

**AN EVALUATION OF THE EFFECTIVENESS OF INTERNAL
QUALITY ASSURANCE SYSTEM IN PUBLIC UNIVERSITIES
IN GHANA**

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CHAPTER ONE

INTRODUCTION

Background to the Study

Higher education institutions including universities are to train people to acquire measurable knowledge, skills and attitudes to effectively match with the needs of modern workplace, labour market and the society at large. The quality of knowledge which is generated in institutions of higher learning is critical to national growth, well-being and competitiveness. Only quality education can sharpen the minds of the individual and help transform the society economically, socially and politically. No nation can develop beyond the quality of its higher education. If higher education is considered as a system, then any quality assurance programme should concentrate on assessing input, process and output.

The rapid changes in the higher education context driven by political, economic and socio-cultural forces in the latter part of the 20th century have generated concern for quality (Becket & Brookes, 2008). Quality assurance is a systematic review of educational programmes to ensure that acceptable standards of education, scholarship and infrastructure are being maintained (United Nations Educational, Scientific and Cultural Organization, 2004). Similarly, International Network of Quality Assurance Agencies in Higher Education (2005) sees quality assurance as those attitudes, objects, actions and procedures, which through their existence and use ensure that appropriate academic standards are being maintained and enhanced in each programme. Contained in these views of quality assurance are issues of maintenance and improvement of quality and standards, embedded in the demands for accountability. This makes quality assurance a collective process by which university ensures that the quality of educational

process is maintained to the standards it has set itself. A quality assurance system in higher education institution may be described as a totality of the policies, values/attitudes, procedures, structures, resources and actions devoted to ensure continuous improvement of quality of the educational processes.

Assuring the quality of educational programmes requires institutional capacity, infrastructure, and human resources to function together. Having an agreed quality measure is important, but ensuring quality maintenance and continuous quality improvement is central to any quality assurance system. Woodhouse (2004) claims that although quality itself has been discussed throughout recent higher education history, quality assurance has just become a profession moving into the 21st century, and INQAAHE has been a major part of that development. That does not mean quality assurance is a new idea in higher education. Rather, it has now caught the attention of significant stakeholders in higher education, such as the governments, higher education institutions, industry bodies and international organisations.

The development and utilization of quality assurance mechanisms to improve educational institutions are essential for their growth. It is critical that educational institutions are able to develop strategies and structures for self-introspection that will ultimately lead to the improvement of the institutions. Internal quality assurance systems are practices and procedures put in place within educational institutions to promote participation of all stakeholders in quality related activities to maximize its output. This is important as the institutions are able to set goals and targets, work hard to achieve them, and assess if these are being achieved.

The government of Ghana established a national quality assurance agency, the National Accreditation Board (NAB), to regulate the quality of education provided by higher education institutions in Ghana. Generally, NAB's quality assurance involves both institutional and

programme accreditation. As part of the requirements for a higher education institution in Ghana to have full accreditation, the institution should establish an Internal Quality Assurance Unit (IQAU) within a maximum of five years from its first partial accreditation. A well-established and functioning IQAU would, among others, heighten the level of clarity and focus in institutional functioning towards quality enhancement; facilitate the acculturation of quality within the institution through institutionalization of good practices; provide sound basis for decision making; act as a dynamic system for quality changes in the institution; and make the institution and its graduate globally competitive in programme and institutional rankings, in attracting prospective students and collaborators to the institution and in graduate placement on the job market (NAB, 2000).

With the student population growing at a faster rate than the available facilities in the majority of Ghanaian tertiary institutions, quality assurance is essential to ensure that the education processes within the institutions are efficient and effective. Internal quality assurance is not only becoming a policy priority for institutions, but a necessity for their existence (Bonsu & Amakyi, 2014). Internal quality assurance practices are also needed to ensure that all students who enter and leave the institutions obtain the best education with the available resources. Internationalization and globalization as increase mobility of students and academics across national frontiers and it is important that the quality of an institution be recognized in another country (Mohamedbhai, 2008). When internal quality is assured, there is integral combination of quality student admission, high quality lecturing staff, and high quality programmes and resources. It is imperative therefore to ensure the relevance of programmes provided and the employability of student graduates within and outside the country.

Internal quality assurance practices in an institution anchor on four pillars to promote its effectiveness. This can be achieved if considered from the Total Quality Management (TQM) perspective and the systems thinking perspective (Tsinidou, Gerogiannis, & Fitsilis, 2010). TQM describes a management approach to long-term success through customer satisfaction. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work. Systems thinking is a management discipline that concerns an understanding of a system by examining the linkages and interactions between the components that comprise the entirety of that defined system. The four pillars address (a) creating quality institutional climate, (b) promoting quality assurance at the departmental/unit level, (c) shifting focus from quality assurance for accountability to quality assurance for improvement, and (d) engaging in reflective practice and peer review. The pillars are predicated on the urgency for establishing a new paradigm for assuring internal quality in institutions. The new paradigm places emphasis on doing the right things well, in a manner that meets the criteria of producing quality graduates resulting from total quality management and total stakeholder satisfaction (Chetsanga, 2010). The emphasis on total quality management and systems thinking focuses quality assurance on inputs, throughputs, and the outputs of the institutions. That is, there is the need for quality assurance from the moment students enter the institution through to the time the students graduate.

Csizmadia (2006), in a study on the implementation of quality management in higher education institutions, applied institutional theory together with resource dependency to analyze quality management in Hungarian higher education. He found that organizational complexity, leadership, and decision-making process influence the pace and scope of implementation of quality management in higher education institutions. That is, the more complex the higher

education institution, the slower the pace of quality management implemented. The study demonstrated the relevance of organizational theories in analyzing the practice of quality assurance in universities.

There has been the emergence of transnational providers on the higher education market and the lobbying by some developed nations to include higher education under the World Trade Organisation's (WTO) General Agreement on Trade in Services (GATS) arrangements, a development that implies liberalisation of the higher education system (Badat, 2003). Proponents of the liberalisation discourse view higher education as a major industry that could yield potentially good returns on private investments, just like any other service. This quest for profit is one of the major concerns that most African governments have about opening their higher education systems to transnational providers. There is a strong feeling that quality may be sacrificed at the expense of profit making. While some of these higher educational institutions are attempting to prevent globalisation forces from distorting their programmes and services and render them inappropriate in terms of responding to local needs, there is clearly a limit to this resistance. Trends in higher education suggest that institutions cannot ignore globalisation's effect on knowledge, whatever philosophical perspective they subscribe to. This calls for evaluation of the existing IQAUs in universities to ascertain their effectiveness in order to help prevent excessive external effects to sway them away from their core mandates.

Despite the progress made through research and debate on quality assurance, there is still no universal consensus on how best to manage quality within higher education (Becket & Brookes, 2008). Much of the research conducted so far focus on how quality could be defined, the design and relevance of various national quality assurance schemes, appraising the applicability of industrial models to higher education, tension between improvement and

accountability in both internal and external quality assurance approaches, and the effects of such quality assurance processes in higher education in the context of developed countries (Pratasavitskaya & Stensaker, 2010). For example, applying the Total Quality Management (TQM) Model in education enables employees to focus on quality and strive hard to excel in whatever they do. Total quality management elevates customer feedbacks and expectations as most essential when it comes to formulating and implementing new strategies to deliver superior products than competitors and eventually yield higher revenues and profits for the organization. Deming Application Prize, Malcolm Baldrige Criteria for Performance Excellence, European Foundation for Quality Management, and International Organisation for Standards (ISO) quality management standards, are examples of TQM. Customers and their feedbacks are the foundation of every Total Quality Management model. In simpler words, Total Quality Management begins with understanding customers, their needs and what they expect from the organization.

Tertiary education in Ghana dates back to the late 1940s with the British model of education bequeathed to Ghana like many Sub-Saharan African countries. It was designed to educate an elite corps who will gradually take up roles in the civil service played by expatriates (Morley, Leach, & Lugg, 2009). The first Higher education institution established in Ghana was the University College of Gold Coast in 1948 and later renamed the University of Ghana (UG) after independence in 1957. In 1980 there were three public universities. In addition, there were other professional institutions providing postsecondary education in the country. Prior to 1993, enrollment of the three public universities was 14,500, and by 2002 this had increased to 86,570, and then to 121,390 in 2005 (Adu & Orivel, 2006). Over the past two decades, the number of tertiary institutions in Ghana has grown positively, particularly private institutions. And by 2016, there were more than 188 public and private higher educational institutions accredited by

the National Accreditation Board (NAB) in Ghana. Of these, there are 10 public universities, and 70 private universities, among others.

With the rise in the number of higher educational institutions in Ghana, there is a general concern that the rapid expansion in the enrolment accompanied by inadequate resources; incompatibility of existing capacity and lack of organizational arrangements may result in deterioration of academic quality and standards. As a response to the increasing concerns, the Ghana government established the National Accreditation Board (NAB) in 1993 with the enactment of PNDCL 317, 1993 and the National Council for Tertiary Education (NCTE) by Act 454, 1993 to regulate quality of the education offered in higher education institutions in Ghana.

NAB attaches great importance to institutional audit and the role of the internal quality assessment units (IQAU). IQAU is mandatory for all Institutions under NAB's mandate. If well established, the IQAU performs the role of the NAB in the respective institutions. IQAU is a unit created within an institution purposely to promote quality culture within that institution. The IQAU may undertake several functions depending on its assigned mandate by the institution and its capacity to do so. These roles formulated by NAB for IQAU of institutions under its jurisdiction are as follows:

1. Review and advise the management of the institution's Strong Room.
2. Supervise the conduct of examination.
3. Facilitate internal capacity building for faculty and academic support staff.
4. Oversee the institution's accreditation process and other quality related engagements with NAB including annual reporting.

5. Facilitate the development, dissemination and application of quality benchmarks/parameters for the various academic and administrative activities of the institution.
6. Facilitate the collation and integration of feedback from students and other stakeholders on quality related issues in the institution.
7. Facilitate inter- and intra-institutional workshops and seminars on quality related themes for the promotion of quality culture.
8. Act as a nodal agency for the coordination, documentation and dissemination of quality-related issues.
9. Develop and maintain a database on quality-related information.
10. Prepare an annual quality assurance report on the institution based on the quality parameters/assessment criteria set for the institution in the year under review.
11. Oversee internal and external Ranking issues for the institution and its programmes.
12. Manage the institution's affiliation with the Mentoring institution (where applicable).
13. Facilitate the development and assessment of curricula.

Programme Evaluation is the appropriate, timely, and systematic collection, analysis, and reporting of data to facilitate stakeholder judgment concerning programme worth in regards to its design, demands, size and type of effect, match between effect and need, cost effectiveness, strength of causal connections, and utility (Leahy, Thielsen, Millington, Austin & Fleming, 2009). Comprehensive evaluation models collect and report data from multiple perspectives. The Context, Input, Process, and Product (CIPP) evaluation model reports from four parts which ask the following questions: What needs to be done? How should it be done? Is it being done? Did it succeed? (Stufflebeam, 1971). These four questions are answered through the CIPP

model where context evaluations help prioritize goals, input evaluations assess different approaches, process evaluations assess the implementation of plans and product evaluations assess the outcomes (both intended and not intended). The CIPP Model offers a comprehensive way to gather and report evaluation data. This model has been used in countless educational and non-educational settings with recognizable results (Stufflebeam, 2000).

Many researchers have used the CIPP evaluation model for their study. Ghazali and Hasnida (2015) used the CIPP Model to evaluate the School-Based Assessment (SBA) in Malaysia. Zhang and Cheng (2012) employed the CIPP model to evaluate e-learning at the University of Hong Kong. The CIPP model is deemed appropriate to be used to evaluate the IQA system effectiveness in the public universities in Ghana.

Statement of the Problem

Institutional self-monitoring and review is expected of all accredited higher education institutions in Ghana. The National Accreditation Board (NAB) requires all accredited higher education institutions in Ghana to establish an Internal Quality Assurance Unit (IQAU) within a maximum of five years from the date of first accreditation. Due to this requirement, most accredited higher education institutions in Ghana have IQAU. Despite the existence of these IQAUs, NAB officials after their mandated periodic evaluation of higher education institutions and their academic programmes, withdraw the accreditation of some institutions and some programmes for not meeting up to established standards. This often create problems for students in these institutions and those offering such programmes.

Internal approaches to quality assurance for learning and teaching in universities have typically been based on an overly simplistic notion of quality assurance and/or a disorganised and unrelated set of elements and practices (Lee & Boyle, 2008). Empirically, however, not

much research studies have been conducted on how Ghanaian universities are internally assuring quality of their programmes under the circumstances of rapid enrolment and programme expansion, and in the face of multitude of constraints including changes in student demographics. A review of the empirical research on quality assurance by Harvey and Williams (2010) concluded that it is not clear whether quality assurance systems have truly enhanced the quality of higher education. This suggest that there is lack of agreement on the extent to which quality assurance in education has generated the desired improvement in the core educational processes of universities.

Most studies on quality assurance in higher education conducted in Ghana focused on the implementation and the challenges to smooth implementation. Okae-Adjei (2012) conducted a study of the quality assurance practices of Koforidua Polytechnic (KP) in Ghana and concluded that KP has not been successful in establishing a quality culture. The study by Boateng (2014) on barriers to internal quality assurance in Ghanaian private tertiary institutions, involved 93 respondents made up of academic, administrative staff and students from four private higher educational institutions in Ghana. Using only questionnaire as the instrument for data collection makes the sample size of 93 small which may affect the validity of the result. Failure to link identification of quality objectives to the institutional strategic plan, lack of student involvement, poor or ineffective coordination, weaker emphasis on strategic planning and quality management as well as dominance culture not open to change and improvement were the findings of this study.

A study conducted by Seniwoliba and Yakubu (2015) on challenges to implementation of quality assurance in the University for Development Studies in Ghana, concluded that, staffing and offices; quality culture; physical and financial resources; commitment and support

for quality assurance; and absence of a current policy plan, were the major observed challenges facing the implementation of quality assurance practices in the university.

Almost all the studies on quality assurance conducted in Ghana focused on the challenges and barriers to effective implementation of quality assurance. None of the studies to the best of the researcher's knowledge evaluated the quality assurance system to establish the effectiveness of the internal quality assurance system in universities in Ghana. This gap is what the current study is set out to fill.

Purpose of the Study

The purpose of this study was to evaluate the effectiveness of the internal quality assurance system in public universities in Ghana. Specifically, the objectives that guided the study were to:

1. determine the extent to which institutional quality assurance structure of public universities in Ghana is effective;
2. determine the extent to which public universities in Ghana are effective in ensuring students' progression;
3. determine the extent to which public universities in Ghana are effective in ensuring staff progression;
4. assess the extent to which public universities in Ghana are effective in providing academic support services;
5. assess the effectiveness of instruction delivered by lecturers in public universities in Ghana;
6. assess the effectiveness of research practices in public universities in Ghana;
7. assess the effectiveness of community service in public universities in Ghana; and

8. assess the quality of graduates of public universities in Ghana.

Research Questions

Guided by the use of Context, Input, Process, and Product (CIPP) model, the following research questions were formulated to guide the current study

1. How effective is the institutional quality assurance structure in public universities in Ghana?
2. To what extent are public universities in Ghana effective in ensuring students' progression?
3. To what extent are public universities in Ghana effective in ensuring staff progression?
4. To what extent are public universities in Ghana effective in ensuring academic support services?
5. To what extent are public universities in Ghana effective in ensuring lecture delivery?
6. To what extent are public universities in Ghana effective in ensuring good research practices?
7. To what extent are public universities in Ghana effective in ensuring community service?
8. What is the quality of graduates of public universities in Ghana?

Scope of the Study

The study focused on public universities in Ghana. Most people are of the view that, there are a lot of external interferences from the Ghana government in the management of public universities in Ghana and this can seriously affect the internal quality assurance of these institutions. So the public universities were involved in this current study to investigate whether their IQA system is self-improvement driven or external accountability driven. The

administrators/coordinators of the various quality assurance directorates/units, lecturers, departmental administrators, students and graduates of public universities were used as subjects for the study. The administrators/coordinators of IQA directorates/units usually coordinates the quality assurance policies and practices, ensure the implementation and supervision of these policies and practices. The lecturers are the direct implementers of the teaching aspect of IQA system, the departmental administrators are the implementers of the non-academic aspect of IQA system, and the students are the key consumers of the services the university provides.

The study covered institutional QA structure, approval, monitoring and review of programmes, assessment of students, teaching, academic support services, research practices, and community service. Interview, questionnaire, and focus group discussion were used to gather data for the study. These enabled the researcher to gather both qualitative and quantitative data to help in triangulation of the information to help get a better picture of the phenomenon under study to prove the validity of the conclusions drawn. The data collected were analysed using narratives and descriptive statistics.

Operational Definition of Terms

Effectiveness: how well the universities are following the policy directions, resources and activities that help to ensure quality teaching and learning, research and community service to produce a desired result.

Evaluation is a process of gathering information for guiding decision-making and quality assurance, to help sum up the effectiveness of the current internal quality assurance system in the university system.

Internal Quality Assurance System: the policy directions, institutional structures, resources and activities that help a university to ensure quality teaching and learning, research and community service.

Public University is a university that is established by a legal instrument, accredited and receives government's subventions to help run the institution and owned by the government.

Significance of the Study

This study is significant because it may add to both theoretical and practical knowledge to the available literature on how universities develop and implement quality assurance systems to improve quality of their education in a given environmental context. The findings will benefit university administrators, lecturers, students, educational evaluators, NAB and the NCTE. The findings of the study can be used by educational evaluators and researchers to develop theoretical framework and /or model for building quality assurance systems that fit to the context of Ghanaian universities. This will help to improve the ratings of Ghanaian universities in the world ranking of universities which both the public and government are interested in.

This study has also practical contributions. It may give pertinent and timely information concerning the existing systems and practices of assuring quality to Ghanaian public universities, to other higher education institution and to governmental organizations. The study findings may also help to raise the awareness of university administrators, lecturers, students, NAB and NCTE regarding the problems in the development and implementation of quality assurance and the areas that need improvement.

The findings may serve to provide information to the university administrators about what is not working right with the IQA system and needs to be modified or improved. It may also provide information on the quality culture of the university to the administrators. The findings may also serve to provide information to NAB and NCTE to set standards for quality assurance assessment and methods to be adopted for the universities.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter the review of literature has been captured. The literature has been reviewed in relation to systems and practices of quality assurance in higher education and evaluation models. It made the researcher aware of the contributions of other researches that have been done and need to be done in the area under investigation. The review was guided by the following themes:

- a. Quality Education
- b. Accountability in Education
- c. Quality Assurance Agencies in Africa
- d. Quality Assurance and Quality Assurance Models in Higher Education
 - i. Types of Quality Assurance in Higher Education
 - ii. Quality Assurance Methodologies in Higher Education
 - iii. Internal versus External Quality Assurance
 - iv. Quality Assurance Models for Higher Education
- e. Evolution of Quality Assurance in Higher Education in Ghana
- f. Formative and Summative Evaluation of Educational Programmes

- g. Evaluation Models
- h. Theoretical Framework
- i. Appraisal of Literature Reviewed
- j. Conceptual Framework

Quality Education

The concept of quality education has been given many different interpretations and meanings throughout history, yet its core meaning and purpose remains elusive and context dependent (Sifuna, 2007). This is because the concept of quality education is multifaceted, with different connotations and contradictory positions (UNESCO, 2007). Tikly (2010) attribute such illusiveness and the multifaceted nature of quality education to being grounded in the context and culture of particular settings, and also, factors which contribute to the uniqueness of a country's education system.

Quality is considered by many authors as a notoriously elusive, relative, dynamic, and multidimensional concept (Kahsay, 2012). Quality is a concept defined by various stakeholders in various ways. As a result, considerable and continuous debate has occurred in defining quality. Quality is a philosophical concept that lack a general theory in the literature. Mortimore and Stone (1991) for example, identified four uses of the term quality: an attribute or defining essence; a degree or relative worth; a description of something good or excellent; and a non-qualified trait. It is quite difficult to find a universally accepted and comprehensive definition of quality in higher education. Houston (2008) opined that, the major purposes of quality education

are: the acquisition of measurable knowledge, skills, and attitudes among learners; serving the economic goals of the community in which learners live; and reflecting the broader social relevance of the education provided.

The journey towards provision of quality education in different countries has been faced with an emergence of different frameworks that are used to describe the concept of quality education. For example, while Mosha (2000) regards quality education as a degree of goodness or excellence, Lomas (2002) regards it as a degree of fitness to what the educational beneficiary wants. UNESCO (2005) describes the concept of quality education in terms of its ability to deliver satisfactory human fulfilment and to prepare learners to master their educational challenges and contribute to social progress and social change. Others view quality education in terms of student learning outcomes and the pedagogical characteristics (such as learner-centred, participatory, and engaging classroom features) that are associated with these outcomes (Osborne, Duschl, & Fairbrother, 2002). According to Hjørland (2010), the delivery of quality education is possible only if the issues of relevance and the usability of the learning process are considered as the essential focus. This means that if the term quality is considered from an educational viewpoint, the quality of learning would be related to what learners have gained from school and the usefulness of what they have learnt in their educational journey.

A study by Ng (2007) show that the concept of quality has gone through several waves of change. These include: i). the focus on inspection of product or service quality (First wave of change). ii). the shift of focus from product quality towards process quality (Second wave of change). iii). the introduction of the concept of quality assurance, which was introduced with a focus on the quality of the organisation (Third wave of change). iv). Shift of focus from general focus of issues to specific issues that affect everyone within an organisation (Recent wave of

change). The literature reveals that globally the education sector has also experienced a similar evolution in the definition of quality. The wave for quality education reform has mainly focused on internal effectiveness, with efforts made to improve internal school performance, particularly the methods and processes of teaching and learning in the classroom (Manyanga, 2007).

Over the last two decades the education sector has undergone another quality education reform focused on the interface effectiveness in terms of education relevance, stakeholders' satisfaction, and market competitiveness (Nikel & Lowe, 2010). Today the education processes and reforms, are challenged by the constant changes in the education environment, world-wide competition, globalisation of markets, high customer demands, changing educational stakeholders, and the long-lasting impacts of information technology, global economic instability, and strong demands for economic and social development (Bull & Kay, 2010). In the pursuit of new visions and aims at different levels of education, the need for life-long learning, global networking, international outlook and the use of information and technological power has arisen to ensure that the aims, content, practices and outcomes of education are relevant and functional for present and future generations (Nickel & Lowe, 2010). The emergence of these new developments reveals a shifting focus regarding quality education. The shift towards the provision of quality education has become an essential component of education in today's schools, because the quality education system has been identified as a central enabler for individual learners to respond appropriately to a variety of social and cultural challenges (Fossum & Kubow, 2003).

Dill (2003) equates quality with academic standards, thus, the levels of knowledge, skills, and abilities that students achieve because of their engagement in higher education. Vroeijenstijn (2006) opined that quality is in the eye of the beholder and any definition of

quality must take into account the views of various stakeholders. This view was in line with Cheng and Tam (1997) description of quality as a system that constitutes the input, process, and output of the educational system and that provides services that completely satisfy both internal and external stakeholders by meeting their explicit and implicit expectations. The expectations of the different stakeholders may not only be disparate but even contradictory at times. Considering the various viewpoints, quality in higher education is a multi-dimensional, multilevel, and dynamic concept that is related to the contextual settings of an educational model, to the institutional mission and objectives, as well as to specific standards within a given system, organization, programme, or discipline.

Harvey and Green (1993) identified five discrete but interrelated ways of thinking about quality. These includes quality as exceptional, quality as perfection, quality as fitness for purpose, quality as value for money and quality as transformation.

Quality as Exceptional: this notion is related to the traditional and elitist academic view that perceives quality as something special, and distinctive. In educational terms it epitomizes excellence, high level performance, passing a minimum set of standards unattainable by most. In this view, quality achieved if the standards are surpassed. Such focus on exceptionally high standards of academic achievements would normally drive higher education institutions to selective intake. The internal stakeholders, the faculty/academic staff for instance, are more likely to support this view.

Quality as Perfection: quality is perceived as a consistent or flawless outcome. It focuses on the specifications of processes. It is also culminated by the interrelated ideas of zero defects and getting things right first time. This view is based on the assumption that if consistency can be achieved then quality would be attained as a matter of course. This dimension of quality is not

always applicable to higher education, since no higher education institution could possibly and soberly aim at producing identical or defect-free graduates (Watty, 2003).

Quality as Fitness for Purpose: conformity with institutional missions as well as capacity to fulfilling customer's requirements is the principal perspective underlying this. There is wide spread agreement on the critique that 'fitness for purpose' alone is too wide an interpretation of quality in higher education. The interpretation of quality as fitness of purpose is linked to the adequacy of the quality-related intentions of an organization, which provides a check on fitness for purpose. This way of thinking is of paramount importance to external stakeholders interested in the utilitarian functions of higher education.

Quality as Value for Money: this view perceives quality in terms of return on investment or expenditure. This view embodies efficiency, effectiveness, and accountability. It focuses on how the inputs are efficiently used by the process in a manner that they produce the desired outputs. A simple instance could be an attempt to producing more graduates with less cost. This way of thinking seem to be of interest to those who fund higher education including government, administrators, parents, and students.

Quality as Transformation: refers to the classic notion that views quality in terms of change of the learner from one state to another. In educational terms, transformation refers to the enhancement and empowerment of students or the development of new knowledge through the learning process. This notion of quality presupposes a fundamental purpose of higher education in terms of transforming the life experiences of students. The transformation concept, as argued by Harvey and Knight (1996), is a meta-quality concept. The other concepts are possible operationalisations of the transformative process rather than ends in themselves. Harvey (2002) suggested that in an era of mass higher education, value added transformation ought to become

the central element of any concept of quality rather than excellence, fitness for purpose or value for money.

There is an emerging argument in the literature on the view of quality as culture. Such perspective recognizes the importance of the organizational view of quality as a process of transformation, where each entity is concerned with and acknowledges the importance of quality. This way of conceptualization is related to the intrinsic traits of higher education in which quality is valued as a driving force behind what everyone does in an organization. In connection with this, quality culture is conceived as an organizational culture that involves: (1) a psychological element of shared values, beliefs, expectations and commitments towards quality, and (2) a structural or managerial element with well-defined processes that enhance quality and coordinate efforts (European Universities Association [EUA], 2006). Berings, Beerten, Hulpiau, and Verhesschen (2010) perceived quality culture as organizational culture which contribute to the development of effective and efficient care for quality. It is concerned with the behaviour of the people involved in the organization than the operation of a quality system.

From the discussions so far, it is deducible that quality is a construct and its meaning is contextual. As Barnett (1999) put it, what count, as quality is never neutral and behind it is always a tacit idea of higher education. That is to say, the various arguments on what constitutes quality are rooted in the values and assumptions of the different authors about the nature, purpose and fundamental processes of higher education. Since the purpose of higher education varies and changes across time and context in response to changing environments, so too should the meaning of quality. In this regard, there is a strong support for envisaging quality in terms of ‘fitness for purpose’ in higher education. It is worth noting that, each of the approaches to

defining quality has implications on the nature of quality assurance system and the policy adopted in a particular higher education system.

Accountability in Education

Accountability is the assignment of responsibility for conducting activities in a certain way or producing specific results. A primary motivation for increased accountability is to improve the system or aspects of it. To have a workable accountability system, there must be a desired goal (e.g., compliance with legal requirements, improved performance), ways to measure progress toward the goal (e.g., indicators of meeting legal requirements; indicators of performance), criteria for determining when the measures show that the goal has or has not been met, and consequences for meeting or not meeting the goal. Each of these aspects of an accountability system can vary in a number of ways. Educational accountability targets either the processes or results of education.

In the field of education there are three main types of accountability system: (a) compliance with regulations, (b) adherence to professional norms, and (c) results driven (Anderson, 2005). The first system demands compliance with statutes and regulations. Anchored in an industrial model of education, compliance systems view the school as the embodiment of constant processes and allow for variation in results, generally attributed to the varying characteristics of students. Simply stated, educators were accountable for adherence to rules and accountable to the bureaucracy.

The second system is based upon adherence to professional norms. Although neither mandated nor required, the impact of widespread agreement on certain principles and practices has done much to elevate education as a profession. In the United States, the curriculum and

evaluation standards for school mathematics (National Council of Teachers of Mathematics), the standards for educational and psychological testing (American Educational Research Association), and the programme evaluation standards (Joint Committee on Standards for Educational Evaluation) exemplify the professional norm approach to accountability. Within this system, educators are accountable for adherence to standards and accountable to their peers.

The third accountability system is based upon results, with results defined in terms of student learning. This system has emerged from increasing political involvement in education. The Basic Education Certificate Examination (BECE) and the West African Senior Secondary Certificate Examination (WASSCE) in Ghana are examples of results-based systems. In these systems educators are accountable for student learning and accountable to the general public.

Educators often find themselves responding to all three systems, attempting to balance the requirements of each. Professional norms complement both compliance and results systems. At present, accountability systems focus less on compliance and more on results. Analyses of current results-based accountability systems reveal agreement on five guiding questions: What do we expect students to know and be able to do? How satisfied are we that students have mastered the established content standards? How are teachers prepared to be effective in their classrooms with all students? How and to what degree is the public informed about school results and the contributors to those results? How does society respond to the information they receive about the performance of schools? That is to say, accountability systems should include five components: objectives, assessments, instructions, resources, and rewards or sanctions (Anderson, 2005).

Higher education institutions are facing increasing demands to be accountable for results that support public purposes while at the same time experiencing increasing competition for

resources. These increasing competition experienced by higher education institutions are also due to the emergence of for-profit institutions, information and communication technology, globalization of higher education, ratings and rankings, and public policies advancing market forces. The ability to compete for prestige and reputation has become a driving institutional strategic force that comes together in a competitive “winner-take-all” environment. In this environment, the concern is that competition for survival and prestige will overtake accountability for public purposes such as access, affordability, and degree completion (Eckel, 2008). Without appropriately balancing competition against the public good, higher education institutions will no longer be able to uphold their part of the social contract to produce a well-educated citizenry.

According to Hazelkorn (2009), rankings are inevitable outcome and metaphor for the intensification of global competition, around which, higher education as both the progenitor of human capital and knowledge has become the fulcrum around which geo-political battles for a greater share of the global market are being fought. At the same time, HEIs are knowledge intensive industries behaving as other actors/firms in a competitive environment; to survive and thrive, many institutions are making changes to institutional strategy or adapting their behaviour to fit the ‘norm’ promulgated by rankings. This behaviour of HEIs is influenced by the perception that, it benefit them by bring them more and better able students, increased resources and enhanced prestige when they are ranked among the best. Students associate high rankings with better education quality and critically better career and lifestyle choices. Governments are doing likewise, restructuring or reshaping their systems in the view that high ranked institutions are beacons for investment and international talent which is a vital components for global competitiveness.

The literature on rankings can be roughly divided into two categories, methodological concerns and theoretical understanding. Most commentators have focused on the former, questioning and challenging the basis by which the indicators have been chosen, the weightings assigned to them, and the statistical method and accuracy or appropriateness of the calculations. This attention is not surprising given that rankings are a quantitative exercise, the methodology is still evolving and the results can be controversial. Most critics are of the view that, if rankings are about the transparency of higher education performance then it is incumbent upon the promoters to equally be transparent.

Rankings have become ubiquitous since the 1990s, with publications from government and accreditation agencies, research and commercial organizations, and the popular media. As higher education has become globalized, the focus has shifted to worldwide university rankings, e.g. the Shanghai Jiao Tong Academic Ranking of World Universities (ARWU), Times Higher Education QS Top Universities (THE QS), Webometrics, among others. A search on Webometrics in the last quarter of 2016 reveal that, the best university in Ghana according to their ranking was the University of Ghana, Legon (UG). Unfortunately, UG's position on the world ranking on the same Webometric was 1639. This suggest that universities in Ghana are not on good standing when it comes to world ranking. Currently, there are over 50 national ranking systems and over 80 global rankings of varying significance. Most of the ranking agencies rely heavily on online presence of the institutions. They based their ranking on publications, research, and other related activities done in the institutions that they frequently appear on the web. This means that, an institution may do a lot but if those activities and services do not appear on the web, that institution will not be ranked well. This is a limitation to most of the rankings done by many of the ranking agencies.

Burke (2005) assert that, accountability is the most advocated and least analyzed word in higher education. Burke expand the definition of accountability as the requirement to meet six demands: 1) demonstrating proper use of powers, 2) displaying work toward the achievement of mission or priorities set for the organization, 3) reporting on performance, 4) making evident efficiency and effectiveness or accounting for the resources used and the outcomes created, 5) ensuring quality of the programmes and services produced, and 6) showing that public needs are served. To Ewell and Jones (2006), institutional responsibility for accountability centers on transparency and responsiveness with the substance of accountability focused on results. The fundamental questions with respect to accountability are: who is to be held accountable, for what, to whom, through what means, and with what consequences.

Burke (2005) define four concepts of accountability that represent different types of accountability connections between the principals and agents relative to higher education: upward accountability, downward accountability, inward accountability, and outward accountability. Upward accountability represents the traditional vertical form of accountability between a subordinate and supervisor. In the higher education context, this may be between a state legislature or board and an institution's senior administrators. Downward accountability focuses on accountability between a manager and subordinates. Considering the professional nature of higher education organizations and strong value of shared governance, this concept takes on a collegial form.

Inward accountability emphasizes agents acting in manners endorsed by professional standards or norms. In the case of higher education, this takes on the form of professional accountability. Lastly, outward accountability consists of responding to external, stakeholder or client expectations. This encompasses for higher education the public at large, and more

recently, this form has a stronger market-driven aspect. The upward and outward types of accountability are what is basically practiced in public universities in Ghana, for they are being accountable to a state legislature and the public at large.

Another dimension of accountability is its purpose. The purpose of accountability has shifted over time from the 1960s and 1970s with an emphasis on efficiency, to the 1980s with educational quality, to the 1990s with productivity and performance, to the 2000s with a focus on responsiveness to public priorities and market demands (Burke, 2005). Interestingly, the shift in focus from one decade to the next does not excuse the previous, but rather builds from it. As a logical extension, it is not surprising that the purpose of accountability has become equally complex.

Quality Assurance Agencies in Africa

Universities have a primary responsibility for assuring the quality of teaching, research and internal organisation. All over the world, universities are in a process of systematising measures and instruments for quality assurance and implementing quality management systems. External quality assurance should take into account the effectiveness of the internal quality assurance. Thus, external quality assurance plays a role in supporting universities and in developing their quality. The function of quality control, which traditionally dominated evaluations and many accreditation procedures, is no longer the main focus.

Quality assurance (QA) agencies differ greatly in the way in which they define quality and the methodologies they put in place to assess it. The difference starts from the meaning they give to quality and the assumptions that underlie their quality assurance policies. Consequently, the methodologies they adopt for assessing quality vary. Some agencies follow the ‘fitness-for-

purpose' definition of quality and look into the ways in which higher education institutions (HEIs) or programmes fulfill the objectives they aim to achieve. Attention is paid in this approach to the goals and objectives of HEIs or programmes, as well as institutional diversity. There are QA agencies that emphasize pre-determined sets of standards for the HEIs or the programmes they quality assure. Compliance to norms becomes the focus here. Again, in some instances, quality assurance aims to ensure only the minimum requirements for a particular status. Such approaches are generally meant for compliance purposes. The outcome has implications for approvals and sanctions.

On the other hand, some QA agencies set standards of high quality. In these cases, the frame of reference for assessment is 'excellence' and not just fulfillment of minimum requirements. Such standards usually co-exist with other mechanisms that ensure the minimum requirements. Some QA agencies set standards for quality by identifying the processes and practices required in quality systems. They then use these as benchmarks for relative judgment. Others identify indicators against which the performance of a system can be measured. In these approaches, the terms 'performance indicator' and 'indicator of quality' are used interchangeably. Indeed, the same term can be used by different bodies to refer to different measures.

In general, well-developed systems with strong internal quality assurance mechanisms rely more on the indicators and benchmarks HEIs set for themselves than on externally set ones. In those systems, improvement towards higher levels of performance and peer assessment are central to the quality assurance framework. In emerging systems where there is a mix of accountability and self-improvement concerns for HEIs, QA agencies use both quantitative indicators and peer review carefully. The unit of quality assurance can also vary. While some

QA agencies follow the institutional approach, others follow the programme approach. Although the unit of quality assurance might vary, it must necessarily cover aspects such as academic programmes, students, academic staff, internal quality control, infrastructure, research, outreach, organization and management. The difference lies in the level of detail the agencies look for, as well as in the focus and extent of reliance on quantitative indicators vs. peer assessment. The need for quality assurance to use peer assessment or the judgment of higher education practitioners is well recognized. This is true even of approaches that rely more on indicators and quantitative norms.

Several quality assurance agencies have been established to enhance quality of higher education and research at national, sub-regional and continental levels. Since the middle of the year 2000, a number of initiatives have been launched in Africa to develop common frameworks for comparable and compatible qualifications in order to promote and further strengthen academic mobility. Quality assurance at the continental level involves the Association of African Universities (AAU) and the African Union Commission (AUC). The AAU oversees two initiatives: the African Quality Assurance Network (AfriQAN) and the Europe-Africa Quality Connect Pilot Project.

AfriQAN implements its main mandate of promoting collaboration among quality assurance agencies through capacity building and the African Quality Assurance Peer Review Mechanism. Currently, the network faces the challenge of mobilising funds to implement its activities. The Europe-Africa Quality Connect Pilot Project, funded by the Erasmus Mundus program, was implemented in 2010-2012 by the AAU and the European Universities Association. The project has helped to enhance institutional evaluation capacities in five African universities.

Currently, the African Union implements three initiatives: The African Higher Education Harmonisation Strategy, Tuning Africa, and the African Quality Rating Mechanism. The African Higher Education Harmonisation Strategy was adopted in 2007 to ensure comparability of qualifications. Therefore, this Strategy may be considered as a mechanism for implementing the revised “Arusha Convention”—originally the UNESCO Regional Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and other Academic Qualifications in Higher Education in the African States in the year 1981.

The Arusha Convention and the Harmonisation Strategy focus primarily on quality of academic programmes and institutions, their implementation does not adequately involve higher education and quality assurance stakeholders. This may partly explain the limited progress made on these initiatives. 16 states signed the revised Arusha Conversion in Addis-Ababa in December 2014. The organisation said the 16 states that have so far signed the revised convention are: Burundi, Central African Republic, Djibouti, Egypt, Gabon, the Holy See, Madagascar, Mali, Mozambique, Namibia, Nigeria, Senegal, South Sudan, Sudan, Togo and Uganda. The revised convention includes the following: A shift in favour of applicants for recognition by entitling them to fair recognition of their qualifications within a reasonable time limit, according to transparent, coherent and reliable procedures; The view that recognition should be granted unless substantial differences can be shown; The importance of information and networking at the expert level, in particular through national information centres; The need to develop codes of good practice or recommendations and guidelines, in addition to a solid legal framework.

The second initiative, the Tuning Africa Pilot Project, is anticipated to promote the implementation of the Harmonisation Strategy. This project was launched in 2011 with funding

from the European Union Commission to contribute to the development of a qualifications framework in five subject areas in collaboration with nearly 60 African Universities, the AAU and other higher education partners. The project focuses on intended learning outcomes, skills and competences. Efforts are underway to expand the scope of the Tuning Africa project, which fully engages the academic community at the grassroots level.

The third initiative is the African Quality Rating Mechanism (AQRM), which encourages higher education institutions to assess their performance on a voluntary basis against a set of established criteria. The AQRM is different from ranking systems. It helps to put African universities in clusters according to the quality standards required for participation in regional academic mobility programmes. In 2009-2010, thirty-two higher education institutions from eleven countries participated in an AQRM pilot project undertaken on the basis of self-assessment. A project report produced by the African Union Commission noted some shortcomings, including lack of external validation of the self-assessment results and difficulty in drawing relevant conclusions from the information collected since some institutions failed to complete the entire survey. The report recognises the need to revisit the survey and implement another pilot phase prior to scaling up the mechanism to all higher education institutions.

Challenges: Today, quality assurance is at the heart of all efforts toward revitalising and developing higher education in Africa. These efforts have led to a rapid increase in the number of quality assurance agencies. More than 60% of these agencies have been created during the last decade and many of them still lack the capacity needed to implement their mandates effectively. This is why human capacity building is a high priority for all quality assurance stakeholders in Africa.

Since 2006, UNESCO and its partners have organised five international conferences that have helped to train more than 700 experts in several key issues, such as: Accreditation at Programme and Institutional levels; Quality Assurance of Teaching, Learning and Research; Institutional Audit and Visitation; and Use of ICT in Quality Assurance Practices. UNESCO has also developed a guide for training QA trainers. The annual conferences are believed to have played a positive role on human capacity building in quality assurance, fostering awareness of major actors, emergence of several relevant agencies and the promotion of regional cooperation in quality assurance.

Aspirations: Throughout the continent, the major aspiration is to build an African Higher Education and Research Space (AHERS). In 2010, the ADEA Working Group on Higher Education commissioned several analytical studies to inform the process of building AHERS, including a feasibility study on the establishment of the African Regional Quality Assurance Framework. The African Union, in a complementary effort, recently launched the process of establishing the African Regional Accreditation Framework. It should be noted that these processes merge, since accreditation is the first step of any quality assurance mechanism and the two processes provide a strong basis for development of the African Regional Qualifications Framework, a key objective of the Harmonisation Strategy and therefore fundamental to AHERS.

Mandates: The legal mandates of national QA agencies in Africa have several similarities. All have authority to assess institutions and/or programs, approve new programs, and approve (or deny) the creation of new private tertiary institutions. All of the agencies set minimum standards for institutions and/or programs, monitor the performance of institutions reviewed, and have the power to approve or deny permission to operate to foreign institutions. Perhaps reflecting the

strong link between these agencies and government, some agencies also play the role of adviser to the government. In the case of Ghana, South Africa and Tanzania, the QA agencies are, in addition, responsible for ensuring equitable access to higher education irrespective of gender, race, religion or economic status—a function normally performed by the ministry itself. The national QA agency in Tanzania has the additional responsibility of approving admissions to HE institutions as well as for overseeing transfers between institutions—early signs of a move towards a national qualifications framework. In Nigeria, the QA agency is also responsible for ranking of HEIs as part of the accreditation process—a function usually undertaken by an independent body, separate from the accreditation process. This means that QA agencies at this early stage in Africa are responsible for multiple functions beyond those performed by a typical agency in more developed HE systems. In countries without national QA agencies, the ministry or department responsible for higher education has legal authority over quality assurance and accreditation.

However, there is little evidence of formal processes to carry out these functions. Typically, the power (for example, to accredit new private institutions) is vested in the minister responsible for higher education, with (or sometimes without) a specific supporting team to scrutinize applications and advise the minister. In Cameroon, for example, although an agency for accrediting private higher education is operative, the Minister for Higher education has tremendous powers over quality assurance and accreditation throughout the system. Since ministerial positions are political in nature and often subject to high turnover, there could be problems of consistency leading to loss of credibility and trust in the system. Except for Cameroon, all the countries with national QA agencies now cover both public and private institutions of higher learning (separate QA bodies exist for non-degree granting tertiary

institutions). Although it is too early to conclude how this mandate will be received by staff and management in public institutions, limited experience from Nigeria indicates that the practice is likely to strengthen the credibility of private higher education institutions which have in most countries been regarded as delivering inferior education.

Quality Assurance and Quality Assurance Models in Higher Education

The term quality assurance in higher education is increasingly used to denote the practices whereby academic standards, that is, the level of academic achievement attained by higher education graduates, are maintained and improved. This definition of academic quality as equivalent to academic standards is consistent with the emerging focus in higher education policies on student learning outcomes, the specific levels of knowledge, skills, and abilities that students achieve as a consequence of their engagement in a particular education programme (Brennan & Shah, 2000). Quality Assurance (QA) clearly emerged as a principal business methodology in the Western world. There is a need to understand the different philosophy which predominates QA in the business sphere and that in the public services. Within the industrial/business setting the philosophy has focused on the training of employees to prevent problems, strengthening organisational systems, and continually improving performance. While within public service areas such as health and education the philosophy has been based on taking a watchdog approach, relying on government controls, professional credentials, internal audits, and external inspections to maintain standards, weed out poor performers, and solve problems.

Types of Quality Assurance in Higher Education: Much of the dialogue on quality and quality assurance dwells on issues of values and power relations between and among the different stakeholders in higher education institutions. Such ways of thinking determines the quality assurance types adopted by a certain higher education institution. Conceptions of quality

in particular higher education institutions and countries may entail several types of values. This suggest that the adoption of an approach is contingent upon quality conceptions and values of a certain type.

Brennan and Shah (2000) identified four main forms of quality values that underlie different approaches to quality assurance, namely, academic, managerial, pedagogic, and employment focus. In the academic category, criteria of quality stem from the characteristics of the subject; the focal point. This type is associated with strong professional authority and academic values. Conceptions of quality are based on subject affiliation and vary across the higher education institution, which has limited scope to define and assess quality.

The managerial category is grounded on the assumption that good management can produce quality. Hence it is associated with institutional focus of assessment. The institutional policies, procedures and structures are the spotlight of the assessment. Quality characteristics are regarded as invariant across the entire institution. According to Brennan and Shah, the principle of Total Quality Management provided an underlying ideological justification for this type.

In the pedagogic category, teaching skills and classroom practices of the faculty is emphasized. This is strongly associated with staff training and development. Quality characteristics are considered invariant across the institution. In this approach, a lot of emphasis seems to be given to the delivery aspect than to the content.

In the employment-focused category, more attention is given to graduate output characteristics, standards and learning outcomes. This approach is normally associated to customer satisfaction in which employers of graduates are usually regarded as customers. It takes into account both elements of subject specific and core characteristics of higher education.

Quality contains some features invariant across the institution. Some other features may also vary according to subject.

These four categories are elaborated further and applied by Lockett (2006). Lockett argues that quality assurance systems are replete with power tensions; and thus the focus in analyzing any quality assurance system should not be much on how quality is formally defined, as on in identifying whose interest is served. Accordingly, key questions such as ‘who is in control of the evaluation? Who initiates and owns it? Is the ownership internal or external to the academic community?’ should be asked in analyzing any quality assurance system.

Adopting the four quality values, Lockett (2006) proposed four ways of thinking to quality assurance in universities: collegial rationality, managerial rationality, facilitative rationality, and bureaucratic rationality. Quality assurance in the *collegial type* is conducted within the norms and values of the academics since it presupposes that academics are in the conditions of their professional work. The purpose of this quality assurance is enlightenment of academics and improvement in which academics learn more about their teaching and determine how to improve. The models of quality assurance in this type are typically controlled and owned internally and locally. The academic staff would initiate and design the evaluation of their programmes and determine the criteria for making context-specific judgments about quality. The criteria for quality are usually implicit, founded in shared meanings with interpretive and inter-subjective methodology. The most utilized method in the collegial type is self-evaluation wherein the academics themselves are the key agents of the evaluation. Students are not considered as customers and their evaluations and opinions are subject to triangulation with opinion data from other sources such as external peers and staff themselves. The academia owned the evaluation results and they are the primary audience of the findings. The results serve

formative purpose never linked to any extrinsic reward or punishment. The effectiveness of this type is based on collegial agreement on improvement made. The conception of quality as excellence fits this type. This is praised for it is most likely to lead to genuine improvement of quality. On the other hand, the fact that the evaluation and peer reviews may lack critical distance, and hence, may become protectionist is a point of criticism against it. The critique can also be taken farther by suspecting that quality criteria may remain implicit and unclear to outsiders, hence, improbability to meet accountability requirements.

The *managerial type* to quality assurance is grounded in the belief that good management is the key factor in productivity of successful organizations. Corporate management, explicit systems and procedures, strategic planning and greater centralization and regulation by management characterized this category. As a response to external pressures, monitoring of academic work through the establishment of institutional quality management systems is believed to enhance efficiency and effectiveness of institutions as organizations. Quality is viewed as a management tool to strengthen the institution and the central authority at the expense of professional power. The purpose of quality assurance in this type is to enlighten senior management. The locus of control of quality assurance in this category is at the senior management level and usually devolved to the middle management level. The institution as a whole is the focus of evaluation in this type and the senior managers are the primary audiences well as the owners of the model of quality assurance. The methods include self-evaluation, followed by validating findings by external peers and then using findings for summative purpose. The management in consultation with quality assurance experts determines the evaluation criteria. The definition of quality as fitness for purpose fits this type because the focus is on improving effectiveness and efficiency. The managerial approach may be useful in

facilitating accountability culture in universities. The methodological critique of this type is the assumption that humans achievement of predetermines goals can be objectively measured against standardized criteria. In this approach, students are considered as customers.

In the *facilitative type*, external authorities or agencies play a facilitative or supportive role in quality assurance. The quality assurance models are owned and controlled externally but are improvement oriented. The criteria used to measure quality would be internally owned. The typical method here is that quality assurance is external audit where the external agency validates the internal quality assurance system, but does not make judgments about quality as such. The evaluators are peer experts who operate on behalf of the external agency but their appointment is mostly approved by the evaluated. The results of evaluation are neither punitive nor linked to funding and the evaluation report is often confidential. This type of quality assurance is useful to stimulate internal self-evaluation and improvement processes. It helps to make institutional quality assurance processes more explicit and institutionalized. One of the drawbacks of this type is that it can be superficial and add little value to the institutional self-evaluation. The definition of quality as fitness for purpose also fits more to this type.

The *bureaucratic type* to quality assurance is based on norms and values that are external to the institutions and on which they are imposed. These norms and values are those related to governance and control such as administrative efficiency and system building priorities that are grounded in the instrumental view of higher education. Quality assurance models have accountability and compliance purposes and are externally controlled and owned by a government funded and appointed agency with legal status. The government usually initiates quality assurance and reflects the interests of external quality agency. The quality assurance methods employed in this type are institutional audit of quality assurance system, the

accreditation of institutions and programmes, evaluation of research and external examination of students. Standardized criteria provided by government are used to measure performance and accountability with a focus on input, output and outcomes. Students are viewed in this type as customers. The results of evaluation are linked to sanctions in terms of running a programme or institutions and funding. The strength of this type asserts government control and institutes a standardized model of accountability across the system and uses quality assurance to steer the higher education system towards state defined goals. It is, however, likely to be a reduction of diversity in the higher education system and the process dimension is usually ignored in the evaluation processes. The quality assurance is unlikely to the improvement of the organizational practices. Consequently, this may drive the academics to a culture compliance and conformity. The definitions of quality as fitness of purpose and quality value for money fit this type.

The four types of quality assurance reviewed here underline the notion of purpose and power tensions in the implementation of quality assurance systems in universities. These four type can be classified into two broad domains namely internal and external. The collegial and managerial types go to the internal quality assurance, whereas the external quality assurance comprises the facilitative and bureaucratic types.

Quality Assurance Methodologies in Higher Education: With respect to QA methodologies, Harman (1998) was of the view that, even though the methodologies used in various QA reviews vary considerably, most quality reviews depend on one or a combination of a limited number of key methodologies. The key methodologies identified from the literature are: (1) self-study or self-evaluation, (2) peer review, (3) quality assurance, (4) quality audit, (4) student surveys, and (5) accreditation.

Self-evaluation: Self-evaluation (or self-study) refers to the study of institutional processes and practices by members of the respective institution. This practice has proved to be both effective and cost-effective (Harman, 1998). According to Harman, the concept of self-review first emerged in the US in relation to institutional and courses accreditation. However, this methodology has now become an important feature of many QA systems. The positive features of self-study as follows: They are cost effective. The main work is done internally; Hence, often few additional resources are necessary. They usually achieve a high degree of ownership since key staff is involved and such involvement increases the chances of substantial improvements being achieved. The overall process of review or assessment is less threatening when emphasis is placed on self-evaluation. Self-study is also known to be valuable in combination with other methodologies, for example peer review and audits.

Accreditation: Accreditation is the process by which a government or private body evaluates the quality of a higher education institution as a whole or a specific educational programme in order to formally recognize it as having met certain pre-determined minimum criteria or standards (Vlăsceanu, Grünberg & Pârlea, 2007). The result of this process usually awards a status (a yes/no decision) of recognition, sometimes of a license, to operate within a limited time of validity. The process can imply initial and periodic self-study and evaluation by external peers.

Accreditation is an evaluation of whether an institution or program meets a threshold standard and qualifies for a certain status. Obtaining accreditation may have implications for the HEI itself (permission to operate) and its students (eligibility for grants). The focus of accreditation is comprehensive, examining the mission, resources and procedures of the HEI or program (UNESCO, 2010). Accreditation is a sign of commitment by the institution to

continuous development and improvement in the context of the dynamic sphere of higher education. It is more than a onetime procedure that is automatically renewed. Commitment to accreditation sets a tone for the way an institution operates in its financial, organizational and academic affairs (Koenig, 2004). Accreditation is widely used method in quality assurance in many countries.

According to Koenig, accreditation is now perhaps the most widely used instrument of external quality assurance in HEIs. Accreditation, understood as a formal system of official recognition, and carried out on strictly academic grounds by an independent and authoritative agency, is a very sensible idea. As higher education institutions increase in volume and become more market related, there is probably a growing need to protect degrees (and students) from inadequate provision and “rogue providers”. Based on assessment and evaluation, it makes an explicit judgment as to whether a programme or institution meets particular quality standards that may be either a set of minimum standards, standards of higher quality or excellence, or the institution’s own purposes.

Accreditation against minimum (also called threshold) standards provides assurance of acceptable programmes or institutions. When it is also linked to the authorization to operate, it is usually called licensing. Some systems also apply high standards. This makes it possible to differentiate between those programmes or institutions that meet threshold standards (and are thus acceptable) and those whose purpose is to meet the basic standards for the profession or for higher education in general (Lenn, 2004). This discussion on the concept of QA shows the difficulties in defining and categorizing processes and procedures. It is particularly difficult when international experiences are considered. This is because existing country realities show a variety of practices that use concepts in a disorderly manner. There is therefore no point in

attempting to be conceptually pure. However, there is a definite need to establish a common language for pedagogical reasons.

The accreditation process generally involves three steps with specific activities, namely:

- 1) a self-evaluation process conducted by the faculty, the administrators and the staff of the institution or academic programmers, resulting in a report that takes as its reference the set of standards and criteria of the accrediting organization; 2) a study visit conducted by a team of peers selected by the accrediting organization which reviews the evidence, visits the premises, and interviews the academic and administrative staff, followed by an assessment report including a recommendation to the commission of the accrediting body; and 3) examination by the commission of the evidence and recommendation on the basis of the given set of criteria concerning quality and resulting in a final judgment and a formal decision for the institution and other constituencies, if appropriate.

Quality Audit: The process of reviewing an institution or a programme is primarily focused on its accountability, and determining if the stated aims and objectives (in terms of curriculum, staff, infrastructure, etc.) are met. In Ghana, when an audit in an institutional process is carried out internally, the process is described as an “institutional review” process. Institutional Audit/institutional Review is an evidence-based process carried out through review that investigates the procedures and the mechanisms by which an institution ensures its quality assurance and quality enhancement. When it specifically addresses the final responsibility for the management of quality and standards that rests with an institution as a whole, the process is called an institutional review (Vlăsceanu, et. al., 2007).

Quality audit is the process of quality assessment by which an external body ensures that (1) the institution or program has quality assurance procedures, or (2) that the overall (internal

and external) quality assurance procedures of the system are adequate and are actually being carried out. Quality audit looks to the system for achieving good quality and not at the quality itself. Only persons (i.e., quality auditors) who are not directly involved in the areas being audited can conduct a quality audit. Quality audit can be undertaken to meet internal goals (internal audit) or external goals (external audit). The result of the audit must be documented through an audit report.

Peer Review: Peer review refers to the practice of utilising the expertise and experience of third parties in appraising the academic soundness, performance, creativity, or quality of programmes submitted for accreditation (Smith, 2006). Third parties here refer to colleagues or peers in a specific area of competence which lies within a similar domain. Eisenhart (2002) argues that colleagues from the same domain are best placed to assess the extent to which the programme or institution under assessment meets the quality standards. Peer review teams are thus comprised of practitioners who are experts in specific subject areas and field of practice. Peer reviewers must adhere to agreed and well documented standards, policies and procedures for assessing quality. The identities of the peer reviewers and the host institution for the programme or institution to be accredited may remain anonymous or they may be open. Whatever the case, the peer review process should foster objectivity and fairness in accordance to the agreed norms and standards and should be done by people who are not affiliated or conflicted with the reviewing entity or reviewed institution (Tyler, 2006).

Peer review is considered to be a critical component of accreditation that is focused on ensuring fairness and objectivity through a well-organised system of checks and balances in the pursuit of quality improvement in higher education (Lee, Sugimoto, Zhang & Cronin, 2013). Proponents of the peer review system consider it to be the most effective instrument for

improving the standards of higher education delivery through applying the tenet self-regulation and mutual control involving the separation of responsibilities and powers (Daniel, Mittag & Bornmann, 2007). Peer review is an interactive process that is designed to embody acceptance, endorsement and respect by colleagues who provide constructive criticism, necessary for quality improvement (Head & Johnson, 2011). However, many people world-over, have criticised the peer review-based accreditation on the pretext that it leads to delays in the accreditation process, is expensive and is often biased (Padro, 2010). Notwithstanding these criticisms, no effective alternatives have been proffered; hence it is prudent for quality assurance bodies to ensure that the peer review system is improved by taking into account the stakeholder concerns (Bornmann, Mittag & Daniel, 2006).

It is important to note that the peer review method is not limited to accreditation processes; it is also applicable to all fields. For example scholarly journals use it to assess the rigor, accuracy, importance and utility of manuscripts presented for publication; universities use peer review for assessing suitability for tenure, promotion, awards/honours, and research funding whilst other organisations use it to evaluate candidate for membership into prestigious societies (Lawrence, Jones, Matthews, Pepler & Callaghan, 2011). Whilst all these perspectives of peer review exist, the focus of this study is on peer-review in quality assurance in higher education.

Internal versus External Quality Assurance: There is a continuous debate in the quality assurance literature on whether the emphasis of quality assurance should be on accountability or on improvement. How to keep an appropriate balance between these two purposes is also an issue of concern. The dichotomy between external (accountability-oriented) and internal

(improvement-oriented) quality assurance exercise is a matter of how the exercise is initiated, who owns the practice and the resulting effect on higher education institutions.

Internal quality assurance refers to those policies and practices whereby academic institutions themselves monitor and improve the quality of their education provision, while external quality assurance refers to supra-institutional policies and practices whereby external bodies assure the quality of higher education institutions and programmes (Dill, 2007). It is argued that external quality assurance is in general more accountability-oriented, summative, and judgemental and that it provides only a snapshot of quality, while internal quality assurance is more formative in nature and likely to lead to continual quality improvement efforts and the development of quality culture in institutions (Wiklund, Klefsjö, Wiklund & Edvardsson, 2003)

External quality assurance assumes the conceptions of quality as fitness for purpose and value for money, whereas the transformation view of quality is linked with internal quality assurance approach. Van Vught (1994) argues that, on the one hand, quality assurance systems that only emphasizes on collegial peer review without reference to the needs of outside stakeholders like professional organizations, employers and other training organizations risk isolating higher education institutions from the rest of the world. On the other hand, the academic experts of the institutions may not take quality assurance systems seriously and are limited to merely providing accountability to the state. This suggests the need for the right balance between internal and external quality assurance. As Boyd and Fresen (2004) put it, the internal and external approaches are not mutually exclusive opposites but are both essential, in relative proportions, for a successful quality assurance system at the higher education institutions. In this regard, the equilibrium between the internal and external mechanisms,

mediated by institutional quality culture, are necessary for the effective implementation of quality assurance in higher education institutions.

There are, however, arguments that quality improvement is not easily achieved through external quality assurance whatever the official balance between quality improvement and accountability may be (Westerheijden, Stensaker & Rosa, 2007). This suggests that external quality assurance cannot stand alone in effecting quality improvement in higher education institutions. In relation to this, Harvey (1996) argued that an external quality assurance approach in higher education has a higher probability of leading to a culture of compliance in the end. The academic staff may comply with external quality assurance mechanisms to minimize disruptions rather than to improving quality. External quality assurance is also criticized for its inadequacy to address issues related to actual student learning experience. Genuine improvement, according to Barnet (1999), comes through self-understanding. To Wilger (1997), academic quality is best guaranteed when the responsibility for it is located as closely as possible to the processes of teaching and learning.

Considering the earlier discussions, it suggests that externally controlled quality mechanisms may not necessarily lead to quality improvement, but that they can complement internally controlled quality assurance mechanisms. In this sense, it can be argued that a formal quality assurance system leads to continuous quality improvement when it is internally owned and controlled and the external quality assurance system plays a supportive and facilitative role to the internal practices. Continuous quality improvement requires organizational commitment for self-evaluation. Effective self-evaluation demands addressing four fundamental questions: what is the organization trying to do (focus on leadership and policies)? How is it trying to do it (focus on strategies and resources for action)? How does it know it works (focus on indicators

and measures of success)? How does the organization change in order to improve (focus on feedback and learning)? These four questions are embedded in the Plan-Do-Check-Act (PDCA) cycle.

We can also notice that the accountability versus improvement argument has implication to the nature of quality assurance systems. According to Westerheijden, et. al., (2007), quality assurance schemes appear in a confusing multitude of forms, with different aims, scope, foci, levels, etc. There are differences in quality assurance systems ranging from the scope on teaching/learning or research or community service to a focus on input or process or output, from the level at national or institution or programme to the responsibility on government or buffer body or institution (Kahsay, 2012). There is no ‘one-model fit all’ approach to quality assurance.

Quality Assurance Models for Higher Education: The renewed interest in quality of higher education since 1980s centered on two questions: one is related to improvement; the extent to which graduates learn the knowledge and skills necessary for a changing economy. The second is related to accountability; the extent to which higher education institutions spending tax money in the right direction (Westerheijden, et. al., 2007). As Williams (1993) noted, the occurrence of quality management approaches in higher education is a product of the market ideologies of the 1980s and the managerialism that accompanied it. During this time, management of quality was made central to the new discourse on governance of higher education institutions (Srikanthan & Dalrymple, 2003). Many higher education institutions adopted the quality management models originated in the world of business and industrial production such as TQM, ISO 9001, EFQM and BPR since 1980s.

The active debate on the suitability and applicability of the industrially originated quality management models to the field of higher education sufficiently proves that no quality assurance model could be singled out for general acceptance and suitability. As Westerheijden (1999) puts it, there is no theory of quality per se, and it is necessary to link quality to its context and to the processes of which it is part. In the recent past, attempts have been made to propose and adopt quality assurance models considered suitable and applicable to the nature and characteristics of higher education. These models along with the reflection underlying them could possibly enable one draw some elements of an ideal quality assurance practice. The following are descriptions of some of the quality assurance models for higher education.

The Transformative Model (TM): The transformative model was presented by Harvey and Knight (1996). It is rooted in the notion of qualitative change on the part of the learners. In this model, education is considered as a participative process and students as participants, as opposed to products, customers, service users or clients. Hence, education is not a service for customers but an ongoing process of transformation of the participants (Harvey & Knight, 1996). This model is premised in the proposition that an effective model is one that develops a quality culture of continuous improvement. It shifted the primary emphasis on quality from external scrutiny to internal effective action.

As summarized below, this model focuses on two main concepts: enhancing and empowering the participant (student). First, quality education is one that effects changes in the participants and thereby enhances them. They call it ‘Value-added measure’. It judges quality in terms of the extent to which the educational experience enhances the knowledge, abilities and skills of students. The second major concept of this model is empowering participants. It involves giving power to participants to influence their transformation and thereby taking

ownership of the learning-process. The transformation process itself provides the opportunity for self-empowerment through increased confidence, self-awareness, and so on. Empowering learners includes the development of students' critical ability. Students' capacity to transcend received ideas, preconceptions and prejudices is emphasized.

The transformative view commits students of life-long learning, to critical reflection and to riding the continuous flow of change. According to this model, learning should be a transparent process that is based on a dialogue between teachers and students, and also among teachers about the teaching and learning process. This contributes to a rich and relevant total student experience as well as to multifaceted dialogue. This model gives emphasis to the need to advise a quality system that drives improvement from the staff-student interface. Therefore, quality assurance systems, according to this model, should both be student centered and oriented towards the experience of the learner.

Comprehensive Educational Quality Assurance Model (CEQAM): Boyle and Bowden (1997) propose this model based on their general knowledge of quality assurance and academic needs and culture. According to the authors, the requirement for comprehensive quality assurance approaches include; 1) an overarching vision or purpose of the organization, 2) effective leadership and management, 3) people including policies and plan for human resource development and employee involvement and trust etc., 4) customer focus that includes knowledge of needs and expectation and customer satisfaction, 5) evaluation and continual quality improvement, and 6) structures, policy and procedures that support primary purposes and processes.

This model is grounded in the overall perspective that all support groups in an institution must develop quality assurance that best enables them to achieve their goals. This model

contains a number of enabling conditions, basic principles and values, and a set of related key elements integrated to form a quality assurance network. According to the authors, the model should be interpreted in the light of its principal key elements listed below.

Key Output Elements: contains evidence based quality improvements in student learning (programmes), and evidence for accountability requirements, including knowledge of quality.

Key Enabling/Process Elements: include vision, values and strategic goals (including plans), programme quality assurance system and processes; faculty development programme; assessment of student learning (processes and information on outcomes) and faculty/personnel evaluation systems.

Key Support Systems: includes support groups, structures, policies and resources and their quality assurance systems.

The authors perceive the model in an integrated way. The three elements: Program quality assurance system, Faculty development and Assessment of student learning all shape critical outcome element, namely the Quality and continuous quality improvement in student learning. The element Faculty development is viewed as an important determinant and functional partner for Programme quality assurance. Similarly Faculty development and Faculty evaluation need to be interrelated. Similar to the transformative model, this model has a clear focus on the quality improvement in student learning.

The Engagement Model of Quality (EMQ): This model, developed by Harworth and Conrad (1997), is grounded in the idea that students must be meaningfully engaged in learning activities through interaction with others and through conducting worthwhile tasks. In this perspective, ‘high quality programmes are those that contribute to the development and improvement of student learning experiences. This model emphasizes on the engagement and interaction of

academics, administrators, and students in mutually supportive teaching and learning. According to this model, teaching and learning should be based on critical dialogue, mentoring and cooperative. As summarized by Srikanthan and Dalrymple (2002) the model maintains that in high quality programmes the principal stakeholders: academics, students, and administrators invest in five separate clusters of programme quality. These programmes include: participatory culture, interactive teaching and learning; adequate resources, faculty and basic infrastructure. Each of these contributes to enriching the learning experience of students. In this model, like the transformative model, programme quality that enhances students learning experience is considered a primary purpose of higher education.

The Responsive University Model (RUM): Tierney (1998) suggested this model based on the views of different authors. The main premise of this model is that quality relationships are characterized by mutuality and equality. Responsiveness of universities is required. This according to the author, is viewed from different perspectives, namely, students, community and national points of view. The university should be student centered in programmes, community centered in outreach and nation centered in research. This requires the academic staff to review regularly their academic programmes in line with the internal and external partnerships. This model according to Srikanthan and Dalrymple (2002) emphasizes on communication, which requires new relationships and partnerships both internally and externally. It also requires the university to develop networking and partnership with government and the public. In this model, there is a clear focus on meeting the learning needs of students through communication and partnerships.

The University of Learning Model (ULM): Bowden and Marton (1998) propose this model that shares similar ideas with the transformative model of quality in giving emphasis on

‘enhancing students learning’. Srikanthan and Dalrymple (2002) argued that quality in a university context relates strongly to quality in learning. This model views higher education from a pedagogical perspective. The authors argue that the essential goal that underlies universities is learning and knowledge formation. Learning is a core process in all functions of a university. Accordingly, teaching, research and service are considered as the means, not the aims of, the university system. Preparing the individual, the community, and the society to face future problems and opportunities based on current knowledge is the ultimate objective of a university system.

Student learning in this context is not only and probably not even mainly, a function of teaching. It however depends up on how each student experiences the learning opportunities. This model highlights a synergistic involvement of academics in course/research teams, in developing a holistic view of students’ competencies and a collective consciousness of what is common and what is complimentary. In this model, there is a shift from an input-oriented educational approach to a learning-focused approach. This in turn requires a shift in university organizations to focus on policies and activities centered on student learning.

The Generic Quality Model (GQM): Srikanthan and Dalrymple (2007) developed this model based on a synthesis of other quality models and approaches previously discussed in the literature. It focuses on student learning experience and an active collaboration at the educational delivery level as a basis for quality. This authors argue that quality in higher education is related to quality student learning. Hence, the focus has to be on enriching the learning experiences of students. The authors suggested that as learners are transformed in higher education, it would directly address and even exceed the ‘value for money’ criteria of the funding bodies and the community at large. The quality management process in this model integrates both the service

aspects and the core areas of learning and teaching. The core features of the model include: 1) a clear focus on ‘transformation’ of learners (and of the institution): enhancing them through adding value to their capability and ultimately ‘empowering’ them; 2) a synergetic collaboration at the learning interface which is grounded in the idea that high quality programmes are anchored in collegial and collective cultures that invites widespread involvement; 3) a significant commitment to improve learning that considers the critical importance of creating tangible mechanisms to preserve the commitment in order to stimulate progress.

The main elements of the model include institutional transformation of learning; teaching for transformation; assessment for transformation; quality improvement, and monitoring for quality. In this model, institutional transformation for learning involves development of a collective conscious and teaching as key performance indicators. According to this model, the focus of quality assurance is on improvement of students’ learning. Learning improvement in turn should be informed by educational theory.

In this generic model, emphasis is given to the role of the student; Empowerment of the course team across all boundaries to facilitate a dialogue cantered on learning is also another point of focus. Implementation of this model requires the development of collective consciousness and vision shared by all actors involved. The model carves a clear role for senior management to encourage and ensure collegial culture. Commitment of senior management, culture of continuous improvement, team interaction and shared vision within the academic community are also some requirements for the actualization of quality assurance. Similar to the proceeding models, this model focuses on what and how students are learning and on how student learning can be improved.

Dill's Academic Quality Framework (DAQF): This framework is proposed by Dill (1992) based on his basic assumption that a higher education programme can be conceived as an interrelated system. The focus in this framework is on the centrality of academic design and on the means of managing academic quality in higher education. The emphasis is on the entire programme chain. Teaching is carried out through a designed programme that features specific educational processes. Quality, in this framework, is not “assessed in” or not “controlled in” but designed in”. In this perspective, academic quality is the responsibility of all academic programmes with strong leadership exercised collegially by the faculty as a whole. The educational quality management would address the following critical intersect in the programme chain.

Source Management and Student Selection: This focuses on cross- functional teams and on increased coordination of related processes including admission, registration etc. A concern with student quality and success is the underlying idea in this regard. In this quality management processes there is greater emphasis on assuring the continual improvement and reliability of the performance of incoming students on measures of academic quality. This entails not only assessing students for admission on critical measures, but also systematically validating the preparation of the student body and effectiveness of selection processes based on the essential criteria of academic quality. Thus, an academic quality management perspective places greater emphasis on the relationship between student selection and their long-term success on academic tasks. The integration and coordination of source management and student selection with the process academic programme design is also another focal point.

Academic Programme/Process Design: Faculty members' skills in instruction, course planning, and student assessment based on common causes of variation are the basic concerns here. There

is also an emphasis on the importance of coordinated programmes designs/cross-functional design teams including faculty representatives, educational assessment, production materials as well as sequencing of those academic design involves the sequencing of various academic programme components to make student learning more effective.

Customer Needs Research: The model recognizes the importance of conducting research on college alumni as well as on potential employers. This is to find out the relevance of academic skills and of knowledge to post academic success. Survey on the perceptions of alumni in various occupational sectors as to what constitutes quality academic preparation could provide institutions with the potentially valuable customer research.

Design a Supporting Quality Information System: This deal with the collection of data on measures of the students' performance. This model involves measures based on assessment embedded in educational process. Core elements process includes student admission and placement, dropout, graduates, competence and their satisfaction on their respective programmes. These critical components of an ideal academic quality information system are necessary to support the management process of student selection and source management, programme or process design, customer satisfaction and institutional legitimacy. This model puts emphasis on institutional processes and conditions that affect student-learning experience.

Massy's Model of Quality Process (MMQP): This is developed by Massy (2003) as a quality model dealing with both the design and implementation of quality. In this model, design quality refers to the specification for the product or service, whereas implementation quality refers to how well production actually meets the specifications. As Massy (2003) noted, focusing attention on teaching and learning, assisting in their efforts improve teaching and learning

quality, and facilitating accountability for quality are the objectives of this model. The following five domains of activities are contained in this model;

Determination for Desired Learning Outcomes: This domain deals with the intended outcomes of the educational programmes expressed in terms of changes in students' capabilities and experiences.

Design of Curricula: This refers to the content, sequence, organization and relevance of the curricula including course materials. This domain deals with design quality.

Design of teaching and learning process: this domain deals with the organization and selection of appropriate teaching methods as well as other resources. Some of these resources include roles and responsibilities of the faculty and feedback mechanisms.

Design of Student Examinations and Use of Examination Results: This deals with the selection and use of assessment measures and indicators to assess the students' learning which includes the determination of long-term outcomes of educational experiences and the procedures to be employed.

Implementing Quality Assurance: This refers to the mechanisms developed by the academic community to assure to which extent content is delivered as intended, teaching and learning process is being consistently implemented, and assessments are affected and results effectively used. Putting more emphasis on desired learning outcomes, curricula, educational processes, student assessment, and implementation quality is the central theme in this model. It also focuses on the quality of design of curricula, on outcomes and on the processes of teaching, learning and assessment.

Quality Management Framework for Higher Education (QMFHE): This model is proposed by Csizmadia (2006) based on insights derived from a review of quality assurance and

management models previously described in the literature. This model is grounded in the basic system model that characterizes higher education as an academic organization. It employs the input-throughput-output approach with a focus on education and its direct support processes. The main elements of this model are described under input, throughput and output dimensions.

The input dimension includes external influences such as governmental expectations, accreditation agencies, students' demands and resources. The specific educational processes such as academic, governance and support processes are categorized under the throughput dimension. Finally, the elements such as student satisfaction with courses, student/employer satisfaction with degree programmes, study results, research output and services are categorized under output. This model also focuses on education and support processes that influence quality of learning outcomes.

The University as a Learning Organization Model (LOM): This concept was first coined by Senge (1990). The fundamental premise of a learning organization is that learning is valuable, continuous, and most effective when shared and that every experience is an opportunity to learn (Kerka, 1995). A learning organization is an organization skilled at creating, acquiring, and transforming knowledge; modifying its behaviour; facilitating the learning of all its members, and continuously transforms itself (Lewis, Benjamin, Jude & Marcella, 2008).

In this perspective, a university is conceptualized as being both explicitly and implicitly built on notions of relevance to the importance of learning at an individual level. This perspective considers quality of education as a dynamic concept involving continuous improvement and development of members, practices, processes, and outcomes of an educational organization (Cheng & Tam, 1997). The main characteristics of a learning organization are; learning culture, free exchange and flow of information, commitment to

learning, valuing people, climate of openness and trust and learning from experience (Nakpodia, 2009).

The five disciplines essential to a learning organization include team learning, building shared vision, awareness of mental models, personal mastery and systems thinking (Senge, 1990). Team learning focuses on the ability of the group to learn, and shared vision refers to building understanding and commitment among members concerning the organizational vision. Awareness of mental models refers to the assumptions that affect ways of seeing and interacting with the environment. Personal mastery is related to development of an individual's vision. Systems thinking involve integrating others into a coherent theory. The main trust of this perspective is that the chances of successful implementation of quality assurance in university will be improved if the organization operates as a learning organization with a commitment to continuous quality improvement (Lim, 2001).

Evolution of Quality Assurance in Higher Education in Ghana

The government of Ghana formally introduced quality assurance in higher education institutions by establishing the National Accreditation Board (NAB), under the Ministry of Education (MoE). It is a national quality assurance agency responsible for quality assurance in higher education within the territorial jurisdiction of Ghana. It was established by Provisional National Defense Council Law 317, 1993 (PNDCLaw 317, 1993) which was later amended by an Act of Parliament, which resulted in the enactment of NAB Act 744, 2007 (Ntim, 2014). The PNDCLaw 317 mandates NAB as being the sole institution responsible for the accreditation of both public and private tertiary institutions in Ghana in terms of content and standards of programmes. It is also to determine in consultation with professional bodies or institutions in mounting programmes and the maintenance of professional and academic standards. In addition,

NAB is responsible for determining the equivalents of Degrees, Diplomas and Certificates obtained in Ghana or elsewhere.

The passage of the NAB Act 744, 2007 by the Parliament of Ghana does not only make it to retain the above responsibilities of NAB but also accorded the agency more powers to deal with quality assurance in Ghana. The additional responsibilities which have been assigned to the agency include: publishing the accreditation status of institutions as well as their programmes as deemed appropriate at the commencement of each academic year; and advice the President of Ghana on the grant of a presidential charter to private tertiary institutions. The agency may also perform any other function as assigned to it by the Minister of Education. Following the PNDCLaw 317 and its subsequent amendment into NAB Act 744, 2007, the NAB made the establishment of Internal Quality Assurance Unit (IQAU) a statutory requirement in tertiary institutions in Ghana. Tertiary institutions that are recognized by NAB are required to establish IQAU within a maximum of five (5) years from the date of first accreditation.

According to NAB, the existence of functional IQAU is a key indicator in assessing the performance of an institution towards institutional re-accreditation and the grant of a presidential charter (NAB, 2011). The functions of IQAU are many and depending on its assigned mandate by the institution, it may perform one of the following functions: review and advise management of the institution's Strong Room; supervise the conduct of examination; facilitate capacity building of academic and support staff within the institution; ensure institutional accreditation process and other quality activities with NAB including annual reporting; facilitate the development, dissemination and application of quality benchmarks for the various academic and administrative activities of the institution; facilitate the collation and integration of feedback from students and other stakeholders on quality related matters in the institution; promote quality

culture through the facilitation of workshops and seminars on quality related themes; act as a link agency by coordinating, documenting and disseminating quality matters; develop and maintain a database on quality related information; prepare annual report on quality assurance of the institution based on the quality benchmarks set out for the institution; oversee issues pertaining to the internal and external ranking for the institution and its programmes; managing the institution's affiliation with mentoring institution; and assisting in the development and assessment of curricula. For the reasons given above, various tertiary institutions particularly public universities/professional institutions and private tertiary institutions have established their quality assurance Units/Directorates/Offices. This is to position the institutions for performance assessment by NAB on one hand and to make them competitive in the global job market by ensuring compliance with internal quality assurance measures and external (national/international) standards with the potential to promote comparability of qualifications across institutions of higher learning.

Internal quality assurance unit or department is a unit created within an institution purposely to promote quality culture within that institution. It has the primary responsibility of facilitating the development and operationalization of structures and systems within the institution for assuring quality in academic and other services in the university. It would usually prepare the institution for scrutiny by an external quality assurance agency (Dadzie-Mensah, 2012). The European Network for Quality Assurance (ENQA) in Higher Education has formulated in 2005 guidelines for internal quality assurance, based on experiences. In these guidelines, Institutions should have a policy and associated procedures for the assurance of the quality and standards of their programmes and awards. They should also commit themselves explicitly to the development of a culture which recognises the importance of quality, and

quality assurance, in their work. To achieve this, institutions should develop and implement a strategy for the continuous enhancement of quality. The strategy, policy and procedures should have a formal status and be publicly available. They should also include a role for and assessment of students and other stakeholders. Other requirements include: Approval, monitoring and periodic review of programmes and awards: Institutions should have formal mechanisms for the approval, periodic review and monitoring of their programmes and awards; Assessment of students: Students should be assessed using published criteria, regulations and procedures which are applied consistently; Quality assurance of teaching staff: Institutions should have ways of satisfying themselves that teaching staff are qualified and competent to do so. They should be available to those undertaking external reviews, and commented upon in reports; Learning resources and student support: Institutions should ensure that the resources available for the support of student learning are adequate and appropriate for each programme offered; Information systems: Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes of study and other activities; and Public information: Institutions should regularly publish up to date, impartial and objective information, both quantitative and qualitative, about the programmes and awards they are offering

Formative and Summative Evaluation of Educational Programmes

In formative evaluation, programmes or projects are typically assessed during their development or early implementation to provide information about how best to revise and modify for improvement. This type of evaluation often is helpful for pilot projects and new programmes, but can be used for progress monitoring of ongoing programmes. In summative evaluation, programmes or projects are usually assessed at the end of an operating cycle, and

findings typically are used to help decide whether a programme should be adopted, continued, or modified for improvement. Both evaluation methods are recommended for use, when possible, to provide programme staff with ongoing feedback for programme modifications (formative) as well as periodic review of long-term progress on major programme goals and objectives (summative), and to meet regular reporting requirements.

According to Boulmetis and Dutwin (2005), formative evaluations concentrate on examining and changing processes as they occur, provide timely feedback about programme services, and allow you to make programme adjustments “on the fly” to help achieve programme goals. Some types of formative evaluation are: needs assessment that determines who needs the programme, how great the need is, and what might work to meet the need, structured conceptualization that helps stakeholders define the programme, the target population, and the possible outcomes; implementation evaluation that monitors the fidelity of the programme delivery; and process evaluation that investigates the process of delivering the programme, including alternative delivery procedures.

Summative evaluation examines programme outcomes to determine overall programme effectiveness. It is a method for answering some of the following questions: Were your programme objectives met? Will you need to improve and modify the overall structure of the programme? What is the overall impact of the programme? What resources will you need to address the programme’s weaknesses? Some types of summative evaluation are: goal-based evaluation that determines if the intended goals of a programme were achieved. Outcome evaluation that investigate whether the programme caused demonstrable effects on specifically defined target outcomes, impact evaluation which is broader and assesses the overall or net

effects (intended or unintended) of the programme, cost-effectiveness and cost-benefit analysis that address questions of efficiency by standardizing outcomes in terms of their dollar costs and values.

Within the range of formative evaluation approaches, there are four main goals for formative evaluation, each of which may be more or less emphasized depending on the programme needs (Nan, 2003). These approaches to formative evaluation are planning evaluation, implementation evaluation, monitoring evaluation, and progress evaluation. Planning evaluation clarifies and assesses a project's plans. Are the goals and timelines appropriate? Are the methods utilized to reach the goals appropriate? In addition, a planning evaluation can lay the groundwork for future formative and summative evaluations by developing indicators and benchmarks. In quality assurance, it is often useful to include a planning evaluation component in order to ensure that all stakeholders share common enough visions of the quality system plans. A planning evaluation can be a form of consensus building amongst those involved in quality assurance.

Nan (2003) stated that, an implementation evaluation focuses on the extent to which a programme is proceeding according to plan. Information about ways in which a programme is not proceeding according to plan can be used to either revise plans or to revise programming. In quality assurance, implementation evaluation can be a useful component to feed into a planning-focused evaluation. Where work is not proceeding according to plan, participants and facilitators can use an implementation evaluation with a planning focus to ask themselves why things are not going according to plan, and adjust plans or strategies accordingly.

Nan (2003) further stated that, monitoring evaluation is usually conducted by an outside evaluator during the course of a programme. A funder may choose to monitor implementation of a quality assurance policy by visiting an institution, checking in with staff and students, or talking with coordinators directly involved in the implementation. A monitoring evaluation can provide a funder useful reassurance that money is being well spent. And a progress evaluation assesses a programme's progress. The programme's unique goals should serve as a benchmark for measuring progress. Information from a progress evaluation can later be used in a summative evaluation.

Evaluation Models

According to Owsten (2008), one of the pioneers in evaluation, Ralph Tyler, when he conducted a longitudinal study of schools in the 1930's defined evaluation as a school-based process used to evaluate the extent to which curriculum objectives have been reached. Then, from the 1960's onwards, various roles of evaluation have been discovered. The theme has changed from being a solely school-based activity into numerous programmes which have been evaluated by various agencies and has also changed its focus from programme improvement to programme comparison. Michael Scriven expanded Tyler's concept of evaluation by redirecting the attention of evaluators to consider not only the intended outcomes of a programme but also the unintended outcomes as both outcomes are important considerations in evaluating programmes (Glatthorn, Boschee, Whitehead & Boschee, 2012).

Stufflebeam (1983) realised the shortcomings of Tyler's definition as not fitting the needs of society, institutions and citizens, redefined evaluation as the process of providing useful information for decision making. This is similar to the definition of Gredler (1996) who defined

evaluation as the systematic collection of information to assist in decision making. Decision makers will differ depending on the institution, so in a university setting they could be faculty members, a curriculum committee, academic board, or the university council. Donaldson (2003) defined evaluation as the process of determining the merit, worth and value of something. This is similar to a definition by Merriam-Webster (2013) that evaluation is an act to determine the significance of a subject's merit, worth or condition of usually by careful appraisal and study. It shows that merit, worth and value cannot be separated from the term 'evaluation'.

Stufflebeam and Shinkfield (1985) defined evaluation as the process of delineating, obtaining and providing descriptive and judgemental information about the worth and merit of some object's goals, design, implementation and impacts in order to guide decision making, serve needs for accountability, and promote understanding of the involved phenomena. This definition present evaluation as a continuous and systematic process that supports the process of decision-making, accountability and promoting an increased understanding of phenomenon. And at the same time, it represent a broad picture of evaluation which includes formative and summative aspects along with its stated goals.

There are different types of evaluation depending on the objects that are being evaluated or the role of evaluation. Considering the role of evaluation, there are two types of evaluation; formative and summative. If evaluation is conducted in order to improve the programme or to develop current activities while the programme is still under development that is formative evaluation. Alternatively, if evaluation is conducted to look at the effectiveness of a programme or outcome for accountability, certification, selection or continuing a programme of an already completed programme then it is a summative evaluation (Owsten, 2008). Similarly, providing

the success or failure of a programme is also considered a summative evaluation (McNamara, 2002). Both forms of evaluations are needed in the development of a product or service.

In order to evaluate the programme in a more complete and meaningful manner, it is advisable to follow certain models. A model as a conceptual picture that shows the interrelationship between various elements involved in any activities. Experts in evaluation categorise different methods in evaluation based on the different approaches, strategies or models.

The Tyler Evaluation Model: Tyler evaluation or ‘goal-based’ evaluation model was developed by Ralph W. Tyler in the late 1940s. Tyler’s model focused on the ‘goals’ such as the programme objectives, performance targets or expected outcomes (Kahan, 2008). The constructs involved in this model are the statements on the ‘goals’ in behavioural terms taking into account factors like pupil’s entry behaviour, analysis of culture, school philosophy, learning theories or new developments in teaching. Evaluation is conducted based on pre-post measurement of student performance. The steps in the Tylerian Evaluation Approach are as follows:

1. Establish broad goals or objectives
2. Classify the goals or objectives
3. Define objectives in behavioural-terms
4. Find situations in which achievement or objectives can be shown
5. Develop or select measurement techniques
6. Collect performance data
7. Compare performance data with behavioural-stated objectives.

The strengths of this model are that it is easy for evaluators to determine whether the goals have been met and it is easy to design evaluative studies using this model (Kahan, 2008). It is also scientifically acceptable, logical, easily adapted by the evaluators and has had a great influence on the evaluation approach that comes after it (Lee, 2008). On the contrary, its weakness is that it turns to focus on information on terminal rather than information on pre-programme or the ongoing programme. Evaluation also focuses more on objectives rather than its value. It is the fact that this approach does not consider the validity of the chosen 'goals' (Kahan, 2008). If evaluation results show that they are aligned with predetermined goals that does not necessarily mean that they are caused by the programme implementation but could be due to other factors. This phenomenon of ignoring processes seem to limit the approach in evaluating.

Stake's Responsive Evaluation Model: Stake's responsive evaluation model is a naturalistic approach. This model gives the evaluators more freedom to choose which methodology to be used in the programme evaluation (Owsten, 2008). It is natural in the sense that evaluators act naturally like most of the people who evaluate things by observing and reacting. Stake proposes an approach that responds more to the needs of the audiences as he asserting that, evaluation probably will not be useful if the evaluator does not know the interests and language of his audience. That is why it is also known as 'client-centred study' where evaluators have to work hand in hand with the clients and act as a counsellor or advisor to the clients in improving open-ended and emergent designs of the study, thereby producing a narrative description of study in order to create a rich set of information of the programme.

Evaluators under this type of evaluation model should attend actual programme activities and not to focus only on the programme intentions. Evaluators should also present multiple

perspectives from the audiences on the success or failure of the programme and should be focusing more on the methodology of anthropology and journalism in order to gain more information on the programme (Owsten, 2008). In evaluating programmes based on the responsive evaluation approach, Stake lists the role of evaluators as follows:

1. To make plan of observations and negotiations.
2. To make an arrangement for the various observers of the programme.
3. To make a brief narratives, portrayals, products display or graphs.
4. To find out what values most to the clients.
5. To collect descriptive and judgemental data from various individuals.
6. To check records quality.
7. To get programme personnel to react to the accuracy of his portrayals.
8. To get authority figures to react to the importance of findings.
9. To get audience members to react to the relevancy of findings.
10. To prepare for final written report if needed.

The strength of this model is that it provides a systematic method for the data matrices which contain descriptive data with intentions and observations and also judgemental data. But still, it might not have enough methodology to gain information and it stirs up value conflicts. However, methods used still depends on the evaluation purposes (Stufflebeam, 2001).

Kirkpatrick's 4-level Model: Kirkpatrick's evaluation approach was developed by Donald J. Kirkpatrick in 1959 and takes an objective or goal-based approach. It favours neither the decision-making nor naturalistic approaches (Owsten, 2008). Instead it consist of four levels of training evaluations which are reaction, learning, behaviour and results in a sequential manner (Kahan, 2008), with a fifth level added later to measure return on investment (McNamara, Joyce

& Hara, 2010). The first level, the 'reaction level', is the easiest to conduct while the highest level is the hardest (Zinovieff, 2008). In general, this model is used to measure the quality, efficiency and effectiveness of the programme. The first level, the reaction level measures the 'affection factor' of the participants towards the programme, learning level assesses knowledge, skills and attitudes of participants, behaviour level measures the change in participants' behaviour and results are dealing with the impact of the programme. In evaluating level 1, a positive reaction means that the participants are happy and satisfied with the training programme and are more likely to use the skills and knowledge they acquire and vice versa for the negative reaction.

Kirkpatrick and Kirkpatrick (2008) believed that the participants might be motivated to learn if they give a positive reaction. In level 2, evaluation determines how much knowledge, skills and attitudes that have been gained by the participants throughout the training. The assessors can use pre-test and post-test to measure knowledge, performance test to measure skills and attitude survey to measure attitude change. In order to assess level 3, participants need to be given certain range of time for the pre-post performance appraisal so that they have an opportunity to apply what they have learned (McNamara *et al.*, 2010). An example of an evaluation made at the result level in the field of higher education is to assess students' performance at work following graduation, thus permitting an evaluation of the impact of course or programme on the job performance of students (Owsten, 2008).

Normally, levels 1 and 2 are considered as formative evaluation, while levels 3 and 4 are summative (Zinovieff, 2008). The first two levels are easy to assess because they involve the extent to which participants' satisfied and have changed their level of attitude, knowledge and skills after attending the programme. But, the latter levels are more difficult to assess as they

involve assessing changes in participants' behaviour and also changes in the organization as a result of the participants; attending the programme (Owsten, 2008).

This model is considered good for its straight-forward procedures when it comes to implementation but it does not explore the 'why' or 'how' of the results (Kahan, 2008). Evaluators using Kirkpatrick's model have difficulties in determining the suitable evaluation methods and sometimes they end up conducting only the first two levels of evaluation because complexity increases as level increases (Eseryel, 2002). A suggestion by McNamara et al. (2010) which is also consistent with Kahan and Eseryel's viewpoint is that results produced using this model of evaluation might not be significant enough although it represents evaluation as a straight-forward process. Moreover, this model does not consider the intervening variables that can affect learning such as learner motivation or entry levels of trainers' skills and knowledge (Frye & Hemmer, 2012).

Malcolm Provus' Discrepancy Evaluation Model (DEM): Provus (1969) viewed evaluation as the process of agreeing upon program standards, determining whether a discrepancy exists between the programme and the standards governing that aspect of the programme, and using discrepancy information to identify weaknesses of the program. His goal was to obtain sufficient information about the operation of new programs in order to make the necessary changes in the early stages of the planning of the programs. Provus believed in the importance of evaluation to systematically improve programs and ensure educational benefit and fidelity.

Provus (1969) developed the following equation to assess, implement, and make the necessary changes in the program under study:

$$I(P) = O$$

In the equation, I equals the input (I), P is the process (P) and O is the outcome (O).

Provus (1969) suggested that the difference between the goal of the program and the outcome should be minimal. Further, Provus believed that the key intention of any program evaluation should be to understand better the relationships of its equation. When program evaluators have the information of what inputs, processes, and outcomes are involved, the program is better understood, defined, operational, and productive. For the purpose of this study, the IPO technique will be used to describe the internal quality assurance practices in universities in Ghana.

Provus (1969) considered discrepancies to be the essential clue in program evaluation as he explained: Discrepancies point out differences that exist between what program planners think is happening in the program and what's actually happening. In his work, Provus (1969) stated, evaluation at its simplest level may be seen as the comparison of performance against a standard. When evaluation is viewed as a process for program development, stabilization and assessment, as is the case of the Discrepancy Evaluation Model (DEM), there are five such relevant comparisons. Each stage, performance, and standard is presented in the Table 1.

Table 1: Provus' Evaluation Stages

STAGE	PERFORMANCE	STANDARD
I	Program Design <i>Input Dimension</i> <i>Process Dimension</i> <i>Output Dimension</i>	Design Criteria
II	Program Operation	Program Design Input Dimension

		Process Dimension
III	Program Interim Products	Program Design Process Dimension Output Dimension
IV	Program Terminal Products	Program Design Output Dimension
V	Program Cost	Cost of Other Programs with Same Product

Provus (1969) deemed that at each stage, some indicator of performance is obtained which is compared with a standard that serves as the criterion of performance. In his research, Provus recommended that when discrepancies occur, either program performance or program design standards should be changed. The Provus Discrepancy Evaluation Model is a well-tested, commonly accepted, effective model to use in evaluating programs. For the purpose of this study, Provus' first three stages of his model will be incorporated. The program terminal and cost analysis phases will be omitted. In Stage IV of the Provus model, the standard refers to the terminal objectives of the program design. Its purpose in an evaluation is to assess whether the design of the program achieved its major objectives. Stage V refers to the program cost, which will not be a component of this study.

The CIPP Model: The CIPP model was developed by Daniel Stufflebeam and his colleagues as a guidance to evaluate programmes, projects, personnel, products, institutions or systems from various disciplines such as education field, housing and community development, transportation safety and military personnel review systems (Stufflebeam, 2003). It has been used to evaluate various educational programmes such as those related to science and mathematics education, rural education, educational research and development, school improvement, professional

development schools and many more (Stufflebeam, 2002). It could be implemented by internal evaluations, self-evaluations or external evaluations. It is a model that can serve both formative and summative purposes of evaluation. Stufflebeam believed that the CIPP model places priority for evaluation to function as a way to improve the programme rather than to prove. But still, proving can be conducted using summative evaluation. Stufflebeam also believed that by using his model, formative evaluation focuses on decision-making whiles summative evaluation focuses on accountability of the programme (Owsten, 2008).

The CIPP model is based on the management-oriented approach, an approach that allows evaluators to provide enough information for the organisational leaders following information needed by the managerial decision-makers (Hogan, 2007). Being a decision or accountability-oriented evaluation, the CIPP model is able to facilitate decision-making and quality assurance (Stufflebeam & Shinkfield, 2007). The four components of the model are the context, input, process and product evaluation.

Context evaluation focuses on planning decision. Example of specific evaluation questions that could be asked from context evaluation dimension are “what is the aim of the programme?”, “what is the context of the programme and how will it match with the target population?” or “who are the providers and their background information?” (Clinton, 2001). Data collection methods that could be used are surveys, document reviews, interviews, secondary data analyses, diagnostic test, system analyses hearings or the ‘Delphi technique’, and focus groups, website, journal or standardised test (Clinton, 2001).

Input evaluation focuses on the personnel, resources and procedures in achieving the programme objectives or the desired results. Not only does it involve assessing current system capabilities, it also involves examining potentially relevant approaches and then recommending

alternative approaches. It serves 'structuring decisions' because the alternative strategies are structured to meet the needs of the given objectives (Stufflebeam, 1971). Example of input evaluation components are lecturers' skill and knowledge, equipment, workshop facilities, funds allocation or role of Vice Chancellor. Examples of specific evaluation questions are "what is the number of sessions?", "what input was received from MOE?" or "what professional development did the providers receive?" (Clinton, 2001). Data collection can come from surveys, interviews, websites, journals or existing documentation.

Process evaluation focuses on the process implemented to achieve programme's objectives. The information is needed occasionally to monitor the programme implementation. During the process evaluation, other than monitoring challenges, it also identifies programme adjustment, gets additional information for changes, documents the process and runs regular monitoring on the activities. It serves an 'implementing decision' as it provides information during the implementation stages of a programme or a complete description of the actual programme activities. This is to help indecision-making, helping to understand how the implementation could be strengthen, how programme replication could be assisted or the reasons why programme objectives that are not being achieved could be determined (Stufflebeam, 1971). Examples of process evaluation component of an evaluation of subject's effectiveness are teaching and learning methods practised by the lecturers, methods used by the lecturers to assess course work or courses attended by lecturers (Clinton, 2001). Methods such as questionnaires, on-site observation, interviews, rating scales, photographic records, records analysis, case studies of participants, focus groups, self-reflections with staff or tracking expenditures, survey, existing documentation, website or focus group could be used. Clinton (2001) believed that interviewing is the most suitable mode of data collection method for process evaluation.

Product evaluation assesses programme outcomes hence it is sometimes called an ‘outcome evaluation’. After evaluation has gone through the three phases (context, input and process evaluation), at the end of it, of course it is important to know the extent to which the participants’ needs are met by asking “Did the programme succeed?” (Stufflebeam, 2003). For product evaluation component, it is divided into four subparts of evaluations of impact, effectiveness, sustainability and transportability evaluations (Stufflebeam, 2003). Impact evaluation assesses whether the programme reaches the target audience. These findings are very important for the stakeholders as an assurance as to whether the programme reaches intended beneficiaries or as a judgement on whether the programme serves the right beneficiaries and addresses the important community needs. Effectiveness evaluation assesses the effectiveness of the programme outcomes in terms of their quality and significance by looking at the positive and negative outcomes. The findings could be used by stakeholders as judgement on the success or failure and the significance of the programme and then to come up with accountability reports of the outcomes. As Stufflebeam put it “Did it succeed in meeting the beneficiaries’ needs?” or “Were their targeted needs met?” (Stufflebeam, 2003).

The sustainability evaluation focuses on whether to continue the programme or not. As Stufflebeam put it “Did it succeed in sustaining the beneficiaries’ gains?” or “Were the gains for beneficiaries sustained?”. The findings from the transportability aspects help in determining sustainability of the audiences, the information to be disseminated and the programme to be applied at other places. As Stufflebeam put it “Did it succeed in proving a transportable and adaptable gains for the beneficiaries and later is capable to be applied in other settings?” or “Did the process that produced the gains prove transportable and adaptable for effective use elsewhere?”. Examples of evaluation questions concerning product evaluation could be “Are the

intended outcomes achieved?” or “What is the impact on the achievement outcomes?” (Clinton, 2001). Product evaluation could be conducted using techniques likes rating scales, case studies, logs and diaries of outcomes, hearings, focus groups, documents analysis, etc.

Table 2 lists out the slight difference of the questions addressed dealing with formative and summative evaluations using the CIPP Model.

Table 2: Formative and Summative Evaluations

Evaluation dimension	Questions addressed	
	Formative evaluation	Summative evaluation report
Context	What needs to be done?	Were important needs addressed?
Input	How should it be done?	Was the effort guided by a defensible plan?
Process	Is it being done?	Was the service designed executed competently and modified as needed?
Product	Is it succeeding?	Did the effort succeed?

Hence, this model could be used for both purposes, formative or summative evaluation. The differences in actions taken following their roles in evaluation in all four dimensions of the model is shown in Table 3.

Table 3: The Relationship of Evaluation Roles to Context, Input, Process and Product Evaluations

Evaluation roles	Context	Input	Process	Product
Formative evaluation	Guide to identify needs or raking of goals	Guide to choose strategy and examine work plans	Guide to implement plans	Guide to continue or terminate project

Summative evaluation	Compare goals and priorities to assessed needs, problems, assets and opportunities	Compare strategy, design and budget to targeted needs	Compare designs and actual processes and costs	Compare outcomes and side effects to targeted needs
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The main aim in formative evaluation is to improve programme, and it is meant to be conducted during the implementation process. All actions are in the form of guidance for the evaluators to act upon at various stages based on certain conditions to help them in decision making and quality assurance. As for summative evaluation, it is the action of comparing to the targeted needs since it is conducted at the end of a completed programme to sum up the programme's merit, worth, probity and significance.

The relationship between the types of evaluation and decisions is shown in Figure 1 and Table 4. Figure 1 shows the dynamic action of evaluations serving the decisions in the CIPP Model. It is 'dynamic' in the sense that information from any stage of the decision making activity could be provided to the previous stage so that modifications on evaluations could be made. In Table 5, the 'Ends' row explains the realization of the objectives which is achieved by the planning and recycling decisions whereas the 'Means' row shows the act of achieving ends which is achieved by the structuring and implementing decisions (Isaac & Michael, 1982). Furthermore, decisions are also categorised under an intended act or an actual one. Planning and structuring decisions are grouped as intended ends and means respectively whereas recycling and implementation decisions are grouped as actual ends and means respectively.



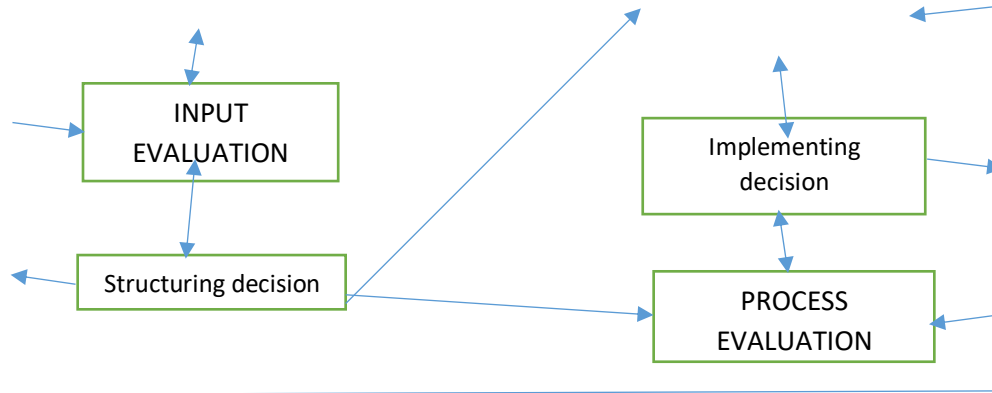


Figure 1: Dynamic Action of the CIPP Model

Source: Isaac and Michael, 1982, p.10

Table 4: Types of Evaluation and Decisions

	INTENSIONS	ACTUALITIES
ENDS	Planning Decisions supported by Context Evaluation	Recycling Decisions supported by Product Evaluation
MEANS	(What needs to be done?) Structuring Decisions supported by Input Evaluation	(Did it succeed?) Implementing Decisions supported by Process Evaluation
	(How should it be done?)	(Is it being done?)

Next, the framework of the CIPP Model on types of evaluation together with their steps in the evaluation process is shown in Table 5. The steps involved are delineating, obtaining and providing. Delineating involves outlining questions to be answered and focusing on the information required by decision makers (Stufflebeam, 1971). Obtaining involves relevant information by organizing and analysing information using measurement and statistics and providing is a step which synthesises information to be provided to the decision-makers.

Table 5: The Framework of the CIPP Model (Stufflebeam, 1971)

	EVALUATION TYPES				
STEPS	IN	CONTEXT	INPUT	PROCESS	PRODUCT
EVALUATION					
PROCESS					
Delineate		System variables	Problem	Process decision	Effectiveness

	and values	specifications	points	criteria
		Design criteria	Milestones	
		Constraints	Barriers	
Obtain	Performance and judgment data	Identification and analysis strategies	Monitoring of procedures	Primary, secondary and tertiary effects
Provide	Profile of needs, opportunities and problems	Strategies by problem matrix	Progress reports Exception reports	Description and explanation of projects' impact

When using the CIPP Model to evaluate any programme, it is best done with all the four components of model. However, Stufflebeam and Shinkfield (1985) believed that evaluation could be conducted using any one, two or three components.

Theoretical Framework

According to Greening and Gray (1994), various theories have been developed and applied over the years to examine and understand the aspects of organization. The theoretical framework of the current study is based on organizational theories such as resource dependency perspective and bureaucratic politics model to examine the practices of internal quality assurance systems in public universities. These theories will help in evaluating the effectiveness of internal quality assurance systems in Ghanaian public universities.

Resource Dependency Theory: The resource dependence approach explains how an organization manages to survive through its ability to acquire critical resources. Developed by Pfeffer and Salancik (1978) the theory emphasize that to understand organizations, one must understand how they relate to other actors in their environment. This approach is constructed on the basis of the fundamental assumption that all organizational action is ultimately directed at securing its survival. Organizations can have basic goals and objectives, but if they do not exist, these cannot be attained. Thus, survival is the core objective of every organization and for survival it needs resource.

The resource dependency theory advocates that higher education institutions depend on other actors whenever they strive for goals whose achievement can be facilitated by them. No organization, however, is able to generate all of the distinctive resources that it needs. Therefore, to guarantee the flow of resources, an organization must interact with other organizations that control these resources, and thus it depends on them. Dependency by definition creates uncertainty, as uncertainty stems from actions that an organization cannot control. Organizations favour a predictable and stable existence, therefore they will attempt to minimize the uncertainty and their dependencies on externals in order to acquire more stability and autonomy (Oliver, 1991).

Some organizations might be more important to an organization than others with respect to resource acquisition. An organization will be more likely to follow the requirements of the supplier of resources when it depends on its sources. When the dependency is low, resistance represents minimal risk to organizational interests because it is no longer held captive by a single or limited number of sources of social support, resources or legitimacy (Oliver, 1991). Thus, in sum, the resource dependence theory implies that an organization's responses to external requirements can to some extent be predicted from the situation of resource dependencies confronting it.

Focusing on public higher education institutions in Ghanaian contexts, public universities cannot generate most of the resources they need so they depend on the central government as a funding source. The government decides on the budget for higher education and what is expected from the higher education institutions. Effective implementation of a quality assurance system depends largely on the availability of human and financial resources. There is currently no link between quality assurance processes and public financing decisions for tertiary

education. Without such a link, institutions lack the means and incentives to implement quality improvement recommendations. These funds have a positive impact on quality, but their sustainability will be better assured if at the policy level a clear connection is made between the quality assurance process and financing decisions for institutions (Materu, 2007).

Furthermore, the resource dependence theory emphasizes commitment of resources to educational quality; how institutions use resources to enhance education quality and how quality assurance processes are adequately funded. In addition to financial resources, the presence of experienced and highly qualified faculty members and administrators within institutions and competent professionals and technical staff in the national QA agency and institutional QA structure is indispensable. The success of academic review is particularly dependent on human capacity. The QA system in Africa is experiencing the difficulty of funding a sufficient number of academics who are qualified and available to serve as peer reviewers and lack of training for those involved in the process of quality assurance (Materu, 2007).

In Ghana, the dependence of public HEIs on government is very high. Accountability for the invested resource can be ensured through quality management; hence the expected introduction of quality mechanisms, among other things, in HEIs. There is a proposal that the less higher education institutions financially depend on government the later quality assurance systems will be implemented. This perspective concludes that institutions will be more likely to follow the requirements of the supplier of resources when it depends on those resources. The resource dependence is a crucial approach because implementation of a QA system needs human and material resources.

The Bureaucratic Political Model (BPM): this is a conceptual model on decision making in organization developed by Allison (1971). The BPM focuses on the internal politics of an

organization. Organizational staff members do not constitute a uniform group. Rather, all persons are, in their own right, players in a competitive game (Allison & Zelikow, 1999). The name of the game is bureaucratic politics: bargaining along regularized channels among staff members positioned hierarchically within an organization. Thus, organizational behaviour can be understood according to this model as the outcomes of bargaining games among individuals. Individuals become players in an organization by occupying a position for producing decisions on organizational issues. The positions define “what players both may and must do” (Allison & Zelikow, 1999). However, the decisions depend not only upon the position, but also upon the player who occupies it. As Allison and Zelikow (1999) emphasise, personality, each player’s basic operating style, and the complementarity or contradictions among personalities and style, in the inner circles are irreducible pieces of the policy blend. Then, too, individuals bring their own mind-sets to their job in determining sensitivities and debts to certain issues, personal standing with and commitments to various issues.

Games are played to determine organizational decisions and actions but they advance and impede the players’ conception of the organization’s interest, operational objectives, specific programmes to which they are committed, and other personal concerns. These overlapping interests constitute the stakes for which, to what extent, how, and with which means games are played. As Allison and Zelikow (1999) notice, stakes are the mix of individual interests shaped by the issue at hand. In the light of these stakes, a player decides on a stand on the issue. The quality assurance literature emphasizes the role of leaders, especially that their commitment is essential for organizational success in implementing quality assurance mechanisms. Leaders can support and legitimize the implementation because they have authority to allocate resources. Dill (1995) notes that quality must become the responsibility of all academics, but he also

emphasises the need for strong and committed leadership to make that happen. In sum, quality assurance implementation usually requires leaders who are committed to the issue, provide the necessary resources, and negotiations between the various interests inside an organization and between the organization and its environment. External experts can help to increase effectiveness and efficiency in this process. The study aims to evaluate the effectiveness of quality assurance systems in public universities in Ghana. The effectiveness of internal quality assurance is connected to resource dependency and bureaucratic politics.

Appraisal of Literature Reviewed

The review of literature for this study examined studies conducted which relates to quality assurance in higher education. The discussions on the concept and definitions of quality and its assurance lack consensus among scholars. A closer look at the reviews indicate that student learning is implied in the definitions suggested by different authors. An example is Dill (2003) who equates quality with academic standards. That is, the specific levels of knowledge, skills, and abilities that students achieve because of their engagement in higher education. Different countries use different frameworks to describe the concept of quality education. As some regard quality education as a degree of goodness, others regard it as degree of fitness to what education beneficiary wants, while some view it in terms of student learning outcomes. This make the issue of quality in higher education a complex concept that lack accuracy in measurement.

Quality assurance is about putting an institutions notions of quality into action. This requires both a clear statement about an institutions concept of quality and shared understanding of that concept among institutional stakeholders. It is therefore important to note that, analysis of any quality assurance systems should not be so much on how quality is formally defined, but

should focus on identifying whose interest is served and how it is serving that interest. Quality assurance systems need to be explained with reference to the purposes they serve in higher education. Different quality assurance systems serve different purposes. On the one hand they may serve the purpose of enhancing self-improvement, while on the other they may act as state-surveillance mechanisms and serve accountability purposes.

The general trends in quality assurance in higher education place much emphasis on the external-internal nature of quality assurance system as the major determinant for effectiveness in enhancing institutional improvement. The literature links external approaches with accountability rationales of quality assurance, while internal systems are seen to be for self-improvement. What most of the literature is silent on is the influence of leadership in assuring quality in higher education institutions. Quality assurance systems are replete with power tensions. Thus, the locus of power in quality assurance systems is a key factor influencing how it is viewed in an institution, and how it is implemented by stakeholders in the institution.

The Resource Dependency theory and the Bureaucratic Political Model are useful in explaining university's response to external expectations and the influence of leadership in assuring quality. The resource dependency perspective emphasizes how universities are externally controlled and how university's action is to a large extent determined by the dependence on external resources and the exchange relationship in which a university is involved. Different individuals occupying different positions in the universities have different personalities and interests. The mix of these personalities and interests influence the planning, implementation, and outcome of the assuring quality of the students and other services the universities provide. It is therefore important for the universities to orientate all stakeholders

especially staff and students on its quality agenda to help reduce the personal influences in assuring quality learning, teaching and research outcomes.

Generally, there is no one best model of evaluation that fits certain programmes. In choosing the evaluation model, one has to consider whether the approach is plausible, practical or has been proven that it works. Although there are many evaluation models with different purposes, it can be said that they might have one factor in common; all evaluation models are supposed to evaluate in a systematic and reliable way to come up with an outcome (Robinson, 2002). The CIPP Model by Stufflebeam is based on the management-oriented evaluation approach. This approach helps managers to plan, implement and evaluate programmes (Hakan & Seval, 2011). In the field of education, evaluators use this approach to gain enough information to serve school managers, school administrators, teachers and other stakeholders for decision-making process. Since this study is focusing on collecting data related to the IQA system effectiveness in public universities in Ghana to help stakeholders make decisions whether to revise or continue the IQA system, this approach is appropriate to be used.

Most of the published studies on higher education quality assurance, specifically in Ghana (Okae-Adjei, 2012; Badu-Nyarko, 2013; Boateng, 2014; Seniwoliba & Yakubu, 2015) focused on implementation and the barriers against smooth implementation of internal quality assurance in higher education in Ghana. Issues on the standards the higher education institutions have set for themselves, the processes that the institutions have proposed to go through to help them achieve their objectives of assuring quality, and the actual practices of internal quality assurance in the various universities were left out of these studies. This shows a research gap in the topic of quality and quality assurance in the context of the Ghanaian higher education.

The public universities are becoming complex in terms of expanding access and study programmes and they depend mostly on government for financial resources. These trends raise a concern about quality of education and thus lead to demands for accountability on the part of universities. Such changes necessitate the undertaking of a study that will evaluate the quality assurance system. This will help to fill the research gap on quality and quality assurance practices in the Ghanaian universities. This study will use the notions of purpose and power tensions in analysing the quality assurance approaches used at the public universities in Ghana, and the forces that shape them. Using these two notions as analytical lenses, an attempt will be made to show whether the systems are self-enlightening or accountability-driven.

Conceptual Framework of the Study

Conceptual framework provide a theoretical clarification to support the study and a clear picture on the purpose of the study and the process of achieving it. A conceptual framework is defined as the current version of the researcher's map of the territory being investigated (Miles & Huberman, 1984). The conceptual framework developed in this study originated from the CIPP Model by Stufflebeam (2000). It includes four essential features which are context, input, process and product, with an ultimate aim of investigating the IQA system effectiveness in public universities in Ghana. The context, input, process and product evaluation subsequently serve planning, structuring, implementing and recycling decisions respectively.

The conceptual framework for this study reflects the various elements of the IQA system in the university. The researcher believe that there are two critical elements in the conceptual framework shown in Figure 2. Student's mastery of knowledge and good research outcomes is at extreme right of the diagram, institutional QA policy at the left of the diagram. Both need to be seen as the most important drivers for IQA. Student's mastery of knowledge and good research

outcomes are the primary focus for IQA and every university aspire to achieving that. Student and graduate outcomes are clearly important and need to be measured and evaluated as accurately as possible. Universities are required to train people to lead in the economic, social, political, and other aspects of societal life and this can be well achieved with staff and students with excellent research knowledge and skills.

The beginning and the end of success in achieving high quality student learning for the majority of students depend on the quality and commitment of leadership. If the higher executive makes it clear to staff that research is predominantly valued and pay only lip service to the importance of teaching, with little hard evidence of the voiced support (e.g. clear recognition and reward for merit in teaching; allocation of funding for innovation in learning and teaching), then the institution will fail to achieve the ultimate goal of maximising the quality of student learning. Policies and value statements relating to teaching, and increasingly learning, often remain the province of academic boards or senates and their committees. This is appropriate but university leadership needs to ensure that mechanisms exist to support these policies.

With programme design, Lee and Boyle (2008) were of the view that universities focus on subject or unit level rather than focusing on whole-of-programme level. This is as a result of insufficient thought and planning invested in the design of programmes in the universities.

INSERT FIGURE 2

To ensure quality programmes are to be designed with planned student learning activities, and how learning activities in particular subjects link with others in order to build capabilities over time.

A comprehensive IQA system needs to include appropriate supports and resources to enable quality assurance activities to occur. The critically important continual improvement aspect of QA will only be achieved if appropriate supports for staff and students are provided. Strategic staff development, programmes to support innovations in learning and teaching, recognition and reward mechanisms for staff, and student support services are all particularly important. An effective IQA should include comprehensive guidelines and rules for teaching, learning and research practices. Both staff and students are to be informed and trained on what, how and when to do what they are tasked to do to enhance quality.

There are many aspects of the student and staff experiences, and several are fundamentally important for shaping the ultimate learning outcomes that students achieve. Student engagement is an important component of student experience. This is supported by Coates (2006) that, the best facilities, courses and teachers are of no consequence if students don't capitalise on them. In other words, universities can provide the best facilities, staff and courses, but it takes students to fully participate in the right activities at the right place and time to achieve the necessary results. Students need to engage in lectures, avail themselves for the various support services, and both staff and students need to engage in research training and activities, as well as in community service. Effective evaluation and follow-up improvement and communication processes are essential for any comprehensive approach to IQA. They need to be

established to enable continual monitoring and improvement of all of the major components within the broader IQA framework.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter provides explanation on the procedure employed for the conduct of the research by providing information on the research design, population, sample and sampling techniques, instrumentation, procedures for data collection and data analysis techniques.

Research Design

The study was an evaluation research and thus the mixed-methods design with the convergent parallel approach was adopted. Mixed-methods design is one in which both quantitative and qualitative methods are used to answer research questions in a single study (Mertens, 2014). Mixed-methods approach is useful to develop a better understanding of complex phenomena by triangulating or corroborating or complementing one set of results with another and thereby enhancing the validity of inferences.

Proponents of mixed-methods argue that it is inevitable, whether done consciously or not, because most research paradigms are not single, pure types but mixtures of beliefs and practices that are evolving through continuous re-evaluation (Creswell, 2009; Johnson & Christensen, 2008). The approach makes it possible to complement the weakness of one method by the strength of the other method by maintaining the importance of the two paradigms. Social research, as Denscombe (2008) argue, inevitably requires a number of different perspectives if it is to provide useful answers to important social questions.

In finding out the effectiveness of the internal quality assurance (IQA) system, the Stufflebeam's CIPP evaluation model was employed in this study. The CIPP Model lends itself

to the use of mixed-methods approach. Using the CIPP model for this study, the Context evaluation focused on the Institutional QA policy and structure. The Input evaluation focused on student's entry, progression and exit policy, staff recruitment and promotion policy, programme design and approval policy, T/L facilities (Lecture halls, laboratories, libraries, ICT), research policy, and policy on community service. The Process evaluation focused on the actual implementation of the IQA activities in the universities, and look at lectures, research practices (staff & students), student's support services (guidance& counselling, Visual & hearing), and community service. The Product evaluation focused on student's mastery of knowledge and skills of graduates.

Frye and Hemmer (2012) believe that the CIPP evaluation model offers a powerful approach to evaluate a complex, dynamic and having nonlinear relationships between elements in a programme and, since quality assurance system is a programme with those features, choosing this model seems to be a wise decision. The good thing about the CIPP evaluation model is that, research could be done using all the four dimensions of the model or one of the combinations of the dimensions depending on the programme's requirements. It could be used for both evaluation purposes, either formative or summative and could be conducted by various disciplines especially the social and educational projects in the dynamic social context (Stufflebeam & Shrienfield, 2007).

The mixed-methods design was chosen for this study based on two assumptions. First, studying quality assurance is a complex and multifaceted process that involves the perspectives of different actors and, the collection and analysis of data from different sources. Second, employing a single approach to study quality assurance system and practices at institutional level may limit the comprehensiveness of the data and accuracy of the findings. Hence, the

convergent parallel approach made of a combination of analysis of quantitative and qualitative data was employed for this study. This approach involves collecting both quantitative and qualitative data independently and simultaneously.

The researcher believes that the combination of various methods within the qualitative and quantitative approaches improved the chances of getting a better, more reliable data and minimise the chance of biased results. Becker, Bryman and Ferguson (2012) however, indicate that the notion of triangulation is rooted in the belief in “multiple operationism” which posits that the validity of findings and the degree of confidence in them will be enhanced by the deployment of more than one approach to data collection. The justification for employing methodological triangulation enabled the researcher to explore the research questions from different perspective to obtain a better understanding of the reality of the practices of quality assurance in universities in Ghana

Population, Sample and Sampling Techniques

The population for this study was made up of all public accredited universities in Ghana. Administrators at the quality assurance directorate/unit, lecturers, departmental/unit administrators, regular students and immediate past students in the 10 public universities in Ghana formed the target population. The accessible population was 151,419 people made up of 120,796 regular students, 4,083 academic staff, 920 departmental/unit administrators and 25,620 immediate past students. The target population excludes part-time lecturers, post graduate students, sandwich students and distance education students.

Table 6: Distribution of Population and Sample for the Study

Stakeholders	Population	Sample Selected
Regular Students	120,796	2,560
Academic staff	4,083	200
Administrators	920	84
Immediate past students	25,620	40

Total	151,419	2,884
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Four out of the 10 public accredited universities were purposively selected. Kwame Nkrumah University of Science and Technology, University of Cape Coast, University of Education, Winneba and University of Energy and Natural Resources were used for the study. Kwame Nkrumah University of Science and Technology was selected because it is the oldest university in Ghana for science and technology. University of Cape Coast was selected because it is one of the public accredited university running a wide range of academic programmes in Ghana. University of education, Winneba was selected because it is the only accredited public university in Ghana fully committed to teacher education. University of Energy and Natural Resources was selected because it is one of the two newly established public universities by the government of Ghana and accredited to train students in areas that most of the already established universities are not focusing on and of importance for national growth.

All the four administrators in charge of the quality assurance directorate/unit in the four selected universities were purposively selected for the study. The names of all the departmental/unit administrators and full-time lecturers were collected from the human resource division of each of the four selected universities. The simple random sampling technique was used to select 50 lecturers from each of the four selected universities. The simple random sampling technique was used to select 20 administrators from each of the four selected universities. A total of 200 lecturers and 80 administrators were sampled for the study.

In selecting the students, simple random sampling technique was used to select eight departments from each selected university. A total of 32 departments was used for the study. In each selected department, 80 students were selected using the convenience sampling technique. Students were selected from the undergraduate academic levels in the department. First year

undergraduate students were excluded because data was collected in the first semester and they were fresh on campus and may not have gotten enough experience in the university. The snowball technique was used to select 40 immediate past students 10 from each selected university. One immediate past student from a selected university was identified by the researcher and through him/her other colleagues were identified. The sample size for the study was 2884 people made up of 4 administrators of the quality assurance directorate/unit, 200 lecturers, 80 administrators, 2560 regular students and 40 immediate past students.

Instrumentation

The researcher used interview, questionnaire and focus group discussion for data collection. The administrators of internal quality assurance directorates/units were interviewed, while the lecturers, administrators and regular students responded to questionnaires. The immediate past students were engaged in focus group discussion. An interview guide which allowed an 'in-person' interview was designed based on the research questions to gather relevant data. The interview guide was made up of 11 broad questions. This gave the researcher the opportunity to freely use probes and prompts to obtain clarity to responses and additional information for an in-depth understanding of the phenomenon under investigation. There were follow-up questions for clarity of the responses.

Two sets of questionnaires were developed by the researcher and used to collect information from lecturers, administrators and students. The questionnaire for staff (lecturers and administrators) was called University Internal Quality Assurance Survey for Staff (UIQASS). The UIQASS was made up of eleven sections (A-J). Section A elicited the demographic data of the respondents and was made up of both open and closed-ended items. Items in sections B, C, D, E, F, G, H, I and J were made up of close-ended 3-point and 4-point

Likert type scale. Section B was on orientation for newly recruited staff, section C was on approval, monitoring and periodic review of academic programmes, section D was on staff progression, section E was on orientation for students on progression, section F was on lectures, section G was on assessment of students, section H was on supporting services, section I was on staff and students research practices, while section J was on community service.

The questionnaire for students was made up of six sections (A-F). It was called University Internal Quality Assurance Survey for Students (UIQASS). Section A elicited the demographic data of the respondents. That is, the university, faculty and department of the respondent, level, and age. Items in sections B, C, D and E were made up of closed-ended 3-point and 4-point Likert type scale. Section B was on orientation for students on progression and exit, section C was on lectures, section D was on assessment of students, while section E was on supporting services.

In establishing the validity of the instruments, experts in the researcher's area of study in the University of Ilorin, Nigeria were consulted to content validate the draft interview guide, questionnaires, and the focus group discussion guide. Based on suggestions and comments from these experts, items that were deemed to be ambiguous or misleading were modified, removed or replaced to help ensure clarity. The instruments were pre-tested in one of the accredited private universities in Ghana so as to help sharpen them by correcting possible weaknesses, inadequacies, and ambiguities. The Cronbach alpha was used to establish the reliability of the responses from the questionnaire, while the trustworthiness criteria was used for the responses from the interview.

A duration of two weeks was used to administer the instruments to staff and students of Valley-View University, one of the accredited private universities in Ghana. The reliability test

was conducted on the sub-scales of the instruments: questionnaire for staff, and the questionnaire for students after the trial test. The table of reliability coefficients as shown in tables 7 and 8 indicates that the figures were well within 0.70 to 0.95 preferred Cronbach alpha value (Tavakol & Dennick, 2011; Nunnally & Bernstein, 1994) to yield the desired results for the current study.

Table 7: Reliability Coefficient for the sub-scales of Questionnaire for Staff

Sub-scales	Number of items	Cronbach Alpha
Orientation for newly recruited staff	5	0.79
Approval, monitoring and periodic review of academic programmes	7	0.81
Staff appointment and progression	4	0.71
Orientation for students on progression and exit	6	0.79
Lectures	9	0.74
Assessment of students	6	0.75
Learning resources and students support	15	0.80
Students involvement in ensuring quality	4	0.75
Staff and students' research practices	3	0.88
Community service	3	0.80
Overall		0.81

Table 8: Reliability Coefficient for the sub-scales of Questionnaire for Students

Sub-scales	Number of items	Cronbach Alpha
Orientation for students on progression and exit	6	0.72
Lectures	9	0.74
Assessment of students	6	0.73
Learning resources and students support	15	0.77
Students involvement in ensuring quality	4	0.76
Overall		0.80

Procedure for Data Collection

The researcher introduced himself to the institutions involved in the study using the introductory letter collected from the Department of Social Sciences Education of the University of Ilorin, Kwara State, Nigeria. Copies of the introductory letter were sent to the registrars of the selected universities for the study. The registrars granted formal permission in writing and copies of those letters were sent to all the departments and units used for the study in the

selected universities. The administrators of the quality assurance directorate/unit in each of the selected universities were interviewed by the researcher. A consent form was sent to the IQA directorate/unit administrators by the researcher to help seek their consent and arrange the time and venue for the interview sessions.

The researcher sought the consent of the respondents to record the conversation during the interview session. The interview sessions were held in the offices of the administrators of the IQA directorate/units of the selected universities. Each interview session lasted between 45 minutes and an hour. 32 national service personnel were purposively selected from the four selected universities, eight from each university to serve as research assistant to help in the distribution and collection of the questionnaires to staff and students. These service persons were serving in the departments selected for the study in each university. The service persons were trained by the researcher on the rationale for the study, what the sections and items in the questionnaires sought to elicit, and tips on questionnaire administration and collection. The training were done in each university involving eight service persons at a time. They were given the opportunity to ask questions for clarification. The lecturers and administrators were given a week to respond to the items while the students were asked to respond within a day.

The immediate past students were engaged in a focus group discussions. The researcher served as the moderator for each focus group discussion. One national service person who is a past student of a selected university was identified by the researcher, and through that person others service persons who were past students were identified. Four focus groups were formed, one from each selected university. Each focus group was made up of 10 immediate past students of a particular selected university. Telephone numbers of selected members were collected and the researcher communicated with each member, and their consents were sought to participate in

the focus group discussion. The day, time and venue for each session were discussed among group members and consensus were reached. Each focus group discussion lasted for between an hour and one hour thirty minutes.

Data Analysis Techniques

In this study, both quantitative and qualitative data were collected. The data was analysed by combining quantitative statistical results with qualitative narrations to better understand the views expressed by participants and to reach meaningful conclusions. The recorded information from the interviews were transcribed. The transcripts were read several times to identify the responses that are consistent with the themes discussed. The transcripts were sent back to those interviewed to read through to find out whether they reflect the responses they provided. The data collected were then presented in narratives. The qualitative data was analysed following the approach of Cohen, Manion and Morrison (2011). This approach entailed organizing, synthesising, accounting for and interpreting the data collected according to themes. Pseudonyms such as ADMIN 1, ADMIN 2, ADMIN 3 and ADMIN 4 has been used to represent the internal quality assurance administrators and FGP for the past students who participated in the focus group discussion.

After collecting the sets of questionnaire for staff and students, the questionnaires were serially numbered after it has been edited. The edited responses were coded and scored since the items were made of Likert-type of scale. Sections with responses being Very Effective, Fairly Effective, and Not Effective were coded 3, 2, and 1 respectively. Sections with Good, Fair, and Poor were coded 3, 2, and 1 respectively. Sections with Good, Fair, Poor, and Not Available were coded 3, 2, 1, and 0 respectively. Means and standard deviations of the composite scores

for the participants were computed to ascertain the direction of responses for decision making. The minimum and maximum cumulative scores and ranges were used to re-categorise the means as Very Effective, Fairly Effective, Not Effective or Good, Fair, Poor depending on the responses for that particular section whose data has been used to obtain the mean. Frequency counts, percentages, means and standard deviations were used to help determine the areas of strength and weaknesses in the internal quality assurance systems in the public universities.

Ethical Consideration

To address ethical issues related to the study, the researcher disclosed his identity by introducing himself to the subjects. The purpose of the study was clearly explained to participants. An informed consent form was issued to each of the interviewed respondents before actual data collection started. All the respondents were assured of utmost anonymity and confidentiality of any information provided. This was done by not requesting for the names of respondents. Only pseudonyms were attached to transcripts for easy identification. The participants were made aware that participation in the study was voluntary. The participants were informed on their right to participate in the study or not. Participants consent were sought before electronic recording of the interactions during the interviews and the focus group discussions. The participant were also informed on the benefits of the study to them and the university community. Finally, all data gathered were lodged with the researcher.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

This chapter is devoted to the analysis of data and presentation of the results of the study. Responses from the participants were analysed to answer the research questions. Tables and narrations are provided to illustrate and support the findings. Quantitative data are presented using frequency counts, percentages, and means while narrative approach amidst quotations from respondents were employed to analyse the qualitative data for the study. The presentation of results was done in the order in which the research questions were stated.

Background Characteristics of Respondents

The sample size for the study was 2884 comprising 2560 regular students, 200 academic staff, 84 administrators, and 40 immediate past students (graduates). A total of 2840 copies of questionnaires were distributed to 2560 regular students and 280 staff members. 2545 questionnaires were collected from the regular students representing 99.4% return rate, while 255 questionnaires were collected from the staff representing 91.1% return rate. Transcripts of interviews with four administrators of IQA directorate/unit and transcripts of focus group discussions with immediate past students were gathered for presentation and analysis. There was an overall return rate of 98.6% representing 2844 respondents out of 2884 sample size. The demographic information of the students and staff have been presented in Tables 9 – 11 and Appendices 1 and 2.

Table 9: Status and Academic levels of Participants

Staff

University	Number of participants	Status	
		Academic	Non-academic
KNUST	62 (23.9%)	43	19
UCC	68 (26.3%)	47	21
UEW	66 (25.5%)	45	21
UENR	63 (24.3%)	17	18
Total	259	180 (69.5%)	79 (30.5%)

Regular Students

			Academic level	
		200	300	400
KNUST	640 (25.1%)	320	248	72
UCC	625 (24.7%)	48	302	275
UEW	640 (25.1%)	288	311	41
UENR	640 (25.1%)	320	205	115
Total	2545	976 (38.3%)	1066 (41.9%)	503 (19.8%)

Immediate Past Students

		Age ranges (in years)		Related Programme	
		21 – 25	26 – 30	Science	Humanities
KNUST	10	6	4	8	2
UCC	10	7	3	2	8
UEW	10	3	7	3	7
UENR	10	7	3	8	2
Total	40	23 (57.5%)	17 (42.5%)	21 (52.5%)	19 (47.5%)

Table 9 show that 259 university staff made up of 62 (23.9%) from Kwame Nkrumah University of Science and Technology (KNUST), 68 (26.3%) from University of Cape Coast (UCC), 66 (25.5%) from University of Education, Winneba (UEW) and 63 (24.3%) from University of Energy and Natural Resources (UENR) were involved in the study. Out of these

256 university staff, 180 (69.5%) were academic staff, who were mostly full-time lecturers, and 79 (30.5%) were non-academic staff, who were mostly departmental administrators. Out of the 180 academic staff, 43 were from KNUST, 47 were from UCC, 45 were from UEW, and 17 were from UENR. The less number of academic staff recorded from UENR is because it is a young university with less lecturers as compared to the other universities used for the study. With the 79 non-academic staff, 19 were from KNUST, 21 were from UCC, 21 were from UEW, and 18 were from UENR.

Also, Table 9 show that 2545 regular students made up of 625 (24.7%) from UCC, 640 (25.1%) each from KNUST, UEW, and UENR were involved in the study. The 625 regular students from UCC were made up of 48 second year students, 302 third year students, and 275 forth year students. The 640 regular students from KNUST were made up of 320 second year students, 248 third year students, and 72 forth year students. The 640 regular students from UEW were made up of 288 second year students, 311 third year students, and 41 forth year students. The 640 regular students from UENR were made up of 320 second year students, 205 third year students, and 115 forth year students.

Furthermore, Table 9 show that 10 immediate past students from each of the four universities used for the study, making a total of 40 immediate past students were involved in the study. Out of the 40 immediate past students, 23 (57.5%) had their ages within the age range of 21 – 25 years, while 17 (42.5%) had their ages within the age range of 26 – 30 years. Also, 21 (52.5%) out of the 40 immediate past students did science related programmes for their first degree while 19 (47.5%) did programmes under humanities for their first degree.

Table 10: Rank and Highest Academic Qualification of Staff Participants

Rank	Number of participants	Percentage
Associate Professor	2	0.8
Senior Lecturer	69	26.6
Lecturer	101	39.0
Assistant Lecturer	13	5.0
Principal Administration Officer	16	6.2
Senior Administration Assistant	43	16.6
Administration Assistant	15	5.8
Total	259	100
Qualification		
First Degree	20	7.7
Second Degree	165	63.7
Doctorate	74	28.6
Total	259	100

Table 10 show the ranks of the 259 university staff involved in the study. Two representing 0.8% were associate professors, 69 (26.6%) were senior lecturers, 101 (39.0%) were lecturers, 13 (5.0%) were assistant lecturers, 16 (6.2%) were principal administration officers, 43 (16.6%) were senior administration officers, and 15 (5.8%) were administration assistants. Also Table 10 show that, 20 (7.7%) of the university staff involved in the study were first degree holders, 165 (63.7%) were second degree holders, and 74 (28.6%) were doctorate degree holders. This show that majority of the university staff involved in the study made up of lecturers and administrators were second degree holders. This makes them very suitable to contribute meaningful information for the study.

Table 11: Age Ranges and Years of Working Experience of Participants

Staff		
Age range (in years)	Number of participants	Percentage
20 – 30	30	11.6
31 – 40	92	35.5
41 – 50	100	38.6
51 – 60	37	14.3
Total	259	100
Working Experience (in years)		
0 – 5	84	32.4
6 – 10	89	34.4
11 – 15	70	27.0
16 – 20	16	6.2
Total	259	100
Students		
Age range (in years)		
Below 21	422	16.6
21 – 25	1670	65.6
26 – 30	329	12.9
31 – 35	84	3.3
36 – 40	14	0.6
Above 40	26	1.0
Total	2545	100

Results in Table 11 show that 30 (11.6%) of the university staff involved in the study had their ages within the age range 20 – 30 years. 92 (35.5%) had their ages within the age range 31 – 40 years. 100 (38.5%) had their ages within the age range 41 – 50, while 37 (14.3%) had their ages within the age range 51 – 60 years. For the number of years that one has worked in the university, Table 11 show that, 84 (32.4%) have worked in the university for a period ranging from 0 – 5 years. 89 (34.4%) have worked with the university for a period ranging from 6 – 10

years. 70 (27.0%) have worked with the university for a period ranging from 11 – 15 years, while 16 (6.2%) have worked with the university for a period ranging from 16 – 20 years.

Out of the 2545 regular students involved in the study, 1670 (65.6%) being majority have their ages falling within the age range of 21 – 25 years. 422 (16.6%) of the regular students had ages below 20 years. 329 (12.9%) were between the age range of 26 – 30 years. 84 (3.3%) were between the age range of 31 – 35 years. 14 (0.6%) were between the age range of 36 – 40 years, while 26 (1.0%) were over 40 years.

The 2545 regular students involved in the study were from 20 schools/colleges/faculties from the four universities involved in the study. Three schools/colleges/faculties from UENR, namely, Natural Resources, Engineering and Science. Four schools/colleges/faculties from UEW, namely, Foreign Languages, Education, Science and Social Sciences. Seven schools/colleges/faculties from UCC, namely, Social Sciences, Physical Sciences, Business, Art, Health and Allied Sciences, Biological Science, and Humanities and Social Sciences Education. Six schools/colleges/faculties from KNUST, namely, Physical and Computational Sciences, Agriculture, Bioscience, Art and Built Environment, Humanities and Social Sciences, and Engineering (see Appendix 1). Also, 32 departments were involved in the study, eight departments from each of the four universities used for the study (see Appendix 2).

Results

Eight research questions were raised to guide the current study. To adequately provide answers to all the research questions, percentages, means and standard deviations were used as

statistical tools to analyse the quantitative data while narrative approach was used for the qualitative data.

Research Question 1: *How effective is the institutional quality assurance structure in public universities in Ghana?*

This research question was formulated to assess how the actual operational structure of the IQA system in public universities in Ghana promote the quality assurance activities in the institutions. In answering this research question, responses from interviews with administrators of IQA directorates/units on the structure of the internal quality assurance directorate/units of public universities and responses from section C of the staff questionnaire, were analysed by the researcher.

The public universities have a more complex IQA structure with some degree of autonomy. The structure of the IQAU of the four universities studied follow the second form of what the National Accreditation Board (NAB) proposed. According to NAB, an institutions IQAU can take the form of a more complex entity with some degree of autonomy headed by a proven reputable academic with, at least, Senior Lecturer status. NAB proposed the Head of the institution to be in-charge, followed by the Head of the IQAU, then a Coordinating body, followed by Functional areas (e.g. Admissions, Curriculum, e.t.c.). A participant stated that:

The internal quality assurance directorate is headed by a director who is a professor and report to the Vice Chancellor directly. As IQAU we have five sections, a section to deal with accreditation, a section to deal with management information system, a section to deal with assessment and other sections. Every section is supposed to have a head, but at the moment only two people are doing the work of five people. This is making the IQA work difficult (ADMIN 1).

The comment suggest that the public universities have not appointed the required number of personnel to be in charge of all the proposed sections under the IQAU, and few

people are doing the work of many. This is affecting the effectiveness of the monitoring and coordination of quality activities that will bring about the needed quality culture expected in the universities. Other participants also made similar comments to support the fact that lack of personnel is making the internal quality assurance work not very effective. A participant asserted that:

“We need a full complement of staff but we lack personnel. We have only two senior members who are in charge of all the things we have to do here, so we have a lot to do and it is difficult for us” [ADMIN 2]

Another participant reported that:

There are a lot of work to be done to ensure that the IQA policy documents is fully implemented but as a monitoring and coordinating body, we need more qualified personnel to work with. Currently we are using people not much qualified and the national service persons to do the work (ADMIN 3)

All the universities have a detailed QA structure in their QA policy documents, indicating roles and responsibilities of all stakeholders in assuring quality in the services they provide. The IQAUs are to monitor and coordinates internal quality assurance activities for the achievement of set targets and goals in all sectors of the university. For the IQA system in the public universities to work effectively, schools, faculties, departments, sections and units in the universities are supposed to set-up IQA sub-committees. Most of these IQA sub-committees are non-existent. This is making the efforts to develop the desired quality culture in the universities difficult. A participant stated that:

“We have asked all colleges and departments in the university to set up quality committees (quality sub-unit). The only college, one out of the five, that is distance education, have establish the unit we are talking about. Even though they have established the unit, they are not living up to expectation” (ADMIN 4).

Another participant indicated that:

“Faculties and departments are not setting up the IQA sub-units as expected of them. Some members of the university community see the quality assurance work in the university to be done by the few people who are working at the IQAU. This is affecting the effectiveness of assuring quality in the university” (ADMIN 3).

From the comments from the IQAU administrator participants, the public universities have QA policy documents that direct the implementation of internal quality assurance in their respective institutions. There is lack of qualified personnel to help the IQAU to effectively play its role as a monitoring and coordinating unit to ensure that the desired quality is assured in the services and programmes provided by the institutions. Also, the nonexistent of IQA sub-units in the various sections in the institution is affecting the effectiveness of IAQ structure to help assure quality in the institution.

In addition to the narrations from the interview with the administrators of IQAUs, other staff participants were asked to assess the effectiveness of approval, monitoring and periodic review of academic programmes which are part of IQA structure in the universities. Distribution of their responses are presented in Table 12.

Table 12: Staff Assessment of Institutional QA structure

Description	Frequency	Percentage
Not Effective	11	4.3
Fairly Effective	162	63.5
Very Effective	82	32.2

Data from Table 12 show that, majority of staff 162 (63.5%) perceive that the institutional structure of IQA in public universities is fairly effective, while 82 (32.2%) perceive it to be very effective. Only 11 (4.3%) of staff perceive institutional structure of IQA not effective.

Mean and standard deviation of responses from lecturers and administrators on institutional structure of IQA found on section C of the questionnaire for staff were computed

using the composite scores. These scores were categorised and judged as $8 - 12.0 =$ Not effective, $12.1 - 17.0 =$ Fairly effective and $17.1 - 21.0 =$ Very effective (Boone Jr & Boone, 2012; Harwell & Gatti, 2001). The summary is presented in Table 13

Table 13: Summary data on Institutional QA Structure

Respondent	N	Composite Score		Mean (\bar{x})	Standard Deviation
		Minimum	Maximum		
Staff	255	8	21	16.26	2.77

The mean score of ($\bar{X} = 16.26$, $SD = 2.77$) fall in the range of $12.1 - 17.0$ representing fairly effective. This indicates that the staff participants for the current study were of the view that, institutional IQA structure is fairly effective in the public universities in Ghana. This support the finding from the responses from the interview with IQAU administrators.

Research Question 2: *To what extent are public universities in Ghana effective in ensuring students' progression?*

Research question two was formulated to help assess the effectiveness of the orientation given to students to help them know what is expected of them to enable them progress in their academic journey. Also, to assess the effectiveness of how students are assessed to help make informed decisions on their progression in their academic journey. In answering this research question, responses from items found on sections B and D of the students' questionnaire and items found on sections E and G of the questionnaire for staff were used. Means of the ratings were computed, categorised and judged as $6.0 - 8.0 =$ not effective, $8.1 - 14.0 =$ fairly effective,

and 14.1 – 18.0 = very effective. Distribution of stakeholders' assessment of effectiveness of orientation for students on progression are presented in Tables 14 - 16.

Table 14: Students' Assessment of Orientation for students

Description	Frequency	Percentage
Not Effective	101	4.0
Fairly Effective	1468	57.7
Very Effective	976	38.3

Data from Table 14 show that, 1468 (57.7%) of students view orientation given to students on their progression from one level to another as fairly effective, while 976 (38.3%) view it to be very effective. 101 (4.0%) of students view given to them for their progression not effective.

Table 15: Staff Assessment of Orientation for students

Description	Frequency	Percentage
Not Effective	7	2.7
Fairly Effective	89	34.9
Very Effective	159	62.4

Data from table 15 show that, majority of staff 162 (62.4%) view orientation given to students as very effective, while 89 (34.9%) view it to be fairly effective. Only 7 (2.7%) of staff view orientation given to students as not effective.

Table 16: Summary data on Orientation for Students

Respondent	N	Composite Score		Mean (\bar{x})	Standard Deviation
		Minimum	Maximum		
Students	2545	6	18	13.60	2.59
Staff	255	8	18	14.76	2.37
Overall				13.70	2.59

Results from Table 16 indicate that students ($\bar{X} = 13.6$, $SD = 2.59$) describe the orientation given to them for their progression to be fairly effective, while staff ($\bar{X} = 14.76$, $SD = 2.37$) described the orientation given to students for their progression in their academic journey as very effective. Deduction from the results indicate, that the overall mean and standard deviation of $\bar{X} = 13.70$, $SD = 2.59$ meant that the general view of the participants for the study is that orientation given to students on their progression is fairly effective.

Table 17: Students' Assessment of How Students are assessed

Description	Frequency	Percentage
Not Effective	26	1.0
Fairly Effective	1154	45.4
Very Effective	1365	53.6

Data from Table 17 show that, 1365 (53.6%) of students indicated that how students' are assessed is very effective, while 1154 (45.4%) indicated that it is fairly effective. Only 26 (1.0%) indicated that it is not effective.

Table 18: Staff Assessment of How Students are assessed

Description	Frequency	Percentage
Not Effective	0	0.0
Fairly Effective	66	25.9
Very Effective	189	74.1

For the staff participants, data from table 18 indicate that majority 189 (74.1%) indicated that how students' are assessed is very effective, while 66 (25.9%) indicated that it is fairly effective.

Table 19: Summary data on how students' are assessed

Composite Score	Standard
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Respondent	N	Minimum	Maximum	Mean (\bar{x})	Deviation
Students	2545	6	18	14.55	2.27
Staff	255	10	18	15.76	1.88
Overall				14.66	2.26

Data from Table 19 indicate that both students ($\bar{X} = 14.55$, $SD = 2.27$) and staff ($\bar{X} = 15.76$, $SD = 1.88$) described how students are assessed as very effective. Deduction from the results indicate that, the overall mean and standard deviation of $\bar{X} = 14.66$, $SD = 2.26$ meant that the general view of the participants for the study is that students are assessed very effectively.

Research Question 3: *To what extent are public universities in Ghana effective in ensuring staff progression?*

This research question sought to elicit from staff participants their views on activities and programmes the universities planned and organize to help them deliver on the job. To answer this research question, responses from items on sections B and D of the staff questionnaire were used. Means of the ratings were computed, categorised and judged as 5.0 – 7.0 = not effective, 7.1 – 12.0 = fairly effective, and 12.1 – 15.0 = very effective for responses for section B items eliciting information on orientation for staff, and 4.0 – 5.0 = not effective, 5.1 – 9.0 = fairly effective, and 9.1 – 12.0 = very effective for responses for section D items eliciting information on staff progression. Distribution of staff assessment of effectiveness of orientation for staff are presented in Table 20.

Table 20: Staff Assessment of Orientation for staff

Description	Frequency	Percentage
Not Effective	19	7.5
Fairly Effective	166	65.1
Very Effective	70	27.4

Data from Table 20 show that, 166 (65.1%) of staff indicated given to them is fairly effective, while 70 (27.4%) indicated that it is very effective. 19 (7.5%) indicated that it is not effective

Table 21: Summary data on orientation of staff

Respondent	N	Composite Score		Mean (\bar{x})	Standard Deviation
		Minimum	Maximum		
Staff	255	5	15	10.77	2.27

From the result on Table 21 with staff ($\bar{X} = 10.77$, $SD = 2.27$), indicate that staff participants described orientation for newly recruited staff as fairly effective.

Table 22: Staff Assessment of staff progression

Description	Frequency	Percentage
Not Effective	17	6.7
Fairly Effective	77	30.2
Very Effective	161	63.1

Data from Table 22 show that, 161 (63.1%) are of the view that activities planned and organized to help them in their progression is very effective, while 77 (30.2%) are of the view that it is fairly effective. 17 (6.7%) are of the view that it is not effective

Table 23: Summary data on staff progression

Respondent	N	Composite Score		Mean (\bar{x})	Standard Deviation
		Minimum	Maximum		
Staff	9	5	12	9.63	1.83

The results in Table 23 show that, staff participants ($\bar{X} = 9.63$, $SD = 1.83$) perceive the in-service training and other planned activities for staff progression to be very effective in public universities.

Research Question 4: *To what extent are public universities in Ghana effective in ensuring academic support services?*

Research question four was intended to assess the views of the respondents on the quality of academic support services rendered by the various units in the university in ensuring a conducive learning environments. In answering this research question, responses from items in section E of the students' questionnaire and section H of the staff questionnaire were used. The means of the ratings were computed, categorised and judged as 0.0 – 7.0 = not available, 7.1 – 22.0 = poor, 22.1 – 37.0 = fair and 37.1 – 45.0 = good. Distribution of the stakeholders' assessment of the goodness of support services based on their ratings are presented in Table 24 - 25.

Table 24: Students' Assessment of Support services

Assessment	Frequency	Percentage
Poor	528	27.0
Fair	1980	77.8
Good	37	1.5

Data from Table 24 show that, majority of students 1980 (77.8%) see the support services render by the university as fair, while 528 (20.7%) see it as poor. Only 37 (1.5%) see it as good. None of the students judged it to be not available.

Table 25: Staff Assessment of Support services

Assessment	Frequency	Percentage
Poor	22	8.6
Fair	179	70.2
Good	54	21.2

Data from table 25 show that, majority of staff 179 (70.2%) see the academic support services render by the university as fair, while 54 (21.2%) see it as good. 22 (8.6%) see it as poor. None of the staff judged it to be not available.

Table 26: Summary of data on Support Services

Respondent	N	Composite Score		Mean (\bar{x})	Standard Deviation
		Minimum	Maximum		
Students	2545	11	41	27.76	5.42
Staff	255	16	45	32.16	6.42
Overall				28.17	5.66

Data from Table 26 indicate that both students ($\bar{X} = 27.76$, $SD = 5.42$) and staff ($\bar{X} = 32.16$, $SD = 6.42$) described the quality of academic support services as fair. Deduction from the overall mean and standard deviation of $\bar{X} = 28.17$, $SD = 5.66$ give the general view of the participants of the study on academic support services rendered by the university as fair.

Research Question 5: *To what extent are public universities in Ghana effective in ensuring lecture delivery?*

This research question was formulated to help assess the quality of lectures in public universities. In answering this research question, responses from items found on section C of the questionnaire for students, and items found on section F of the questionnaire for staff were used. Means of the ratings were computed, categorised and judged as 9.0 – 13.0 = poor, 13.1 – 22.0 = fair and 22.1 – 27.0 = good. Distribution of stakeholders' assessment of goodness of lectures is presented in Table 27 - 28.

Table 27: Students' Assessment of Lectures

Assessment	Frequency	Percentage
Poor	10	0.4
Fair	769	30.2
Good	1766	69.4

Data from Table 27 show that, majority of students 1766 (69.4%) judge the quality of lectures to be good, while 769 (30.2%) see it to be fair. Only 10 (0.4%) see it as poor.

Table 28: Staff Assessment of Lectures

Assessment	Frequency	Percentage
Poor	1	0.4
Fair	55	21.6
Good	199	78.0

Data from table 28 show that, majority of staff 199 (78.0%) judge the quality of lectures to be good, while 55 (21.6%) see it as fair. Only 1 (0.4%) of staff see it as poor.

Table 29: Summary data on Quality of Lectures

Respondent	N	Composite Score		Mean (\bar{x})	Standard Deviation
		Minimum	Maximum		
Students	2545	10	27	23.31	3.18
Staff	255	13	27	24.45	2.79
Overall				23.42	3.17

Data from Table 29 indicate that both students ($\bar{X} = 23.31$, $SD = 3.18$) and staff ($\bar{X} = 24.24$, $SD = 2.79$) judged lectures in the university as good. Deduction from the results indicate that, the overall mean and standard deviation of $\bar{X} = 23.42$, $SD = 3.17$ meant that the general view of the participants of the study is that, lectures render in the university is of good quality.

Research Question 6: *To what extent are public universities in Ghana effective in ensuring good research practices?*

Research question six was formulated to elicit the views of lecturers and administrators on the effectiveness of the workshops and seminars organized for staff and students to help improve on their research skills. To answer this research question, responses from items on

section I of the staff questionnaire were used. Means of the ratings were computed, categorised and judged as 3.0 – 4.0 = not effective, 4.1 – 7.0 = fairly effective, and 7.1 – 9.0 = very effective. In addition, responses from interview with administrators of IQAUs in the public universities were used. Distribution of staff assessment of effectiveness of research practices are presented in Table 30.

Table 30: Staff Assessment of Research Practice

Description	Frequency	Percentage
Not Effective	39	15.3
Fairly Effective	176	67.8
Very Effective	43	16.9

Data from Table 30 show that, majority of staff 176 (67.8%) judge the quality of research practice as fair, while 43 (13.9%) see it to be good. 39 (15.3%) of staff see it as poor.

Table 31: Summary Data on Research Practice

Respondents	N	Composite Score		Mean (\bar{x})	Standard Deviation
		Minimum	Maximum		
Staff	255	3	9	6.05	1.53

The results in Table 31 show that staff participants ($\bar{X} = 6.05$, $SD = 1.53$) perceive the seminar and workshops organized for staff and students to upgrade their research skills to be fairly effective in public universities. The value of SD is low depicting closeness in the opinion of staff on effectiveness of research practice.

Results from the interview with the administrators of IQAUs revealed similar trend of idea as found in responses from the questionnaire. On "how the university assure quality of research done by both staff and students", the administrators gave insightful but varying responses. One administrator claimed:

"The university has a research policy that guard the work that we do. It is the duty of lecturers and students to ensure that their research work conform to the details of that research policy" (ADMIN 1).

Another participant assert that:

“We have the research policy. We have the research ethics policy for staff and graduate students. We have policy for publication that talks about plagiarism and other things. Staff and students need to get copies of these policies and comply” (ADMIN 2).

From these comments, the picture is being painted as if the existence of a research policy guaranteed compliance. Policies are good but they are not end in themselves. There should be a better and proper way of monitoring to ensure compliance. Research is one of the core functions of institutions of higher education, and it is important to keep track of the research performance of staff. It is not enough to develop policies and think that it will guarantee compliance. Building capacity in the area of research need to be organized regularly for both staff and students in all areas of research and not some selected areas. A participant indicated that:

Anytime there is the need to build capacity in any area of the research process, be it proposal writing, how to publish, and other areas we organise workshop for staff. We do not have a specific timetable showing all the areas in research that we want to build capacity on (ADMIN 3).

There seem to be a notion among some members of the university community that all lecturers are knowledgeable in research, and they have the skill to coach students to develop their research skills. This was show in some of the responses given by some of the participants interviewed. A participant indicated that:

For the students, we rely on the lecturers to ensure that the students have the right knowledge to be able to do their research work. Almost all the lecturers are doing research because it is part of their core mandate and we expect them to transfer that knowledge to their students. What we are interested in is the plagiarism test. We have a software for the plagiarism test for students work (ADMIN 3).

Another participants indicated that:

“Lecturers teach research methods to students and they are supervising students’ research work. It is the responsibility of the lecturers to ensure quality

in the research practices of the students. If the quality of research produced by students are not good, then the lecturers are to be blamed” (ADMIN 4).

The universities are doing well in checking for plagiarism when it comes to student research work. What goes into the conduct of student’s research work is left with the student and the supervisor. What is means is that, if the research knowledge and skill of the supervisor is weak it will have influence on the quality of the students research work.

Research Question 7: *To what extent are public universities in Ghana effective in ensuring community service?*

Research question seven was formulated to help assess the views of staff on how the university motivate members of the university community to participation in community service. To answer this research question, responses from items on section J of the staff questionnaire, and responses from interview with administrators of IQAUs in the public universities were used. Means of the ratings were computed, categorised and judged as 3.0 – 4.0 = not effective, 4.1 – 7.0 = fairly effective, and 7.1 – 9.0 = very effective. Distribution of staff assessment of staff and students engagement in community service are presented in Table 32.

Table 32: Staff Assessment of Community Service

Description	Frequency	Percentage
Not Effective	76	29.8
Fairly Effective	179	70.2
Very Effective	0	0.0

Data from Table 32 show that, majority of staff 179 (70.2%) judge the quality of community service as fair, while 76 (29.8%) see it as not effective. None of the staff participants judged community service as very effective.

Table 33: Summary Data on Community Service

Respondents	N	Composite Score		Mean (\bar{x})	Standard Deviation
		Minimum	Maximum		
Staff	255	3	7	5.14	1.14

The results in Table 33 show that staff participants ($\bar{X} = 5.14$, $SD = 1.14$) perceive staff and students engagement in community service and staff being motivated to engage in it for promotion to be fairly effective in public universities.

Results from the interview with the administrators of IQAUs support the idea that there not much conscious effort to motivate members of the university to engage in community service. Asking the administrators to comments on how the quality of community service is assured in the university, the administrators gave insightful responses. A participant indicated that:

Community service is something that is catching up in academic field. The university has a formal system for every department on community service for the purpose of accreditation and reaccreditation. The problem with community service has to do with proper coordination and ensuring that it is done and done well (ADMIN 3).

Another participants remarked that:

“Authenticating the quality of what people claim they have done as community service is another issue” (ADMIN 2).

These comments show that, the system put in place for community service is for the purpose of accreditation and reaccreditation. To monitor and ensure the quality of the type of community services that members of the university community engaged in and how they go about such engagement is nonexistent. Members of the university community engaged in community service, but there is no proper coordination on what is done. This is manifested in some of the responses from the interview with the administrators. A participant remarked:

“Members of the university community do engage in community service, but because we don’t have a proper way to coordinate, we don’t get the information. How they do it qualitatively, one cannot tell”(ADMIN 2).

There seems to be no clear descriptions accepted by all on what constitute community service by members of the university community. This is manifested in the comment of one of the administrators that:

In fact, as for community service it is very broad. I think some of the community service are not documented, because when I check the application form for senior members, we have a place for community service and it even includes service to banks especially where you don’t directly charge them. There is no formal way of assuring the quality of community service (ADMIN 3).

For members of the university to effectively engage in community service and do what is needed will require proper monitoring and coordination which seems to be missing in the responses from the interview participants. The University coming out with a formal system for the engagement in community service for the purpose of accreditation, with nonexistent monitoring and coordination is not assuring effective engagement in community service by the members of the university community.

Research Question 8: *What is the quality of graduates of public universities in Ghana?*

Research question eight was formulated to find out from immediate past students of public universities in Ghana who are currently doing national service, how they see the degrees they have obtained comparing with similar degrees from other universities and how they see themselves ready for jobs related to their area of study. To answer this question responses from the focus group discussions with the immediate past students were used. When asked how they will rate the quality of their degrees compared to those with similar degree from outside Ghana, these were some of the responses from the participants:

If you compare us with students from MIT for example, you can see that there is vast difference in practical skills. I mean those of us who did ICT and computer

engineering. If it comes to theory we know much about the computer. We have to memorize to pass examination because our examinations are theory based. When it comes to the practical skills we are weak [FGP]

“Theory wise we are not doing anything different from what others are doing. We can’t apply what we have learnt. I did electrical engineering. All in all I think it is six out of ten if I should rate” [FGP]

We need to find a way to apply the knowledge outside the university. The classroom work is full of theory, and we have to go out there to practice to get the experience. Those who did the same programme outside have advantage over us when it comes to practical work [FGP]

“When it comes to the theoretical aspect I will outperform any individual with a similar degree from anywhere, but for the practical aspect I think I did not receive that much. There wasn’t much hands on training” [FGP]

“We had less practical experiences, so practically I am handicapped. I can still compete with others but not with practical stuff” [FGP]

From the comments, it can be deduced that most of the past students of public universities are of the view that they lack practical skills as part of the training they were given. This situation may be as a result of insufficient and ill equipped laboratories and workshops for practical lessons. Have the knowledge and not being able to apply it in real life situation to solve practical problem makes most of the graduate from the public universities who did practical related programmes handicapped in their field of study. Those who did programmes with less practical components had these to say:

“I did English education. Ours don’t involve much practical works. We did practice teaching. I can match anyone with similar degree from anywhere” [FGP]

“I think in terms of quality, on a scale of ten, I will put my degree on the point eight in terms of content. Skill for the job market I will put on point six” [FGP]

“I see repetition of courses in our programmes. I need additional knowledge in content of the programme I read. So in rating, I will give six out of ten” [FGP]

“Some of our lecturers have poems, drama, and songs they composed. They motivated us to be like them. We are as ready as those with similar degrees from outside” [FGP]

The comments suggest some of the graduate who offered programmes with less practical component see themselves more prepared for the world of work than those who offered programmes which are more of practical oriented. When asked how they will generally describe the quality of graduates produced by public universities in Ghana, the past students have these to say.

“I will say six out of ten, because when you take a graduate from KNUST and you compare with a graduate from Ashesi (a private university), you will see a vast difference. Those from Ashesi do a lot of hands-on practical work so they are far better than us” [FGP]

“I will give six out of ten in rating. All we do is theory. No practical works” [FGP]

“On a whole I will say five out of ten. This is because we were not given the opportunity to practice what we learn” [FGP]

“I will give five out of ten, because our graduates are not innovative enough. We don’t have that entrepreneurial skills” [FGP]

“I will give one out of three because we have theoretical knowledge but we lack practical skills and innovation” [FGP]

From the comments, there is a general consensus that most graduates from the public universities in Ghana lack practical skills because they were not exposed to practical experiences in the course of their study in the university.

Summary of the Findings

Based on the results from the analysis of data on Evaluation of Internal Quality Assurance System Effectiveness in Public Universities in Ghana, the following were the findings;

1. The non-functional QA sub-units or committees in the schools, colleges, faculties, departments and sections in the universities to ensure decentralization of QA activities, makes the operational structure of internal quality assurance in public universities in

Ghana fairly effective. Majority of staff 162 representing 63.5% perceive the institutional structure of IQA as fairly effective.

2. Students' progression activities to equip students with the knowledge to progress from one level to another in their academic journey is fairly effective in public universities in Ghana. 1465 students representing 57.7% indicated that it is fairly effective.
3. Staff progression activities planned and organized to help staff deliver on the job is very effective in public universities in Ghana. 161 staff representing 63.1% indicated that it is very effective.
4. Academic support services in the public universities in Ghana is rated fair in quality by both students and staff. 1980 students representing 77.8% and 179 staff representing 70.2% indicated that it is fairly effective.
5. Lectures render to students in public universities in Ghana was rated by both students and staff as generally good. 1766 students representing 69.4% and 199 staff representing 78.0% indicated that it is good.
6. Research practice in public universities in Ghana is judged by staff to be fairly effective. 176 staff representing 67.8% indicated that it is fairly effective.
7. Staff and students engagement in community service is fairly effective in public universities in Ghana. 179 staff representing 70.2% indicated that it is fairly effective.
8. Graduate of public universities lack practical skills in the various areas of study.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This chapter is devoted to the discussion of findings summarised in chapter four, conclusions drawn from the findings and recommendations made for the stakeholders of public universities in Ghana. Limitations and suggested areas for further studies are also added. The main thrust of this study was to evaluate the effectiveness of internal quality assurance system of public universities in Ghana. Eight research questions were raised to guide the study. Adopting the Context, Input, Process, Product (CIPP) evaluation model, the study was descriptive employing mixed methods convergent parallel design. This design lent itself to the collection of both quantitative and qualitative data from the staff, students and immediate past students of public universities in Ghana. Data were gathered from the participants through the use of questionnaires, interviews and focus group discussions. Data collected were analysed employing percentages, means and standard deviations for the quantitative data and narrations for the qualitative data.

Discussion of Findings

Structure of IQA system

This research explored the structure of the internal quality assurance of public universities. It was revealed that, the non-functional QA sub-units or QA committees at school, college, faculty, departmental and sectional levels negatively infringes on the effectiveness of assuring quality in the various public universities in Ghana. Some members of the university community perceive quality related issues as the responsibility of those working at the internal quality assurance directorate. The findings is in line with the view of Seniwoliba and Yakubu (2015) who conducted a study titled ‘An analysis of the quality assurance policies in a Ghanaian University’ and found that some staff view activities of IQAU with suspicion instead of seeing it as a transformative endeavour of the university demanding a collective responsibility. As a result of this perception, information on quality related matters is often viewed with some ambivalence. They argue that quality assurance is nascent and it may take time for quality culture to be built in the university.

Also, an international survey conducted by Martin and Parikh (2017) it was revealed that, the lack of technical support for quality assurance at decentralized levels within institutions is an obstacle to the institutionalization of quality assurance. In most responding institutions, the university leadership (head of the institution and the vice-rector) played the most important role, followed by a quality committee and a dedicated person in charge of quality assurance. Decentralized authority over quality assurance (deans and departmental committees) was, however, less frequent. This suggests that IQA is still widely perceived as a central-level responsibility, which needs to further permeate HEIs to become fully effective.

Every public university in Ghana has an internal quality assurance directorate/unit. The National Accreditation Board (NAB) of Ghana insists on the existence of Internal Quality Assurance Unit (IQAU) as one of the critical requirements for institutional accreditation at the tertiary level of education. Some of the institutions have planning and quality assurance under one directorate while others have it as quality assurance directorate/unit but their functions in relation to assuring quality do not differ.

As one of the administrators interviewed in this study retorted “to be successful in developing a good quality culture in the university we need to encourage the bottom-up approach to quality assurance.” What this means is that, if the public universities want to achieve their aim of rendering quality services to their stakeholders, they need to ensure that every unit in the university establish functional QA sub-unit or QA committee as it is recommended in the QA policy documents of the universities. This may bring additional cost in human capital or financial commitment. While a high level of quality cannot be achieved with little funding, the costs related to neglecting quality must also be recognised. In the long run lack of appropriate funding for quality measures could lead to the institutional mission remaining unfulfilled. Therefore, investment in quality is seen as indispensable for higher education institutions and, in order to minimise cost, the key question to ask is: what can be done better, rather than what additional activities should be embarked upon

The current structure of QA assurance system in the public universities mandate the IQAU to ensure effective implementation of institutional QA policy and coordinates all QA related processes and activities in all sections in the university. This mandate seem not to be very clear to some members of the university community, thinking that it is the responsibility of some few individuals to assure quality in the institution. This calls for serious education for people to

understand that assuring quality is the responsibility of all and not for a few. Some members of the university community see the staff of the IQAU as people who are in to police them. This is supported by Rauhvargers, (2004) that, in some countries higher educational institutions have established performance-based management systems rather than improvement-oriented and learning outcomes-based quality culture. While quality of teaching as such is often mentioned, there is no notion of learning and learning outcomes in the general descriptions of the internal QA systems, suggesting there is a need to focus more on internal QA.

Additionally, higher educational institutions have been observed to take the top-down management-oriented approach in dealing with quality by promoting a QA system that centers on compliance to standards and a top-down management-oriented approach. According to Abma, (2006) this top-down management-oriented approach has several flaws. First, the goals and intentions of policy makers in making judgment would lead to management bias. Second, the findings are hardly used in decision making and third, the stakeholders' experiences and expertise and dialogue with and between stakeholders are being sidelined although their interests are at stake.

Staff and Students Progression

Students and staff are key players in the life of every university. Therefore, any good IQA system needs to be much focused on the progression of students and staff. Research questions two and three examined the effectiveness of activities organised by the university to assure smooth progression of students and staff from one level to another. The findings revealed that activities and procedures to assure students and staff progression are fairly effective. All the required activities and process that students and staff need to experience for smooth progression are stated in details in the various policies in the universities, but their implementation is not

done as expected. This is in line with Anyakoha, (1994) that our policies are written by knowledgeable writers who have foresight and believe strongly in what they write for the future but the problem comes when translating theory into practice by implementers.

There are many factors that help a new staff or student flourish when arriving on campus and remain prosperous once there. Orientation programmes aid in the successful transition for staff and students who are eager to start their new experience and continue successfully through their university journey. It is therefore important for universities to put quite a reasonable time and resource into the orientation they give to their staff and students. New staff and students are to be educated on their responsibilities, rights and privileges in the university. Students should be educated on the courses to offer for the award of degree and the requirements to progress from one level to another. All those responsible for the various academic support services should be given the opportunity to educate staff and students during the orientation period. There is no need to rush staff and students through orientation programme with the excuse of insufficient time and resources. Staff and students who are taken through well-structured orientation programme taking into consideration inputs of all academic support services are likely to produce better results.

The European University Association (2006) Quality Culture Project had identified staff development as an important building block of internal quality assurance and quality enhancement. It indicated that institutions should provide low performing staff with opportunities to improve their skills to an acceptable level and should have the means to remove them from their duties if they continue to be demonstrably ineffective. Romina (2013) has posited that vibrant staff development programme on a continuous basis will help academics and non-academics to clarify and modify their behaviour, attitude, value, skills and

competencies. In this way, they grow and develop in their knowledge and thus become more effective and efficient in the performance of tasks.

Academic Support Services

The results revealed that the quality of academic support services provided in the universities is fair. This means that, students are not getting all the needed support to help them excel in their academic journey. The lack of facilities such as science laboratories, workshops, libraries, ICT services, residential accommodation on campus, electricity and others, affect the quality of education. For good quality delivery, these facilities must meet the minimum standard specified by the National Council for Tertiary Education (NCTE) and the National Accreditation Board (NAB). As supported by Agar and Knopfmacher (1995) that there is a need to have extensive support programmes in place to enhance academic performance, to positively contribute to the overall student experience and throughput rates.

This finding is in line with the findings of Mensah (2016) who conducted a study titled ‘implementation of internal quality assurance in polytechnics: evidence from Ghana’ and found out that the polytechnics run support services like tutorials, counselling services, and sporting facilities/equipment to all students but they are insufficient and inadequate. The inadequacy and insufficiency of these support services will affect the quality of the service provided. The finding of this study is also in line with Kahsay (2012) finding on a study conducted on quality assurance in Ethiopian Universities and reported that, inadequacy of available facilities and support services are major problems across the public universities in Ethiopia. Botha, Brand, Cilliers, Davidow, De Jager and Smith (2005) reviewed international literature on higher education and concluded that academic and social support to students during their tertiary education is lacking in most higher education institutions. If the accommodation service on

university campus is not sufficient, students will have to stay outside campus. This may compromise accessibility to university resources like library which has impact on student's performance. If the higher education system is to promote effective learning and prevent learning breakdown, there should be effectively organised academic support services whose aim is to break down barriers to learning, structured into the education system.

Universities provide an extensive range of services such as counselling, disability support, and welfare support to help students complete their chosen courses. However, these services are often under-utilized because of student reluctance and a lack of knowledge about them. As a consequence, students may withdraw, fail, and not achieve to their fullest potential, indicating a need for the development of supportive academic environments (Drew, Pike, Pooley, Young & Breen 2002). If these academic support services are not good enough as revealed in this study, it affects the academic performance of students. This is supported by Morrison, Brand and Cilliers (2006) that tertiary institutions cannot function properly without the support capacity provided by counselling and the other development centres.

Research Practices in Universities

It was revealed in the study that, the research seminars and workshops organized for staff and students to upgrade their research skills in the public universities is fairly effective. Aside the research policies developed by the various universities, there is the need to ensure that the needed structures and incentives are provided to motivate members of the university to engage in quality research. This findings is in line with Lodhi (2012) who conducted a study titled 'researching the research culture in Pakistani public universities: the academics' perspective'. Lodhi reported that majority (70%) of the respondents spend most of their time in teaching and do not have adequate time to conduct research or involve themselves in research related

activities. This is partly because the existing structure of the universities was more supportive to teaching as compared to research activities. Lohdi asserted that, in the eyes of academics, teaching oriented leadership operated as a barrier in the promotion of research culture.

Ubogu and Van den Heever (2014) posited that, different institutional components ranging from financial incentives (allowances, salaries), to non- financial incentives (improved research management, modern infrastructure, promotions) need to be employed by the universities to stimulate the research productivity of their academic staff members. The universities of developed countries have a rich research culture. The scholarly output of academics is an important contributing factor in the development of knowledge-based economy of advanced countries. On the other side, universities in the developing countries have firm teaching traditions but weak research culture (Salazar-Clemeña & Almonte-Acosta, 2007). In this regard, Ghana is no exception. In Ghana, academics are judged on the bases of their scholarly output and number of research publications in renowned national and international journals. There is a lot to be done to shift the focus of faculty members from dominant teaching traditions to strong research culture in universities, thereby, bringing a balance between two main activities of academics.

The cultivation of research culture in a university is a long-term process which needs continue strategic planning, committed leadership and favorable climate. However, research is also considered as an individual-driven activity, because in universities it is initiated, planned and conducted by a single or small group of people (Hazelcorn, 2005). Therefore, it is suggested that university may take research orientation of academic staff into account at the time of recruitment and selection (Hazelcorn, 2005). For this purpose, academic qualifications,

publications and their frequencies may provide an idea about applicants' tendency for doing research (Jenks, 2009).

Hemmings, Rushbrook, and Smith (2007) find that well-reputed researcher as mentor may influence the research interest and productivity of mentee. Mentoring programme, aiming at the creation of working relationship between novice and established researcher, can play a significant role in the building of a sustained research culture in a university. Bland & Ruffin (1992) further argue that the formal and informal interaction with colleagues who have established themselves as researchers may also motivate the young academics to emerge as a researcher and enrich their own research profiles. Therefore, the arrangement of such activities that provide opportunities to interact with renowned researcher might be useful for fostering the importance and value of doing research among academics (Jenks, 2009).

Hazelcorn (2005) argues that the nature and availability of training and development opportunities for academics promote research practices in universities. For example, time management training may enable the academics to maintain balance between workload (either teaching or administrative) and research activities (Jenk, 2009). Consequently, academics from teaching intensive universities can minimize the negative impact of teaching and administrative responsibilities on their research performance especially for writing publications (Hemmings, et al., 2007). Moreover, skills development training and workshops, especially academic 'writing skills', 'basic and advanced research skills', 'communication and self-presentation', may be helpful for nurturing the self-efficacy among academic staff for doing research. It can be supplemented by arranging seminars about how to find a relevant journal, publishers, conference for dissemination of research outputs, what the funding possibilities which may be available, and how information technology can be incorporated in research activities (Jenks, 2009).

Salazar-Clemeña and Almonte-Acosta (2007) asserted that academics need to be motivated to engage in research by providing proper facilities, encouragement from leadership and senior colleagues along with other administrative supports such as; research friendly environment, decentralized research policy, availability of time, funding, and rewards for research. Decentralised university management structure and strong leadership are prerequisites for the creation of research culture (Pratt, Margaritis, & Coy, 1999).

Community Service

The mission of higher education has traditionally been focused on three core areas: teaching, research, and community service. The findings of the study indicated that staff and students' engagement in community service is fairly effective. This may be as a result of unclear description of what constitute community service that the university expect members to engage in, and the proper monitoring and coordination of such services. Antony (2000) posited that, one of the important parameters for internal quality assurance is that higher education institutions must promote faculty participation in consultancy and extension services. It is therefore important for public universities in Ghana to the description of community service clear to members of the university community and motivate members of the university community to effectively engage in activities and services that meet the needs and culture of the local society.

Students' engagement in community service will be of benefit to them for career preparation, awareness of community problems, and the connection of theory to practice. For lecturers, service is a way to apply theory and knowledge to local problems. For administrators of educational institutions, service is a way to improve relationships between campus and community. Service to the community is a way for campuses to address public perception that higher education exists for its own good (Ward & Wolf-Wendel, 2000). There is strong evidence

that incorporating community service into the curriculum strengthens student academic achievement and promotes student engagement. (Tai, Haque, McLellan, & Knight, 2006). Community service has a positive impact on academic learning and critical thinking, improves students' ability to apply what they have learned in "the real world", and contributes to career development (Chusid, 2007). It is therefore important for the universities to consider the issue of community service in their curriculum review to include it where possible.

Quality of Graduates

The quality of graduates of public universities in Ghana as perceived by the graduates themselves was explored in this study. Fresh graduates who were doing national service revealed that graduates of public universities lack practical skills. This findings is in line with Mohamedbhai (2014) report on the study conducted by the Inter-University Council for East Africa (IUCES) in 100 public and private universities in the five East African countries on employers' views on the employability of graduates from its member universities. The survey revealed some stark and disturbing facts. Between 51% to 63% of the graduates were found to be 'half-baked', 'unfit for jobs' and 'lacking job market skills'. The worst records were in Uganda (63%) and Tanzania (61%). Although the study covered only five countries, there have been concerns about the poor quality of graduates in most Sub-Saharan African countries for quite some time.

There have been similar reports from other studies on the quality of graduate from universities all over Africa. For example, in Nigeria in 2010, the accreditation of several academic departments in over 20 universities was withdrawn by the national regulatory body, the National Universities Council (NUC), on grounds of lack of infrastructure and suitably qualified academic staff. In 2011, the Engineering Registration Board of Kenya refused to

recognize the engineering degree from three leading public universities in Kenya because of poor curricula, lack of qualified lecturers and shortage of appropriate facilities. In the same year, on similar grounds, the Council of Legal Education of Kenya rejected the applications to practice law from graduates of several public and private universities in Kenya. In South Africa as well it has been reported that many law firms have found that the LLB graduates are unable 'to draw affidavits and pleadings as they lack both numeracy and literacy skills' (Mohamedbhai, 2014). A direct consequence of the poor quality of graduates has been the increasing unemployment of graduates. Universities across the globe are increasingly pressed to find ways of proving their worth not only in the preparation of students, but also how they are linked to business and industry. The unanswered question is, which models of student support are the public universities using to ensure that the graduate acquire the needed knowledge and practical skills for the job market? This is a question that needs to be investigated.

Conclusion

Most members of the university community are not committed in ensuring the building of quality culture in public universities in Ghana. Universities have well documented policies which if implemented well, will help achieve building a sound quality culture. The challenge for assuring quality is emanating from the fact that most of the universities are running top-down managerial system, and it is making most members of the university community see assuring quality to be the responsibility of a few.

Implications of the Study

The implication of the finding is that, members of the university community do not take ownership of assuring internal quality in the universities. It is not enough to produce good and detailed policy documents, with little commitment to ensuring its implementation. Quality

assurance is implemented by few individuals of the IQAUs in the universities. Real results of achieving a quality culture in the universities will occur if all members of the university community take ownership of assuring quality by embracing the idea of setting up functional QA sub-units and QA committees in every section within the university.

Recommendations

Based on the findings of the study, the following recommendations have been made.

1. The university authorities should make it mandatory for every school, college, faculty, department and section within the university to establish a functional QA sub-unit or committee. The heads of the various departments and sections should be tasked with the responsibility of establishing functional QA sub-unit or committees. Failure should attract some penalty.
2. The IQAU in collaboration with the students' affairs division and other sections should develop and implement a well-structured orientation programme taking into consideration all the academic support services for students. This should be done at the university level, school level, college level, faculty level, departmental level and at the unit level. Enough time should be given for the orientation programme.
3. The IQAU in collaboration with the human resource division and other sections should develop and implement a well-structured orientation programme taking into consideration roles, responsibilities and expectations for all staff recruited into the university.
4. The university management should monitor the various units and sections providing academic support services to ensure that they function effectively. This can be done by

establishing proper collaboration between the various units and sections providing academic support services.

5. The university management should improve the resources that facilitate good delivery of lectures to motivate lecturers to continue to deliver good academic materials to the students.
6. IQAU should collaborate with all the various sections of the university to implement the research skills development aspect of the research policy and ensure that staff and students fully benefit from all what the policy stipulate.
7. The university management in collaboration with the IQAU should develop a clear policy direction for both staff and students community service engagement. The IQAU should educate the entire university community on the need and benefits of engaging in community service.
8. The government of Ghana and the university management should provide the right material and human resources, and monitor to ensure their use for practical engagement of the students in their various fields of study.

Limitations of the Study

1. The study focused on only public universities in Ghana. Therefore, the findings cannot therefore be generalized to cover private universities in Ghana.
2. There were many scales for the questionnaires. This increased the number of items which required more time to provide responses. It is likely some respondents may not spend time to patiently read and provide genuine responses.

3. Some of the immediate past students never had opportunity to be in a focus group discussion, so it was their first time experience. This made them to repeat some of the points and ideas raised by earlier contributors instead of coming out with their own unique experiences. The situation was significantly minimized by the researcher who happen to be the moderator for all the various focus groups, buy asking follow-up questions for clarification.

Suggestion for Further Studies

In the light of the limitations of this study and the need to further explore the generalisability of the findings to all tertiary institutions in Ghana, other researchers may consider;

1. Evaluation of the effectiveness of internal quality assurance system of private tertiary institutions in Ghana.
2. A comparative analysis of internal quality assurance system of public and private tertiary institutions in Ghana.
3. Assessing the factors affecting the decentralization of internal quality assurance structure of tertiary institutions in Ghana.
4. Visions and strategies for internal quality assurance system in Ghanaian tertiary institutions.

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APPENDIX 1

Schools/Faculties/Colleges

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Natural Resource UENR	160	6.3	6.3	6.3
	Engineering UENR	240	9.4	9.4	15.7
	Science UENR	240	9.4	9.4	25.1
	Foriegn Languages UEW	80	3.1	3.1	28.3
	Education UEW	160	6.3	6.3	34.6
	Science Educ UEW	240	9.4	9.4	44.0
	Social Sciences UEW	160	6.3	6.3	50.3
	Social Science UCC	160	6.3	6.3	56.6
	Physical Sciences UCC	80	3.1	3.1	59.7
	Business UCC	72	2.8	2.8	62.6
	Art UCC	73	2.9	2.9	65.4
	Health and Allied Sciences UCC	80	3.1	3.1	68.6
	Biological Science UCC	80	3.1	3.1	71.7
	Humanities and Social Sciences education UCC	80	3.1	3.1	74.9
	Physical and Computational Sciences KNUST	160	6.3	6.3	81.1
	Agriculture KNUST	80	3.1	3.1	84.3
	Bioscience KNUST	160	6.3	6.3	90.6
	Art and Built Environment KNUST	80	3.1	3.1	93.7
	Humanities and Social Sciences KNUST	80	3.1	3.1	96.9
	Engineering KNUST	80	3.1	3.1	100.0
	Total	2545	100.0	100.0	

APPENDIX 2

Department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Environmental Management UENR	80	3.1	3.1	3.1
	Mechanical Engineering UENR	80	3.1	3.1	6.3
	Energy and Environmental Enginnering UENR	80	3.1	3.1	9.4
	Renewable and Environmental Engineering UENR	80	3.1	3.1	12.6
	Forest Science UENR	80	3.1	3.1	15.7
	Chemical Engineering UENR	80	3.1	3.1	18.9
	Computer Science and IT UENR	80	3.1	3.1	22.0
	Mathematics and Statistics UENR	80	3.1	3.1	25.1
	French UEW	80	3.1	3.1	28.3
	Special Education UEW	80	3.1	3.1	31.4
	Pychology and Education UEW	80	3.1	3.1	34.6
	Chemistry Educ UEW	80	3.1	3.1	37.7
	Physics Educ UEW	80	3.1	3.1	40.9
	Biology Educ UEW	80	3.1	3.1	44.0
	Social Studies UEW	80	3.1	3.1	47.2
	Political Science UEW	80	3.1	3.1	50.3
	Sociology nad Anthropology UCC	80	3.1	3.1	53.4
	Economics UCC	80	3.1	3.1	56.6
	Mathematics and Statistics UCC	80	3.1	3.1	59.7
	Accounting and Finance UCC	72	2.8	2.8	62.6
	Communication Studies UCC	73	2.9	2.9	65.4
	Nursing and Midwifery UCC	80	3.1	3.1	68.6

Biochemistry UCC	80	3.1	3.1	71.7
Business and Art Education UCC	80	3.1	3.1	74.9
Computer Science KNUST	80	3.1	3.1	78.0
Agriculture KNUST	80	3.1	3.1	81.1
Food Science and Technology KNUST	80	3.1	3.1	84.3
Planning KNUST	80	3.1	3.1	87.4
theoretical and Applied Biology KNUST	80	3.1	3.1	90.6
Physics KNUST	80	3.1	3.1	93.7
Economics KNUST	80	3.1	3.1	96.9
Electrical and Electronic Engineering KNUST	80	3.1	3.1	100.0
Total	2545	100.0	100.0	

INTERVIEW GUIDE FOR ADMINISTRATORS/COORDINATORS OF QUALITY ASSURANCE DIRECTRATE/UNIT

1. How does your university decide what the aims and objectives of IQA policy would be?

- Did your university consult anyone? If yes, who and what was the nature of the consultation?
2. Who is responsible for undertaking the review of IQA policy in your university?
 - Did your university compare the aims and objectives of your IQA with the aims and objectives of other QA policy guidelines by NAB to see how, or if, they overlap or complement other policies?
 - If yes, what did you discover of interest?
 - If not, do you think comparison of IQA policies aims and objectives should be undertaking?
 3. When you settled on the IQA aims and objectives did you have them approved or agreed with anyone?
 - If yes who? Why did you have to have them agreed?
 4. What kind of structure do you have in place to support IQA?
 - How do you disseminate the aims and objectives of IQA to staff and students?
 - How do you receive feedback from staff and students on IQA matters?
 5. What are the roles of academic staff in the IQA in this university?
 - how do you measure the achievement of their roles?
 6. What are the roles of students in the IQA in this university?
 - how do you measure the achievement of their roles?
 7. What are the roles of non-academic staff in the IQA in this university?
 - how do you measure the achievement of their roles?
 8. What are the practices in your institution regarding assuring quality in:
 - i. Student's entry, progression, and exit?

- ii. Staff recruitment, promotion, and competency on their job?
 - iii. Programme design, approval, monitoring and periodic review?
 - iv. Students' assessment?
 - v. Students' support services?
 - vi. Lecture space and laboratory equipment?
 - vii. Research training for staff and students?
 - viii. Research findings dissemination and utilization?
 - ix. Community service?
9. How do you evaluate the effectiveness of the internal quality assurance practices of this university?
10. What problems/challenges do you think are facing the IQA system of your university?
11. In what ways can existing quality assurance practices be improved to enhance a sustainable quality culture in this university?



DEPARTMENT OF SOCIAL SCIENCES EDUCATION

FACULTY OF EDUCATION

UNIVERSITY INTERNAL QUALITY ASSURANCE SURVEY FOR STAFF

Dear Sir/Madam,

My name is ESHUN Peter, a Ph.D. student of the above mentioned university. I am doing my research on the effectiveness of internal quality assurance (IQA) system in public universities in Ghana. I would like to request your participation in the study.

This questionnaire is intended to collect information that will be used purely for my Ph.D. study purposes. Your responses will therefore be treated with utmost confidentiality. You are kindly requested to respond to all questions and honestly in order to enable the researcher to draw the most accurate conclusions on internal quality assurance issues in your university.

Your cooperation and support will contribute to the success of this study will be greatly appreciated. The outcome of this study is expected to contribute to the improvement of internal quality assurance of public universities in Ghana.

Thank you for participating in the study.

SECTION A: Demographic information

DIRECTIONS: Please tick (✓) the box corresponding to your choice(s) or write the requested information concerning each question in this section.

1. University
2. Status: Academic []
 Non-Academic []
3. Highest Academic Qualification
4. Rank
5. Years of working experience in the university:
 0 – 5 []
 6 – 10 []
 11 – 15 []
 16 – 20 []
 Above 20 []
6. Age: 20 – 30 []
 31 – 40 []
 41 – 50 []
 51 – 60 []
 Above 60 []

DIRECTIONS: Please read the following statements and respond to each of them by ticking (√) in the cell (space) that best reflects your measure of each statement with respect to ensuring internal quality practices in your university.

SECTION B: Orientation for newly recruited staff

The items below seek to explore the effectiveness of orientation giving to staff in your university. Please, tick the cell that matches your thinking.

S/N	Statement	Very Effective	Fairly Effective	Not Effective
	<i>How my university gives orientation on:</i>			

7	roles of staff members in various positions			
8	channels of complain and redress			
9	rights and privileges			
10	requirements and procedures for promotion			
11	access to information in the university			

SECTION C: Approval, monitoring and periodic review of academic programmes

The items below seek to explore the effectiveness of approval, monitoring and review of academic programmes in this university. Please, tick the cell that matches your thinking.

S/N	Statement	Very Effective	Fairly Effective	Not Effective
	<i>How my university carries out:</i>			
12	approval procedures for degree/diploma programmes			
13	monitoring of programme content and intended learning outcomes			
14	monitoring of the progress and achievements of students			
15	monitoring of mode of delivery of lectures			
16	monitoring of available learning resources			
17	periodic reviews of academic programmes			
18	feedback from students and employers used in academic programme review			

SECTION D: Staff progression

The items below seek to explore the effectiveness of training, application of rules and promotions in this university. Please, tick the cell that matches your thinking.

S/N	Statement	Very Effective	Fairly Effective	Not Effective
19	In-service training given to staff to improve on their skills			
20	Promotion requirement and procedures are followed in staff promotions			
21	Staff are disciplined per university regulations			
22	Termination/cessation of tenure/retirements regulations are followed in dealing with all staff			

SECTION E: Orientation for Students on progression

The items below seek to explore how effective your university is with respect to the orientation given to students

S/N	Statement	Very Effective	Fairly Effective	Not Effective
	<i>How my university gives orientation on:</i>			
23	courses to offer for the award of degree			
24	requirements to progress from one level to another			
25	how to access the library and e-library resources			
26	channels of complains and redress			
27	Students' responsibilities, rights and privileges			
28	requirements for graduation			

SECTION F: Lectures

The items below seek to explore how good your university is with respect to lectures

S/N	Statement	Good	Fair	Poor
29	Information to students on content of courses			
30	Coverage of contents of each course			
31	Students attendance at lectures			
32	Lecturers attendance at lectures			

33	Giving of reading/written assignment to students by lecturers			
34	Lecturers' response to reading/written assignments			
35	Opportunity to ask/answer/comment/discuss during lectures			
36	Opportunity to take note/jot points during lectures			
37	Lecturers' interaction with students in the lecture hall			

SECTION G: Assessment of Students

The items below seek to explore the effectiveness of student assessment procedures in this university. Please, tick the cell that matches your thinking.

S/N	Statement	Very Effective	Fairly Effective	Not Effective
	<i>How my university carries out:</i>			
38	supervision of research projects and practical/practicum			
39	directions given on how to go about continuous assessment tasks			
40	feedback by lecturers on responses to assessment tasks			
41	conduct of quizzes/tests			
42	conduct of examinations			
43	implementation of regulations covering students' absence and illness during tests/examination			

SECTION H: Academic Support Services

The items below seek to explore the effectiveness of the supporting services in this university. Please, tick the cell that matches your thinking on how good each of them is

S/N	Statement	Good	Fair	Poor	Not Available
44	University library services				
45	Faculty library services				
46	Departmental library services				
47	Information, communication and Technology (ICT) services				
48	Guidance and counselling services				
49	Students' disability support services				
50	Accommodation services for students				
51	Transport services				
52	Health services				
53	Water services				
54	Electricity services				
55	Laboratories/Workshops				
56	Sports and Games				
57	Students' complaints				
58	Access to food/cafeteria/canteen/restaurant				

SECTION I: Staff and Students' research practices

The items below seek to explore the effectiveness research practices in this university. Please, tick the cell that matches your thinking on the following

S/N	Statement	Very Effective	Fairly Effective	Not Effective
59	Research seminars/workshops organized for staff to upgrade their research skills			

60	Research seminars/workshops organized for students to upgrade their research skills			
61	Staff and students research findings used by the university and other stakeholders to improve the society			

SECTION J: Community service

The items below seek to explore the effectiveness of staff and students engagement in community service in this university. Please, tick the cell that matches your thinking.

<i>S/N</i>	Statement	<i>Very Effective</i>	<i>Fairly Effective</i>	<i>Not Effective</i>
62	Staff engagement in community service			
63	Motivation of staff to engage in community service as a component for promotion			
64	Students engagement in community service			

Thank you



DEPARTMENT OF SOCIAL SCIENCES EDUCATION

FACULTY OF EDUCATION

UNIVERSITY INTERNAL QUALITY ASSURANCE SURVEY FOR STUDENTS

Dear Student,

My name is ESHUN Peter, a Ph.D. student of the above mentioned university. I am doing my research on the effectiveness of internal quality assurance (IQA) system in public universities in Ghana. I would like to request your participation in the study.

This questionnaire is intended to collect information that will be used purely for my Ph.D. study purposes. Your responses will therefore be treated with utmost confidentiality. You are kindly requested to respond to all questions and honestly in order to enable the researcher to draw the most accurate conclusions on internal quality assurance issues in your university.

Your cooperation and support will contribute to the success of this study will be greatly appreciated. The outcome of this study is expected to contribute to the improvement of internal quality assurance of public universities in Ghana.

Thank you for participating in the study.

SECTION A: Demographic Information

DIRECTIONS: Please tick (✓) the box corresponding to your choice(s) or write the requested information concerning each question in this section.

1. University
2. Faculty.....
3. Department
4. Level: 100 []
200 []
300 []
400 []
500 []
600 []
700 []

5. Age: Below 21 []
21 – 25 []
26 – 30 []
31 – 35 []
36 – 40 []
Above 40 []

DIRECTIONS: Please read the following statements and respond to each of them by ticking (✓) in the cell (space) that best reflects your measure of each statement with respect to ensuring internal quality practices in your university.

SECTION B: Orientation for Students on progression and exit

The items below seek to explore how effective your university is with respect to the *orientation* given to students

S/N	Statement	Very Effective	Fairly Effective	Not Effective
	<i>My university gives orientation on:</i>			
6	courses to offer for the award of degree			
7	requirements to progress from one level to another			
8	how to access the library and e-library resources			
9	channels of complains and redress			
10	students' responsibilities, rights and privileges			
11	requirements for graduation			

SECTION C: Lectures

The items below seek to explore how good your university is with respect to lectures

S/N	Statement	Good	Fair	Poor
12	Information to students on content of courses			
13	Coverage of contents of each course			
14	Students attendance at lectures			
15	Lecturers attendance at lectures			
16	Giving of reading/written assignment to students by lecturers			
17	Lecturers' response to reading/written assignments			
18	Opportunity to ask/answer/comment/discuss during lectures			
19	Opportunity to take note/jot points during lectures			
20	Lecturers' interaction with students in the lecture hall			

SECTION D: Assessment of Students

The items below seek to explore the effectiveness of student assessment procedures in this university. Please, tick the cell that matches your thinking.

S/N	Statement	Very Effective	Fairly Effective	Not Effective
	<i>My university carries out:</i>			
21	supervision of research projects and practical/practicum			

22	directions given on how to go about continuous assessment tasks			
23	feedback by lecturers on responses to assessment tasks			
24	conduct of quizzes/tests			
25	conduct of examinations			
26	implementation of regulations covering students' absence and illness during tests/examination			

SECTION E: Academic Support Services

The items below seek to explore the effectiveness of the supporting services in this university. Please, tick the cell that matches your thinking on how good each of them is

<i>S/N</i>	Statement	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>Not Available</i>
27	University library services				
28	Faculty library services				
29	Departmental library services				
30	Information, communication and Technology (ICT) services				
31	Guidance and counselling services				
32	Students' disability support services				
33	Accommodation services for students				
34	Transport services				
35	Health services				
36	Water services				
37	Electricity services				
38	Laboratories/Workshops				
39	Sports and Games				
40	Students' complaints				
41	Access to food/cafeteria/canteen/restaurant				

Thank you

GUIDE FOR FOCUS GROUP DISCUSSION WITH IMMEDIATE PAST STUDENTS OF PUBLIC UNIVERSITIES IN GHANA

1. How will you rate the quality of your degree compared to those with similar degree from outside Ghana?

2. What experiences in the university helped you to develop your problem solving skills?
 - How effective where those experiences?
3. What experiences in the university helped you to develop your critical and reflective thinking skills?
 - How effective where those experiences?
4. What experiences in the university helped you to develop your communication skills?
 - How effective where those experiences?
5. Considering the programme you studied at the university, how has it prepared you for work related to your area of study?
6. Have you been given opportunity to supply information to your university on quality of
 - Lectures
 - Lecture halls
 - Library
 - Laboratories
 - Sports
7. How will you generally describe the quality of graduates produced by public universities in Ghana?
 - Give reason(s) for your description.