage our affairs needs to demonstrate to society. Our waste management system should serve as a model to the nation. (UG, 06)

The above assertion is an indication that, if the University of Ghana in its strategic vision wants to solve the grand challenges in society, the university must showcase on its university campus how that will be done. The above statement is backed by OECD's (2007) report that, individual university's should provide demonstration of good practices through campus management, development activities such as strategic planning, building design, transportation initiatives, waste maximization and good citizen initiative. Most respondent were of the view that in order to become a world class university, there was a need for a better connection between the university and its society. One of the ways in which the university is getting connected to the society is establishing and engaging in public debate through the 'New Year School Programme'.

The New Year school is an annual residential programme of about a week's duration organised by the College of Education of the University of Ghana, Legon, at which people from all walks of life meet to deliberate on topical issues of national and international interest. The School is usually held during the last few days of December and the first three or four days in January (University of Ghana Website)

The aim of the programme among other things is,

1. *to provide a platform for the dispassionate discussion of matters affecting the overall development of the country*
2. *to encourage consensus-building among people of diverse opinions and backgrounds*
3. *to educate the general public on important and topical national and international issues*
4. *to provide a forum for the initiation of public policy (as evidenced by follow-up actions on the recommendations of the School)*
5. *to assess public opinion on pertinent issues in order to ensure good governance*

Respondents were of the view that this platform brings various opinion leaders, corporate world and academics together, who come out with varied ideas and opinions on socio-economic issues with regard to national development.

We think, engaging the public and interacting with the society through this mode, is one of the ways we interpret UG's vision of becoming a WCU. We need to open up to society and vice versa. Dialoguing through this platform helps to know the way forward and contribute to national development (UG, 05)

5.3 Organizational Changes or possible effects of actor's interpretations of UG's "World Class University"

The second aim of this study was to examine to what extent are organizational change processes at the University of Ghana the result of the implementation of the university's WCU strategy? The findings of this study track and explain the changes in the four sectors of UG (internal governance, research, human resource policies, academic core and funding) that exist over the last five years (2010-2015) as a result of academic and management interpretations of WCU strategic visions. Documents such as UG annual reports, UG strategic documents, UG Basic Statistics and Visitation panel reports provided valuable insights in helping to map up changes that have taken place in the four sectors mentioned above as a result of the WCU strategy. Again, the semi-structured interviews from the various actors' interpretations provided the researcher with insights on changes that have occurred and those that are currently ongoing which have not been captured by these documents. Above all, the interviews gave the researcher a better understanding of the motive behind such changes based on the various actors' interpretations. This will allow us to determine or deduce in which direction of organizational change the UG is moving towards based on academic or management interpretation.

Changes in Reserach Activities

5.3.1 Research

As part of the institution's vision to become a WCU with the aim of increasing research activities, University of Ghana has identified four priority areas (UG Reserach Report, 2013). This according to some respondents will enable the university to focus and promote international collaboration in research initiatives that will not only enhance the University's research output but also affect the development of society (UG 02, 03, 05). These research areas are: malaria research, trans-disciplinary research into climate change adaptation, enhancing food production, processing and development policy and poverty monitoring and evaluation. The four priority areas were initiated by the university leadership together with various research centres, colleges, academic units, senior faculty researchers for deliberations and acceptance (UG, 05).

In contrast, Taylor (2006) claims research is a personal activity which is strongly dependent on the individuals or groups imagination. However, in order to increase research activities at the forefront of knowledge, respondents were of the view that, there is the need to have a centralised office that manages and plan research activities rather than individual academics (UG, 01, 05, 06, 10), the above assertion of respondents falls in line with the claims made by Harle (2007). It is against this background the UG established the Office of Research, Innovation and Development (ORID) in 2010 to foster and enhance research in the University, as part of its efforts to support and promote research. ORID's mission is to promote, coordinate and facilitate research activities, and also to lead the development of the university's strategic plans, including business plans and fund-raising strategies (UG Research Report, 2013).

Another subsidiary aim of ORID is promoting creativity and innovation, patenting and commercialization of intellectual property. In this regard, some respondents emphaisize the need of using research output as a catalyst in solving key problems in industry and society (UG 04, 05, 06). One important development of translating such plans into action is the establishment of technology development and transfer centre (TDTC) which is under the auspices of ORID (UG, 06). Currently, the centre seeks to facilitate the development and transfer of technologies in the areas of information communication technology, horticulture and livestock to the private sector.

We are now stepping up our game in engaging industry to facilitate the conduct of demand driven research aimed at addressing the technological needs of the country's economic sector. In line with this, the UG is collaborating with the Ministry of Environment, Science, Technology and Innovation to facilitate the transfer and diffusion of these technologies to industry (UG 05).

It also aims to extend its operations to other disciplines in the near future, on top of this development. The centre also serves as a licensing or technology commercialisation office for researchers and inventors in the UG. It will promote proactive liaison to parties interested in leveraging UG's research for academic, societal and corporate endeavours (UG, 08)

In line with the establishment of TDTC, another exciting change process is the development of the Intellectual Property (IP) Policy which most respondents' emphasise will ensure that innovators are encouraged by benefitting from their discoveries and innovations. Innovations are also enhanced by promoting and rewarding the generation and implementation of creative ideas. In a seminar held for the purpose of creating IP awareness dubbed, "Intellectual Property- harnessing the Next Generation of Innovators at the University of Ghana", the VC in his opening remarks underscored the importance of '*harnessing the ingenuity and creativity of researchers and scientists in order to offer innovative solutions to the myriad of challenges being faced by Ghana*'. The Pro- Vice Chancellor (research and innovation) also emphasized *the need to harness the innovative capabilities of scholars and scientist so as not only to achieve excellence but also to facilitate the transition of Ghana into a knowledge based economy.* (UG, Research Report, 2013).

5.3.2 Research Funding

Funding is the life blood of every university, enough funding is one of the key resources in undertaking relevant research. However, relevant among issues that respondents mentioned was the problem of inadequate funds for research which remains a serious constraint. The above respondents assertion captures this situation;

Government allocations to research are not adequate and it partially affects us, this is because the money they give us is inadequate and above all the amount is not released on time (UG 05)

It is against this background that most respondents opined that in order to translate research excellence into actions, UG needs to augment its sources of funding by competing for

research grants and also by having joint research with other universities. University of Ghana has allocated part of its internally generated funds to set up funding schemes which are accessible to members of the university community for research. As part of its aim of becoming a research excellence institution. ORID has set up UG research grant scheme to encourage faculty members to actively engage cutting edge research activities that will enhance UG research profile. Currently UG have instituted three types of funds that can be accessed by faculty members (UG Research Report, 2013).

1. *Seed Grants: These grants are targeted at faculty members at the early stage of their career to enable them to explore new ideas to apply for larger funding or bigger grants in the future and would normally not exceed GHc5000 (\$1500 equivalent)*
2. *Investigator led Grants: These grants would normally not exceed GHc30000 (\$8500 equivalent). According, to respondents these types of grants are awarded to faculty members with a clear research question they wish to address.*
3. *Multidisciplinary research Grants: These shall not exceed GHc100000 (\$28500 equivalent) and are for multi disciplinary and inter faculty research projects which specifically address a national developmental issue and are capable of shaping or influencing policies in Ghana.*

Even though some respondents admit that this funds initiated by university management are not adequate, most acknowledge that, it is a step in the right direction. An interesting revelation from some respondents was that, research problems should be framed within the four priority areas of the university which is developmental related in order to have access to the research grants (UG, 03, 05, 08,10). Hence, one could argue from the respondents assertion that, management to some extent are inducing academics to use focus their energies in helping solve societal problems by the institutionalising the reserach grants.

Another initiative respondents highlighted was the conference grant. The university currently encourages all faculty members to actively engage in professional and academic activities that would enhance not only the image of UG on the global scale but also contributing to solving problems in the Ghanaian society (UG, 06). In this regard, UG provides support for faculty members to participate in international conferences, seminars, workshops (as presenters) critics, discussions and chairs of sessions. Grants are also awarded for faculty members who are able to host international conference in Ghana. A respondent reveals that topics and themes of such conferences needs to be relevant and have an impact not only to academic knowledge but also to society (UG 05).

5.3.3 Cooperation/Collaboration

The UG in its quest to become a world class university has strategic alliances with other institutions and non-institutions. *These alliances in one way or the other are meant to not only for UG to become effective and competitive but also to learn from each other and create effective networking (UG 08).* According to a respondent, partnerships and collaborations have also been considered as one viable avenue to achieve the mission of enhancing research activities that will enhance not only UG's visibility but also helping solve various challenges of the society (UG05).

One general development is the boost in capacity building development for UG faculty members is the building Stronger Universities in Developing Countries Initiative (BSU), a partnership between research and higher education institutions and Danish government (UG, 01). The project which is funded by the Danish government aims at strengthening research and educational capacities. The University of Ghana is involved in three thematic areas-, that is Environment and Climate (BSU-EC), Growth and employment (BSU-GE) and Human Health (BSU-HE). Within the two year period at each phase UG will receive 20million Danish Kroner, while Environment and Climate Platform will receive 8million Danish kroner (UG Research Report, 2013). Strategically, one can deduce that, the focus areas of UG collaborations is related to finding solutions to socio-economic challenges.

Another brilliant initiative respondents drew attention to, was the fact that in order to enhance international cooperation and draw on foreign academics, the University of Ghana in 2011, established a Diaspora Linkage Programme (UG-DLP) under its Next Generation of African Academics project funded by the Carnegie Corporation of New York. The UG-DLP seeks to promote partnerships with African Professors in the diaspora in order to draw on their expertise to enhance UG's faculty strength for post-graduate teaching, supervision and thesis examination, with particular emphasis on PhD training. It is expected that such partnerships will lead also to collaborative research that will enhance research productivity. The UG-DLP seeks to establish links with existing Diaspora Networks, partner universities and individual diaspora professors. The expectation is that individual diaspora professors will obtain the endorsement from their universities to spend their leave/sabbatical periods at UG (UG 06).

Professors invited on the UG-DLP must be available for a minimum of four weeks, preferably one to two semesters, and willing to teach graduate courses, supervise MPhil/PhD students,

examine student theses, engage in research - ideally in collaboration with UG faculty and support the development of new post-graduate programmes. With funds provided by Carnegie Corporation of New York, UG will cover economy air ticket of Professors on the UG-DLP and provide a small daily allowance to cover costs in Ghana for the initial 90 days of their stay. UG will also endeavour to provide accommodation on campus where necessary.

5.4 Academic Programme Changes

5.4.1 Changes in Curricula

One of the trademarks of universities is the programmes they deliver to their products (students). Respondents were of the view that one of the core functions of the university is to train students by imparting knowledge to individuals who will become ambassadors of change by applying the skills and knowledge they acquired. As a result, respondents placed emphasis on Masters and PhD programmes since they are of the view that not only do they form the backbone of the next generation of academics but to handle complex problems and situations in the current knowledge economy (UG, 01, 02). As the society is changing, so is it for us to adjust our programmes to suit the relevance of the local, national and global trend (UG, 02, 04).

What are the changes that have been initiated in order to strengthen the academic programmes?

Knowledge is seen as defining the core of academic work and academic workers. As Clark (1983) insightfully explains, knowledge is “the prime material around which activity is organized... knowledge materials, and advanced ones, are at the core of any higher education system’s purposes and essence. This holds true throughout history and across societies as well” (1983, p. 13). In furthering Clark’s assertion, Gumpert (2000) also argues that in contemporary times universities are adapting to the dynamics of society in terms of restratification of their academic programmes. This is done in order to adapt our programmes to the demands and introduce new practical ways of learning (UG, 06).

A change process occurring at the University of Ghana is the restructuring of some of its academic programmes. Responds from the interviews and documentary analyses indicate that the university has diversified some of its programmes in order to give students wide range of

programmes to choose from so as expand students' knowledge in order to meet the increasingly diverse human resource needs nationally and internationally. However, respondents' views vary in terms of how academic programmes should be positioned in the current context of the strategy. In one breath, respondents were of the view that it should reflect the relevance of society and demands (UG 02, UG05, UG08), whereas on the other hand, more respondents say programmes should be geared towards solving societal problems and cognitive skills (UG01, UG 02, UG04, UG06, UG09, UG10).

The above views are in congruence with Lyotard (1984, p.51) as cited in Barnett et al., (2001) that in contemporary times, the value of knowledge is weighed by the instrumental value as opposed to the theoretical value. It is also in this direction that there has also been the introduction of general but compulsory courses. These courses are to support students in their academic and general development but do not form part of their main specified programmes (UG, 02). A major change at the University of Ghana is the introduction of the University Required Courses (UGRC). These are unique to the University and compulsory for every student (University of Ghana handbook, 2011a; 2011b).

These courses, introduced in 2009, were spoken of passionately by respondents (UG, 02, 04, 05, 09). They are to 'ensure broadminded individuals and critical thinkers' (Ibid). They include academic writing, numeracy skills, critical thinking and practical reasoning. Numeracy skills are compulsory for students in the Humanities, except those offering Economics, Computer Science, Mathematics and Statistics. The courses are also to enable students solve real life problems (University of Ghana Handbook, 2011). To emphasize the seriousness attached to academic writing, students in the humanities are required to undertake twelve credit hours, while students in the sciences are required to undertake six credit hours.

In reference to the above one respondent reflects thus:

that the decentralisation process of the University of Ghana is not only to enhance efficiency and make the university administration more effective, but also the University of Ghana adopted a collegiate model which aims at giving students wider choices and enhancing efficiency in order to enhance inter disciplinary nature of their academic programmes. The essence of these diversifications is also to make UG programmes more competitive nationally and internationally and also relevant (UG05).

University of Ghana has also introduced what is called a 'bouquet of courses' in the humanities and Social Sciences to make students more employable. Formerly, some courses including Dance, Archaeology and Music were regarded as having limited employability prospects. They were also believed to be pursued by people who were not academically able enough to get admission into programmes such as Law, Medicine, Business Administration and Sociology (UG06).

5.4.2 Changes in Masters / Doctoral Programmes

Respondents noted that for the University of Ghana to make an impact in its excellence drive and, become a research oriented university, it must make its MPhil and more especially PhD programmes not only more attractive and competitive but also adapting to changing dynamics.

In its quest to ensure academic excellence and to revive its academic programme, changes have been made in both undergraduate and post graduate programmes. Of most importance are the changes in the structure of PhD programmes. Beginning from the 2012/2013 academic year, the University of Ghana changed its PhD duration from three years to four years. This change was to pave way for inclusion of course work, experiential learning or research internship (UG Research Report, 2013) as compared to the previous three years which only placed emphasis only on research which is evaluated through thesis examination and viva voce. Some respondents were of the view that is to ensure academic excellence and also to prepare quality scientist/researchers (UG, 05, 07)

The School of Graduate Studies (SGS) through its efforts has also improved its activities over the last five years. It now organises workshops on research planning and thesis writing for students. Furthermore, there are separate workshops for the sciences and humanities. Resource persons are drawn from across the university. Each student is assigned a supervisory committee to advice, guide, monitor progress and provide support. Workshops on research supervision are also organised for faculty members to review their performance and discuss ways of improving graduate delivery through quality supervision (UG, 07).

Respondents mentioned that they took for granted that PhD students are well knowledgeable in areas of research process and conducting research. UG's PhD programmes and its scholars have been strengthened through the introduction of course work and seminars such as methodological skills, scholarships, counseling, mentoring, supervisory skills, introduction to methods of teaching and learning that will enhance their capability to train future academics.

In most master's programmes, according to a respondent, as part of the changes, candidates are no longer admitted straight into the MPhil programme as it used to be initially. Currently all students enroll in the MA programmes in the first academic year; then the students progress unto the MPhil based on their academic performance and demonstration of research capability during the first year (UG, 06). New master's programmes, which are professional in nature have been introduced in order to meet the demands of the changing society and industry (UG, 05). Respondents (UG, 01 08, 09) suggested that there is the need to beef up the sciences programmes since the humanities outweigh the sciences in terms of the number of students. However, another respondent said that steps were being taken to increase science students. These are the Master of Science and Master of Philosophy Programmes in Computer Science to be offered by the Department of Computer Science, and a Professional Master of Science Programme in Medical Laboratory Sciences at the School of Allied Health Sciences (VC Speech, 2013). In addition, Master of Philosophy in climate change and sustainable development has been established.

5.5 Human Resource Policies

5.5.1 Qualification and quality of Academic staff

It is not surprising that most respondents stress that the critical mass in any university is a prerequisite for the research function of the university as it remains one of the ways to shore up the research activities in order to increase research visibility of the university and conduct demand driven research (Manu et al., 2007). In this regard building the research capacities of academics is one of the surest ways of improving upon the critical mass of the university. A university's quality turns largely on the competence and application of its faculty members. To enhance the quality of UG academics, there is now a new policy which requires all lecturers to hold PhD degrees. This Policy was introduced by the University Council in 2010; consequently, there is also a mandatory minimum entry point of PhD for all lecturers to teach in the UG. A respondent said that

If you want to be excellent in research and increase your research capacity which is a significant attribute of World Class University, you need to have quality researchers (UG 05)

One key policy with regard to changes in quality of researchers is the change of entry qualification from MPhil degree to a PhD degree. This policy was enforced by the university

leadership in the year 2010. A respondent recounted how academics were invited to be part of this new policy (UG 09). Most respondents were of the view that it was a good policy if the university aimed to strive for academic excellence. A respondent in support of the PhD policy commented saying:

You know people who possess MPhil as faculty members do not have the detailed skills enough to undergo sophisticated and applicable research which is the norm of the day. (UG 08)

Hence, in effect, the respondents seeks to link master's degree holders as one of the factors that causes low research output among faculty members, and also the inability to conduct applicable research that will lead to innovation and affect the development of society.

However, in order to retain faculty members with a master's degree, a new policy has been put in place for internal staff who holds a master's degree and are internal Ph.D. candidates, or are currently lecturers or higher or holds higher ranks, to be given paid leave without teaching responsibilities for a limited time to enable them obtain their doctorates within the stipulated periods (Visitation Panel Report, 2007). Respondents were highlighted that each faculty were tasked to develop their human resource policies which is then submitted and bargained at the top level. This has become formalised and centralised.

5.5.2 Appointment Procedure

The appointment procedures at the UG are in two phases. The first phase is the planning phase and the second phase is the appointment phase. The planning phase takes place at the top management, where a position is defined and a discussion is being held in order to ascertain how the position fits in the UG strategic plan and the faculty development plan. Again, in terms of appointment, age has implicitly been a crucial element. Since 2010, there has been a policy that academics should possess a PhD degree. This has become a very important criterion in appointment process. A committee is set up to look critically into the appointment of academics. The procedures for appointment have being formalised. Even though the appointment committee is made of academics who scrutinize applicants for a job, apart from academic merits and research profile, there seems to be some difference between the hard and soft disciplines in terms of criteria of appointment.

One important change regarding appointment procedures is that, as a result of the change in organisational structure in the collegiate system, all appointments starting from an assistant

lecturer to a senior lecturer are done at the college level whereas appointment of professors is done at the top management. The appointment committee which is made up of academics assesses applicants based on the criteria set and work according to formalised procedures, statues and regulations set by the top management level. They then assess applicants and short lists them. The complex nature of appointment procedures is that, shortlisted applicants are to demonstrate their teaching skills during a trial lecture at the departmental and faculty levels where academics are present. This is aimed at ascertaining how in practice applicants can teach effectively (UG 03).

Nonetheless, some respondents also revealed some difference with respect to criteria for selection into the soft and hard disciplines in terms of teaching and research functions. Respondents from the hard disciplines emphasised that priority is given to applicant who have been involved in research projects that are multidisciplinary in nature and, or how useful/applicable is applicant's research result to the needs of society or industry how is to some extent key in recruitment process (UG, 08), whereas respondents from the soft disciplines try to maintain a fair balance between both teaching and research (UG 09). The final stage is the selection of suitable candidates. This involves academics assessing applicants based on trial performance of lectures, academic merits and applicant's ability to contribute to the development agenda of the faculty. The selected names are then sent to top management for final clearance and double background checks. When they are satisfied, management issues an appointment letter with conditions of services.

5.5.3 Reward Systems

Reward systems are initiatives that are put in place to attract the best teachers and researchers and to help retain them. With regard to this, some respondents were of the view that if the UG is to become relevant and also increase research activities, its faculty must be highly motivated. Salary and other conditions of service need to attract faculty from all over the world. Also there has been an urge from leadership to faculty; those faculty members, who conduct research that are applicable and use oriented, academics that design programmes that are highly professional oriented and highly sought after based on the demands of the society and business world that attract funding (in terms of full fee paying from students) and engage a number of graduate students, could be remunerated at levels higher than faculty members without such research programmes (UG 01, UG 02).

While some respondents claims such a “two-track salary system” undoubtedly cause initial problems, they argued that it could well be the catalyst required to stimulate some other faculty members to be more active and to raise themselves to levels where they would be engaged in similar research programmes that are relevant and can impact the needs of society attract similar remuneration (UG01, UG03, UG04). This is a difficult choice that the university must face squarely if it wishes to stimulate such initiative and drive for quality in its faculty (UG, 04). Research competence and output should be the determinants of which “track” a particular faculty member will use, even though respondents emphasised that this is still on the discussion table with management and academics and it is not yet been operationalised.

In terms of salary policy in the case of UG, government pays academics their emoluments and research allowance; however, respondents were of the view that the research allowance was inadequate to allow for an effective and ground breaking research that are highly relevant and demand driven (UG 03, UG 05). With the University of Ghana aiming to become a research excellence institution, one of the brilliant initiatives they have undertaken is establishing University of Ghana Research Grants for its faculty members through its own internally generated funds. This fund according to most respondents will stimulate faculty members to apply for funds to conduct research.

5.6 Internal Governance

5.6.1 Organizational Structure

Organisational structure according to Greenberg (2011) refers to formal structures between individuals and groups concerning the allocation of tasks, responsibilities and authority within an organisation.

“The whole structure is overlarge, inert and indecisive, over concerned with formalities, not much concerned with the tasks of managing the University through very difficult times. However, in the modern era, where institutional size, financial stringency and the need to set priorities have become dominant issues in university management, universities need to be run, not as a business, but in a business-like way, if they are to survive and prosper. The University of Ghana’s governance structures were designed for a different age and for a much smaller and more intimate institution, and they have not been adapted to changing times, let alone to manage the kind of growth that has taken place”. (Visitation Panel Report, 2007 p.56)

The above organizational structure was the picture that was painted by the Visitation panel report in 2007. Currently, there has been the introduction of the collegiate system. This in essence means that UG has decentralized its administration into four colleges: college of health sciences, college of humanities, college of education and college of applied and basic sciences. Each college is headed by a Provost (UG, 02). This reform according to a respondent is also to enable other smaller faculties merge with bigger ones to create an environment where researchers can cross over to different departments and faculties under the same college without any administrative hindrances. This will create an enabling environment that could also enhance interdisciplinary and multidisciplinary research that will solve grand complex challenges in society (UG, 05). It has also allowed deans who head the various faculties coordinate with other deans within the same college to plan and apply for resources.

A respondent also remarked that the current collegiate structure has freed university leadership in many functions and now university leadership concentrates on international relations, strategic vision and other related matters (UG, 03). Nonetheless, the university leadership keeps a keen eye on every activity that goes on in each college to ensure that the various units activities are in line with the mutually agreed strategies. A respondent was also of the view that, the new structure has created a flexible way of doing things without following cumbersome procedures as was the case previously so as to adapt to societal needs and demands. Now things are done in a clear and efficient manner without any delays (UG 10).

Another important office which was created in 2010, to ensure research functions was the Office of the Pro Vice Chancellor (PVC) in charge of research, innovation and development. This was created specifically to give attention to research activities of academics. Subsidiary to the PVC office, a new support unit 'research development officers' has been established with the sole aim of promoting and facilitating research at the lower units. They seek for funds, look out for calls for proposals, which fall in line with our priority areas, coordinate with donor agencies and advise various departments on latest information (UG, 05). This according to a respondent is a good development that has at least reduced their burden of writing proposals for grants. In addition, a new technology transfer officer(s) also monitor(s) prospective and potential opportunities, commercialisation process and liaise with industries and the university (UG, 10).

5.3.4 Governing Boards

The University Council which is the highest decision making body in the University of Ghana has been changed to suit the strategic vision of the university. Thereby reducing ineffectiveness and delays of taking decisions (UG, 06).

The governance structure we operated initially was developed to suit a particular circumstance and age but as things change, society is changing, the university is seen to be an agent of change, we can no longer run our activities on a single individual and some central mechanism (UG, 07).

The governance structure has been reduced but at the same time, it has given chance to external bodies to be part of the governance of the university (UG 01). Some respondents claim it is crucial in safeguarding the university's relevance (UG, 02, UG 05, UG,06), not only in such times when the environment is unpredictable and uncertain but also for the users who actually provide the support and resources needed to keep the university surviving (UG01, UG02, and UG 06). Meanwhile, the introduction of the collegiate system has also given more power to the various units to take decisions which are in line within the framework of the overall strategic vision of the university.

5.7 Conclusion on the main findings

The salient points from the field work presented in preceding chapter is discussed briefly. The first presentation was the findings of how academics and management interpret UG's WCU strategy and the second section presented the possible effects or organizational change based on actor's interpretations of UG WCU.

The question worth asking after presenting the findings, is first, to ascertain how academics and management interpret UG's WCU strategy? Based on the interdependency management perspective and using the upper layer that emphasizes the interpretation two groups of actors, that is, academics and management. In retrospect in chapter 3.6 in the analytical model, the study assumed that academic interpretations of UG WCU strategy in the literature emphasis the notion of academic excellence whiles management interpretation was also assumed to have a different interpretation from the academics, hence emphasizing the notion of relevance and problem solving. Based on the findings presented, how do academics and management at the UG in practice interpret the WCU strategy?

The findings revealed that in practice management interpretations of UG WCU was still based on the notion of relevance and solving societal problems, this in essence means the assumption in the analytical model is valid. Regarding, the academic interpretation of UG's WCU, the findings revealed that though some academics emphasized academic excellence, it was more related to innovation and application to the needs of society rather than determining research needs towards their own knowledge activities. This means academics interpretations are in line in the direction of the management interpretation which emphasis the notion of relevance and problem solving i.e. having a better link to society. Hence, based on the findings the study revealed that, there is a link between these two groups of actors interpretations. This is because the relevance and problem solving interpretations is dominant by both academics and management.

Based on this dominant interpretation of relevance and problem solving (having a better link to society), what does it mean for organizational change? Based on the indicators of organizational change that the findings revealed, it provides a basis to suggest which direction of change process UG is emphasizing (based on our analytical model in section 3.6). Indicators with respect to sectors such as internal governance, research, academic profile and human policies, the findings revealed to some extent that, organizational change is moving towards the direction aimed towards strengthening relevance and problem solving of academic activities. Which means UG is moving towards the direction of emphasizing relevance and responsive to societal needs.

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATION

6.0 Introduction

The previous chapter presented and discussed the main findings from the field work. This chapter presents the summary, conclusion, implications of the study and recommendation(s) for further studies. The first point of call is the research questions for this study. The study sought to answer the following:

1. How is the institution's "World Class University" strategy interpreted by central managerial and academic actors at the University of Ghana (UG)?
2. To what extent are organizational change processes at the University of Ghana the result of the implementation of the university's WCU strategy?
 - 2a) To what extent are organizational change processes with respect to the institutional research profile at the University of Ghana the result of the implementation of the university's WCU strategy?
 - 2b). To what extent are organizational change processes with respect to academic programmes at the University of Ghana the result of the implementation of the university's WCU strategy?
 - 2c). To what extent are organizational change processes with respect to human resource policies at the University of Ghana the result of the implementation of the university's WCU strategy?
 - 2d). To what extent are organizational change processes at the University of Ghana with respect to internal governance the result of the implementation of the university's WCU strategy?

6.1 How is the institution's "World Class University" strategy interpreted by central managerial and academic actors at the University of Ghana (UG)?

The notion of 'World Class University' has become more and more accepted around the world. It implies that more and more universities can be expected to include the WCU template in their missions/visions and make it an essential element of their strategic plans. WCU in the academic literature (e.g. Altbach 2013, Altbach & Balan 2007, and Salmi 2009) emphasizes academic excellence.

The first aim of the study was to move beyond the rhetoric and to understand how management and academics interpret UG's strategic vision of becoming a WCU. Using an interdependency management perspective (Braun et al., 2014) allowed us to understand that, the interpretations of the WCU strategy neither emphasize a purely top-down nor bottom-up approach but instead, show that management and academics mutually initiate, coordinate and depend on each other to allow for change without university management imposing on academics and vice versa. Based on this perspective the analytical framework developed in chapter three (3.6) specifically assumed that the academics' interpretation was related to academic excellence, with the management interpretation being different from the academics', in the sense that it was related to the changes in governance which is the strengthening of management and assumed to emphasize relevance and problem solving.

The findings with respect to interpretations of the WCU vision reveal that regarding the management interpretation of the UG WCU strategy, management aims at contributing to UG becoming more relevant by solving societal problems using academic activities. The underlying rationale is that, as the society changes, the university needs to adapt its activities to suit the needs of the society from an instrumental point of view in order to ensure survival, enhance the legitimacy and flow of resources from the environment. This also relates to changes in governance which has granted university management/leadership more autonomy. In terms of relating management interpretation to the assumption made on the analytical model the findings shows that it is valid, since both the findings and management assumption of the analytical framework emphasis relevancy, solving societal problems and having a better connection with society.

Regarding the academics' interpretation of WCU, it was assumed that the UG academics want to increase the volume and quality of research activities at the forefront of knowledge, emphasizing academic excellence. This idea of the academic perspective is to be an active contributor/player in the global knowledge economy by publishing in high impact journals (Marginson, 2004). In the long run, this would enhance UG's visibility and reputation (Geiger, 1990). However, most academics interviewed in the study interpreted the WCU in a different way by emphasizing the need for the university to enhance and contribute to the development of society and nation building through research, innovation and close interaction with industries (Altbach, 2007a).

It was assumed that by emphasizing achieving academic excellence the UG academics would want to determine their own research needs towards their own knowledge activities rather than the needs of society., But the academics at UG interpret the WCU vision in a way that is more in line with the assumed management interpretation. In essence this means that the two groups of actors' interpretation of the WCU vision is dominated by the emphasis on the notion of relevance and solving societal problems i.e. having a better link to society.

6.1.2 To what extent are organizational change processes at the University of Ghana the result of the implementation of the university's WCU strategy?

The second aim of this study was to analyze the extent to which organizational change processes are the result of actor's interpretations of University of Ghana's WCU strategy. Based on the findings, the study revealed an overlap between academic and management interpretations of UG's WCU vision, in the sense that the dominant interpretation of the two core groups of actors emphasized relevance and solving grand challenges in society i.e. having a better connection with society. The next question worth asking is, what does this dominant interpretation of UG's WCU i.e. relevance and solving societal problems, mean for organizational change at the UG? Considering the time frame, one may argue that the period since the introduction of the WCU vision at UG is short implying that, it might not be possible to say a lot or ascertain the effects of the UG WCU interpretation. However, based on the dominant interpretation of the two core groups of actors, and the assumptions of organizational change underlying the analytical model, we can expect the organizational changes to be going in a specific direction with respect to organizational aspects, such as internal governance, research, academic profile and personnel policies. Indeed the findings reveal that there is a slow but clear direction (at least to some extent) implying that organizational change is moving towards strengthening relevance and problem solving of academic activities. Using the indicators introduced below the next sections will discuss with respect to each of the organizational aspects the direction of change based on actors dominant interpretation.

6.1.3 To what extent are organizational change processes with respect to the institutional research profile at the University of Ghana the result of the implementation of the university's WCU strategy?

Despite the fact that university leadership has been strengthened, the leadership is not acting like a manager in a business world deciding from top to down regarding the visions of the university. Instead, UG leadership seem to be acting like portfolio managers, who decide to make strategic investments in selected prioritised research areas through wide deliberations and develop their own goals and ways to achieve them (Whitely, 2008).

This is predicated on the findings of the study that UG has set out its four priority research areas: malaria research, trans-disciplinary research into climate change adaptation, enhancing food production, processing and development policy, and poverty monitoring and evaluation. The above indicated that the research focus primarily aims to induce academic activities through allocating funding for research aimed at strengthening relevance and solving challenges with respect to the four selected areas, which confirms that UG is moving towards the direction of organizational change emphasizing responsiveness to society needs.

The findings revealed that, as part of strengthening, managing and coordinating research activities in a centralized manner (Harle, 2006), ORID which is headed by the Pro VC was established. Again, in UG's bid to enhance its visibility outlook through research outputs and publish in high reputed journal, a research fund has been established to encourage faculty members to increase research productivity.

Strikingly, the research funds is linked to the four research priority areas, which in essence means for researchers to have access to the funds, research problems and proposals must address either one of the research focus set out by management. This to some extent is to induce academics to become active players in using their research for affecting the Ghanaian society. Conference grants have also been made available for faculties and non-academics to attend and present papers at conferences, and also faculty members who are able to host conferences in Ghana are supported. The contributions of such conferences, as well as the theme of the conference, and the abstracts of papers to be presented, are all verified before such funds are granted. A technology development transfer centre has been set up in its bid to ensure engagement with the industry. The above indications confirm that UG is moving in the direction of relevance to society based on the dominant interpretation of the WCU strategy

6.1.4 To what extent are organizational change processes with respect to academic programmes at the University of Ghana the result of the implementation of the university's WCU strategy?

It is widely acknowledged that as society changes, there is a need for universities to adapt its core activities to the changing demands. The findings of this study revealed that there have been some adaptations regarding UG's study programmes in order to satisfy the demands of the labour market and also other relevant sectors of the economy (Gumport, 2000). Some initiatives as championed by management indicate changes in the structure of its doctoral and master's programmes and an introduction of new master's degree programmes that are relevant for socio-economic development, as well as the introduction and strengthening of the PhD programmes coupled with introduction of course work. It was revealed that the introduction of general courses, such as numeracy skills, critical thinking and practical reasoning, had as its main aim to enable students to solve real life problems both in the society and at work. These courses have been made compulsory to enhance the employability attributes of students (Lyotard 1984 p.51 as cited in Barnett et al., (2001). All indications regarding changes in UG academic programmes show that they are moving in the direction of becoming connected to society through UG academic activities. The direction of organizational change is in line with the dominant interpretation by the two core actors emphasizing the notion of relevance and problem solving, which means becoming responsive or having a better link/connection to society.

6.1.5 To what extent are organizational change processes at the University of Ghana with respect to the institutional human resource policies the result of the implementation of the university's WCU strategy?

The quality of a university's activities largely depends on the competence of its faculty. The study revealed that, UG has realised that for it to be more responsive to society it depends on its human resource capabilities (Manuh et al. 2007). Hence, the findings reveal that prominent among UG development is the introduction of 'PhD or terminal degrees' as an entry requirement into academia. Additional important requirements, such as the number of publications and trial lectures are also considered important in the appointment process. However, the study reveals that in terms of appointment there appears to be a difference in criteria between the hard and soft disciplines. The former emphasizes the research profile of applicants, involvement of research projects, nature of research projects and the applicability/usefulness of the findings of the research. The main expectation here was that these characteristics will enhance the quality of its academic staff which will in turn increase

research activity that has impact on society and industry. On the other hand the soft disciplines emphasized mainly teaching abilities.

In terms of recruitment and appointment procedures this study revealed that, as a result of the introduction of the collegiate system, the appointment system has been decentralized. This means that all matters regarding appointment, filling of position and promotions from assistant lecturer to senior lectures are handled at the college level. Recruitment of professors is done at the top level. This has also led to the formalization of activities. The study found out that as part of the process to recruit top researchers and retain them, reward systems, such as research and conference grants, have been institutionalized in order to motivate researchers. These reward schemes have been institutionalized by management and have created the circumstances that induce academics activities to be geared towards societal needs.

6.1.6 To what extent are organizational change processes with respect to internal governance at the University of Ghana the result of the implementation of the university's WCU strategy?

To what extent are organisational change processes with respect to internal governance at the UG the result of the implementation of UG's WCU vision? Despite the young stage of the WCU vision coupled with the fact that change is difficult to observe with the relative short time frame from 2010-2015, the assumption underlying the direction of the indicators for internal governance based on the dominant interpretations of the two core actors reveals that UG is moving towards change emphasizing the notion of relevance and problem solving.

The UG's highest decision making body (the university council) in some cases has incorporated the views of industry players in their decision. It was revealed that, such views is seen as crucial in protecting UG's relevance for stakeholders. This makes the university to be attuned to the demands and needs of the society in the university's bid to relate to society and helps contribute to societal challenges. Inclusion of external stakeholders on boards, committees will help to contribute to advocating the skills required in the business sectors, problems beings faced in the business and society.

The UG has streamlined its internal structures, which in effect implies that it has reduced its long bureaucratic procedures and communication channels. In order for management to become reactive towards societal needs, UG structures needs to be flexible in order to adjust more effectively to the dynamics of society. Hence, as a result of the 'collegiate system',

research centres, various faculties, departments have merged together and grouped under four colleges, namely the college of education, college of humanities, college of basic and applied sciences and college of health sciences. The aim of the collegiate system is to create an enabling environment for effective research and flexibility. Also from an academic interpretation of academic excellence, the collegiate system is expected to enhance cross-disciplinary research and programmes (Jansen, 2002).

The stronger management coupled with the leadership style as revealed in some way induced academics activities to impact society. This is predicated on the fact that despite the WCU initiative coming from the vice chancellor, there has been a wide deliberation and consultation with both internal and external stakeholders and it is of an interpretative nature. It helped the university leadership to convey a meaning that serves as a frame which motivates various actors and stakeholders in a favorable meaning for the university (Maassen & Potman, 1990).

6.2 Conclusion of the study

One of the core areas of change in governance relations between state and higher education institutions is the enhancement of institutional autonomy in deciding upon and managing their own affairs. It is argued that, these changes in governance relations are partly inspired by NPM. In effect this has strengthened the hierarchical structure of university leadership to set goals, priorities and strategies as exemplified in the case of the UG's WCU. However, despite university leadership autonomy, it was depicted in the literature (Cohen et al., 1972) that, in the university setting unlike the business organization any attempt to impose an overarching strategy from management to academics without mutual cooperation and interaction will be resisted and met with conflict and inertia on the part of academics who are involved in the execution of core activities of teaching and research.

In essence, balancing the stronger hierarchical leadership structure coupled with the continuous control of academics in the core functions of teaching and research and beliefs system, there are bound to be varied and different kinds of interpretation with regard to the strategic vision and the consequence of the interpretation. Hence, the adoption of an interdependency management perspective as part of this study allows us to appreciate the new form of management and how various relevant actors interpret the University of Ghana's vision and its consequences.

Hence, the analytical framework in chapter three helped in understanding the assumptions on how the two core groups of actors based on the above perspective interpret the UG's WCU vision. It was assumed that, whereas academics interpret WCU as academic excellence, i.e. increasing basic research activities at the forefront of knowledge, management had a different interpretation than the academics, in the sense that management as a result of strengthened governance structure aims at using academic activities to affect the development of society hence aiming to be relevant and solve society problems. Regarding the effects of the two core actors' interpretations of change, the study assumed that if the dominant interpretation by the two core actors emphasizes academic excellence then the direction of organizational change is aimed at strengthening curiosity driven research. Whereas if the dominant interpretation by the two core actors emphasizes relevance and problem solving then organizational change is going in the direction of strengthening the responsiveness of research and academic study programmes.

The study used semi-structured interviews and document analysis as research tools in analysing the interpretations and possible effects of UG's WCU vision. The findings show that there is a link between the two core actors' interpretations of UG's WCU vision. Surprisingly, the findings reveal that the academics' interpretation in practice depicts that academics aim to use research activities to affect the needs of society rather than to enhance their own knowledge activities. The findings of the academics interpretations, however, are not in line with the assumption in the analytical framework. Instead it overlaps with the management's WCU interpretation of emphasizing the notion of relevance and problem solving. The stronger management in some way induces academics through reward schemes, allocating research funds as revealed in the findings to specific research activities that are geared towards affecting society and industry. In other words, management has set up these schemes, grants to pressure academics to formulate research questions and problems around the needs of society.

The findings also show that the dominant interpretations of core actors, emphasizing the notion relevance and problem solving, have an effect regarding the implementation of the WCU vision, despite the relative short time since the introduction of the vision. The study's indicators of change gave a relatively clear indication of the direction of organizational change emphasizing responsiveness and having a better link/connection with the Ghanaian society.

6.3 Implications of the study

It can be argued that the findings of this study have practical implications not only for the UG but also other Ghanaian higher education institutions and universities in Sub-Saharan Africa. First, those in charge of formulating institution's strategic plans will benefit from a greater understanding of the preparation of strategic documents and how they fit into the scheme of the changing society.

Secondly, another implication of this study is that, university leadership and management in developing countries when drawing up policies or strategic plans for their institutions, the context should be of prime concern and importance rather than adapting to global templates as prescriptions. This is because these global templates might not be fitting to specific countries' cultural and socio-economic needs, and characteristics.

Based on its use of the interdependency management perspective, the study provides practical implications in the sense that considering the structure of universities, leadership cannot impose on academics a rigid set of executive rules or policies to be adhered to, since it may result in conflicts and create tension. Hence, academics and management have to cooperate in order to ensure acceptance and legitimacy.

6.4 Recommendations for further research

This study focused on examining and understanding how university management/leadership and academics interpret the University of Ghana's vision of becoming a "World Class University" and the extent to which organizational change processes are the result of these actors' interpretations of the University of Ghana WCU vision. Regarding the interpretations, the dominant notion emphasized was relevance and problem solving by academic and managerial actors. In taking a step further, the study revealed that the effect of the emphasis in both actors' interpretation of the notion of relevance means that UG is moving in the direction of responsiveness and having a better link/connection with the Ghanaian society, which is confirmed by the indicators of change used in this study. The study has also made some key recommendations to institutional leaders, policy makers and academics about the strategic vision of UG and other Ghanaian universities.

There are several avenues for further studies to be conducted based on the findings. First, a more comparative qualitative research could be done on how various core actors interpret their policies for other Ghanaian universities and other flagship African universities, such as the University of Cape Town and Makerere University. Further empirical studies could be conducted to ascertain the influence of the vision of becoming a 'World Class University' and how that has impacted on the institution's behaviour in the areas of funding, performance of departments, research productivity, and rankings. Again, a study investigating the perceptions of external stakeholders and the government/ministry of education on UG's strategy will be useful to map the interpretations of WCU. Since one of the limitations of the study was the inability to suggest causal effects of the strategy and change process i.e. for instance claiming that changes in governance is a result of the WCU strategy, it will be prudent to further examine the organizational changes that have occurred following the WCU strategy.

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APPENDICES A

INTERVIEW GUIDE

Relevant Actors

Vice Chancellor, Pro Vice chancellor (Organization, Research, Innovation and Development), Pro Vice Chancellor (Academics and Students Affairs). Provosts, Deans, director of research

This section will seek participants (relevant actors) perceptions and interpretations about the notion /underlying idea of becoming a 'World Class University'.

1. From your perspective, what is the meaning of World Class University in the context of the University of Ghana?
2. What are the attributes that makes a university to be classified as world Class University?
3. What is/are the underlying rationale(s) for the University of Ghana with respect to its ambitions becoming a world class university?
4. Why was it necessary for the University of Ghana to become a world class university?
5. How is the ambition / strategy of becoming world class operationalized and implemented by the university?
6. What are the available instruments that the leadership/management have put in place to realize the ambition?
7. To what extent has the decision of the university to become world class been influenced by external actors or stakeholders?
8. What have been until now the main changes taking place as a result of this strategic ambition of becoming a world class university?

Consequences (Change Process)

Research

How would you describe and rate the current research output/production of the University of Ghana?

What are the main factors influencing the current level of research output at the university?

What are the main institutional policies and instruments/tools aimed at supporting the university's research productivity?

What are the main arguments underlying these policies and instruments?

Programmes

When it comes to the strategy of becoming world class, how important are the university's study programmes in this strategy?

What are the main goals with respect to the university's study programmes? Have for example any new study programmes been introduced (BA, MA/MSc/MPhil, PhD) in the framework of this strategy?

In your opinion, does the university currently have the capacity (financial and personnel resources) to realize its goals in the area of education?

Human Resources Changes

Can you briefly describe the university's recruitment policies, and indicate how they relate to the strategy?

What are the challenges of the University of Ghana in recruiting world class students and scholars?

What are some of the measures or initiatives put in place to strengthened human resources?

Governance

Can you briefly indicate how the university is organizing the implementation of the strategy?

Have there been changes introduced with regard to the university's organizational structure, have there been any new positions created?

To what extent is the governance system flexible to incorporate divergent views from both external and internal demands and expectations?

HEADS OF DEPARTMENT (HOD)/SENIOR ACADEMICS

Are you familiar with the university's strategy of becoming a world class university?

To what extent have you and other heads of department been involved in the development of and decision with respect to this strategy?

In your opinion, how important are the departments in the implementation of the strategy?

Is there any inertia or resilience of certain policies being introduced from leadership? If yes what is/are the policies and reasons?

If relevant, how does your department interpret and operationalize this strategy in its day-to-day activities?

In your opinion, what are the main effects with respect to your department until now of the University's strategy?

