

QUALITY IN SENIOR HIGH SCHOOL ACCOUNTING EDUCATION IN GHANA

By

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**DECLARATION**

I hereby declare that **‘Quality in senior high school accounting education in Ghana’** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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**DEDICATION**

To Paapa, Afia Nhyira, Sakeena, and the entire Tufuor family

## ABSTRACT

The issue of quality in the educational enterprise is of paramount interest to all stakeholders in education. Stakeholders in accounting education expend money, effort, time and other scarce resources that have alternative uses. However, once they have chosen accounting education over other competitive choices, there is need for them to get the satisfaction desired. This is the essence of assessing the quality in senior high school accounting education in Ghana to enable the stakeholders evaluate the investments they have made to guide future decisions and actions. The study was a descriptive survey that drew from both quantitative and qualitative methods of research. This involved the use of questionnaire, observation, vignette and documentary analysis. Only 159 accounting teachers and 2242 accounting students in public senior high schools offering accounting education in Ghana were involved in the study. These participants were drawn from Brong Ahafo, Northern, and Western Regions which were randomly selected from each of the three zones as in Southern (Central, Greater Accra, Volta and Western Regions), Middle (Ashanti, Brong Ahafo and Eastern Regions) and Northern (Northern, Upper East and Upper West Regions). Descriptive and inferential statistics, content analysis, narratives and themes were used to analyse the resulting data.

The study found among other things that the quality in senior high school accounting education was poor. It was accordingly recommended that accounting teachers inspire enthusiasm in the delivery of cost accounting lessons. On their part, accounting students should disabuse their minds and erase the erroneous mentality that cost accounting is not interesting. School authorities should acknowledge and make provisions for continuous professional development to capacitate accounting teachers to holistically implement the entire curriculum to avoid the selective implementation. They should as well strengthen instructional monitoring and supervisions should be encouraged and strengthened. Other research should focus attention on extensive studies on the teaching and learning resources for accounting lessons delivery.

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## **CHAPTER ONE**

### **ORIENTATION TO THE STUDY**

#### **1.1 INTRODUCTION**

Since the implementation of the 2007 Educational Reforms in Ghana there has been some concerns about its rate of success. These concerns result from politicization political activists whether in opposition parties or in government of educational issues in the country. To score political points and win votes, politicians often stand by their promises on the system of education in the country which needs an overhaul, during campaign for power through ballots. These promises are often in conflict with those of other political parties. Redeeming those promises, no matter how inappropriate they may be in the circumstances, is shrewd enough for the people whose mandate is sought to perceive the politician to be loyal. Hence, the education system in the country has been the object of experimentation and basis of exacting loyalty to redeem campaign promises. Although politics cannot be separated from education the over politicisation of educational policies could negatively influence the quality and standard of education in the country. The sudden reversal of the duration of the 4-year senior high school, to 3-years by the government that came to power in 2009 is a case in point. It is a very serious indictment on the government's attitude to quality education because there was no public consultation before the duration of the high school was reduced. After some time of familiarisation with the 4-year senior high school, teachers now have the increased responsibility in readjusting to be tune with the 3-year senior high school system.

Added to this is the problem with the teacher compensation. Since the announcement by the government of Ghana of the single spine salary for public sector workers, concerns have been expressed about delays in its implementation. Teachers have expressed profound anxieties about what level of salary adjustment they would receive under the new salary scheme. Some teachers, using the adjusted salaries of other public sector workers as a proxy, predicted their anticipated salaries. But their heightened expectations turned to gross disappointment when they were migrated unto the new salary scheme. The poor conditions of service can have a negative impact on teaching. Being merely equity sensitive, the average teacher in Ghana has become sentimentally disillusioned to give all their best to support the delivery of quality education. Although various governments have done and are still doing what they can to promote good quality education, no phenomenal results have been achieved yet. This may be the result of inappropriate diagnosis of the problem to provide the relevant remedy. Most governments lack political will to address the problem properly. Governments tend to spread

their time thinly across the wide range of situations requiring attention within their short stay in office. Again, in practice there is a lack of political will for successive governments to continue the efforts previous administrations put in place to improve the quality of education in the country. The state of capriciousness of educational decisions, teacher motivational packages and ill-addressed educational challenges could militate against the delivery of quality education in Ghana in general and accounting education in particular.

## **1.2 THE SETTING**

Ghana practices the centralised education system. Accordingly, curricular decisions are centrally made by the Curriculum Research and Development Division (CRDD) of the Ghana Education Service (GES) and disseminated across all the 405 senior high schools in the country. Therefore, accounting teachers in senior high schools in Ghana have the responsibility of approximating the accounting curriculum as much as possible. When the accounting curriculum, just like any other curriculum, completes its full cycle, summative evaluation is conducted to determine whether to continue or discontinue it. In Ghana, this is usually done on the basis of external examinations (e.g. West African Examinations) passed and utility of the knowledge and skills students have acquired from the educational process. In part, these express the extent of attainment of curriculum goals.

Where the result is not encouraging, the programme may either be modified or replaced. Thus, the result of summative evaluation may lead to curriculum change, be it a reform or an innovation, to improve the quality of education. Although often presented as such by some stakeholders in education, having concern for quality in accounting education is not a new phenomenon. To consider it as new ignores the efforts of academics who have long pursued excellence in courses offered to students and in the research they have conducted (Karmel in Watty, 2007). What has changed significantly in the past two decades is the focus on quality as a strategic issue. This focus is a world-wide phenomenon that, in education, has been unparalleled across the Western world, independent of political context (Wilson in Watty, 2007).

School systems, the world over, have realised that education must be transformed to meet the needs of an emerging information and service-based society. In pursuant of the quest for quality in education in Ghana, the senior high school accounting curriculum, as a part of the total educational enterprise, has experienced another major change. This is what the 2007

Education Reform has left in its wake. Almost all other elements in education have been affected in one way or the other. As Sampsell (1997) observed, accounting education saw rapid changes in the 1990s forcing institutions of higher education to constantly adopt their course materials to suit the work force and external environment. This sent a signal to educationists and practitioners to anticipate changes in accounting concepts and work demands to make provision for such contingencies. Accordingly, the Curriculum Research and Development Division (CRDD) revised the accounting curriculum.

The new accounting curriculum as a whole focuses on continuous quality. Students are expected to master the knowledge, applications, and attitudes that will reinforce workplace competencies. The changes in senior high school accounting education in Ghana have emanated largely, but not exclusively, from national government policy that has resulted in institutions becoming increasingly accountable to a variety of stakeholders including government, employers, students, quality assurance agencies and professional bodies. Key stakeholders of global accounting education such as the International Federation of Accountants (IFAC) is interested in the way accounting students are educated and certificated. To ensure quality and consistency in accounting education around the globe, the IFAC Education Committee has developed International Education Standards for Professional Accountants (IESs) which prescribe the essential elements of accounting education. Failure to comply with such standards implies defiance. This is to ensure uniformity to promote quality of accounting education to guarantee the best service delivery in industry. It was, therefore, prudent for the CRDD to monitor the changes in the IFAC Education Standards so as to adapt the accounting education to enable senior high school accounting students obtain those terminal competencies. Such was the motivation that promoted interest in the revision of the senior high school accounting education.

### **1.3 THE IMPORTANCE OF ACCOUNTING EDUCATION IN THE SCHOOL CURRICULUM**

In recent years the demand for accounting education in Ghana has increased and subsequently enrolment of accounting students in High Schools has also increased. In the contemporary Ghana lots of people have become aware of the relevance of accounting as a subject. It has been seen by many as subject which has a pivotal role to play in the socio-economic development of the country. Job opportunities abound in both the private sector and the government departments. The awareness of the importance of the subject has

however created congestion in accounting classrooms and shortage of qualified teachers. This is a challenge which needs to be addressed by the ministry of education if accounting education is to continue to play a role on the country's socio-economic development. Thus in a changing environment, accounting is being re-positioned to meet the changing needs of contemporary Ghanaian society. Instead of being seen as a convenient mechanical device for a review of the stewardship and a measurement of the status and results of a business enterprise, accounting is nowadays seen as an integrated component of a business information system within its socio-economic environment, facilitating decision making of economic entities. In the business world, accounting is one discipline of study that all people, regardless of job position, should have some knowledge of. Its concepts can be applied to all job specialties, its importance has been promoted in recent years, and it is useful in people's everyday lives. .

The earliest form of accounting education started in the United States of America in the form of apprenticeship training. An experienced bookkeeper who needed an assistant would train an apprentice to lend a helping hand (Ainsworth & Plumlee, 1993). It then got to some point when businesses grew. Those merchants who were doing apprenticeship training realized that that form of training could no longer cope with the growth in business because more bookkeepers were needed than could be supplied. Tutors therefore started going round to teach people in the countryside the art of bookkeeping. After sometime the senate incorporated bookkeeping into the curriculum of schools. The situation is not so different in today's globalised world in which business rules supreme. There is the indication that the demand for businesses and their allied courses such as accounting and auditing will continue in the years to come. This is because there would always be the need to train the workforce to make their skills and outlook relevant to the times. This implies increased quest to gain accounting education. Yet by that simple economic principle--when demand exceeds supply sellers rule--might affect the quality of delivery of providers of accounting education. Taken for granted that such a principle does not apply in this regard, the inclusion of accounting education in the school curriculum must be justified.

Any course in accounting is designed to develop the students' understanding, capability and awareness in processing business data and give them the opportunity to reason inductively and to formulate judgments. The senior high school accounting curriculum puts great emphasis on the broad understanding of the theory and practice of accounting so as to

provide students with a good foundation to further their studies in business disciplines in tertiary institutions and to pursue a career in accounting. The accounting curriculum does not only aim to develop knowledge and skills in students, but also to provide a vehicle for the development of students' sound moral character as well as the enhancement of their generic skills and commitment as life-long learners. The specific objectives of the subjects are to enable students to have a thorough appreciation of accounting concepts, conventions, principles, techniques, procedures and their applications in various contexts. Thus students who study accounting would be equipped with an understanding and capability to analyse and present business data and acquire useful information for business decision-making (Curriculum Development Council, 2007).

The Accounting curriculum creates a sense of awareness in the development of the business practices and statutory requirements of accounting practices in Ghana and, in particular, how changing technologies lead to changes in accounting and business practices. As part of the general curriculum, the subject also aims to nurture in students the ability of self-management, the initiative to study and work on their own and collaborate with others. It equips students with generic skills in numeracy, communication, problem solving, critical thinking, creativity, and information technology. The high ethical standards and sound moral characters, e.g. how to respect others, pursue specific goals with perseverance and develop a strong sense of national identity, responsibility and professional commitment, that students need for their moral development are made readily accessible through accounting education. Also, accounting can be applied in all job specialties. Secretaries must use accounting skills to manage the company cheque book and orders, auditors have to study financial statements to evaluate the accuracy and integrity of the business, and executives need to judge the success of their business using accounting statements from the past and present. These are just a few of the many possible positions where an understanding of accounting is necessary.

Additionally, it is vital that everyone, not just business students, acquire an understanding of accounting for personal benefit. People use accounting in their daily lives when they study financial statements to make investment decisions, assess interest rates to pay off their house mortgages, and calculate rates for car payments. In the business world, accounting is utilised in much greater depth, but each individual encounters some activities in his/her everyday life that require knowledge of accounting principles. Accounting is the most basic framework of business. Without an accounting education, students would be unprepared for the real world.

However, the attainment of these important roles that accounting education plays in the school curriculum rests almost entirely on the accounting teacher. The accounting teacher is expected to translate the curriculum documents into learnable experiences for students to learn with ease. Accounting teacher's preparedness, competence and motivation are central to the delivery of quality senior high school accounting education. Adequate teacher preparation is fundamental to achieving the prime object of the curriculum. Yet, the extent of teacher preparation is dependent, among other things, on the Accounting teachers' knowledge, professional status and skills. According to Shulman (1986), *Accounting* teachers who blend pedagogy and content to have the pedagogical content knowledge of *Accounting* are likely to be more successful in instructional delivery. Possessing either one of the two or having the two kinds of knowledge separately is just not enough. However, it has been argued that an overwhelming majority of accounting teachers in Ghana are professionally trained and certified with an appreciable level of experience (Ankomah & Kwarteng, 2010). This implies that the state of the average Ghanaian Accounting teacher is of a higher quality to support the delivery of the senior high school accounting curriculum.

It is not just enough to have well qualified teachers to promote programme success. Teacher commitment stemming from teacher motivation is paramount to enable the Accounting curriculum measure up to expectation. However, the state of events in the country on teacher compensation discussed on the single spine salary structure has rather worsened teacher commitment to duty. The single spine salary scheme measures a workers outcome according to their inputs. It considers the nature of work, the workload, inconveniences, and qualification, among others to determine the salary of an employee.

Accounting teachers, just like any other teachers in the country, are dissatisfied with their conditions of service and hence might not be willing to teach wholeheartedly. Consequently, accounting instructions in senior high schools might be duly affected with the heap of the burden resting on accounting students. Accordingly, external chief examiners in accounting education have expressed concerns about accounting students' performance. They often remark that candidates' performance was generally below the performance of previous years (West African Examination Council, 2004, p. 1). At least, if things do not progress they are expected to be static rather than retrogress. Yet the state of Accounting education in the

country suggests that there is still some more to be done to sustain some appreciable level of quality.

#### **1.4 BACKGROUND TO THE PROBLEM**

Even though technically there has been no change in the three-year duration for implementing the Accounting curriculum, almost all of its components ranging from content to evaluation have been affected. Value Added Tax (VAT) Accounting has been introduced in the new Accounting curriculum. Such a topic is of prime concern since Ghana has shifted from the sales tax to a more robust tax system which proves readily collectible upon consumption. All other topics that were considered in the old curriculum are still maintained in the current one. The old syllabus offered teachers the latitude to supplement the prescribed content; however, the new system provides somewhat exhaustive information thereby avoiding any inclusion of extra notes. In addition, the sequence of the topics has changed. For example “Accounting concepts and policies” which form the theoretical basis of Accounting will have to be taught and learnt before “final account of sole traders”, “reserves and provisions” and “bank reconciliation statement”. This structure was not prevailing under the old curriculum. Indeed, there is the need to have a sound appreciation of the theory of Accounting before one can understand accounting better, yet often teachers intentionally reserve this topic for later periods. This has implications on vertical organization of learning experiences. Content should be sequentially arranged in order of increasing difficulty level (Tyler, 1949; Taba, 1962; Wheeler, 1967). The utility principle has also been used in the content organization. The inclusion of VAT as the penultimate topic indicates that the practical usefulness of the concept is of utmost importance in students’ life after school.

Successful teaching and learning of financial Accounting is partly dependent on the study of some other related subjects referred to as allied subjects. Allied subjects serve as reinforcement to study the main subject. Cost Accounting which is considered a part of financial Accounting at advanced levels is complementary to financial Accounting at the senior high school level. This explains the reason why the old curriculum made it mandatory for all students studying financial accounting to study cost Accounting as well. However, business management which used to be optional for financial Accounting students has been made compulsory under the new system. Among the optional subjects in the new system are cost Accounting, elective mathematics, French and economics. The freedom granted by the new system allows students to choose other optional subjects other than cost Accounting.

This may therefore break the natural unity that exists between financial and cost Accounting, thereby creating teaching and learning problems for both teachers and students.

The content of cost Accounting has been changed to exclude business mathematics. It is now composed of only the principles of costing. Business mathematics as a part of the subject contributed to ensuring that students have experiences that promoted their understanding and interest in other subjects like core mathematics, financial Accounting and economics. It served to reinforce concepts and principles taught in financial Accounting. Topics like simple interest, margin and mark-up, just to mention a few, are essential to holistic appreciation of how to deal with incomplete records and analysis of financial statements in financial Accounting. The slimming down of the subject to a relatively manageable unit may sound welcoming news to some teachers as it decreases the amount of work that needs to be done. However, other teachers may express some concern because this may imply that they teach concepts and principles to enhance understanding which could have been taught under costing.

Time allocation for teaching and facilitation has changed from seven teaching periods of 40 minutes to eight periods of 40 minutes per week (MoE, 2003; 2008). This means extra workload for teachers. However the new system does not come with any incentive package that is capable of boosting the morale of teachers. The approach to teaching under the new system is team teaching. This ensures that teachers have the competence and time to deliver each topic so as to sufficiently and successfully cover the entire curriculum within the stipulated time. Field trips and excursions which were hitherto organized under the old system to supplement classroom experience and to break monotony are to be organized under the new system to give students practical orientation of the world of work. Accounting teachers' role has changed from the traditional instructors to passive on-lookers once students embark on such trips.

The evaluation component has been modified to incorporate profile dimensions. Accounting students will be evaluated based on knowledge and understanding, and application of knowledge. The profiles are given a percentage weight that should be reflected in teaching, learning and testing. There has also been an introduction of a new school-based assessment to provide teachers with, among other things, advice on how to conduct remedial instruction on difficult areas of the syllabus to improve performance. This change surfaced at a time when

student numbers have increased on a massive scale. As result, the actual impact of the new Accounting curriculum might be clouded by this unhealthy turn of events. The large numbers in accounting classes are likely to affect the quality of accounting education. The nature of Accounting requires tact not merely pedagogy in teaching it or most Accounting students would be trained to be mechanics of the discipline instead of qualifying as critical thinkers to make informed decisions. The nature of Accounting encourages rigorous emphasis of the rules, concepts, principles and Financial Reporting Standards that are fundamental to producing corporate report. Rigid efforts to train students' minds to assimilate these guidelines often mould them into graduates who cannot operate beyond the knowledge level of Bloom's (1956) classification of the cognitive domain. Yet to ensure the total development of the learner to create an eventual productive Accounting graduate, it is imperative that Accounting educationists are shrewd enough to deliver training to achieve the best possible results. Students' training in Accounting should offer them the opportunity to become lifelong learners which should be "a key aim for those who provide learning" (Parnham, 2001, p. 58) so as to make it easier for people to learn. The Accounting curriculum is expected to be responsive to the nature of the Accounting discipline by incorporating the pedagogical implications of the subject matter.

However, changes in the Accounting curriculum following the review are likely to change Accounting teachers' role, increase their workload, and require an update of their pedagogical content knowledge or other extrinsic motivation to deliver the change as expected. Without a commensurate update of accounting teachers pedagogical content knowledge to aid the Accounting curriculum implementation there is the likelihood that accounting education would suffer its intended quality.

### **1.5 PROBLEM FORMULATION**

Accounting teachers are expected to demonstrate specific skills, apply knowledge, and possess professional qualities as a result of their preparation. They must instruct students with diverse needs who can meet society's demands for high performance. Accounting teachers are tasked with the business of translating the plan as outlined in the curriculum document into practical activities to help bring about the desired changes in the learner. The implementation of the revised Accounting curriculum has the Accounting teacher as the focal figure upon whom the success of the change rests. If a student does not succeed, the teacher, the student

or both may be at fault. One is therefore unsure about the balance of probability not to apportion blames on the teacher.

The mass failure in accounting examinations in Ghana is attributed to Accounting teachers' insensitivity to the nature of Accounting when planning instructional activities in the classroom (Akintelure, 1998). Accounting teachers are not consulted or involved in planning of the curriculum. It is done by people who are not involved in teaching and given to teachers to implement. This development of "teacher-proof" (devoid of or limited in teacher inputs) curriculum in Ghana where Accounting teachers' representation on the planning and development of the curriculum is limited has led to lack of clarity about the demands of the new Accounting curriculum. Accounting teachers' demand for in-service training on the new curriculum (Ankomah & Kwarteng, 2010) is an indication that they are not implementing the curriculum as planned. One may therefore wonder how Accounting teachers are implementing the new Accounting curriculum which they were not involved in planning and designing. Thus, the concern about increased role, workload, update of pedagogical content knowledge among others, as stemming from the 2007 Education Reform, may have implications on the successful implementation of the Accounting curriculum in particular and quality of Accounting education as a whole. In the light of the above arguments, this study sought to answer the question: *'What is the quality of senior high school accounting education in Ghana?'*

### **1.5.1 Sub-problems**

The main problem is to investigate how the accounting curriculum was being implemented to ensure quality Accounting education. To address this problem, some subsidiary questions, which would collectively generate answers to the main problem identified, were formulated to guide the study. These subsidiary questions were derived from the overarching question as:

1. What is the level of use of the accounting curriculum by accounting teachers and how comfortable are they in using the curriculum?
2. How do accounting teachers describe the components of the accounting curriculum they are using and how do their description affect quality accounting education?
3. At what stage, as determined by the Stages of Concern, are accounting teachers in implementing the accounting curriculum?
4. How prepared are accounting teachers and accounting students to deliver the cost accounting curriculum in the senior high schools?

5. Why do accounting examiners raise concerns on accounting students' performance in the West African Senior Secondary Certificate Examination?
6. How successful are accounting lessons to improve quality accounting education at the senior high school level?

### **1.5.2 Assumption**

In line with the central research question, the researcher makes the following assumption:

1. Accounting teachers' stages of concerns in the implementation of the accounting curriculum are a factor of:
  - a. Gender;
  - b. Highest teaching qualification;
  - c. Teaching experience; and
  - d. Workload.

### **1.6 OBJECTIVES OF THE STUDY**

The study sought to find out the views of accounting teachers about the stakeholder groups that influence the senior high school accounting curriculum and the concerns of accounting teachers with regard to the implementation of the new accounting curriculum. This aided the quest to assess the quality of accounting education at the senior high school level. The specific objectives of the study were to:

1. study the level of use of the new accounting curriculum by accounting teachers;
2. examine and assess how the new accounting curriculum configuration enhances its quality;
3. explore the stages of concerns of accounting teachers in implementing the new accounting curriculum;
4. examine the level of accounting students and teachers' preparedness to implement cost accounting curriculum relative to the financial accounting curriculum; and
5. analyse examiners' concerns of students' performance in accounting in the West African Senior Secondary Certificate Examination.
6. assess the instructional quality of accounting education at senior high school level.

### **1.7 SIGNIFICANCE OF THE STUDY**

The study focused on the assessment of accounting education in Ghana. Its main purpose was to provide relevant information on the quality of accounting education in the country to

stakeholders such as the public, government and institutions involved in the training of accountants in the country. Its findings would bring to light the existing conditions regarding how Accounting teachers perceive Accounting education, problems associated with the implementation of the accounting curriculum at the high school level. The Curriculum Research and Development Division (CRDD) would have the opportunity to obtain adequate information about how the Accounting curriculum was implemented by accounting teachers. This would communicate to programme planners and designers any defects in the programme. This input could let them withdraw, improve and reintroduce the programme if need be in order not to commit funds and valuable human capital into such a less viable venture. The findings of the study would provide guidance for Accounting curriculum planners and designers to plan and design future accounting curriculum to achieve a high rate of adoption and subsequent use.

Findings from the research is a source of information for planning in-service training and other capacity building programmes for accounting teachers to update their pedagogical skills and knowledge. It would allow accounting teacher educators to determine the direction of in-service activities. It could facilitate administrators' role to design interventions for effective accounting curriculum adoption and implementation with information for planning support services. It would help to identify target groups of accounting teachers for more intensive efforts.

### **1.8 LIMITATIONS OF THE STUDY**

There were quite a number of factors that had potential effect on the validity of the results. The observation which was undertaken with the knowledge and consent of the accounting teachers and students could have caused the instructional participants to fake behaviour. For that matter, the observation data might not be credible for addressing the research questions. The position of the researcher as an accounting teacher could have affected the credibility of the conclusions reached. For the fact that the researcher was an accounting teacher some facts could be prejudiced or highly opinionated. Although, measures were put in place to reduce these occurrences, there was a chance affect for their existence.

### **1.9 THE SCOPE OF THE STUDY**

There are five stakeholder groups in education who are interested in the quality of accounting education. These include professional accounting bodies, government, school administrators, academics in Accounting education and students completing an accounting major in accounting education. The study, however, concentrated only on all the accounting teachers in the selected senior high schools.

Just as there are several stakeholders in accounting education, there are several determinants of quality of accounting education. Such criteria for judging the quality of Accounting education may include teacher competence and effectiveness, relevance of content and text covered, appropriateness of methodology, quality of assessment techniques employed to evaluate students' learning and degree of its implementation. Yet the study concentrated on accounting teachers' concerns in implementing Accounting education at the senior high school level. This aspect of the criteria incorporates most of the other criteria for evaluating the quality of education.

The major approaches to assess the degree of programme implementation included Action Research, Concerns-Based Adoption Model (CBAM), Curriculum alignment, and Comprehensive School Reform Programs (Marsh & Willis, 2003). Each of these approaches has some level of prominence but the study adopted the CBAM as the working model to assess the concerns that accounting teachers might harbour in implementing the Accounting curriculum. The assessment of accounting teachers' concerns will help track the quality of tuition delivered to students in order to facilitate prudent decisions about accounting education.

### **1.10 DEFINITION OF CONCEPTS**

*Accounting*: Comprises cost accounting and financial accounting.

*Accounting teacher*: An academic currently involved in accounting education at Ghanaian senior high school.

*Accounting education*: The study of cost accounting and financial accounting.

*Concern*: Perception, rather than worry, of the new Accounting curriculum.

*Education*: Formal way of imparting knowledge under the auspices of an organised body.

*Stakeholder*: Parties who influence or are influenced by the activities and decisions of an educational enterprise.

### **1.11 METHODOLOGICAL ISSUES**

This section presents a synopsis of the methods employed in this study. The study sought to examine how the accounting curriculum was being implemented to ensure quality Accounting education. The study adopted the mixed methods research approach. The descriptive survey method was employed as research design for the study. The descriptive survey method was selected because the researcher sought to describe the views and experiences of stakeholders of accounting as a subject with regards the quality of accounting education. The population for the study comprised both accounting students and teachers in all 413 senior high schools offering accounting in Ghana.

The multi-stage sampling technique was used to select 96 senior high schools for the study. The questionnaire, observation guide, vignette, and checklist were used as data collection instruments. The quantitative data was analysed using both descriptive and inferential statistics while content analysis and the narrative method was employed to analyse the qualitative data.

### **1.12 CHAPTER DIVISION**

The study is composed of six main chapters. Chapter One deals with the introduction of the study which centred on the background to the study, statement of the problem, research questions, aims of the study, assumption, delimitation and limitations of the study. Chapter Two presents review of theoretical literature on the change process, highlighting the theoretical frameworks (i.e. CBAM and Fidelity of curriculum implementation). The third chapter explores empirical studies on the questions raised that are considered relevant to put the study in perspective. Details of the method used in the investigation are presented in Chapter Four. This includes the research design employed, population, sample and sampling procedure, instrumentation, data collection and data analysis procedures. The fifth chapter presents the result of the data analysis. It also discusses the resulting findings to address the questions raised in Chapter One. The final chapter, Chapter Six, summarises the study to aid in making conclusions. Based on the conclusions to be arrived at appropriate recommendations were made to help resolve the issue of quality in senior high school accounting education in the country.

### **1.13 SUMMARY**

This chapter has provided an orientation to the study. The background of the study helps to put the study into perspective. The main research question is clearly stated and the aims of the study delineated. On the basis of the aims of the study, some assumptions are made. The key terms used in the study are defined in the light of the study. This chapter also presented an overview of the methodology employed in undertaking the study. The organisation of the study was also depicted in this chapter.

## **CHAPTER TWO**

### **CONCEPTS AND THEORIES OF QUALITY ACCOUNTING EDUCATION**

#### **2.1 INTRODUCTION**

This chapter presents a combination of conceptual issues in accounting and the theoretical underpinnings of the study. It provides a broad knowledge base of the conceptual strands in accounting detailing the implication of the nature of the accounting discipline on its pedagogy. It addresses the need for the constant evaluation of the accounting curriculum and provides the basis for accounting curricular change. Detailed procedures (comprising situation analysis; programme goal crafting; decision on resource use and strategies to develop the curriculum; the final open use of the curriculum; and how to monitor the success of the process) undertaken to manage the accounting curricular change set the logic for the discussion in the chapter.

#### **2.2 CONCEPTUAL STRANDS IN ACCOUNTING**

The conceptual strands in accounting are the core competencies that every accounting student, graduate or professional should possess before they are adjudged sound and competent for certification or licensure to practice. The major core competencies to be assimilated, internalised and transferred to reporting on business economic events include:

1. principles of accounting;
2. accounting concepts and convention; and
3. accounting standards

##### **2.2.1 Principles of Accounting**

The principles of accounting are geared towards enabling students to gain a sound appreciation of the discipline. These principles are the rudimentary principles that are harmonised and packaged to stimulate sound grasp of accounting and provide the platform for broader concepts. The principles draw from the other thematic strands to present the background knowledge required for success in future higher order learning. Such principles employ a bit of accounting theory and presents the basic framework and format for accounting and reporting business transactions and events. Typical concepts explored include, but not limited to, statement of financial position and income statement; double entry bookkeeping; books of accounts; adjustments; final accounts of sole proprietors, partnerships and corporations; working capital; and application of information technology to accounting. These concepts are normally captured under major headings such as the context and purpose

of financial reporting; the qualitative characteristics of financial information and the fundamental bases of accounting. Other topics modelled after the concepts are further captured as the use of double entry and accounting systems; recording transactions and events; preparing the trial balance; and preparing the basic financial statements. In sum, the principles of accounting aim at developing students' knowledge and understanding of the underlying principles and concepts. This enables students to accumulate financial and technical proficiency in the use of double entry techniques including the preparation of the basic financial statements.

### **2.2.2 Accounting Concepts and Convention**

The accounting concepts and conventions are the broad basic assumptions that undergird the preparation of accounts. They provide the necessary guidelines to enable learners know how to explain and treat particular business transactions and events in given circumstances. Once thoroughly assimilated, not only learners but also, practitioners apply these concepts and conventions in dealing with concrete everyday business undertakings. The four key concepts and conventions of accounting are going concern, separate entity, cost and prudence concepts. Other concepts include money measurement, accrual, materiality, realisation and substance over form. These concepts present the theory behind the practical technical accounting skills that are emphasised. In fact, students must have a firm grasp of these concepts and conventions of accounting before they can manage and report any business dealings. This does not mean that students' mind should be drilled to master the recitation of such concepts and conventions but rather emphasis must be made for students to make reference to them whilst they execute a given task in the discipline. By so doing, students are more likely to cultivate the habit of remembrance through experience.

### **2.2.3 Accounting Standards**

The last of the thematic strands identified in accounting education is the accounting standards. The term standard denotes a discipline, which provides both guidelines and yardsticks for evaluation. As guidelines, accounting standard provides uniform practices and common techniques of accounting. As a general rule, accounting standards are applicable to all corporate enterprises. They are made operative from a date specified in the standard. The Institute of Chartered Accountant of Ghana (ICAG) harmonises the Accounting standards of Ghana through the Accounting Standards Board by adapting the International Accounting Standards. The Accounting Standards Board is entrusted with the responsibility of

formulating standards on significant accounting matters keeping in view the international developments, and legal requirements in Ghana. The main function of the ASB is to identify areas in which uniformity in standards is required and to develop draft standards after discussions with representatives of the Government, public sector undertaking, industries and other agencies.

Accounting standards are necessary to promote high quality financial reporting. The fundamental role of accounting is to communicate economic information about businesses and other organization to various stakeholders including government, investors, shareholders, suppliers, lenders, customers and the general public. These stakeholders use such information to take decisions and to assess the stewardship of people appointed to manage such organizations. If this information is not of a high quality standard, then the stakeholders would be unable to take effective decisions that will benefit them. For example, if a financial report is manipulated to show higher profits, investors would hold on to their shares with the belief that the company is doing well.

Accounting standards came to be developed from the mid-sixties onwards to promote the integrity of the accounting profession by way of ensuring uniformity in the way accountants report transactions in their books and also in their preparation of the final accounts of businesses. This is by and large aimed at boosting the confidence of stakeholders, particularly shareholders and potential investors in the accounting profession. Good and useful information should have the essential characteristics of understandability, comparability, relevance and reliability in order to play its role effectively. Accounting standards serve to promote the understandability, comparability, relevance and reliability of financial reports. This report gives the users of financial information such as the owners, government agencies, employees the needed inputs to make informed decisions about the organisation in question.

Implement centrally co-coordinated initiatives for curriculum development and better teaching practices to ensure quality standards in accounting and auditing courses in all Ghana universities and colleges. The reform of accounting curriculum and teaching methodology should increase critical thinking ability of students. An updated curriculum should include international accounting and auditing standards, extensive teaching of business ethics as a separate subject, and practical-oriented teaching at the undergraduate level. Supported by case studies, the ethical dimensions of business management, corporate finance, accounting,

and auditing should be taught in undergraduate business/commerce programs. Efforts should be made to make International Accounting Standards learning materials easily accessible and inexpensive to students.

#### **2.2.4 Empirical Evaluation of the Conceptual Strands in Accounting**

Nearon (2002) argues that only the Statements of Financial Accounting Concepts need to be understood in any depth, on the grounds that these concepts are akin to financial reporting principles and theories. As far as standards are concerned, he suggested that, all that is required is an ability to locate and apply them when required. Certainly a body of knowledge composed of techniques and rules does not develop a professional who has the ability to think and deal with the constant changes in society. Rather, it can expose them and leave them vulnerable in the market place. Zeff (1989, p. 203 in Carr and Mathew, 2004) make the observation: ‘Through our unquestioning acceptance of the solutions embodied in final pronouncements as the constituted body of thought and practice to be taught in our courses, we have succeeded in converting the educational process into an indoctrination in officially prescribed accounting’.

To qualify as an authorized training provider, an individual should have sufficient knowledge and experience with practical aspects of all the applicable standards and codes. Upgrade skills of existing educators with train-the-trainers programmes, and hire educators who can provide quality teaching of relevant subjects with international components. Senior high schools should be supported to improve accountancy education, and appropriate accreditation of external education and training providers should be stricter. The ICAG needs more rigorous arrangements to regularly monitor quality of practical training provided by authorized training providers.

### **2.3 PEDAGOGICAL IMPLICATIONS OF THE NATURE OF ACCOUNTING**

Accounting as a discipline, by its nature, calls for minimum deviation from the rules of thumb that have been established to guide practice. Students must develop the required skills and habit of mastering the required reporting principles, standards as well as conforming to the common conventions that guide practice. This uniformity enhances standardisation in financial reporting which in turn creates a wider market appeal for accounting graduates. To continually uphold this, accounting teachers must ensure strict adherence to the principles, standards and conventions of accounting. This, more or less, implies indoctrination and thus

does not give room for creativity. Hence some realist curriculum might be created where students are made to memorize and recite the concepts without having to question what they learn. In this case the accounting instruction might be teacher-centred for the fact that the teacher is considered a *know-all* and repository of all knowledge and wisdom so as to instruct students through discipline of the mind to bring students to the knowledge of the onerous *wisdom* that the accounting teacher possesses retrospectively. By design, the traditional accounting curriculum which aims at nothing but the creation of technical accounting experts.

However, several factors including the diversity of the student body, technological and economic change and external pressures from employers might not support, if not militate against, the religious impartation of such *virtues* to students. Given this, it is interesting to say that concerns are still raised about the importance of the skills graduates lack and how best to teach and promote such skills. Some argue that if accounting graduates require professional skills they need to develop them while studying at the school and that educators of future professional accountants should be committed to developing the relevant attributes identified as desirable for the professional practice of accounting (American Accounting Association , 1986; AECC, 1990). Training students this way might lead to the creation of technical accounting experts who may be stereotypically prejudiced.

The call for accounting graduates to be equipped with a broader range of non-technical skills in addition to the necessary technical skills is not recent. A lot of investigations (Watty, Cahill and Cooper, 1998) involving accounting academics have been undertaken which found evidence of recognition by academics of the growing importance of developing other skills in addition to those which were strictly technical. However, despite this, Howieson (2003) suggests that practitioners have traditionally recommended an entrenched technical approach which provides them with graduates that can instantly turn to profitable activities. Seeing this to be myopic and short-term profit-centred, Howieson further suggests that educational institutions and practitioners must change their perspective from the short-term and technical desires and aim at the long-term and adaptability of the skill base. This was earlier echoed by Elliott and Jacobson ( 2002) who in a way blamed accounting academics for not doing much to support the evolution of the accounting profession by defining the body of knowledge more suited to the realities of the marketplace, to the needs of the decision makers, and to the future prospects of both.

On his part, Williams (1994, p. 208) rather sees the work of the accounting teacher to be professionally deficient as he stresses that accounting teachers should focus on preparing students to become professional accountants whilst they remain in the classroom. This is an argument for establishing a fair support for students whilst in school instead of hoping that they acquire the relevant skills on the job. If the latter is in the affirmative, what then is the use of the accounting teacher if the students can learn to be professionals on the job? This will then be akin to apprenticeship training that people undergo without any formal classroom instruction. Accordingly, Williams (1994, p. 208) suggests there is the need for changes the accounting curriculum which "... should focus on the process of learning, not just teaching answers" the content of which "should be taught to identify and solve unstructured problems, learn by doing work in groups, and learn to use technology effectively, such as databases for researching issues". Thus, the new development in the skill requirement of the accounting graduate calls for the need to change the curriculum. Obviously, a change, be it an innovation or reform, in the accounting curriculum is more than desired, if much could be achieved in accounting education.

#### **2.4 INNOVATING THE ACCOUNTING CURRICULUM TO ENSURE QUALITY**

Change is a necessary concept in almost every situation because static culture, as speculated, is twice more difficult. Failure to adapt to the ever-changing world implies nonconformity with the current modes of thinking and ways of living necessary to exploit the full benefit of what the dynamic world has to offer. Change requires professional accountants to maintain and develop new and/or more specialised knowledge and skills throughout their careers (IFAC 2009; Reckers 2006).

As trends in the world of work change so is the need for educational institutions to constantly adapt their practice to suit the current market demands (Lewy, 1977). Total educational change may be necessary or a modification of an aspect rather than the entire system may be required to be in tune with time. Thus, educational change may imply a total shift to entirely new things or an update of the aspects of the system considered obsolete. Thus, accounting curriculum change may see the birth of either curriculum improvement or curriculum change. These two terms are deemed to be the same and are used interchangeably by some experts (Zais, 1976; Wiles & Bondi, 1979). However, Taba (1962) has drawn a thin line between the two. She explains that curriculum improvement does not affect the rationale or philosophy of the curriculum. It seeks to make the curriculum more current by changing certain aspects of

the curriculum but keeping to its foundation and structure to improve its relevance to those committed to it. The enthusiasm of users to implement it is therefore sustained.

In contrast curriculum change goes beyond mere refinement of the status quo, shaking its foundation to reconstitute it and thereby creating something new. Taba (1962) opines that curriculum change involves a change of the entire institution of education. “This involves change in values, people, society and culture, and basic assumptions about what constitutes education and the good life” (Zais, 1976, p.19). The rationale, goals, aims, objectives, scope, content, and organisation, just to mention a few, of the curriculum will be entirely reconstituted; and the roles, skills, knowledge and orientation of participants. Curriculum change is not episodic but rather a process that is repeated over and over as time and conditions necessitate. Tasks are procedurally arranged to provide a fine platform for determining the logical flow of decisions and actions. According to Lachiver and Tardif (2002, in Gruba, Moffat, Søndergaard & Zobel, 2004), curriculum change is managed in a logical five-step process:

1. an analysis of the current offerings and context;
2. the expression of key programme aims in a mission statement;
3. a prioritization of resources and development strategies;
4. the implementation of the targeted curricula change; and
5. the establishment of monitoring tools and processes.

These form the basis of the review of the rest of the conceptual and theoretical literature.

#### **2.4.1 Situation Analysis**

The most important first step to developing any sound and fully functioning curriculum is the need to appraise the current state of affairs to determine the extent of achievement of the desired end. This is technically referred to as situation analysis, needs assessment, or diagnosis of needs. Tanner and Tanner (2007) write:

However logical Tyler’s or Taba’s sequence may appear, there is an educational situation already in existence, operating with implicit if not explicit objectives and other curriculum determinants. If there is any starting point, it derives from that situation and should be focused on a diagnosis of the problems arising from that situation (p. 135).

Recker (2006) suggests that academics must listen to the needs expressed by the profession and evaluate those, keeping in mind the needs of society as a whole. There should be a

radical attempt to appraise present state of affairs to be acquainted with the situation to provide clue as to how to approach the problem or attempt a remedy. Although Taba (1962) failed to include it in her model of curriculum development she stresses the essential role played by diagnosis of needs as an important first step to developing the curriculum. To be able to change the status-quo there is the need to know the extant exact state of affairs. Bishop (1985) confirms this by positing that to alter what is first, know what it is. Situation analysis is considered a key part of several evaluation processes. To Daft (1997), situation analysis typically includes a search for *SWOT* (strengths, weaknesses, opportunities, and threats) that affect organisational performance.

Albrecht and Sack (2000) Students forget what they memorize. Content knowledge becomes dated and is often not transferable across different types of jobs. On the other hand, critical skills rarely become obsolete and are usually transferable across assignments and careers. Accounting education has frequently been criticized for spending too much time on content mastery and too little time and effort to helping students to develop skills that will enrich their lives and make them successful. The rationale for this situation analysis is to ensure that the innovation to be developed serves the needs of the community and people for which it is meant. This bottom line is increasing the adoption and subsequent success of the innovation.

Skilbeck categorizes the many factors that are diagnosed into two: external and internal factors (Bishop, 1985). The internal factors reveal strengths and weaknesses existing in the educational system. Strengths are positive internal characteristics that the educational enterprise can exploit to achieve its goals. Weaknesses may inhibit or restrict the attainment of the desired goals. The educational institution has the latitude to manipulate these factors to its advantage. The external factors include psychology of learning, financial consideration, culture of society, and philosophy of education, societal consideration, government policy, and examination bodies. They pose threats and/or offer opportunities. Threats are characteristics of the external environment that may prevent the institution from achieving its goals. Opportunities on the other hand have the potential to help the institution achieve its goals. The educational institution must monitor the developments in the system in order to innovate to take advantage of the rapid development and ever-changing needs of the global business environment which have resulted in evolutionary changes in the skills required by accountants to add value for their clients (De Lange, Jackling & Gut 2006). In times of such

change and development, few would deny that the role of the traditional accountant as a mere score-keeper is no longer a viable contributor to business (Jackling & De Lange 2009).

Accounting professionals have envisaged that accounting education has serious problems (Albrecht and Sack, 2000). If serious changes are not made, accounting education will lose its relevance to schools, students, and the employers who might otherwise be interested in accounting students. Albrecht and Sack, (2000) identified six major categories of perceived problems in accounting education as relating to accounting curriculum, its pedagogy, its ability to develop critical skills, application of technology to accounting, teacher development and motivation, planning of accounting programmes and administration of accounting departments.

The course content and curriculum needs a complete overhaul. The minor tinkering has not been sufficient. While the traditional curriculum may create a good accountant, the business world wants a good businessperson. Albrecht and Sack, (2000) found from an interviewee that, “the practice profession has been highly innovative while accounting education has not” as what is taught no longer matches what the core competencies of the profession are. In spite of the fact that the rigor of accounting courses are appreciated, stakeholders of accounting education often urge providers of accounting education to cover the basics of accounting quickly and avoid the temptation to increase curricula with follow-on courses refining the basics and studying details in more depth. It is recognised by accounting scholars that the accounting curriculum is too detailed and too technical and as a result there is need to admit that wrong curriculum decisions are often made when designing accounting curriculum. This is what is ordinarily expected as the extent of teacher involvement in planning the accounting curriculum is minimal in Ghana. The centralisation of the curriculum decisions often imply the reliance on the *wisdom* of selected few who may not be classroom teachers. The apparent lack of adequate consultation of the accounting planners with classroom accounting teachers might negative influence teachers genuine quest to adapt the curriculum and make it their own. This result of the development of such teacher-proof accounting curriculum might militate against teacher enthusiasm to implement the curriculum which they were no part in its creation.

This teacher-proof accounting curriculum coupled with the lack of in-service training programmes to make accounting teachers’ professionalism consistent with the delivery of the

accounting curriculum (Ankomah & Kwarteng, 2010) problematic. In this state of confusion in the delivery of the curriculum, accounting teachers may resort to covering topics in so much detail than ordinarily expected of them. According to Albrecht and Sack (2000), often, this situation leads to some frequent criticisms such as:

1. teaching accounting courses as a series of technical rules, resulting in a conformance orientation.
2. focusing accounting curriculum on examinations and achieving the right answer.
3. narrowing the accounting curriculum without the use of enough real world examples to expose students to a broad business education.
4. failing to use a global perspective to teach accounting.
5. failing to deal enough with values, ethics, and integrity.

In fact, there are some developmental connection of these criticisms and the way accounting teachers are prepared from accounting teacher training institutions. Accounting teacher education programmes are designed primarily to help teachers develop narrow research agenda, perpetuate the focus on detailed specialization which they carry into classrooms. This tradition has shaped accounting teachers to give accounting students the wrong impression of accounting and thus expose students to the bookkeeping and rule-based orientation of accounting in senior high schools. Although information technology has been captured as a topic in the accounting curriculum, accounting teachers fail to teach students how to use technology accounting. The curriculum itself fails to present a detailed guide as to how teachers are to facilitate how technology is used in accounting. The content lacks a practical identity of the orientation that is required for students to internalise the right concepts and skills in the use of technology to accounting. Content has been reduced to discussions of computer hardware and software without a cogent application of technology to accounting.

While technical accounting competencies remain obligatory for the professional accountant, these competencies alone are insufficient in today's workplace. Accounting students were inclined to rank technical accounting competencies and oral communication skills higher than other skills (Rebele, 1985). However, recent studies indicate that development of students' generic skills is required for career success. For example, Hurt (2007) emphasised fundamental skills rather than a technical orientation. He advocated that the development of critical thinking skills in future accountants is of primary importance. In fact, the need for developing communication skills in the accounting student cannot be overemphasised.

According to Schmidt, Green and Madison (2009), communication skills are considered important and most valued in the accounting curriculum. Potential accountants need to master the skill of communicating the result of business undertakings to stakeholders. This is a fundamental aspect of accounting profession especially in stewardship accounting. Accounting practitioners are no longer merely required to undertake the necessary task of information provision such as bookkeeping and data analysis; rather, they are regarded as information facilitators. This has resulted in the need for future accountants to be forward thinkers, skilled strategists and team players (Jones & Abraham 2008).

Accountants need intellectual skills such as problem solving and critical thinking. Intellectual skills include the ability to relate concepts learned to new situations, the ability to think for oneself, to critically assess new information and situations, and to apply knowledge from one workplace context or problem to another. Kavanagh and Drennan (2008) defined problem solving as the ability to apply theory to practice, as well as critical analysis and thinking skills. Mohamed and Lashine (2003) defined critical thinking as the ability to reach justifiable conclusions to questions that cannot be answered definitively—and where all relevant information may not be available. Intellectual skills help accountants to: a) exercise judgment based on comprehension of an unfocused set of facts; and b) display a capability for inductive-thought process and apply value-based reasoning in unfamiliar settings (Awayiga, Onumah & Tsamenyi 2010).

Communication skills are essential to the success of accountants and are seen as vitally important in satisfying the requirements of the workplace (Kavanagh et al. 2009). Communication skills are concerned with the ability to transfer and receive information easily (Andersen 1989; Awayiga, Onumah & Tsamenyi 2010; Ballantine & Larres 2009; Hancock et al. 2009). In addition, communication skills include listening effectively to gain information, understanding opposing points of view, and having the ability to present ideas orally or in writing and discuss matters with others (Fortin & Legault 2010; Hancock et al. 2009; Jones, G. & Abraham 2008; Rebele 1985).

Interpersonal skills enable accountants to work with others to achieve the goals of the business. Companies require employees with good interpersonal skills and the ability to work in a collaborative environment (Accounting Education Change Commission 1990a). Interpersonal skills include the ability to interact with and influence different kinds of people

from different backgrounds and with different value systems, and to negotiate work collaboratively. Interpersonal skills also include the ability to organize and delegate tasks, motivate, resolve conflicts, and enhance client relations and decision making (Awayiga, Onumah & Tsamenyi 2010; Ballantine & Larres 2009; Jones, G. & Abraham 2008; Kennedy & Dull 2008). Watson (1928 in Gillies & Ashman 2003) noted that groups think more efficiently than the best member of the group working alone. Vygotsk (1978 in Kozulin et al. 2003) asserts that a person is able to perform a certain number of tasks alone, however, in collaboration a greater number of tasks can be performed.

The need for a broader set of skills beyond technical accounting competencies, intellectual, communication, and interpersonal skills includes: a) accountants can cope more efficiently in a challenging business environment; and b) it will increase accountants' competencies levels required by the global market (Jackling & De Lange 2009; Jackling & Watty 2010; Kavanagh & Drennan 2007, 2008; Kavanagh et al. 2009; Mohamed & Lashine 2003). Specifically, Jackling and De Lange (2009) believe a mixture of skills is a major requisite of employers as it helps in solving a diverse range of business challenges. This raises the issue of how universities provide the accounting profession with suitably qualified graduates (Albrecht & Sack 2000).

According to Musselman et al. (1979), the adoption by business of new technology, particularly automation, to process financial data dictates that the emphasis in the accounting course has been shifted from performing repetitive manual work to understanding accounting concepts and principle so that the students can really adapt to the variety of systems and procedures. Moreover, in keeping with the concept of career education that stress that students be ready when they leave school either to perform a job with competence or to pursue further education. Accounting curriculum must provide students with a foundation of skills and knowledge with which to confidently and competently enter the world of work or if they prefer to go on to advance their study. This and other reasons propel providers of education to modify the accounting curriculum to make it relevant to the current demands to enhance its sustainability.

#### **2.4.2 Expression of Programme Aims**

In tackling business problems, one needs to draw upon knowledge and skills from different business areas, such as accounting, finance and management. Students need a solid

foundation to understand and integrate knowledge and practice from the various areas that play a contributory role. In the business environment, accounting serves as a language of business for both internal and external communication. People use accounting information, together with other business knowledge such as finance, marketing, and human resources, in making business decisions. The business curriculum should, therefore, enable students to acquire a common body of business knowledge, including accounting, to deal with the dynamic business environment.

Curriculum aim considers defining the purpose of the curriculum (Pratt, 1980). It gives direction to those who follow the curriculum. The direction helps in arriving at the destination which is the purpose of the programme. For instance, it serves as a guide to programme designers; it helps teachers to select appropriate learning experiences; it makes students aware of what is expected of them; and it provides the basis for evaluating the programme (Pratt, 1980). The aims are a product of the situation analysis and “imply preferences, values, judgements, priorities and emphases” (Bishop, 1985, p.126). The formal statement of programme aims in its mission is an important step in transforming intentions into practical efforts. The key programme aims in its mission are considered the rationale of the programme. The rationale is a persuasive statement written into the programme to entice stakeholders to commit time and resources to it. It clarifies in a persuasive manner why the curriculum should be given attention. Programme aims are an indispensable part of a curriculum. They are key to developing any sound curriculum. They set the stage for deriving other specific objectives. Rational attempt should therefore be made to state them fairly and professionally. Appropriate criteria should be followed in writing such aims.

The Albrecht & Sack (2000) report, which was widely supported in the business education literature, recommended that accounting educators alter their curriculum to produce accounting graduates with a broader set of skills and attributes, encompassing more than purely technical accounting expertise (Braun, 2004; Leveson, 2000). Further, Albrecht and Sack suggested that accounting curricula was driven by the interests of faculty and not by the demands of the marketplace, with the focus of teaching upon content and not the development of generic skills. The call for accounting academics to re-examine seriously the mission of university accounting education and its interface with the needs of society and the accounting profession (not necessarily one and the same) was again enunciated by Reckers (2006 p.37). He also suggested that due to globalization, technological innovation, and other

fast-paced changes, there is a need for a broader set of transferable skills and content knowledge than in the past. In addition to this, Musselman et al. (1979) said accounting as a subject area is clearly a well-established part of the curriculum, despite its popularity; there is little agreement as to what the objectives the course should be and what type of program should be offered. Even in a relatively small sampling of schools, one could find these different points of views:

1. In some schools, the major objective of the course is to produce vocational or vocationally related preparation. In other schools the subject is taught primarily for its personal values.
2. Some schools adapt the subject matter to emphasize record keeping activities thereby hoping to meet the needs of students with limited abilities. Other stress accounting concepts and only admit students of above average ability to the course.
3. Others follow a traditional approach and require students to demonstrate understanding of all or most of the course content.

Clearly, no inflexibly structured curriculum can fully prepare some students to assume the responsibilities of full time accounting position and at the same time prepare others to perform competently the recording duties related to a specific clerical or merchandising position nor can this same inflexibly structured course provide other students with all the accounting preparation they need as potential managers, business owners and investors. Even if all types of preparation could be incorporated into one standard class, it would not be possible to predict which student should receive which training.

### **2.4.3 Prioritizing Resources and Development Strategies**

Resources in general are limited. Financial, human and material resources as key resource base of every nation are constrained. National education authorities actively seek national financial support corresponding to the high priority areas on education because of the tight spending pattern of the government. According to Lockheed and Verspoor (1991) “This involves studying the overall allocation of government resources and developing an effective strategy for strengthening political and bureaucratic support for the education sector” (p.185). The allocation of resources is done on the basis of key areas weighed on a scale of preference. Planning is central to the allocation of such resources.

One of the most important aspects of curriculum planning is the idea of curriculum development. To Salia-Bao (1987), curriculum development is the systematic approach to the development of curriculum materials for teaching/learning processes. There are four (4) main functions in developing a curriculum. These include identifying objectives, selecting the means for the attainment of these objectives, organizing these means, and evaluating the outcomes. Although a number of scholars, like Taba (1962) and Tyler (1949) have treated these four (4) functions as linear steps to curriculum development, albeit such functions are rather interdependent but not rigidly sequential. However, Taba (1962) explains that “Curriculum development is a complex undertaking that involves many kinds of decisions” (p.7). As noted above, plans need to be made for a decision to be taken on the aims and goals that should be pursued; the learning experiences needed to help achieve those desired outcomes and how the extent of achievement could be measured. Indeed curriculum development is an eclectic stance but not a unitary function.

Although these earlier reports led to significant and meaningful changes by some educators, Albrecht and Sack (2000) argue that the changes in accounting education have not been pervasive or substantive enough. In adopting a big picture approach these authors encouraged educators to establish a strategic planning process that rigorously examines existing educational programmes and considers alternative structures when developing future academic programmes. They contend that a one-size-fits-all approach is inappropriate and that the assumption that ‘a narrow but deep education is better than a broad-based education’ is obsolete in the current environment (p. 60). Interestingly, Albrecht and Sack (2000) also contend that ‘the important thing is that each school takes a “zero-based” approach to its curriculum – throw away what is no longer needed and try to make its program as value-added as possible’ (p. 64). The importance which these authors placed on general education is also evidenced by their proposal that ‘an accounting minor on top of a broad humanities or social science degree’ is an ‘alternative’ structure worthy of consideration by accounting educators (p. 62). From the literature it is clear the criticisms still continue and innovation and change are still major accounting education priorities.

Accounting educators should align the accounting curriculum with other subjects to achieve a broad and balanced whole-school curriculum. The provision of a wide range of elective subjects in the senior high school curriculum widens the knowledge base for student selection and to provide opportunities for in-depth study of individual subjects in preparation for

students' further studies and careers. To achieve the overall goals of senior high accounting education, planners have designed a broad and balanced school-based curriculum by offering elective subjects to complement or supplement student learning as a whole. The traditional way of grouping subjects in a specific stream (e.g. science / arts / vocational and technical/ business only) affords students the opportunity to support and integrate the elective subjects from various key learning areas with the core subjects which include social studies, integrated science, English language, Mathematics and a Ghanaian language to promote whole-person development.

#### **2.4.4 Curriculum Implementation: Theoretical Approaches**

It is not uncommon to find policies, programmes and projects developed by their makers being put into practice. For a successful delivery of every developed curriculum there is the need to implement it thoroughly in all the target areas for its coverage. Curriculum implementation as defined by Fullan (1991, p. 378) "is the process of putting a change into practice". The process ranges from the use of formative evaluation devices such as try-out and field trial to the actual large scale and final open use of the programme (Lewy, 1977). Thus, implementation can be on piecemeal basis so that in a situation where the programme is failing, it can quickly be revised and reinforced or discarded to avoid the commitment of huge amount of resources into a wasteful venture.

There are several dissemination strategies used to smoothen the implementation process. They comprise translocation, communication, animation and re-education. Three main approaches to curriculum implementation are employed: fidelity, mutual adaptation and enactment. As noted by Snyder, Bolin and Zumwalt (1992), depending on the system of education an approach is adopted to implement educational programmes.

##### **2.4.4.1 Fidelity of implementation**

Although some scholars in curriculum opine that no consensus exists on what exactly constitutes fidelity of implementation (Fullan & Pomfret, 1977; Scheire & Rezmovic, 1983), Cobbold (1999) sees fidelity as how "faithfully" teachers put the new or innovated curriculum into practical use in accordance with the programme mandates or dictates. Fidelity is the extent to which curriculum is delivered in accordance with its tested design. Implementing a programme with fidelity implies delivering the programme as it was implemented in the research that provided evidence of effectiveness. The work of Snyder et

al. (1992) that “the desired outcome of curricular change is fidelity to the original plan” (p. 404) confirms the assertion. In fidelity approach, planning is usually separate and distinct from implementation. Because “curriculum knowledge is primarily created outside the classroom by experts who design and develop the curriculum innovation” (Snyder et al., 1992, p. 404). Teachers are to implement it as planned with minimum degree of deviation. It is important to note that fidelity is not absolute but a matter of degree. Suffice it to say that fidelity of implementation is usually used to deliver programmes in centralised education systems.

If a programme is not delivered as designed, its outcome (i.e. impact on students) is likely to be changed, diminished, or eliminated outright (Snyder et al., 1992). This is the reason why fidelity aims at identifying the conditions under which the programme works best or approximates, at least, what was intended. It helps to understand how the degree of programme implementation can affect the achievement of goals and more importantly, how implementation can be improved when the programme needs to be scaled up. For instance, the advent of the curriculum may necessitate that facilitators and supervisors are trained to be in tune with the programme dictates in order to implement it successfully (Bauman, Stein, & Ireys, 1991; Moncher & Prinz, 1991). This kind of training is provided to all teachers and supervisors who will be engaged in the delivery of the change.

On the other hand, fidelity fails to recognize that there are some unplanned learning outcomes that are desirable. Such learning outcomes may lack any prior pre-specification but result in the learning process. As Taba (1962) puts it “a limited concept of school learning limits the idea of what is expected of it” (p. 158). This often leads to parochial view of education. Bondi and Wiles (1979, p. 114) noted that “... [*Fidelity*] is not yet sophisticated enough to serve as an absolute guide to practice” (emphasise mine). Fidelity is a matter of degree rather than an absolute phenomenon. Achieving the exact outcomes of the programme is therefore not possible. The fact that sympathizers of the approach tolerated some margin of deviation of the outcomes (Fullan, 1991) of a programme does not mean that it should not be criticized for its failure to attain one hundred percent (100%) fidelity.

Teachers, according to this perspective, are considered as the implementers of the change (Darling-Hammond, 1990). The curriculum cannot achieve its aims or be fairly evaluated unless the teacher implements it in a manner in which it was intended. Teachers’ role in the

process is that of a consumer who makes use of the wisdom of programme developers. This approach to implementation operates on the assumption that lack of standardization within and between programme providers will inflate error variance and decrease power (Boruch & Gomez, 1977; Moncher & Prinz, 1991). Therefore, teachers are requested to implement the same programme in the same way all over the schools covered by that education system. Such uniformity of programme and its implementation ensures that students go through the same or about the same experiences. The result of standardization in implementation is the ease with which evaluation can be done to see how different sites of programme implementation compare. Lewy (1977) opines that “where uniformity of conditions does not exist, interpretation of result is very difficult” (p.11) and it therefore becomes pointless to compare results from different sites of programme implementation.

#### **2.4.4.2 Adaptation**

According to Barnes (2005, p. 2) “teachers acknowledge the existence of programmes, policy, directives, school regulations, and recommendations but in practice they often feign what needs to be done to comply with requirements”. A centrally developed curriculum may lend itself to manipulation by implementers. Its implementation may be flexible to the extent that teachers can alter its elements to suit their peculiar school or classroom situation. Teachers have the liberty to adapt the change to obtain the highest possible result. This approach of curriculum implementation is referred to as adaptation. Adaptation is operational in the flexible school system.

Due to the lack of uniformity in conditions across schools, Paris (1989) explains that to teachers, the skills, talents and knowledge necessary to enact a curriculum were context specific. Curriculum adaptation is not exclusive to only geographical area but it can be done to meet individual students with intellectual disabilities needs (Lee, Amos, Gragoudas, Lee, Shogren, Theoharis, and Wehmeyer, 2006). Teachers achieve maximum curriculum returns by manipulating the conventional curriculum to meet their local needs. The curriculum students actually receive is influenced by what teachers believe, by what peers believe and do, and by other more elusive cultural issues (Sergiovanni, 1996; Wallace, 1998 in Barnes, 2005). In order to meet the diversity in culture, there is need for “adaptations” of the regular curriculum. The effects of this exercise may involve organisational modifications in the goals and contents, in the methodologies, in the didactical organisation, in the temporality, and in

the evaluation philosophy and strategies. The aim is to make it possible to meet everyone's educational needs in the creation of knowledge.

Additionally, comparing the results of one implementation site with another will not yield any practically useful evidence for decision making because the conditions in the different sites are usually not the same. Hence they cannot serve as the basis for meaningful comparison. The practical impossibility of making school conditions uniform dictates that a centrally developed curriculum does not have to be implemented as planned because contextual factors chiefly affect the extent or degree to which actual implementation will approximate the planned curricula.

#### **2.4.4.3 Enactment**

In decentralised school systems it has been the norm to leave the development and implementation of school curricula in the hands of various school districts or schools in the locale. This has been the practice in the USA. This assertion is authenticated by May (1991) who argues that uniform answers to educational problems are viewed as impossible to apply because practical problems are seen to be context bound, situationally determined and complex.

School curricula are tailor-made to suit conditions in each locale as opposed to the centrally developed one operational in both the centralised and flexible school systems. Notwithstanding, the local school curricula are derived from the national philosophy of education. This opportunity enables teachers to develop effective pedagogies that ensure sustainability, citizenship, enterprise, and globalisation of learning experiences to meet the needs of the different areas.

The position of teachers in this approach is described by Paris (1989) as explorers who constantly strive for perfection through continuous practice. The involvement of teachers in this exercise ranges from the production of new syllabuses and curriculum guides at all stages, as syllabus-writers, as members of advisory committees to the syllabus-writers, and as participants in school-based trials of syllabuses and curriculum materials (David & Macdonald, 2001). The advantage of their participation is shrouded in the mystery of promulgating their interest and advancing their views on how the curriculum should be. According to Martin (1993a, 1993b in Handal & Herrington, 2003), curriculum

implementation approaches that do not consider teachers' beliefs have a temporary life. Incorporating teacher beliefs is a sure way of inspiring teachers' enthusiasm and winning their trust for the curriculum adoption. Notwithstanding, granting unwarranted liberty to teachers without any control measure may lead to an abuse of freedom. However, regular effective monitoring of teachers could be used to keep teachers' behaviour in check.

## **2.5 ACCOUNTING CURRICULUM IMPLEMENTATION: THE INSTRUCTIONAL PROCESS**

The main objective of teaching accounting is not only to develop the intellectual skills of students but also to provide them with opportunities to work individually, in pairs, small and large groups. The reason for this is to ensure that students become independent problems solvers and active team players. Students, in addition to intellectual skills, also need to equip themselves with professional skills like writing, speaking out, presenting, computer and information literacy, decision making and teamwork. In order to achieve this, new concepts, strategies and methodologies have to be introduced in the teaching of accounting. In the old paradigm teachers were considered as the sole source of information and students approached them for every possible solution for problems encountered.

However, in the modern education paradigm the teachers are considered as facilitators and mainly provide their services in the form of guidance to students. The accounting teacher is therefore seen as the *guide on the side* instead of *sage on the stage*. This modern approach allows room for students to develop their accounting skills at their own pace and seek information as much as required, thus providing opportunities for self-development. The teaching strategies used must therefore be in line with the contextual learning theory where the aim of education is the integration of content learnt with the real world experiences. Therefore, teaching tools such as interactive case studies, simulations and games, group work are widely recommended.

Ewell (2001) stipulates that a more varied approach to teaching accounting, based on the Theory of Situational Leadership as applied to instruction, might result in higher success levels in Accounting. It has been commented that the "why" approach to accounting is more successful than the "how" approach (Tuhkanen, 1976). But the current methods of teaching Accounting have focused on the "how" approach, and usually this has been accomplished via the vehicle of rote learning. Rote learning is appropriate when it has to do with recall of facts,

principles and concepts in accounting. Without deemphasising rote learning, teachers should strive for more high order learning opportunities to enable students learn above mere recall of facts.

Often, this process involves a combination of lecture by the instructor covering the concepts of any given chapter, followed by a review of exercises and problems located at the end of the chapter. Examination procedures usually require students to complete multiple choice and true/false questions and solve by calculation a variety of problems as covered in the reading material. This pedagogy results in passive participation on the part of the students. It has been emphasized that this passive student model is predominant in Ghana. It is instructive for teachers to master the pedagogy that involves students, change the mind-set about the focus of instructions and be provided with the technical and logistical support to enable them focus instructions on students.

There are wider ranges of techniques that can be used to improve students' retention and performance that will prepare him for the job market. Some of these instructional models show that, at least at the Principles level, an overall review of the accounting concepts is preferable to a detail driven approach (Lovell, 1992). There has been a shift in the accounting approach away from didactic teaching methods and courses swamped by technical detail. Along this same line, a need within the accounting profession showed a shift of the skills needed by accounting students after entering the workforce. Due to technological innovations and a greater concentration on strategic accounting approaches, it is believed that instructors must adapt their teaching methods.

Educators have long realized that developing learning skills in students is of greater importance than rote learning of technical and specialised material. Many writers have identified the development of communication skills as vital in accounting courses (Colvin, 1994). Often communication skills can be enhanced via the application of group activities and projects. These group activities and projects are usually of an unstructured nature and assist the students in group problem solving and understanding of the accounting concepts and principles. This method of teaching helps to develop students' critical thinking skills rather than the retention of a common body of knowledge.

While not necessarily utilised at the Principles of Accounting level, the use of case studies has been identified as a key success factor for students completing intermediate-level accounting courses (Feldmann & Dow, 1997). This review has also supported the idea that group activities that enhance student communication and interaction encourage a more active learning environment. Concurrently, it is important in this type of learning environment that instructors grade written assignments for both content and communication skills. Examination methods could utilise more essay, case analysis and short answer question types that would encourage the development of these communication skills. Other authors have identified additional methods for increasing the likelihood of student success in accounting courses. Close contact between student and instructor and the establishment of a business atmosphere in the classroom have also been identified as success factors (Smith, 1979). Of course, class size is a function of college strategy and administration, but smaller class sizes are desirable.

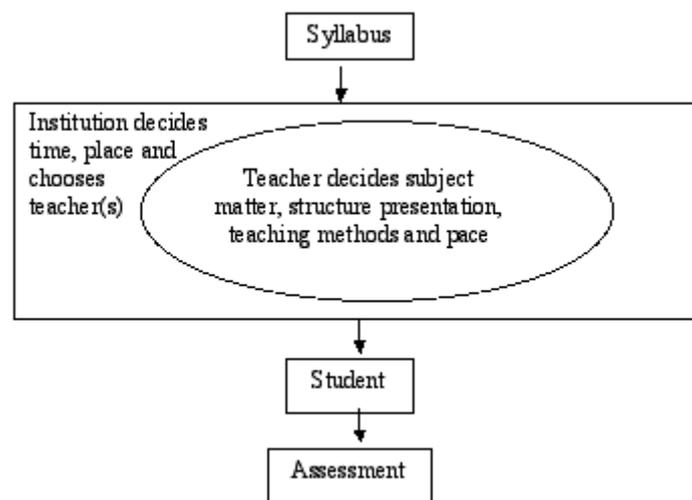
According to Tamakloe, Amedahe and Atta (1996) teaching basically refers to the art of transferring knowledge from a person to another or a group of persons to another. Accounting as a subject can be taught using the lecture method, discussion method, question and answer method etc. In addition, Price et al (2003) stated further that the use of practical methods such as data analysis is also useful. Ghartey (1988) also added that, it is desirable to extend the existing accounting teaching methods to include accounting laboratories and seminars. Accounting laboratories may offer students an opportunity to analyse financial data and report their findings or to develop a strategy for the solution of problems while relying on their own abilities. Seminars as mention by him give students the chance to have discussions in small groups. It also offer them the chance to make oral presentation in front of enlightened, alert and clerical group, and enables them to learn how to organize ideas in a way that may be presentable to the public. Visual aids such as opaque projector, slides and televisions could be very useful teaching aids in the classroom. Though the initial expenditure involved may be quite substantial, but working on capital budgeting basis, the returns may be quite rewarding to the faculty and the student and the public in general.

According to Xia (2010), accounting should be taught by stressing how not one single number on a financial statement besides some cash flow figures can be verified but much everything from the balance sheet's assets and liabilities to income statements' revenues and

expenses is subject to managers' interpretation. The teaching of accounting should emphasize more on the interpretation of figures than the mere presentation of the figures.

### 2.5.1 Dichotomous Approaches to Teaching Accounting

All the strategies of teaching accounting can sharply be distinguished into two: student centred approach and teacher centred approach. Accounting teachers are entrusted with the task of not just students achieving excellent grades in their examinations but also to make them become lifelong learners, independent learners and promote their thinking skills. In view of lifelong learning, Parnham (2001, p.58) affirms that a key aim for those who provide learning must be to make it easier for the people to learn. The rote learning method used by teachers traditionally made learning more difficult. Therefore to make learning more pleasant and approachable by students at large, teachers have to move on from the traditional teacher centred approach and move on to the modern student centred approach. Below are schematic representations of the teacher centred and student centred approaches to teaching.



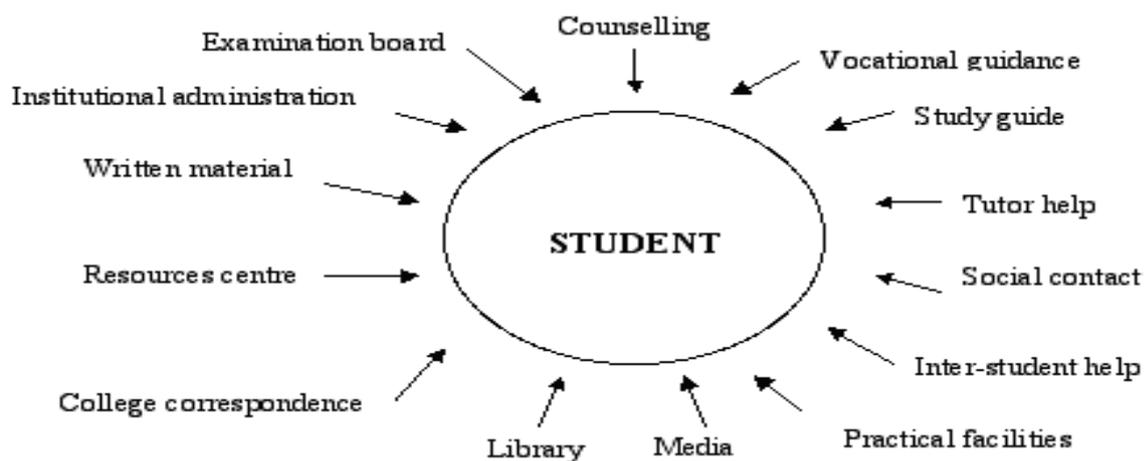
**Figure 2.1: Teacher-centred Approach in Teaching Accounting**

Adapted from *Facilitating Student Learning: A practical guide for tertiary level teachers*, p. 84 (Ellington & Earl, 1999)

Indeed, teacher-centred approaches to teaching accounting saves time as they are orderly and well planned. However, such approaches fail to acknowledge that students' learning is paramount. As such, accounting teachers focus on the instruction to the neglect of the students. In these approaches, teachers concentrate on dispensing with the subject matter of accounting without paying particular head to students' learning. The teachers act as sage on

the stage instead of guide on the side. It is only prudent for accounting teachers to consider themselves as the guide to facilitate students learning.

In modern teaching strategies, the emphasis is on the student centred approach. In this approach accounting students get their input or learn through different modes. They are guided by sources such as tutors, counsellors, fellow students and also gain information from sources like resources centre, library, media and so on. AICPA in its research identifies several teaching strategies and classroom techniques that can be used in teaching accounting courses. These modern strategies include quizzes on lecture material, demonstrations, question answer sessions, discussions, writing journals, one minute papers and responses, problem based learning, group learning and teamwork, cooperative learning, debates, simulations, role playing, visual and computer based instructions, online teaching, fieldworks and internships.



**Figure 2.2: Student-Centred Approach in Teaching Accounting**

Adapted from *Facilitating Student Learning: A practical guide for tertiary level teachers*, p. 87 (Ellington & Earl, 1999)

In Australia, Chambers embraced the issue of having more breadth in accounting education programmes in an address to a group of Australian academics and practitioners in 1992. Chambers (1999) argues that if accountants know not the instruments of thought and action of other fields of inquiry or practice, they bind themselves to the dogma of their kind; for they are unable to discriminate between dogma and reliable knowledge. In the last sixty years, instead of the richness and rigour of thought that arises from the cross-fertilisation of ideas, accountants have insulated themselves from the world of affairs by a cocoon of their own making (Chambers, 1999).

Involving students in the instructional process tends to stir some interest in the students and get them engaged in the lesson. Learners' interests are best sustained when they are active participants in the lesson. They respond to questions and make contributions both of which are capable of giving teachers some clue in gauging the instructional success. However, learner-centred approaches must be planned well to avoid needless distractions and thus enable the class to make judicious use of the instructional time.

### **2.5.2 Developing Instructional Competence in Accounting: Evidence from Accounting Academics**

Some accounting academics and educators adopted and used some teaching strategies in various higher learning institutions to promote scholarship. Berg (1996), for example, uses class peer tutoring for his accounting subjects. He sets out by giving a difficult quiz and then forms groups according to students' performance in the quiz. His groups have 3 students: one who did very well, one mediocre and one poor. These students then work in their groups and he supervises them during lesson. Berg notices that these students continue to work in their groups even outside class timings and a considerable amount of improvement can be noted in the exam results of the poor and mediocre students. Another technique used by Berg (1996) is "wearing two hats". Whenever he needs to ask students to think from two different points of views such as to understand concepts like accounts receivable and accounts payable, he asks the students to put on a "buyer's hat" when thinking from the point of view of a buyer and put on a "seller's hat" when thinking from the point of view of a seller. This innovative way gives students a different approach towards understanding and learning accounts receivable and accounts payable. Berg states that during his lessons, students became very familiar with the strategy that he started using two hats in reality for his lessons. This helps students to understand the "mirror imaging" of transactions, understanding that the entries are opposite when approached at the viewpoint of different people. This can pave way for the students to identify the differences in maintaining books of the business, books of the bank, books of the seller and books of the buyer. In other words, students should be taught to think from being the purchaser and again from being the seller. Thus students put on a "buyer's hat" when thinking from the point of the buyer and a "seller's hat" when thinking from the point of the seller. Although highly practical, the wearing of such hearts may be viewed most secondary school students as childish and fundamentally *classonic* (fit for class one or the lower primary

school level). Hence, patronage and participation will suffer and thus making the lesson unsuccessful.

Deme (1996) uses pre-test technique to increase learning. Here the teacher gives students a pre-test where they can work using their books, notes and together with other students. If students do not achieve the target of 100%, they have to resubmit for a lower full mark of 92% and if mistakes still occur for the next time, a lower full mark of 84% is awarded. The fourth attempt will earn them 76% and the fifth and subsequent time 70%. Students who do not correct all the mistakes will obtain 65%. A student who does not sit for the pre-test gets a zero. These marks are averaged and include a total 10% for the overall grade in the unit. Deme observes that through this method students get valuable experience and feedback from the lecturer prior to the test and this improves their performance at the final test. It makes students conscientious and meticulous and thus causing students to work assiduously in the bid to achieve the maximum score as early as possible. However, students who are not self-motivated may be easily demoralized to continue submitting and resubmitting the same test anytime they fail to score the test.

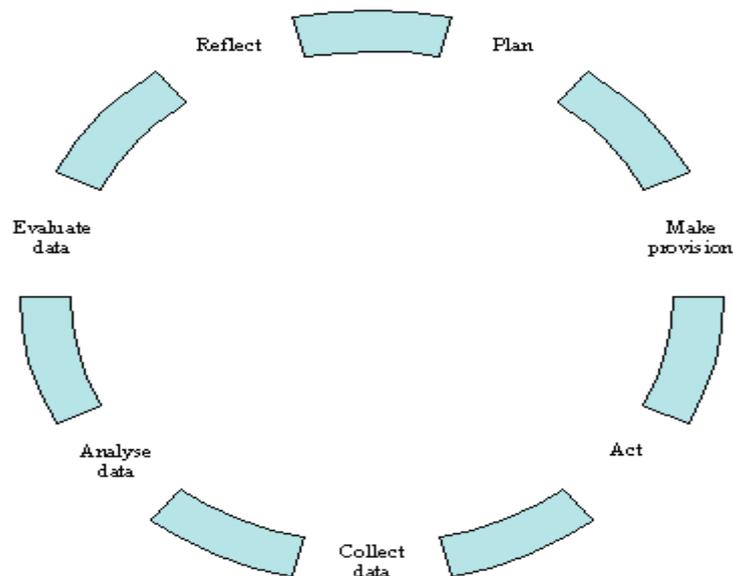
Nibbelin (1996), has designed a form of assessment that is transparent and quite simple to follow and above all is very motivational to students to engage in class participation. Bonus coupons are used for class participation. Coupons are given to students who are able to respond appropriately to questions asked relating to the reading assignment or solutions to homework problems. The following guidelines are used to ensure that the system is more effective and beneficial to all the students:

1. Each student may receive only one coupon per class session. This allows fuller participation by class members. Students may submit up to five coupons with each 100-point exam. Students can raise their grade by a maximum of five points or half a letter grade.
2. Only coupons that are signed and dated by the instructor of the course are acceptable.
3. The instructor must be an equal opportunity coupon distributor. This can be achieved by systematically calling on students in different sections of the classroom.

Class participation should be reduced to only oral responses that students give. Rather participation should be comprehensive incorporating all students' activities ranging from those measured in the affective through cognitive to the psychomotor domains of learning.

According to Jayaprakash (2005), fundamentals of accounting involving the accounting equation can be demonstrated to students in many ways. Applying the approach suggested by Gee (1996) as modified, Jayaprakash (2005) demonstrates to students accounting equation by using 3 jars. The jars are labelled “A” for Assets, “L” for Liabilities and “E” for Owner’s Equity. The jar labelled “E” is filled with water and then poured into the jar marked “A”, for students to recognise that assets are acquired from owner's equity. Then fill the jar labelled “L” explaining to students that the owner can borrow funds from others to invest in assets. This can then be further explained that at any one time, Assets must always be equal to Liabilities and Owner's equity. This activity will sustain students’ interest and enhance their understanding of the lesson. At this delicate level where students should be handled with tact and experience the use of such practical methods come in handy to enable students associate what they already know with their early experiences in the accounting class at the senior high school Form One level.

The strategy adopted must aim at making all students become effective learners by promoting deep learning and not surface learning. Jayaprakash (2005) describes deep learning as making learners who are willing to incorporate new ideas from what they have learned, existing knowledge and personal experiences. Students who are only interested in grades and resort to reproducing what they have learnt adopt surface learning (Campbell 1998). Lynch (2001, p.177) quotes “In order to promote deep rather than surface learning in their students the member of staff must endeavour to motivate and provide various stimulating learning situations” (in Jayaprakash, 2005). In order to achieve this Jayaprakash (2005) resorts to several modern teaching strategies and after every instruction there is need to reflect on the effectiveness of the instruction. This self-reflecting approach provides quality feedback that can be used to plan for future lessons. The self-reflective approach to teaching accounting is a formative evaluation devise that aims at providing timely interventions to instructional decisions. Jayaprakash (2005) witnesses Pollard’s (2002, p.12) consideration of reflective action as a “willingness to engage in constant appraisal and development” which has accordingly been diagrammatized in Figure 3.



**Figure 2.3: The Process of Reflective Teaching**

Source: *Reflective teaching: Effective and Evidence-informed Professional Practice*, p.16 (Pollard, 2002)

The use of this approach to teaching accounting enhances accounting teachers' professionalism and teaching standards as it allows a critical and systematic self-appraisal so that in an event that expectations are not met modifications could be introduced in subsequent instructional intercourse. However, teachers who use self-reflective approach need to show willingness in self-appraisal and development (Jayaprakash, 2005) because of its fundamental requirement of the "... attitudes of open mindedness, responsibility and wholeheartedness" (Pollard, 2003, p.17).

The use of the self-reflection approach gives teachers a sense of judgement and self-evaluation. It gives teachers the liberty to make a choice between the teacher-centred and student-centred teaching approaches. The freedom of choice given to teachers only creates a sense of commitment and intrinsic desire to positively impact students' learning. Thus, consistently, teachers are permitted to undertake a thorough appraisal of the extent to which they are progressing in the implementation of the accounting curriculum. Teachers may use the feedback of this self but often honest appraisal to improve their professionalism in the light of implementing the curriculum.

To promote student learning, teachers need to expand their roles: they have to become facilitators of learning, not just experts transmitting knowledge. They need to concern

themselves with teaching their students *how* to learn rather than just *what* to learn; and they should ensure that students are actively involved in learning. It is recommended that teachers should adopt a variety of student-centred pedagogies which emphasise active learning and collaboration through authentic tasks. The following guideposts to effective accounting pedagogy are suggested (Curriculum Development Council, 2007):

1. ***Build on prior knowledge and experience***: One of the design principles for accounting is to provide an interface between the junior and senior high school curriculum. Particularly for first year senior high students, teachers need to be fully aware of the knowledge they have gained, and the approaches to study they have used, at junior high level. Learning activities should be planned with students' prior knowledge and experience in mind.
2. ***Understand learning targets***: The quality of learning and teaching can be improved when both the teacher and students are clear about the learning targets and objectives. This enables teachers to reflect on what they want students to learn, and why; and it helps students to see what is worth learning and to select appropriate methods for studying.
3. ***Adopt a wide range of learning and teaching approaches and strategies***: Teachers are encouraged to adopt a wide repertoire of strategies to achieve the curriculum aims and learning objectives of accounting, such as developing decision-making and communication skills, according to the learning styles, abilities, interests and needs of their students.
4. ***Use resources effectively***: It is important for teachers to use a variety of learning and teaching resources (e.g. the Internet and newspapers) instead of relying solely on textbooks. Community resources can be utilised to maximise the opportunities for learning accounting within and outside the school environment – for example by arranging for students to participate in seminars, visits or exhibitions.
5. ***Enhance motivation***: Schools and teachers often need to apply a variety of learning and teaching strategies to motivate student learning. In accounting, an effective strategy is to relate the theoretical ideas to everyday experience so that students see the relevance of what they learn in the classroom to the world outside. To motivate those with less ability, teachers may need to design structured learning tasks which they can complete successfully.
6. ***Promote classroom interaction***: Classroom interaction is essential for developing accounting knowledge and skills. Teachers may need to incorporate strategies for

encouraging teacher-student and student-student interaction. In interacting with their students, teachers need to give them feedback on their progress and how they can improve. This not only benefits students but allows teachers to make any necessary adjustments to their pedagogies and pace of teaching.

7. **Promote independent, self-directed learning:** Students should be encouraged to take responsibility for their own learning. The overall objective is to develop students' capacity for self-directed learning in which they consult not just textbooks but also other up-to-date resources such as business journals, magazines and newspapers.
8. **Cater for learner diversity:** Teachers are encouraged to apply different learning and teaching strategies to cater for students' different learning needs, interests and aptitudes. Since student learning is dynamic and complex, there is no single approach that is best for all learning and teaching. A variety of learning and teaching approaches, strategies and activities should be adopted to cater for students' different learning styles.

## **2.6. ESTABLISHMENT OF MONITORING TOOLS AND PROCESSES TO GAUGE INSTRUCTIONAL QUALITY**

After the curriculum has been implemented, be it a full scale implementation or otherwise, it is prudent to develop measures to monitor its progress. Establishing such monitoring tools and processes is the last stage of the change process. There are several methods, approaches or theories of monitoring the extent of curriculum diffusion or implementation. These approaches focus on either the group or individual teachers involved in the implementation process. The most popular models include action research, curriculum alignment, comprehensive school reform programmes, and CBAM.

### **2.6.1 Action Research**

Action research is an interactive inquiry process that balances problem solving actions implemented in a collaborative context with data-driven collaborative analysis or research to understand underlying causes enabling future predictions about personal and organisational change (Reason & Bradbury, 2001). It involves reflective problem solving techniques which enable the researcher to perform a task over and over to achieve the desired state of affairs. Action research aims at bridging the gap between theory and practice. It makes use of various theories resulting from basic research, applying them to concrete situations to evaluate the

impact or potency. It allows teachers to have a practical feel of specific context-bound factors; and affords them opportunity to operate without any restriction.

According to Lewin (1946), to whom action research has been credited, action research or what he referred to as 'rational social management' "proceeds in a spiral of steps each of which is composed of a circle of planning, action and fact-finding about the result of the action" (in Hart & Bond, 1995, p. 15). The three step process has provided a set of principles for conducting action research. This has been summarised as:

*Unfreezing*: Faced with a dilemma or disconfirmation, the individual or group becomes aware of a need to change.

*Changing*: The situation is diagnosed and new models of behaviour are explored and tested.

*Refreezing*: Application of new behaviour is evaluated, and if reinforcing, adopted (Anonymous, <http://en.wikipedia.org>).

This basic principle of a spiral of steps lives on in the design of many action-research studies but Marsh and Willis (2003) challenge that such steps are not in themselves sufficient unless teachers' intentions complement them. This involves conceiving an idea about what needs to be done, executing tasks as planned, determining the extent of task achievement, and looking for alternative means of doing it better. The major limitation of this approach is the fear principals may have following teacher empowerment. This may generate internal problems with possible undermining of the smooth operation of the process.

### **2.6.2 Curriculum Alignment**

Achieving 100% fidelity is often a mirage and far-fetched. The planned curriculum is almost always ideal. It is just a blueprint to guide teachers during instruction. Notwithstanding, teachers should endeavour to approximate the plan. Ensuring this fit is the hallmark of curriculum alignment. According to Marsh and Willis (2003), curriculum alignment ensures utmost compatibility between planned curriculum and the enacted curriculum through extensive testing of what is taught. Basically, it is students who are tested, yet teachers' performance is measured indirectly in terms of how well students perform in standardised tests. Although teachers are not the sole determinants of students' success or failure, they play a key role in ensuring that the right learnable bits are imparted. Such experiences must necessarily stem from the planned curriculum. Myers and Myers (1995) posit that incentives

for teachers are tied to school-wide student performance. Teachers are rewarded accordingly as they perform in aiding students pass examinations. Thus teachers' salaries are adjusted as they put up a remarkable performance. Continuous monitoring of teachers to ensure that they instruct students based on the plan will help increase the degree of fidelity of implementation.

Curriculum alignment also means assuring that the material taught in the school matches the standards and assessments set by the state or district for specific grade levels. It is a way of "mapping" the curriculum onto the standards to be sure that the school is teaching the content that is expected. In states that use tests to assess student mastery, schools may also align their curriculum with the content of the test to assure that students have studied the required content before taking the tests.

### **2.6.3 Comprehensive School Reform Programmes (CSRP)**

The Comprehensive School Reform programme (CSRP) was developed to help low-performing schools overcome some of the most common obstacles to effective school reform. The CSRP requires that schools focus their reform efforts on the entire school, rather than implementing isolated piecemeal programmes. CSRP also requires that schools use comprehensive school improvement models that are proven effective by scientifically-based research. A CSRP requires that these models provide schools with support and training for all stakeholders, including teachers, administrators, parents, and school staff.

There are series of CSRP that low-achieving schools can use to improve upon their performance. The choice of programme is dictated by the needs of the school. No single CSRP is capable of finding solutions to all the problems of a school. There is need to use multiple programmes so as to address every bit of the host of problems that confront a school.

### **2.6.4 Concerns-Based Adoption Model (CBAM)**

The concerns-based adoption model (CBAM) is a well-researched model which describes how people develop as they learn about an innovation and the stages of that process. It also predicts probable teacher behaviour as they implement an innovation and participate in developmental activities. Hall and Loucks used the concept "concerns" to describe teachers' perceptions, feelings, motivations, frustrations and satisfactions through different stages in the implementation process (Snyder et al, 1992). Its assessment allows the characterization of the acceptance of an innovation based on concerns that implementers express in natural conversation (Fenton, 2002).

The Concerns-Based Adoption Model (CBAM) has been an ineffective monitoring tool to identify and analyse contextual factors or influences on teachers' concerns in the United States (Marsh & Willis, 2003). It is practically plagued and incapacitated to unearth school-specific factors that promote or militate against teachers' concerns. This case is highly pervasive in flexible and decentralised school systems that practice adaptation and enactment of curriculum implementation. In these school systems curriculum is tailor-made or at least adapted to suit specific school contexts or locale and thus makes the comparison of different implementation sites untenable. However, in centralised education systems where fidelity of implementation is used to deliver programmes it is expedient and justifiable to adopt the CBAM to monitor implementation progress and also compare different implementation sites.

The justification is mooted in the assumption that where fidelity of implementation is practiced school contexts are considered the same or at least approximated to be the same (Lewy, 1977). Ghana for an example operates the centralised school system and therefore practices fidelity of implementation. Thus, although senior high schools are located in different Regions in the country, school conditions across and within the various administrative areas in the country are considered or approximated to be the same. The fidelity of the implementation of the curriculum is can be reasonable measured using the CBAM. This is based on assumed the commonalities insofar as education is concerned. Therefore the CBAM can provide accurate pieces of information to monitor the progress of the implementation process of the accounting curriculum all over the country on the basis of the assumption underlying fidelity of implementation.

#### **2.6.4.1 Assumptions underlying Concerns-Based Adoption Model**

The use of CBAM is guided by certain assumptions that help in conceptualising the use of the model. Such assumptions are related to 'change' and its participants. Change is a process, not an event, requiring time, energy, and resources to support it. The procedural nature of change requires that constant effort is made to help it succeed. Continuous monitoring is essential to make certain that change agents are implementing the plan. School principals, heads, circuit supervisors and those charged with the supervision of the change should commit time, energy and resources needed to help in the delivery.

Change is achieved incrementally and developmentally and entails developmental growth in feelings about the skills in using new programmes. Curriculum change is directly related to experience with its use. There is a positive relationship between the rate at which a teacher implements an innovation and the skills developed by the teacher with continuous use of the innovation. The longer a teacher's use of the innovation the higher the degree to which a teacher implements it. A teacher's feelings or perceptions about an innovation improves and favours the change as they spend more time putting it to use. Change is accomplished by individuals first. Institutions cannot change until the individuals within them change. Individual practitioners as teachers must own the change and become committed to it before the change can be fully institutionalised. Heads of educational institutions should spearhead and champion the change. They should encourage classroom teachers and those whose roles are affected by the change to remain malleable to be shaped by the innovation. School collegiality and peer influence determine the altitude and magnitude of the implementation process. Once these factors facilitate the adoption process of the change, enthusiastic teachers as individuals will assume their new roles as determined by the innovation. In turn, the entire school will begin to experience the innovation.

Change is a highly personal experience. In spite of the roles that heads of institutions play to encourage teachers, the final choice of implementing an innovation lies with teachers. The extent to which a teacher implements an innovation is a function of their personal encounter with the innovation. Not all teachers will embrace the innovation at once. There are the early adopters, early majority, late adopters and the laggards. It is characterised by individualism and perceptual differences. Curriculum change can be facilitated by change agents providing diagnostic, client-centred support to individual teachers. Teachers often analyse their specific school contexts to enact or adapt the curriculum to suit the situation.

#### **2.6.4.2 Dimensions of Concerns-Based Adoption Model**

The CBAM is a complex multi-dimensional model. It comprises the "Level of Use" (LoU), "Innovation Configuration" (IC) and "Stages of Concern" (SoC). Both SoC and LoU are concerned with the personal attitude, perception and activities individual teachers have or undertake in the light of implementing an innovation. On the other hand, the IC concentrates on the attributes of the innovation that enable it to succeed.

Each of these dimensions can function independently, but using all three in a particular analysis will give a better result. Each of the three diagnostic dimensions of CBAM (IC, SoC, and LoU) has a designated method and an instrument to collect and present appropriate data associated with it. Each of them requires the researcher to be immersed within the scene of the innovation and to continually refine judgments associated with the diagnostic dimensions (Newhouse, 2001).

#### **2.6.4.3 Levels of Use**

To track what teachers actually do during curriculum implementation, Hall, Wallace and Dossett (1973) used a sequence they referred to as “level of use” (LoU) (Marsh & Willis, 2004). The LoU focuses on teachers’ skills and perception and subsequent use of an innovation. According to Hall and Hord (1987), the LoU describe the behavioural dimension of change focusing on what teachers actually do in the classroom when making the transition from teaching one way to teaching differently. To a large extent the LoU determines the extent to which planned curriculum is put to actual open use throughout the system. Based on Hall and Hord (1987) description, Horsley and Loucks-Horsley (1998) provide a simplified version of the LoU describing the characteristic behaviour of each level as:

*Level 0, Nonuse* — A person is taking no action with regard to the programme or practice;

*Level I, Orientation* — A person seeks information about the new programme or practice;

*Level II, Preparation* — A decision has been made to adopt the new practice, and the person is actively preparing to implement it.

*Level III, Mechanical* — This reflects early attempts to use new strategies, techniques and materials. It’s the point in our use of something new at which we often feel inadequate and awkward. At best, we feel as though we’re preparing a new recipe for the first time, constantly referring to the cookbook for guidance and reassurance.

*Level IVa, Routine* — We’ve established a satisfactory pattern of behaviours.

*Level IVb, Refinement* — People go beyond the routine by assessing the impact of their efforts and making changes to increase that impact.

*Level V, Integration* — People are actively coordinating with others to use the innovation.

*Level VI, Renewal* — People seek more effective alternatives to the established use of the innovation. (This is essentially the beginning of a new cycle of Stages of Concern and Levels of Use.) (Emphasis added).

Hall and Hord (1987) identified five distinct Levels of Use among users and three

Levels of Use that define nonusers of a programme. This is reflected in their work as summarized into eight levels above. The levels “non-use”, “orientation” and “preparation” do not involve any attempt of use at all. Teachers conduct at these levels range from absence of intention to use to making plans to put the change to use. The last five levels involve some extent of use. According to Horsley and Loucks-Horsley (1998) there are significantly different levels of mastery. However, once people decide to use a new practice and receive training in its use, they establish a suitable routine fairly quickly.

#### **2.6.4.4 Innovation Configuration**

Lack of clarity of an innovation may hinder its implementation. The lack may stem from misunderstanding teachers may have regarding some of the components of the innovation. To address this, an assessment is carried out to uncover some major components or characteristics of the innovation that are not implemented as planned. For standardisation in implementation to be ensured, there is need to make the major components of the innovation explicit.

The third part of the CBAM borders on the innovation components or configuration committed to making sure that they are made clear and explicit. Once teachers become aware of the main tenets of the innovation their efforts will be channelled towards that common good. Innovation configuration “recognizes the importance of identifying the specific parts of a change, and providing staff developers with hands-on tools for making those identifications” (Horsley and Loucks-Horsley, 1998). They called these tools Practice Profiles. The Practice Profile requires change leaders to formerly define how the change should look when implemented. The profile first includes a precise description of the resources and conditions necessary to implement the programme. Then perhaps six to eight critical components of a programme are identified, along with sets of descriptive examples of what each component looks like when used appropriately. Teachers would be enabled to determine whether they are on the right track once they clearly know what is expected of them. Stressing the essentials does not really mean that all teachers will perceive that as such. Accordingly, Marsh and Willis (2003) comment that:

The IC does not ensure that everyone will agree on what is essential, but it helps everyone clearly identify differences between the planned curriculum and the enacted curriculum, and when disputes arise (about, for instance, fidelity of use versus mutual adaptation), it provides a basis for informed discussion about differences and for possible adjustments in the curriculum (p. 257).

IC is highly operational in the centralised and flexible systems of education with varying degree of applicability. The intent of its use is to identify how differently various teachers are implementing the same curriculum as planned. This will help bring worthy modifications into the curriculum to help elicit desired outcomes.

#### **2.6.4.5 Stages of Concern**

The theoretical basis of the stages of concern as defined by Hall, George and Rutherford (1979) provide a wide range of applicability to diverse monitoring of any programme. It attempts to identify the perceptions and feelings teachers have about the innovation. It is the most preferred part of the CBAM that is capable of yielding the most successful results. This part of the model deals with typical perceptions of individuals. The appropriateness of SoC is best appreciated when the impact of curricular change on teachers is assessed. This analogy explains it all:

Imagine a navigator on a manned spacecraft heading toward a distant destination. The ship has an educational mission. The passengers are students. The navigator is very knowledgeable about the abilities of the students, their educational sophistication, or lack thereof, and the best method to use to impart the information presented to allow the students to reach their potential. The navigator is also in possession of a map that will chart the course. This map describes the things the students will see and the order in which they will encounter each one of them. The map contains other useful information for the navigator, such as all of the pertinent facts in great detail, information about the concepts that students must know in order to process the information given, and a time frame in which this journey will take place. Professional navigators will spend many hours familiarizing themselves with this map. They will learn the facts and perhaps elaborate on them. They will connect the facts to the concepts necessary in order for the facts to make sense. They will plan their itinerary so that all information has been covered in the appropriate time allotted for the journey. They will construct analogies to the information so that students will be able to relate to the topics presented or the sights seen. They will feel confident and

well prepared. Now, imagine the anxiety the navigator would feel if suddenly presented with a new map. Such is the anxiety that many instructors often feel when they are presented with a new curriculum. But such anxiety is not necessary (Anonymous, n.d.).

Uncertainty, ambiguity and tension greet teachers when they are confronted with curriculum change (Flores, 2005). They tend to evaluate their extant state of professionalism in the light of the change to assess their preparedness to execute it. Snyder et al. (1992) warn that the strain and fatigue resulting from role overload and the imminent uncertainty is capable of limiting teachers' motivation in implementing the innovation. Teachers' perception of the change can lead to disinterest in the change. Fullan (1991) explains that not all teachers will embrace the change. Apparently because their involvement in the planning of the curriculum is heavily curtailed. They may have some genuine concerns about their preparedness to implement the change on the grounds of the change being alien to them. It might also be an attempt to sabotage and undermine the change because they are not a party to its planning. Teachers may therefore have differing feelings, attitude, interest and perception about the change. This may require the use of the CBAM-SoC to monitor the implementation. The theoretical definitions of the various concerns teachers may exhibit in the process are presented below:

0 Awareness: Little concern about or involvement with the innovation is indicated.

1 Informational: A general awareness of the innovation and interest in learning more detail about it are indicated. The person seems to be unworried about himself or herself in relation to the innovation. She or he is interested in substantive aspects of the innovation in a selfless manner, such as general characteristics, effects, and requirements for use.

2 Personal: Individual is uncertain about the demands of the innovation, his or her adequacy to meet those demands, and his or her role in the innovation. This includes analysis of his or her role in relation to the reward structure of the organisation, decision making, and consideration of potential conflicts with existing structures or personal commitments. Financial or status implications of the programme for self and

colleagues may also be reflected.

- 3 Management: Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost.
- 4 Consequence: Attention focuses on impact of the innovation on students within teachers' immediate sphere of influence. The focus is on relevance of the innovation for students; evaluation of student outcomes, including performance and competencies; and changes needed to increase student outcomes.
- 5 Collaboration: The focus is on coordination and cooperation with others regarding use of the innovation.
- 6 Refocusing: The focus is on exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. Individual has definite ideas about alternatives to the proposal or existing form of innovation.

Hall and Hord (1987) summarized the various stages in the SoC as follows:

*Stage 0 - Awareness:* Teachers have little knowledge of the innovation and have no interest in taking any action.

*Stage 1 - Informational:* Teachers express concerns regarding the nature of the innovation and the requirement for its implementation. At this stage, teachers usually show their willingness to learn more about the specific innovation or reform.

*Stage 2 - Personal:* Teachers focus on the impact the innovation will have on them. At this point, they exhibit concerns about how the use of the innovation will affect them on a personal level. They may be concerned about their own time limitations and the changes they will be expected to make.

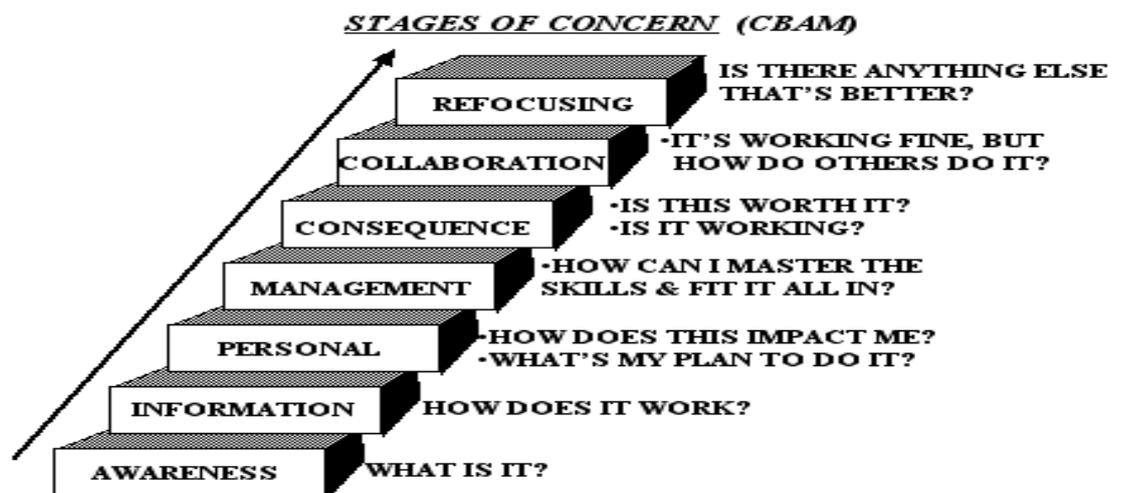
*Stage 3 - Management:* Concerns begin to concentrate on methods for managing the innovation within the classroom. Teachers now express concern over the organisation and details of implementation, and the overcoming of difficulties. Time requirements are among the prime management factors, which create scepticism on the part of teachers in relation to the adoption of innovations.

*Stage 4 - Consequences:* Teacher concerns now centre upon effects on students learning. If positive effects are observed, teachers are likely to continue to work for the implementation.

*Stage 5 Collaboration:* Teachers are interested in relating what they are doing to what their colleagues are doing.

*Stage 6 - Refocusing:* Teachers evaluate the innovation and make suggestions for continued improvement or consider alternative ideas that would work even better.

Figure 2.4 shows that “the Stages of Concern defines human learning and development as going through 7 stages, during which a person's focus or concern shifts in rather predictable ways” Sweeny (2003). Awareness as the first stage describes the extent to which people know of the existence of the innovation. Ordinarily, teachers will have to become aware of an innovation before they will have the desire to know how it really works. Hence they should be involved in the planning and implementation of the curriculum. There is always the tendency that they will consider the relative advantage that is associated with the innovation. This may not necessarily be any extrinsic reward but may also include the satisfaction of accomplishing a challenging task. Once they know the reward associated with the successful delivery of the innovation teachers will master the skill that is required by the change to implement it as intended. After some time they will evaluate their effectiveness to see how well they have performed. They may even desire to see how other faculty is doing this same thing. Hence they will collaborate with others to build teams or consult each other to see how synergy can help fine-tune their skills and understanding.



**Figure 2.4: Stages of Concern (CBAM)**

Source: After Sweeny (2003)

Finally, they may evaluate the innovation and begin to search for new and ground-breaking ways of doing that same thing to achieve a better result. Possibly, this stage is where they have exhausted all the perceived benefits of the innovation. From the foregoing it is evident that the seven stages are in developmental, starting with “awareness” and ending with “refocusing”. Thus the satisfaction of each stage triggers the concerns of the next. In spite of the conventional seven-stage SoC dimension of the CBAM, Horsley and Loucks-Horsley (1998) further categorize the concerns into four:

1. Awareness (Stage 0) describes a person who either isn't aware of the change being proposed or doesn't want to learn about it.
2. Self-concerns refer to the questions we ask when we hear about something new (Stage 1, Informational), and how it might affect us (Stage 2, Personal).
3. Task concerns emerge as we engage with new skills, time demands, materials, etc. (Stage 3, Management).
4. Impact concerns describe our thoughts on how we can make a programme work better for learners (typically students) (Stage 4, Consequence), how to make it work better by actively working on it with colleagues (Stage 5, Collaboration), and, ultimately, being successful with the programme and seeking out a new and better change to implement (Stage 6, Refocusing).

This classification is a more simplified form of the SoC dimension of the CBAM; however, it follows directly from the theory of concern. The first of the three stages of concern, self-oriented, arise prior to implementing the innovation. Therefore “awareness” is better classified as self-oriented concern. The self-oriented concerns allow teachers to determine their preparedness to implement the change. Once a decision is made to accept and implement the innovation, teachers develop task-oriented concerns as they progress in the implementation process. Finally, after gaining considerable experience on the innovation, teachers' concerns shift significantly to determining the impact the innovation is capable of making. Evaluating the innovation is possible after a great deal of experience has been acquired following its implementation.

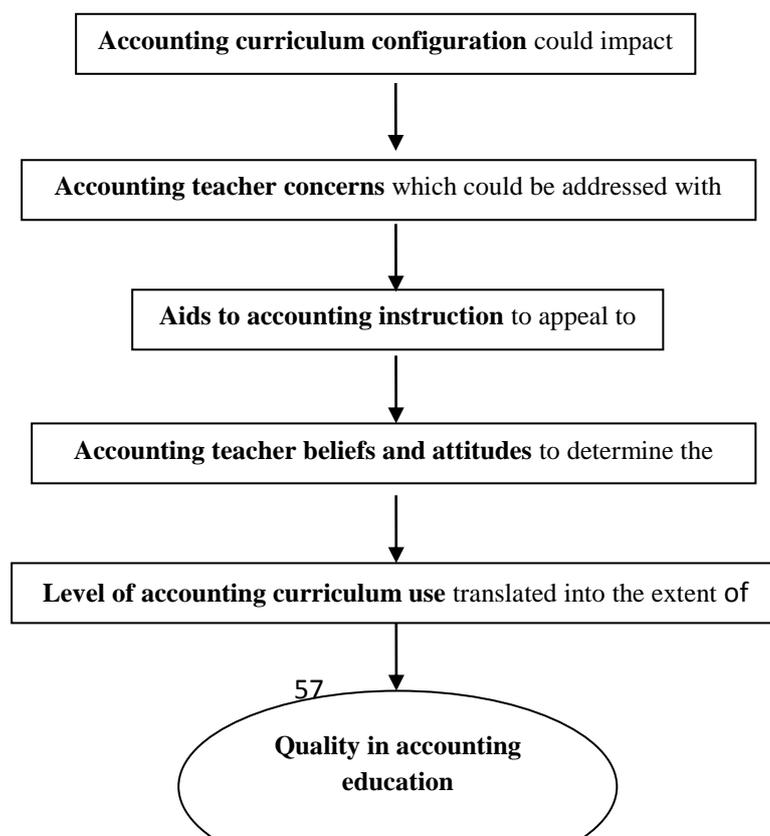
### **2.6.5 Theorizing Quality Accounting Education: Instructional Quality Construct (ICQ)**

The Instructional Quality Model is an amalgam of the CBAM and teacher beliefs and attitudes. It is further embellished with the support services needed to enable teachers bring

their professionalism to bear in exacting obeisance in the instructional process to promote students' learning. The elements of the IQC are presented in logical flow in the following manner:

1. Accounting curriculum configuration;
2. Accounting teacher concerns;
3. Aids to accounting instruction;
4. Accounting teacher beliefs and attitudes; and
5. Level of accounting curriculum use.

There is frequent interaction among these elements which readily affect the diffusion of the curriculum across schools and classrooms. These elements approximate the real life situation existing in schools and classrooms. The interplay of the elements shape the success or otherwise of the results of most classroom practices and interactions. Although not rigidly sequential, there is a technical order which ordinarily shows the naturally occurring fashion in which these elements interact to promote quality accounting education. It should be noted that these elements do not guarantee instructional success per se, but rather depending on the manner in which they interact, some feat of instructional success can be obtained. The model further assumes that instructional success is the proxy of quality accounting education. However, instructional success is not absolute but contingent on the levels of use of the curriculum. It depends on how positively these elements can be harmonized to achieve congruence to promote usage of the accounting curriculum. Figure 2.5 depicts the summary of the relationship among the elements in the IQC.



## **Figure 2.5: Instructional Quality Construct**

Source: Author's construct, 2012

### **2.6.5.1 Accounting curriculum configuration**

The nature of the accounting curriculum and the understanding accounting teachers have about it have an impact on the success rate of the curriculum. The level of clarity and workability of the accounting curriculum components are to increase the rate and speed of adoption. There is need to recognise the importance of identifying the specific parts of the accounting curriculum, and providing staff developers with hands-on tools for making those identifications. It is necessary for the accounting curriculum leaders to formerly define how the change should look when implemented. As well, there should be precise description of the resources and conditions necessary to implement the accounting curriculum. Once the components of the accounting curriculum are identified along with sets of descriptive examples of what each component looks like when used appropriately, accounting teachers would be enabled to determine whether they are on the right track.

### **2.6.5.2 Accounting teacher concerns**

These are the feelings stemming from the continuous assessment that accounting teachers do about the accounting curriculum. The assessment is influenced by the level of participation of the accounting teachers in the design of the accounting curriculum. The greater the degree of participation, the better the assessment is likely to be. Developing a teacher-proof accounting curriculum (devoid of or limited in accounting teachers' input) militates against the subsequent adoption of the curriculum. The 'fear of the unknown' might heighten accounting teachers' concerns about the curriculum. Ordinarily, the lower the stages of concern (refer to the SoC of the CBAM), the more there is need to aid the instructional process.

### **2.6.5.3 Aids to accounting instruction**

These are the support services provided the accounting teachers to enable them deliver the desired instructional quality. These services may range from adoption of appropriate leadership style to inspire enthusiasm in teachers to the provision of motivational packages

that are potent forces to influence performance. Curriculum planners should as well plan in-service training sessions to reduce the *fear* that some accounting teachers may entertain about their preparedness to execute the accounting curriculum. This is necessary following accounting teachers' limited participation in the conception, planning and development of the accounting curriculum. School administrators are expected to provide the necessary logistics required by teachers to promote instructional success. Parents, guardians and the entire community in which the school is situated are to lend their support to teachers by forging ties beyond mere professional courtesy. In sum, stakeholders in accounting education should place the accounting teacher and the students in the centre because the interaction between the accounting teacher and the students is key to achieving the desired quality.

#### **2.6.5.4 Accounting teacher beliefs and attitudes**

The extent of the accounting curriculum use is influenced by accounting teachers' beliefs (the stakeholder group that *currently* exerts influence on accounting education) and attitudes (the stakeholder group that *ought* to exert influence on accounting education). Strategic use of the instructional aids promotes positive teacher beliefs and attitudes about the curriculum. For example, placing accounting teachers at the centre of the decisions involving accounting education improves the morale of the teachers to ensure that decisions to which they were parties in formulation become practical success. Accordingly, the use of the *wisdom* (accounting curriculum) such teachers created may be phenomenal (Kwarteng, 2009).

#### **2.6.5.5 Level of accounting curriculum use**

This is not just about the rate of usage of the accounting curriculum. It implies how accounting teachers make productive use of the curriculum to bring about both planned and unplanned learning.

**Table 2.1: Quality Criteria reflecting Level of Use**

Usage status	Quality description	Definition
Nonuse, Orientation, Preparation	Poor	Measure of quality is undesirably insignificant.
Mechanical	Turbulence	Series of experimentation of what works in the

		classroom makes quality unstable but expect improvement with time.
Routine	Good for the occasion	Stability in quality education but robs students of future opportunities because quality is episodically myopic.
Refinement, Integration, Renewal	Sustainable	Enduring, forward-looking and ever-relevant quality of education.

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*Source: Field Work, 2013*

To a large extent the level of accounting curriculum use determines the extent to which the planned accounting curriculum is put to actual open use throughout the system. A higher rate of accounting curriculum usage is likely to promote higher quality in accounting education and vice versa. The summary in Table 2.1 provides judgement of the extent of quality in accounting education reflecting a user category of the accounting curriculum:

## **CHAPTER THREE**

### **ACCOUNTING CURRICULUM IMPLEMENTATION: EMPIRICAL EVIDENCE**

#### **3.1 INTRODUCTION**

This chapter presents empirical evidences of the findings of earlier researches that are considered relevant to this study. These earlier research findings help put the study in perspective to aid comparison of the findings of this study and conclusions reached in earlier researches. Specifically, the review covers topics such as accounting teachers' concerns and levels of use of the accounting curriculum; teacher characteristics capable of influencing teachers' SoC and LoUs; popularity of cost accounting in senior high schools in Ghana; accounting teachers' and students' attitude and beliefs toward accounting; and factors influencing curriculum implementation.

#### **3.2 ACCOUNTING TEACHERS' CONCERNS AND LEVELS OF USE OF THE ACCOUNTING CURRICULUM**

There have been several studies undertaken to unearth the concerns and level of use teachers in adopting and implementing an educational innovation or change. For instance, Tunks and Weller (2009) investigated the curricular change process among some grade four teachers in a year-long Teacher Quality Grant innovation programme. Their study focused on how teachers' concerns about and levels of use of the innovation changed during the course of the project. Also, they monitored changes in the participating teachers' perceptions and practices as a result of the innovation put in place. They found, among other things, that many of the participating teachers' concerns progressed from self/task toward impact. They also noticed that with continued support, most of the participating teachers achieved routine levels of use, which such teachers were able to sustain beyond the implementation of the programme. Similarly, Donovan and Green (2010) studied initial teacher concerns during implementation of a one-to-one laptop teacher education pilot programme. The study involved 29 teacher candidates who began a one-year multiple-subject (elementary) credential programme with an added emphasis on teaching and learning in a one-to-one laptop environment. Circumstances of teacher involvement in the pilot programme were varied and not controlled. They found that, as a group, teacher participants had high-level of awareness, management, and impact concerns, yet highest concerns for individual teachers varied.

On his part, Kwarteng (2009) studied the concerns of accounting teachers in implementing the accounting curriculum in senior high schools in Ghana. The study was confined to only

Ashanti and Central Regions of Ghana. It was found in the study that accounting teachers had their main concerns at the awareness and personal stages but low concern at the refocusing stage. Also, Christou, Eliophotou-Menon and Philippou (2004) examined the concerns of some primary school teachers in Cyprus in the recent implementation of a new mathematics curriculum and the use of the accompanying new mathematics textbooks. They found that, the concerns of teachers largely focused on the task stage of the CBAM model. According to Oosterheert, Swennen and van Rijswijk (2005), in each developmental phase of the concerns theory, a certain concern is not exclusive, but dominant to some degree. Accordingly, Both (2010) observed that self, task and impact concerns can occur at one moment in time and return throughout teachers' professionalization, especially if teachers are confronted with new problems and chance upon some opportunities.

Wang (2013) studied the implementation of a new English language curriculum for senior secondary schools in China. The study applied the Concerns-Based Adoption Model to examine the stages of concern and levels of use of the new curriculum of three teachers in a secondary school in Guangdong province. Wang (2013) uncovered that the three teachers held a positive view towards the new curriculum, that their concerns were characteristic of three stages - management, personal concerns and consequence, and that they are implementing the new curriculum largely at two levels - mechanical use and routine use.

In almost each of the researches undertaken, it could be noted that at least one element (awareness, informational or personal) of self-concern was found amidst the myriad of other concerns. Therefore, it is highly like for teachers to develop self-concerns in almost every curriculum implementation. Without deemphasising the possibility of the task and impact concerns, at the early stages of the implementation or where teachers' participation in the planning and development of the programme is limited such implementing agents are more likely generate awareness, informational and personal concerns.

### **3.3 TEACHER CHARACTERISTICS CAPABLE OF INFLUENCING TEACHERS' SoC AND LoUs**

The idea of developing "teacher-proof" curricula (Elbaz, 1991) is capable of breeding resentment on the part of teachers. Kwarteng (2009) further found that accounting teachers in Ashanti Region had high awareness but low refocusing concern. Albeit, their counterparts in Central Region peaked at self and refocusing concerns. Indeed, accounting teacher concerns

are context specific and thus fidelity of implementation exists in Ghana in principle but not in practice. Accounting teachers who may attempt to implement the curriculum may have to mediate it with their unique attributes. The extent to which the change affects teachers is hypothesised to be a function of their teaching experience, academic qualification and professional status. Teacher motivation and disposition to implement the curriculum are often impacted by their peculiar attributes. These variables regulate the concerns that teachers have and their preparedness to implement the change. Specific studies that captured these variables and teachers' concerns are discussed.

### **3.3.1 Teaching Experience**

Marsh and Willis (2003) observed that Fuller identified a developmental sequence through which pre-service teachers passed as they become more experienced. Therefore, teachers' concerns are closely tied to teaching experience. Confirming this assertion, Christou, Eliophotou-Menon and Philippou (2004) found that there were significant differences in the concerns of teachers across years of teaching experience but not across years of implementation.

An experienced teacher tends to have lesser concerns as compared to less experienced ones. Teaching experience serves to enhance a teacher's potential and ability to easily understand any change. But Myers and Myers (1995) observed that the beginning teacher has high hopes of achieving performance standards that are rather ideal. However, by the close of the first year of teaching many teachers realize that their dream was only a mirage. Many starting teachers hope for intrinsic rewards and as a result, in spite of the challenges they may face sacrifice their leisure time to accomplish a task. In such instances, they try their possible best to understand the change even if it calls for consulting other experienced teachers. The need for achieving high standards of performance is written into the expectations of many experienced teachers as well. When their expectations come true they become contented and intrinsically motivated to do more or at least maintain that level of performance.

Using concerns-based theory, Lau and Shiu (2008) conducted a study to assess teachers' concerns regarding the use of paired work in a large-scale oral assessment in Hong Kong. Results from one-way analyses of variance (ANOVA) indicated that participants' teaching experience had a significant influence on *Stage 6 (Refocusing)*. Teachers who had 6 – 10 years of teaching experience also were more concerned about refocusing the innovation

( $F=4.672$ ,  $p<0.05$ ) than their peers. In this study, teachers who had the most intense concerns in Stage 6 tend to be teachers who are younger and have less teaching experience. Another set of ANOVA tests identified participants' experience as an Oral Examiner had a significant influence on *Stages 4 (Consequences)* and *Stage 5 (Collaboration)* ( $p<.05$ ). Oral Examiners who were familiar with the oral assessment procedures and had previously conducted the assessment were less concerned about the impact on students or the need to work with other teachers. In contrast, novice teachers had a greater concern for student consequences and were more willing to collaborate with other teachers. In view of these, Lau and Shiu (2008, p. 9) recommended that "If teachers, in particular younger teachers or teachers with less than 10 years of experience, can be persuaded of the innovation's value, they may begin to move towards making a preliminary decision to adopt the innovation". Facilitating this requires some coaching and mentoring by much experience teachers to help them appreciate the innovation before the attempt to implement it. Unsupported inexperienced beginning teachers may grapple with the innovation for some years until they will be comfortable with it, however, such teachers will not go beyond the consequence level (Sweeny, 2003). Lack of thorough understanding of the innovation stemming from inexperience serves as a complete barrier to having much higher concerns. This implies incompetence. But Samarakoon and Rajapakse (1985, p.19) recommended "In order to alleviate any further deterioration of the teaching profession, and to pep up teacher morale, it is vital that a progressive course of action be undertaken immediately". Teachers must be well qualified, trained and have the right experience to be enabled to sail through the stages. Yet, Ankomah and Kwarteng (2010b) found that teaching experience is independent of accounting teachers' concerns about the accounting curriculum.

Alshammari (2000) undertook an investigation to assess among others the influence of teaching experience on teachers concerns as they progress through the implementation of information technology curriculum in Kuwait which revealed that teachers' concerns are not related to their teaching experience. The work of Marso and Pigge (1989) which involved three groups of student teachers and three groups of in-service teachers indicated that teachers' concerns change in hierarchical order based on their level of experience. It was concluded that concerns of teachers during teacher preparation and 5 years teaching experience had shifted from self to higher task concerns; however, impact concerns, as opposed to Fuller's theory, were stable and highest among all groups.

### **3.3.2 Academic Qualification**

Societal expectations and self-contentment compel teachers with comparatively higher academic qualifications to live and perform beyond their colleagues with much lower qualifications. The expectation of taxpayers is to have a system of accountability of the stewardship they entrust in the hands of policymakers and specialists. Teachers by their professional training as specialists are expected to bring their expertise to bear to bring about desired learning in students. They are accountable to the various stakeholders of education since “they are well placed to observe the reaction of pupils to different instructional context” (Pratt, 1980, p. 82). Parents and other stakeholders in education repose faith, trust and confidence in highly educated and well qualified teachers to deliver as expected of them, as they are considered competent. Even the teachers with lesser qualification expect their highly educated counterparts to know and perform better.

The characteristics of the change may require teachers to update their skills and knowledge in order to deliver in accordance with the dictates of the change (Elmore & Sykes, 1992; Apple, 2004). Accordingly, Darling-Hammond and McLaughlin (1995) suggest that staff development provides occasions for teachers to reflect critically on their practice and fashion new knowledge and beliefs about content, pedagogy, and learners. The result of this may be the attainment of higher academic qualification. Academic qualification and training are terms that are often used side by side. The level of training or qualification attained by teachers may have an impact in their bid to adopt and use an innovation as desired. The avenues for professional development may take the form of providing opportunities for advanced academic study at the graduate level, sponsoring teachers to attend conferences and workshops, and in-service training programmes. The ultimate goal of this exercise is to equip them with the current knowledge and skills that will make them up to the task. Many teachers respond to this with great energy, tenacity and enthusiasm when they are immersed in new ideas on their own teaching and learning abilities and provided with opportunities to express themselves honestly. The quest to getting an in-depth knowledge about this requires that a look is taken at some empirical evidences as revealed in some studies.

To innovate an educational system or a part of it, Darling-Hammond (1990) recommended that a nation must consider the educational goal that all teachers will have access to high-quality professional development, and they will have regularly scheduled time for collegial work and planning. High-quality teaching is the central investment of many schools. Most

education budgets will be spent on classroom teaching. There is a need to reinvent teacher preparation and professional development if these goals are to be met.

Several studies have been undertaken to understand the relationship between various training programmes and teachers stages of concern. In investigating the developmental concerns of 240 teachers who attended a science-training programme from 1 to 3 years, Goldsmith (1997) found that teachers develop higher levels of concern as they experience increased staff development. Vaughan (1997) found that there were significant differences in teachers' concerns before and after the training programmes to strategically position teachers to be tune with innovation. On-the-job training programmes specifically designed to promote understanding and consequential adoption of an innovation are but only an aspect of the total development of a teacher. The conclusions of the separate studies conducted by Goldsmith and Vaughan is evident of the fact that on-the-job training improves teacher concern. Although such training programmes may not come with an award of diploma or degree certificates, they facilitate the adoption process. However, the acquisition of higher knowledge tends to bless the student teacher with an avalanche of knowledge which may include most of the topics covered in the training programmes. Ordinarily, the curricula of higher educational institutions or degree programmes have experiences that reinforce the previous knowledge to provide opportunities to acquire new experiences. It is also possible that the experiences from such educational efforts may do little or nothing at all to support the delivery of the innovation. This is in line with the result of Hossad's (2007) investigation that there was no difference between teachers' academic qualification and their beliefs and attitude of the degree of influence exercised by stakeholders in education.

Higher professional or staff development schemes encourage teachers to enhance pedagogical skills and knowledge of subject matter. According to Darling-Hammond and McLaughlin (1995), staff development also means providing occasions for teachers to reflect critically on their practice and fashion new knowledge and beliefs about content, pedagogy, and learners. This provides ammunitions for teachers who have sought higher academic qualification to battle any educational phenomenon with relative ease of understanding and effort. Taken for granted that teachers have the same length of experience in teaching, advanced studies may compensate for the training programmes required for a thorough appreciation of the innovation. Most of the training packages are included in the curricula of institutions that offer advanced programmes. Hence in lieu of training, which improves teachers' concerns,

higher academic qualification will cater for them and put them at par with teachers, who have undergone some training, with lesser qualification. However, according to Ankomah and Kwarteng (2010), academic qualification does not make any difference in the concerns of accounting teachers about the accounting curriculum.

The need for achieving high standards of performance is written into the expectations of many highly educated experienced teachers. They perceive themselves as better placed to achieve maximum result and think themselves as role models. They are the “Dons” of the institution. Frase (1992) makes a revelation that there is overwhelming research evidence, that teachers with higher academic qualification enter teaching to help young people learn, that their most gratifying reward is accomplishing this goal. Such teachers will trade anything for redeeming their reputation that they are well qualified and thus need no further ordinary training and direction. Societal expectations and self-contentment push teachers with higher education to perceive themselves as superior to others in all endeavours. Accordingly, they defy all odds and strive for late task and impact concerns in their bid to make a difference. This is psychologically, rather than professionally driven. However, most of them may act with a professionally genuine intent. Academic qualification provides the impetus to wittingly accept and implement an innovation. It provides change participants with the needed orientation to actively engage in the implementation of an innovation. Due to their great learning and multiple encounters with academics, teachers with increased qualifications are afforded the opportunity to supplement work-related factors to practice their craft successfully. Teachers with higher academic qualification tend to develop a positive outlook and psych up their enthusiasm in the adoption process. They progress quickly and smoothly in the stages of concern (Kwarteng, 2009). As a result of this quest highly qualified teachers endeavour as much as possible to deliver the highest quality of instruction to their students.

### **3.3.3 Professional Status**

The professional status of the accounting teacher may have an impact on their concerns about the accounting curriculum and their beliefs and attitude about the degree of influence exercised by various stakeholders in education. Untrained accounting teachers who for one reason or the other but principally due to economic hardship occupy themselves with teaching as the next available job might perceive themselves in the *transit zone* and therefore lack commitment to the profession as opposed to professional accounting teachers. The untrained teachers most of whom majored in business administration or commerce did not

originally have teaching in their career aspirations. It is only ordinary that they make a living in the interim with teaching whilst they await their choicest jobs. The low commitment of the untrained accounting teachers coupled with the apparent lack of training and certification in professional education has a retrogressive effect on the quality of education.

Training improves teacher motivation; the lack thereof militates against successful professional conduct. Trained professional accounting teachers tend to develop higher concerns and move through the stages smoothly and swiftly. This is as a result of their increased morale with relatively better conditions of service. They are also better placed and well equipped with the right professional outlook to facilitate implementation of an innovation. Untrained accounting teachers, on the other hand, lack the professional skill to deliver the change in accordance with programme dictates. They may be subject specialists but unproductive teachers. Comparatively, such teachers may have the content but lack the pedagogy to effectively adopt the pedagogical content knowledge of accounting in classroom interactions.

Farooq and Shahzadi (2006) evidence this claim that the teaching of trained teachers had significant impact on the mathematics achievement of the students. Students of trained teachers are better performers than the students of untrained teachers. Nevertheless, Hall and George (1978) analysed the work of Fuller and opined that there is a sequential pattern hypothesised to be a developmental process commonly experienced by all teachers, not unique to teachers in a particular professional education programme. The literature on change explains further that teachers, irrespective of their orientation or professional training, go through the same sequential or developmental process in the bid to implement an innovation. This was confirmed by Ankomah and Kwarteng (2010) who found that there was significant difference in the concerns of trained and untrained accounting teachers.

Accordingly, the professional status of accounting teachers is not a determinant of their pedagogical readiness. Prudent inferences from the conclusion of the study in relation to the quality of delivery of accounting instruction suggest similar quality levels in the two groups of accounting teachers. As a result, it could be concluded that improved pedagogical content knowledge is either not a factor of effective accounting teacher training or the untrained teachers have learnt a great deal on the job. It is possible to infer that the professional accounting teacher training is a suspect of quality defects.

### 3.3.4 Gender

Pigge and Marso (1987) distinguished several teaching fields, including elementary, secondary, special education and specialised areas like art, music, health and physical education and related them to changes in attitude and concerns about teaching. From the results of Pigge and Marso, gender was considered to have a significant impact on concerns, while Ghaith and Shaaban (1999) found no effect. Ghaith and Shaaban further explored the relation between selected teacher characteristics, teacher efficacy and the perception of teaching concerns, concluding that the concern theory is in need of further research, as their findings indicated that teaching concerns are more likely to be context specific rather than universal.

## 3.4 POPULARITY OF COST ACCOUNTING IN SENIOR HIGH SCHOOLS IN GHANA

Kwarteng (2009) found among other things that most senior high schools were doing away with cost accounting on the grounds that most tertiary institutions did not require that for entry into their programmes. Some schools also wanted to provide a broad background to their students so that they could pass as either business or arts students, the author noted. Hence they opted for combinations such as accounting, business management, elective mathematics and economics instead of substituting any of the latter two with cost accounting. This was done against the will of most students. However, as one assistant headmaster remarked, *a majority of the students were motivated by their desire to fulfill the entry requirements into University of Ghana (UG) admissions which does not consider cost accounting.* (Kwarteng, 2009). It could also be an attempt to copy from the Nigerian senior high school system which reserves cost accounting to be studied at the tertiary level. Lewy (1977) advised that changing and keeping up with time is essential to promote utility value and usefulness. Since the idea of what constitutes education and good life has changed, there is need to direct educational efforts to live up to the times (Zais, 1976).

Kwarteng (2009) further intimated that, this has led to resentment on the part of most accounting teachers, not only cost accounting but financial accounting teachers as well. Some of them feared that it was an attempt to rob them of their daily bread. He recounted one of the accounting teachers remarked that through this cost accounting would systematically be phased out. As a result, some graduate accounting teachers from the University of Education,

Winneba (UEW) who used to teach cost accounting had to take up either financial accounting or core mathematics in order to stay at post.

In recent times news on the waves have shown that lots of students in the senior high schools in Ghana prefer to be associated to the with the Sciences and the Arts. They defend their claims with the view that most National activities do not project the significance of affiliating oneself to the Business' and as such do not see any reason for which they should relate with such an alienated programme of study at the secondary cycle. Moreover, those few ones who find themselves in the Business' also project their ignorance of having a course combination that does not project the reality on the job market so far as Cost Accounting is concerned due to reasons such as the departmentalization of the Accounting Course; authentic Business educational Course combination structure; the teacher factor; the problem of mutual co-operation; non-availability of internationally recognized legislative instrument.

Business subjects being taught in senior high schools are Financial Accounting, Business Management, Economics and Cost Accounting. In most senior high schools, Cost Accounting as a major Business Subject is made an optional subject. Emphasis is placed on Financial Accounting, Economics and Business Management. Students have the choice of selecting either Cost Accounting or Elective Mathematics to the other three major Business Subjects. This means that, if more students opt for Elective Mathematics, Cost Accounting will not be taught throughout the three year stay of that batch of students in the school. Also, in some schools, Cost Accounting will not be taught at all because such school has Financial Accounting, Business Management and Economics as the only elective subjects for business students.

According to Taba (1962), the organization and development of the curriculum should provide for both horizontal and vertical integration to reinforce concepts taught and studied. Studying financial accounting independent of cost accounting served to impact negatively on instruction and subsequent learning (Kwarteng, 2009). Thus the role of financial accounting teachers would be intense and difficult to execute as students lacked the needed background in cost accounting relevant to facilitate the learning of financial accounting. Most cost accounting teachers miss the mark in the instructional intercourse. Accordingly, Kwarteng (2009) noted that they fail to do what is most necessarily consistent with the delivery of the subject.

To study real-world problem is most perennial than just teaching and learning theoretical concepts of cost accounting. This is because, the cost accounting teacher has to understand that his/her students have to go to corporate practical area where he/she has to control inventory, reduce resources cost and control cost. Students can appreciate and internalise these most appropriately if the accounting teacher presents more practical and concrete examples reflecting the real work situations.

A case in point is the use of infographics in teaching break-even analysis by collecting and creating relationship of all formulas with each other for students observe the pattern and connections among the various variables and how they influence each other. To make a difference and to stand out tall among peers, the cost accounting teacher needs to undertake extra and extraordinary instead of copying or duplicating others and their efforts. Strange it may sound, cost accounting teachers dispense with the subject according to script instead of engaging students with realistic concepts in the corporate world. This is typical of the traditional instructional delivery where cost accounting teachers heavily rely on textbooks to explain concepts. Indeed, students' engagement in cost accounting lessons has lost touch with industrial practice. The only means of assessing and strengthening students' understanding is by engaging them in a series of class exercises which are merely bookish and overly academic. Hence, students' apparent lack of interest in the subject resulting from their passivity in the lesson delivery and the lack of touch with industrial relevance of the subject matter.

Teaching is a challenging career. It will be more challenging, if you have to teach cost accounting because of the rational for the subject. Cost accounting as a discipline in the business programme at the senior high school level equips students with the basics of cost awareness and cost reduction to ensure creation and cautious use of resources in small and large scale organizations (cost accounting syllabus). It has been confirmed by Lightbody (1995) and Haskins and Crum (1985) many students perceive cost accounting topics to be more difficult to learn and understand. This is due, in part, to the fact that most students do not have practical work experience in a manufacturing environment. In addition, students might have difficulty relating to textbook practical manufacturing-centered examples and problems. In view of this, apparently, the Accounting Education Change Commission (AECC, 1990) recommended that teachers actively engage accounting students in the

learning process whereby accounting teachers emphasise and actually live by learning by doing. This issue could be addressed by accounting teachers through the creation of “active-based” learning exercises that engage students in the teaching and learning process (Burns and Mills, 1997; Lightbody, 1997).

### **3.5 ACCOUNTING TEACHERS’ AND STUDENTS’ ATTITUDE AND BELIEFS TOWARD ACCOUNTING**

Tan and Laswad (2006) examined the factors that impact on students’ intentions to study accounting and non-accounting disciplines. A survey of a sample of business students enrolled in an introductory accounting course in a New Zealand University was conducted to gather data about students’ envisioned academic majors, and their beliefs and attitudes towards studying in accounting and non-accounting subjects. The results show that three factors (personal, referents, and control) are elements of students’ intention to study accounting among other business subjects. Further analysis revealed that the students’ major intentions are influenced by key referents’ perceptions. In particular, parents appear to have a stronger influence on students’ intentions to major in accounting. Comparisons of differential personal perceptions by accounting and non-accounting students revealed that accounting students hold positive perceptions of some of the qualities of the study of accounting and the accounting profession. Significant differences were also found in the control perception between accounting and non-accounting major students. This earlier study was extended by Tan and Laswad (2009) by surveying the same students at the beginning and end of their academic programme regarding their major choices, beliefs and attitudes towards studying accounting or a non-accounting subject. Using the theory of planned behaviour, the objectives were to compare intentions with behaviour in relation to studying accounting and other business subjects and to examine changes in attitudes and beliefs between the beginning and end of study. The results indicated that many students choose subjects that are consistent with their intentions at the beginning of their study. Nonetheless, some students also changed their intentions and subjects. Some attitudes and beliefs change over time but the major choice tends to remain relatively stable.

Tan and Laswad (2009) concluded that a higher proportion of accounting students than other business students decide on their major prior to university study. Therefore, students’ preparation at the senior high school should be of particular interest to all stakeholders in education. It is perennial for attention to focus on cultivating positive habit in students for

them to embrace both financial and cost accounting before students vacate the senior high school. Frantic efforts should be made to position the cost accounting course, not just financial accounting, to help increase the popularity of the subject among the entire students body.

A different investigation was conducted by Sugahara and Boland (2009) into the major factors that influence Japanese tertiary business students' vocational choice. A questionnaire-based survey was administered to both accounting and non-accounting students in Japanese tertiary institutions at the undergraduate and graduate levels. It further shows that the major influence affecting vocational choice for accounting students was based on intrinsic values. Non-accounting students indicated career prospects as the major contributing factor when choosing a career. These results are very important for accounting educators as they attempt to address the current unpopularity of the accounting profession.

However, in most situations, accounting teachers fail to recognise the value of their profession relative to other professions. A case in point is the US study replicated by Wells and Fieger (2005) by surveying NZ high school teachers to compare their perceptions of the accounting profession to some other professions such as engineering, law and medicine based on some 24 attributes of a profession. The findings confirmed the US study that NZ high school accounting teachers have a low opinion of accounting as a career option for university-bound high school students.

There is clear case of betrayal by the accounting teachers whose loyalty to the accounting profession is expected to be above reproach. Yet Sugahara and Boland (2009) intimate that major influence affecting the choice for accounting students was based on intrinsic values. If accounting teachers are not enthusiastic about the accounting profession, the possibility of encouraging students to take up accounting career and even the accounting teachers' own pedagogical outlook exhibiting their preparedness to teach accounting is highly doubtful. Even if accounting instructions are not closely monitored, the discovery of the demeaned reputation of the accounting profession by the very teachers who are to promote the subject is evident of the suspicious ineffectual instructional intercourse that plague senior high school accounting lessons.

### **3.6 FACTORS INFLUENCING CURRICULUM IMPLEMENTATION**

Booth, Lockett and Mladenovic (1999) investigated the approaches to learning paradigm in the education literature to investigate the learning approaches of accounting students from two Australian universities as compared to previously reported data for Australian arts, education and science students. They as well investigated the impact of accounting students' approaches to learning on their academic performance. They found that accounting students had relatively higher surface and lower deep learning approach. This might stem from the extent to which the curriculum has been implemented and the factors that might contribute to its success or otherwise. These factors as identified in various studies have an actual or potential influence on the extent of the implementation of the curriculum. These factors can either drive or inhibit the successful delivery of the curriculum. Their effect on the curriculum implementation is not absolute. It is merely a measure of the extent to which they influence the curriculum implementation progress.

Indeed, not all the factors that were reviewed in the literature were situated in accounting education, there is a high tendency of having an idea about the peculiar challenges of accounting education from those in the other subjects. This is further authenticated in the fact that school (African) contexts of where the other studies not related to accounting were undertaken is similar to that of Ghana given the standard of education and the state of economic growth in the various African countries. So an assessment made in this direction might not deviate significantly from what circumstances in Ghana would have been. For instance, Tuwei (2013) investigated the school based factors influencing implementation of secondary school mathematics in Londiani district, Kericho County in Kenya. Studying a sample of 22 principals, 314 students and 60 mathematics teachers, Tuwei (2013) concluded that the implementation of the curriculum suffered inadequacy textbooks for students; large class size evidenced in average teacher/student ratio of 1 to 93. In addition the author cited wide variation in the head teacher perceptions regarding the meaning of mathematics curriculum implementation but majority of them thought the mathematics syllabus was being taught in their school at the right depth and width including the quality of coverage. Most schools also had effective or sufficient instructional supervision both from the principals and district school inspectors. School based actors such as teaching methods, resources; low teacher and student motivation, technical language used in mathematics were found to be key in explaining the unsatisfactory implementation of the mathematics curriculum.

Teachers' methodology dealing with mathematics curriculum implementation, availability of text books in relation to curriculum implementation teachers and learners' motivation and technical language used in mathematics were found to negatively influence mathematics curriculum implementation in Londiani District. However, Wang (2013) was brief in identifying lack of teacher training, and inadequate teaching time to be the main factors that hinder the implementation of new curriculum in classrooms. Gathumbi (2013) strengthens this discovery by extending such factors to cover inadequate or lack of training for teachers. As well, his study further revealed that learner characteristics such as their attitude negatively influenced curriculum implementation.

According to Molla and Lee (2012), the success of curriculum implementation depended on the programme's flexible structure, developers' enthusiasm, in-built training for implementing teachers and the student' interest. Accordingly, they identified that factors contributing to a rather low fidelity were prevailing high-stake assessment measures, time-constraint, large teacher turnover and inadequate training. But according to Makena (2011), the level of a teacher's education does not influence teaching. However, the availability of instructional materials in schools and the method of instruction which in turn influences a teacher's workload affect the quality of teaching and learning in the classroom. Teaching strategies influence teacher effectiveness in curriculum implementation hence teachers should be able to choose the right strategies, Makena (2011) added.

In attempt to add to such factors of curriculum implementation, Owino (2013) conducted a study to determine the influence of teacher preparedness on the implementation of the life skills education curriculum in public primary schools in Kehancha division, Kenya. Additionally, the study explored whether attitudes of teachers, learning resources, and instructional supervision influenced the implementation of the curriculum. After surveying 9 head teachers, 95 teachers and 300 pupils, Owino (2013) realised inappropriate teaching approaches, poor conceptualization of subject by the teachers, limited human resource, lack of school supervision, poor teacher preparation, poor choice of teaching, limited use of instructional resources and negative attitude of teachers and pupils towards the subject taught and learnt. In addition, Kiplagat (2012) observed that administrative experience and level of education of administrators were the main personal characteristics of administrators influencing implementation of curriculum change. However, it was further established in that head teachers' training and workload, learning materials, attitude of teachers and adequacy of

facilities were the key institutional factors influencing implementation of curriculum change. Yet, Juma (2009) stressed resource quality, not just its availability, as well as genders stereotyping, low teacher motivation, schools tradition and low student motivation to be key in explaining the unsatisfactory implementation of the curriculum.

Rutere (2012) was rather emphatic on teacher-related factors and how they influence the implementation of the curriculum. To establish this, Rutere (2012) conducted a study to establish the effects of teacher-related factors on the implementation of integrated Kiswahili curriculum in public secondary schools in Nkuene division. The study found that teacher's pre-service and in-service training, their academic qualifications, their professional qualifications and their teaching experience influence the implementation of curriculum.

Focusing such factors influencing curriculum implementation on accounting students' learning, Adler, Milne and Stringer (2000) conducted a survey of accounting teachers' perceptions in identifying and overcoming obstacles to learner-centred approaches in accounting education. Through face-to-face interviews, they surveyed five individuals from four institutions all of which are approved by the Institute of Chartered Accountants of New Zealand to provide accounting degrees on the South Island of New Zealand. The interview and survey data pointed to three broad groupings of impediments: a lack of student readiness, inadequate teacher support mechanisms, and non-reflective teacher practices. The nature and range of these impediments casts doubts on the idea that the lack of learner-centred approaches can be explained in such simple terms as accounting teachers not being given sufficient time to translate the professions' calls for change into practice. Instead, positive change is only likely to be realized through the adoption of a more vigorous and proactive approach. In discussing the necessary changes in accounting curricula, Ainsworth (2001) noted that accounting curricula must emphasise communication skills (oral communication, written communication, interpersonal communication and listening), personal skills and attitudes (integrity and learning-to-learn), and problem-solving skills (computer applications and critical thinking). This way, the totality of the students' development is more likely to be realised.

Taking it from a different stance, Buckhaults and Fisher (2011) identified accounting anxiety for the teacher and the student as a possible explanation for the decline in accounting education and investigated new methods for teaching accounting at the secondary and

postsecondary levels that will increase interest in accounting education as well as decrease accounting teacher and student anxiety about accounting. They advised that by becoming more familiar with course material and incorporating new methods for teaching accounting, accounting teachers can reduce such anxiety for themselves and their students thereby increasing students' learning.

Some forward-looking researchers might spotted this well ahead of time. They started subjecting the spate of accounting education in their countries to scrutiny apparently to determine the missing link between the desired quality and the achieved quality in accounting education. It might be in this light that Ahmad and Gao (2004) studied the changes, problems and challenges of accounting education in Libya following from which they noted the following as the key challenges facing accounting education: a shortage of qualified accounting academics; inappropriateness of imported syllabuses to the peculiarities of the economy; the unfit marriage of academic teaching and professional training in the accounting curricula; and inadequate accounting research. Striving further and restricting such factors to the classroom, Mohammed (n.d.) sought to determine the challenges of teaching financial accounting in Nigerian secondary schools by studying the Gombe State. The study involved 9 secondary Schools that offered financial accounting. The study found that some of the challenges included; poor academic performance; haphazardly implementation of the accounting education and that the accounting education being treated with levity and lack of adequate instructional materials and/or poor ineffective teaching method.

In conclusion, de Lange and Watty (2011) studied several reports in accounting education and concluded that the main challenges articulated in these reports portray a sector suffering from the combined pressure of a large student enrolment, high student-to-staff ratios, an inadequate funding model, and an ageing academic staff profile. In fact, all the factors of curriculum implementation reviewed in the study are summarised by Assude, Buteau and Forgasz (2010) into personal, institutional, symbolical and didactical resistances. This classification comprehensively covers all the factors, actual or potential, influencing the level of accounting curriculum implementation. Gauging the factors from this classification offers simplicity in shifting attention to the area of concern. For instance, if the issue has to do with teacher motivation, instructional resource availability, then time and attention would quickly be drawn to the sector responsible for such institutional elements to act as desired. This readily allows structures to be harmonised in the educational hierarchy and fosters the

essence of the organisational structure built into the educational enterprise. In this way, educational workers and other stakeholders will be more responsible as they are made to be accountable for whatever legitimate conduct expected of their offices.

### **3.7 SUMMARY: THE GAPS AND EARLIER CONCLUSIONS**

Teachers as agents of curriculum change play a vital role in helping the curriculum to succeed. In centralised education systems where their views are not factored into the development of the curriculum, teachers become disillusioned to pay allegiance to the change. To increase the success rate of the change policymakers, school administrators and those charged with governance and supervision of the curriculum monitor the implementation progress. Frequently used monitoring tools include action research, comprehensive school reform programmes, curriculum alignment and CBAM. However, the theoretical framework that guided the study is the CBAM.

According to Fuller (1969), teachers pass through seven stages of developmental concerns to implement any innovation. Such concerns span from awareness through informational, personal, management, consequence, collaboration to refocusing. Available literature on curriculum change that involves the use of the CBAM bordered on factors such as teacher experience, qualification and gender as determinants of teacher concerns. Many of such studies (Lau & Shiu, 2008; Sweeny, 2003; Pigge & Marso, 198) confirmed Fuller's study that longer teacher experience improves teacher concerns. Nevertheless other researchers (Alshammari, 2000; Kwarteng (2009) and Ankomah and Kwarteng (2010)) uncovered that teachers' concerns are not related to their teaching experience per se. The works of Goldsmith (1997), Vaughan (1997), Hall and George (1978), Farooq and Shahzadi (2006) investigated the influence of teacher qualification on teacher concern and subsequent performance. Alshammari (2000) investigated whether teachers' concerns are independent of their gender.

This study sought to confirm some of the conclusions reached in earlier studies conducted by some of researchers. Part of the study (i.e. stages of concern of accounting teachers in implementing the accounting curriculum and the associated assumption) was a follow up on an earlier study undertaken in 2009. This was the second attempt to investigate the phenomenon in senior high schools in the context of Ghana. However, teachers' assessment of the of the accounting curriculum configuration and the levels of use of the accounting

curriculum was the first assessment, as discovered in the literature, to be staged and executed on the use of the senior high school accounting curriculum in Ghana. As well, the review of related literature revealed that no study had been conducted the assessment of examiners' concerns about accounting students' performance and teacher preparedness in teaching cost accounting. The study, thus, embodied a lot of novelty and contributed immensely to pushing further the frontiers of knowledge whilst emphasising improvements in practice.

## **CHAPTER FOUR**

### **METHODOLOGY**

#### **4.1 INTRODUCTION**

This chapter describes the research design, population, sample and sampling procedure, instruments for data collection and administration of instruments. It also describes how the data gathered were analysed.

#### **4.2 RESEARCH DESIGN**

The study drew from both quantitative and qualitative research traditions. The study was a descriptive survey. The descriptive survey provides opportunities for researchers to gain valuable insight into the existing state of a phenomenon. The study explored the standard of quality of accounting education as it existed in senior high schools in Ghana. According to Leedy and Ormrod (2005), survey research involves studying and gathering information from or about groups of people in order to state their answers or responses; the ultimate goal of which is to make a generalization to the entire population. By employing descriptive survey, the researcher wanted to gain insight into the extent to which pursuance of senior high school accounting education in the country is going on as planned without compromising quality. This was carried out by gathering from accounting teachers their views about the quality of senior high school accounting education. Macmillan (1996) affirms that in a survey, the investigator selects a group of respondents, collects information, and then analyses the information to answer the research questions (p. 182), the responses from participants helped find answers to questions that have been posed. Participating accounting teachers' responses to items were tabulated, summarized, graphed, tested with Analysis of Variance and discussed in order to make sound conclusions.

#### **4.3 POPULATION**

There are three key stakeholders-accounting students, employers and accounting teachers-whose viewpoints are most critical in the discussion of quality accounting education. However, only accounting teachers and students were targeted to be involved in the study. Most considerations of the other stakeholders proved that their assessment of the system of quality of accounting education at the senior high school might be quite inappropriate because they are not so engrossed in the implementation of the senior high school accounting curriculum. Ordinarily, employers are merely placed to evaluate the accounting graduates who might have graduated from tertiary institutions. This is to imply that senior high school

graduates are barely employed for their employers to critically determine their worth to gauge the quality of such accounting education. Although it was expected that graduates from senior high schools in Ghana become productive and employable that purpose has since been defeated. Currently, just like any other senior high school graduate, accounting graduates from senior high school are hardly employed on the basis of their senior high school certificate. If they are even considered they are involved in sedentary and menial jobs that do not require any special skills in accounting. Therefore, it might not be so useful in engaging employers in the analysis of quality senior high school accounting education for the barest reason that senior high school has become merely a transitional point of advancing a career.

With recourse to Theory X, it is established that the average human under supervision does not have an inherent likeness for work. People under supervision might like to be instructed, coerced and directed to work. Accordingly, students might be the only consumers who would like to be cheated in the classroom because they might want to be engaged in playful activities which are however inconsistent with quality education. Without demeaning Ghanaian students, most senior high school students are lazy and would avoid work when given the opportunity. Being the ultimate consumers of accounting education, most senior high school accounting students' cravings may not be the most desired in the instructional process. Although the needs of students are paramount in curriculum planning, relying on students as the only key stakeholders for inputs in the creation and determination of quality accounting education might be disadvantageous. As a result, students by their natural habits might not have an objective analysis of the system of quality built into the accounting education. It was therefore prudent to concentrate on both accounting teachers and students.

As a result, the study focuses on all accounting (i.e. financial accounting and cost accounting) teachers and students who are currently using the senior high schools accounting curriculum. In classrooms nationwide, accounting teachers play a prominent role in preparing students to become responsible citizens, capable of making the astute economic decisions that will benefit their personal and professional lives (National Standards for Business Education, n.d.). Accounting teachers have a duty to introduce students to the basics of personal finance, the decision-making techniques needed to be wise consumers, the economic principles of an increasingly international marketplace, and the processes by which businesses operate. Thus the views of accounting teachers are considered as critical to any discussion around quality in accounting education.

### **4.3.1 Target Population**

In Ghana, there are 413 public senior high schools that offer accounting (West African Examinations Council (WAEC), 2011). The target population for the study was the accounting teachers and final year accounting students in these 413 senior high schools. Interestingly, there was no statistics available on the number of accounting teachers and students available (Kwarteng, 2009). As those closest to the teacher-learner interface, these accounting teachers and the final year accounting students were uniquely placed to comment on the changing nature of accounting education. For this reason, even though, a teacher may be trained as an accounting teacher, if s/he teaches subjects other than financial accounting or cost accounting at the senior high school that individual was not allowed to participate. On the other hand, teachers may train in different disciplines in so far as they currently taught accounting they were targeted. The focus of this investigation was on accounting teachers and final year accounting students who were implementing the new accounting curriculum at the various senior high schools in Ghana.

### **4.4 SAMPLE AND SAMPLING PROCEDURE**

Multi-stage sampling technique was used in the study. This was done at two levels. The first level was the selection of the schools whose accounting teachers would participate in the study. Proportional random sampling was used to select a proportionate number of senior high schools that offer accounting in each Region in Ghana. The West African Examination Council's (WAEC, 2011) register of programmes for public senior high schools was consulted for the selection of schools that offer accounting. This facilitated the identification of accounting teachers to participate in the study. Table 4.1 displays the number of senior high schools that offer accounting in each Region of Ghana; and Figure 4.1 also shows the political map of Ghana.

For the purpose of this study, the country was zoned into three. Thus, each region was captured in one of the three zones as in Southern, Middle and Northern zones. Table 4.1 displays the zones, their constituents and the selected area from which participants were drawn for the study. From each zone, one representational region was selected randomly. Simple random sampling was used to select the three administrative areas from the three zones. This took the form of picking at random pieces of paper on which numbers corresponding to the crafted sampling frame of administrative areas were written. A table of

random numbers was used to eventually select the three administrative areas from the three selected zones.

**Table 4.1: Distribution of Public Senior High Schools in Ghana that Offer Accounting**

Region	Senior High Schools
Ashanti	82
Brong Ahafo	35
Central	49
Eastern	60
Greater Accra	30
Northern	26
Upper East	18
Upper West	14
Volta	64
Western	35
Total	413

*Source: West African Examination Council's*



**Figure 4.1: Political map of Ghana**

Source: *www.mapsofworld.com*

The selection of western (35) from the southern zone, Brong Ahafo (35) from the middle zone and Northern Region from the northern zone (26) implied that accounting teachers and students from a total of 96 senior high schools were involved for the next selection. Thus, the selection of any of these three zones was merely based on equal probability afforded each one of them.

#### 4.5 INSTRUMENTATION

The researcher employed quantitative and qualitative methods of collecting data in this study. Questionnaire, observation guide, vignette and checklist were employed to gather data on the accounting curriculum in use to track the degree of implementation in determining the quality of accounting education.

#### **4.5.1 Quantitative Instruments**

The quantitative tools involved the use of questionnaire and the ICC checklist. Whereas quantitative methods permit gathering of information from large groups yielding generalizable information (Patton, 2002), qualitative methods allow deep digging beneath the surface of broad responses, producing an abundant amount of information from a smaller group of people. Qualitative research gives a holistic view of what is being studied. Its premise depends on interrelationships, where parts are greater than the whole. Qualitative research culminates in the form of a narrative and is imbued with thick and rich description. It is inductive, discovery oriented, and incorporates a flexible yet systematic design. It relies on personal experience and gives voice to perspective and creative synthesis (Patton, 2002).

This study's design involved administering three CBAM instruments: (a) the Stages of Concern Questionnaire (SoCQ), (b) the Levels of Use (LoU) questionnaire, (c) the Innovation Configuration Checklist (ICC) and (d) the Levels of Use interview guide. In addition, some demographic instrument and the instrument on accounting teachers' preparedness to implement the cost accounting curriculum were designed and used. All the questionnaires were integrated into one complete survey instrument. Thus, the survey instrument was in four parts the details of which are discussed below.

These tools were mainly used to streamline the responses due to their scientific nature. They permitted the survey of larger number of accounting teachers and students within a relatively shorter period of time. Such tools were conveniently appropriate as all the respondents could readily respond to them without significant intervention from the researchers. Specific quantitative tools are described below.

##### **4.5.1.1 Demographic Instrument**

The first involved a set of items relating to demographic information of the respondents. These were made up of eight items seeking to know much about the background information of the participating accounting teachers. The use demographic information did not only assist in describing the sample but also helped in the testing of some hypothesis formulated in the study.

#### **4.5.1.2 Levels of Use (LoU) of the Accounting Curriculum Questionnaire**

The second part was designed to elicit responses on the Levels of Use of the accounting curriculum. Also, there was an LoU instrument which was an adaptation of the conventional LoU interview guide and the checklist designed for the CBAM. This facilitated the data collection of accounting teachers' use of the new accounting curriculum. The goal of the Levels of Use (LoU) instrument was to gather enough information from an individual's use of an innovation to assign a level of use. In its completion, the LoU portrays individual variations in the use of an innovation. The LoU instrument has items that are capable of segmenting the respondents into the eight levels of use reflecting the LoU chart. There are a series of items under each of which answers depicted the behaviours portraying an LoU. These questions items assess the user's level based on behaviour categories described in the LoU chart.

Hall, Loucks, Rutherford, and Newlove (1975) propose eight levels of use that range from lack of knowing that the innovation exists to an active and highly sophisticated use of it. In a chart form, the LoU also describes various behaviour categories of the user such as orienting, managing, and integrating. These categories represent functions the user engages in while carrying out the innovation. Below each category are descriptions of the innovation at each level. Individuals may not be on the same level in each category.

#### **4.5.1.3 Preparedness to Teach Cost Accounting Questionnaire**

The third part gathers data on accounting teachers' preparedness to implement the cost accounting curriculum relative to the financial accounting curriculum. This part of the questionnaire used a 5 point Likert scale of *Strongly Disagree*, *Disagree*, *Neutral*, *Agree* and *Strongly Agree* to measure accounting teachers' preparedness to implement the cost accounting curriculum relative to the financial accounting curriculum. In all, there were 15 positive statements that the responding accounting teachers were to respond to. Each item was crafted in the positive form to enhance uniformity and to permit the use descriptive statistic to describe and reach a logical conclusion with the data.

#### **4.5.1.4 Stages of Concern Questionnaire (SoCQ)**

The last part of the questionnaire was an adaptation of an English version of Hall, Hord and George's (1979) 35-item Stages of Concern (SoC) and Levels of Use (LoU) questionnaires designed and recommended for Concerns-Based Adoption Model (CBAM) of curriculum

implementation. Hall, Wallace, and Dossett (1973) developed the SoCQ as a means to quickly score participants' levels of concern. The SoCQ is based on the stages of concern (SoC) that addresses the affective side of change, focusing on people's reactions, feelings, perceptions, and attitudes when implementing an educational innovation. The SoC, which identifies seven stages or levels of concern, is grouped into three sections: Impact, Task, and Self. Impact is sub-divided into the Refocusing, Collaboration, and Consequence stages. Task is generalized into a Management stage and Self is sub-divided into a Personal and Informational stage. A final stage that is not given a category is Awareness.

Hall et al. (1973) format the SoCQ into three parts: the introductory page, two pages of Likert scale items, and a demographics page. The introductory page explains the purpose of the questionnaire and provides an example of how to complete the form. It also requests the participant to respond in terms of present concerns dealing with the innovation. The 35 items on the Likert scale are generalized to cover any innovation and administered with only the name of the innovation changed on the cover page. The typical American expressions used in the questionnaire were replaced with British vocabulary that the average senior high school teacher in Ghana could understand. Thus, where the term *Faculty* was used in the original questionnaire it was replaced with *Accounting Teachers*. For specificity, wherever in the original questionnaire *Innovation* has been used, *Accounting Education* was used instead. Respondents mark the items on a 0 to 7 scale according to how they felt about each statement at the present time. The numbers in the scale are grouped as follows: 0= irrelevant, 1-2= not true of me now, 3-4= somewhat true of me now, and 5-7= very true of me now. Hall, George, and Rutherford (1998) suggest that the SoCQ typically takes 10 to 15 minutes to complete. The SoCQ administrator may customize this page to accommodate desired space limitations or obtain only necessary information. This section provides useful data for descriptive statistics but because the demographic information has been sought already, the part of the SoCQ was not captured.

#### **4.5.1.5 Innovation Configuration Checklist (ICC)**

The Research and Education Center for Teacher Education at the University of Texas at Austin used the Innovation Configurations to identify the major components of an innovation and then describe the observable variations of each component (Hall & Hord, 2001). The researchers found that individuals used different parts of an innovation in different ways. When looked at as a whole, different configurations emerged depicting different innovation

usage. The Innovation Configuration Checklist (ICC) is the tool that represents the different parts of the innovation and its variations. Heck, Stiegelbauer, Hall, and Loucks (1981) list various applications for the Innovation Configuration such as in a dissemination context, illustration of materials, strategies, and management tools, description of operational patterns, evaluation, staff development, and research. For this research, the ICC concentrated on illustration, management tools, description of operational patterns, and evaluation so that basic elements as well as curriculum logistics were covered thereby providing a holistic view of accounting curriculum implementation and the associated quality implications.

Heck, Stiegelbauer, Hall, and Loucks (1981) outline six steps involved in constructing the checklist: identify innovation components, identify additional components and variations, refine checklist, test the checklist with few users, finalize checklist, and major data collection. In view of this, five major components of the accounting curriculum were identified. These were Identification of Content to Teach in Accounting Class, Assessment Procedures in Accounting, Teaching and Learning Resources in Accounting Instructions, Goals and Objectives of the senior high school accounting course and content of the accounting curriculum. Each of these major components has specific variations items which demanded the participants to determine whether there is evidence that the component is included in the accounting curriculum; or the accounting curriculum mentions content related to the component; or the accounting curriculum mentions component and provides guidelines on its application. These levels of responses were given scores from 0 to 2 respectively.

To confirm that these components were appropriate, two academics of the School of Business, University of Cape Coast, Ghana, who were parties to the design of the accounting curriculum, were contacted. Their inputs were used to refine the checklist to incorporate all gathered information. The checklist surveyed only those participants that indicated a LoU. Thus, all Non-users were not made to respond to the checklist. The final ICC shows the five major components of the accounting curriculum that are sub-divided into specific issues explored.

#### **4.5.2 Qualitative Instruments**

The qualitative tools yielded qualitative data to contextualise issues of interest to understand them better. In this case, specific assessments of individual responding accounting teachers and students were gathered in such details as to understand and properly gauge the quality in

accounting education. Obtaining such first-hand unrestricted data permitted genuine responses to approach the extent of quality description of the senior high school accounting education. Specifically, the following qualitative tools were used.

#### **4.5.2.1 Vignette**

To gather some more qualitative evidence to clearly understand the phenomena of interest, two different categories of vignette were developed for data collection. One set was developed to gather data from accounting teachers and the other to study the accounting students. The vignette for accounting teachers was made up of four incomplete stories for the teachers to complete. The completion of those stories provided more qualitative evidence on the accounting curriculum configuration, level of use of the accounting curriculum, their preparedness to implement the cost accounting curriculum relative to the financial accounting curriculum and their assessment of the quality in senior high school accounting education.

The vignette for accounting students, however, concentrated on the students' assessment of only two of the six research questions. These are their assessment of the popularity of financial accounting against that of cost accounting and the quality of accounting education they receive at the senior high school level.

#### **4.5.2.2 Instructional Observation**

An unstructured classroom observation was undertaken. The elements of quality of teaching and learning explored in the observation included the general classroom climate, the physical facility, teachers' dressing and appeal, quality of interaction among teachers and students, teachers' mastery of content knowledge, teachers' competence in handling students' questions and contributions, involvement and motivation of students in lesson delivery and teachers' use of appropriate techniques and strategies to enhance students' learning, among others.

In all, 12 classroom observation sessions of 80 minutes accounting lessons each were carried out across 12 senior high schools. Only the accounting teachers and students who were willing to have their lessons observed were observed. Prior discussions were held with the accounting teachers and students to mutually agree on the appropriate time for the observation. Each observation was undertaken under the normal classroom condition. The observer sat in among the students during the class session. The observer positioned himself

at the farthest end of the class so as not to let any minutest activity in the class escape his attention. The observation was recorded with pen a paper which was then analysed into themes to permit appropriate conclusions.

#### **4.5.2.3 Qualitative Content Analysis**

First all the transcripts were be photocopied and read making brief notes in the margin when interesting or relevant information was found. One after the other I went through the notes made in the margins and listed the different types of information found. Then thorough reading through the list was undertaken to categorise each item in a way that offered a description of what it was about. I identified whether or not the categories could be linked in any way so as to list them as major/minor categories or themes. Then after the various major/minor categories were compared. Because there were several transcripts, the procedures described above were repeated for each transcript. After all the transcripts were dealt with this way, I collected all of the categories or themes and examined each in detail to consider if it fitted and it was relevant. Once all the transcript data was categorized into major/minor categories or themes, the list was reviewed in order to ensure that the data was categorised as should be. All the categories were reviewed to ascertain whether some categories could be merged or if some needed to be sub-categorised.

#### **4.5.3 Summary of Instrumentation**

Using a combination of qualitative and quantitative tools would serve to complement each other and reduce the error rate to enhance validity. The weaknesses of each method of data collection were expected to be reduced with the presence of the other method. In as much as specific research questions were unilaterally addressed by only one method of data collection, others lend themselves to the use of a multiplicity of both qualitative and quantitative methods. Table 4.2 summarises the methods of data collection and the respective research questions the methods aimed at collecting data to address.

**Table 4.2: Research Questions and Data Collection Methods**

Research Question	Data Collection Method
How do accounting teachers describe the components of the accounting curriculum they are using and how do their description	Innovation Configuration Checklist (ICC) and ICC Vignette

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affect quality accounting education?

What is the level of use of the accounting curriculum by accounting teachers and how comfortable are they in using the curriculum?

Levels of Use (LoU) of the Accounting Curriculum Questionnaire and Vignette

At what stage, as determined by the Stages of Concern, are accounting teachers in implementing the accounting curriculum?

Stage of Concern Questionnaire  
Innovation Configuration Checklist

How prepared are accounting teachers and accounting students to deliver the cost accounting curriculum in the senior high schools?

Preparedness to Teach Cost Accounting Questionnaire, Vignette for Teachers and Vignette for Students

Why do accounting examiners raise concerns on accounting students' performance in the West African Senior Secondary Certificate Examination?

Content analysis of the Chief Examiners' report

How successful are accounting lessons to improve quality accounting education at the senior high school level?

Instructional observation guide and vignette for accounting students

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*Source: Author's construct*

#### **4.5.4 Validation of Instrument**

Although the CBAM questionnaire established validity and reliability, in its edited form the entire questionnaire needed to be validated to determine whether there has been a reduction or further strengthening in this wise. In concert with the other parts, the CBAM-SoC instrument was subjected to rigorous scrutiny. To ensure face validity of the measurement tool the survey instrument was forwarded to the research promoter for his professional opinion. After using the constructive suggestions of the study promoter to improve the instrument a further validation was carried out. The modified questionnaire was pilot-tested using the 10 accounting teachers in five senior high schools in the Cape Coast Metropolis in the Central Region of Ghana. Cronbach alpha would be used to determine the degree of its validity and reliability. De Vellis (1991) interpretation of test for validity result would be used to determine the appropriateness of the instrument.

#### **4.6 ETHICAL CONSIDERATIONS**

A letter of consent was given to every participating teacher before the actual field work started. A consent form was attached to the questionnaire for them to fill out before they responded. The respondents were informed about the purpose of the investigation and participants were free to withdraw from the study at any time they so wished because participation was voluntary. No pressure, intimidation or fear was put on any respondent just to elicit compliance. For the sake of confidentiality and anonymity, no respondent was requested to write their names, phone numbers or anything that might link the completed form to the responding Accounting teacher or their school. The conclusions drawn from the results were generalised to the entire population.

#### **4.7 ADMINISTRATION OF INSTRUMENT**

A request for permission to engage accounting teachers in the data collection was sent to the Brong Ahafo, Northern and Western Regional headquarters of the Ghana Education Service (GES). With the permission letter obtained from GES, the researcher visited the district offices of GES and Heads of senior high schools whose Accounting teachers were selected to participate in the investigation. The visit was to inform the school authorities about the permission granted by the G.E.S for the researcher to engage the teachers in data collection. Two main kinds of data gathered in the study were primary and secondary.

##### **4.7.1 Primary Data Collection**

This involved the use of the questionnaires, and the ICC to gather the required data. The questionnaire was administered personally to the participants. This enabled the researcher to assist respondents to understand exactly what the items meant and also to clarify possible issues respondents might find difficult to comprehend. This was done to obtain the right responses. The participants were given a week to complete the questionnaire. Respondents whose questionnaires may not be ready at that time will be given extra time to fill them. The researcher used phone calls as follow up.

Two research assistants and five student-teachers were recruited to guide the administration of the instruments. These assistants were used because they were either natives or residents of those respective regions they were assigned and for that matter each of them was familiar with the terrain. The student teachers, especially, were engaged because they had already been stationed in some of the schools where the responding accounting teachers were

teaching. All the student-teachers engaged were those whose major teaching subject was accounting. The advantages this offered included the fact that the mentors of such student-teachers also were respondents and so therefore the ease with which the data collection could be done. In addition, since the instrument was in their subject area it was expected that they would be in the position to interpret the instruments well once asked by respondents for clarification. The researcher played the role of the coordinator visiting each region twice in the course of the data collection to facilitate the progress.

They were trained for two days. The two teaching assistants were sent to Western Region to survey the respondents selected from that portion of the sample by just distributing the instrument. In addition, one student-teacher was made to collect the completed surveys and despatched them to the researcher. Three of the student-teachers were stationed in Brong Ahafo for the purpose of not over-burdening them because the region was very big and the respondents were sparsely populated in the land area of the region. Only one student-teacher was involved in the Northern Region. The reason for this was that the schools in that part of the country were mostly clustered around Tamale, the capital city. Therefore, that single student-teacher was stationed at Tamale to reach out to almost all the respondents in the area. The collection exercise took a period, in total, of approximately one month. The completed instruments were collected and despatched to the researcher through Expedited Mail Service (EMS) and Federal Express (Fedex) delivery systems. The count of the questionnaires received showed an overall return rate of 79.5%. The details are supplied in Table 4.3. However, all the vignette given to the students were retrieved.

**Table 4.3: Return Rate of Questionnaire**

Zone	Region	Instruments dispatched	Return rate
Middle	Brong Ahafo	80	62
Northern	Northern	60	53
Southern	Western	60	44
Total		200	159

*Source: Field work, 2013*

### 4.7.2 Secondary Data Source

The Chief examiner of West African Examinations Council's report was examined to explain why the examiners of accounting had concerns about the level of students' performance in accounting. Problems they pointed out in the report were used as the proxy of their concerns. These were analysed into the pattern of problems accounting teachers and students have in the instructional discourse. This was translated into the extent of quality marking and the level of implementation of the new accounting curriculum. The reports from 2000 to 2010 for both cost and financial accounting were collected by the researcher for consideration. The use of such secondary data generated by the experts who evaluate the performance of the students taught by accounting teachers is critical in determining the overall quality in the implementation of the curriculum.

The contents of the Chief Examiners' Reports were thoroughly explored and critically examined. Much attention was concentrated on the problems that were noted and how that translated into students' and teachers' conduct in the classroom. The problems were noted and grouped after reports were read from cover to cover. Commonalities in the problems identified permitted the generations of patterns for easier assessment. Since the interest was in capturing as many possible operational patterns of accounting curriculum implementation as possible, the content of the reports were categorized and synthesized to perform content analysis which included data reduction and sense making of the material. This was done by looking for emergent themes and quality of implementation.

## 4.8 DATA ANALYSIS AND REPORTING

Since both quantitative and qualitative data were gathered, the study made use of content analysis and transcription of data gathered qualitatively. Quantitative statistical tools which involved both descriptive and inferential statistics were also used in the process of data analysis. However, specific tools for analysing and reporting the data reflected the nature of the research questions and the instrument used in collecting the data. Accordingly, Table 4.4 displays the techniques for analysing and reporting data to address each research question.

**Table 4.4: Summary of Data Analysis and Reporting Techniques**

Research Question	Data Analysis and Reporting Techniques
What descriptive configurations exist among	Frequencies, percentages and line graph

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the accounting teachers who have indicated a level of use?	
What is the level of use of the new accounting curriculum by accounting teachers?	Narratives, frequencies, and percentages
At what stage, as determined by the Stages of Concern, are accounting teachers in implementing the accounting curriculum?	Means, standard deviations and line graph
How prepared are accounting teachers and accounting students to deliver the cost accounting curriculum in the senior high schools?	Means and standard deviations
What are the concerns of examiners' on students' performance in accounting in the West African Senior Secondary Certificate Examination?	Narratives and themes or patterns
How successful are accounting lessons to improve quality accounting education at the senior high school level?	Themes or patterns

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*Source: Author's construct*

#### **4.8.1 SoCQ Data**

The SoCQ was scored by hand. Each of the 35 statements expressed a certain concern about the accounting curriculum. Respondents placed a number next to each statement indicating the degree to which each concern is true of them at the present moment. High numbers (5-7) indicated high concern, low numbers (1-2) showed low concern and 0 indicated irrelevancy of the statement (Hall, George, & Rutherford, 1986). Each statement corresponded to one of the stages of concern and five statements represented each stage. The responses of the five items on each stage were summed up to obtain a total number. Then, the total score was divided by the number of items to obtain a mean score for each stage. Both means and graphical representations of the statistics were displayed.

#### **4.8.2 LoU Questionnaire Data**

Hall et al. (1975) propose that when the interviewee makes a statement that appears to place him/her at an LoU for a particular category, a tally mark is made on the rating sheet next to the appropriate number. This format was followed by making initial tally marks which were re-evaluated after the interview was completed. The same rating sheet was used to make a decision for each category. This decision was not based on which category has the most tally marks, as certain statements may have greater significance to the respondent than the others, but rather on the overall impression of the interview content. The tally marks acted as a guide and helped to provide evidence for the decision. Whichever description in the LoU fitted the participants and was accordingly checked became their user category. Data for the LoU were analysed through simple descriptive statistics.

#### **4.8.3 Innovation Configuration**

ICC responses were measured quantitatively for the entire group. Through the checklist, the components the participant checked were analysed using means and standard deviation. A mean score between 0 and .49 would imply that respondents indicated that there was no evidence that the component is included in the accounting curriculum; from .5 to 1.49 meant the accounting curriculum mentions content related to the component; and from 1.5 to 2 meant the accounting curriculum mentions component and provides guidelines on its application. The results were displayed in a table.

#### **4.8.4 Preparedness to Teach Cost Accounting Data**

Descriptive statistics were used in analysing the motivation of accounting teachers in implementing the cost accounting curriculum relative to the financial accounting curriculum. Statistical means and standard deviations were employed in crashing the data to determine accounting teachers' reaction to each of the statements made for both individual statement of motivation analysis and the overall analysis. To determine the overall preparedness of accounting teachers in this direction, the mean of means with the accompanying standard deviation was computed and analysed. The use of such measures of central tendency and the attendant measure of spread helped in determining the position of accounting teachers and the extent to which such position achieves congruence.

#### **4.8.6 Testing of Assumption**

The study sought to find out whether some independent variables gathered with the demographic instrument had any influence on the stages of concern of accounting teachers in

implementing the accounting curriculum. This led to the formulation of assumption to test for confirmation or otherwise. The assumption was formulated and tested using Analysis of Variance (ANOVA):

*Accounting teachers' stages of concerns in the implementation of the accounting curriculum are a factor of:*

- a. Gender;*
- b. Highest teaching qualification;*
- c. Teaching experience; and*
- d. Workload.*

#### **4.9 SUMMARY**

This chapter outlined the procedures employed to conduct the research. It explored the research designed and employed to execute the study by detailing the specific approach adopted. It also discussed the population and the approach in selecting the senior high schools whose accounting teachers and students participated in the study. A myriad of qualitative instruments such as vignette for accounting teachers and students, document analysis and unstructured interview guides were used in concert with some quantitative instruments including the stages of concern and levels of use questionnaire and the accounting innovation configuration checklist all of which were responded to by accounting teachers only. The instructional observation was undertaken in the normal classroom atmosphere that afforded participants much convenience to act in their natural way. In all, 159 accounting teachers and 2,242 accounting students participated in the study. No ethical challenges were countered during the field work. The quantitative data obtained were analysed using a multiplicity of descriptive and inferential statistics. However, qualitative data were analysed using narratives, thematic and content analysis approaches.

## **CHAPTER FIVE**

### **DATA PRESENTATION, ANALYSIS AND DISCUSSION**

#### **5.1 INTRODUCTION**

This chapter presents the results of the fieldwork and the discussion to determine the implication of the data on the quality of accounting education in Ghana. The chapter is in two broad parts. First, the data of the fieldwork are presented. This covers data on accounting teachers' survey, accounting students' survey, document analysis and direct observation of accounting lessons in session. The second aspect of the chapter focuses on the discussion of the data to address the research questions. The discussions are presented with headings crafted to reflect the various research questions of the study. Thus, the second part of the chapter addresses the level of use of the accounting curriculum; descriptive configurations of the accounting curriculum; Stages of Concern in implementing the accounting curriculum; preparedness to implement cost accounting curriculum; and concerns of examiners' on students' performance in accounting.

#### **5.2 DEMOGRAPHIC OF PARTICIPANTS**

Since the 2,242 accounting students responded to only the students' vignette and were involved in the separate observation sessions, their background information was not paramount and it was accordingly disregarded in the fieldwork. The background information of the responding accounting teachers only was sought. Such pieces of information have been spread into three components reflecting the respondents' biological background (Table 5.1); educational qualification (Table 5.2) and professional outlook (Table 5.3). These data were gathered to facilitate the testing of the assumption and to help address the other research questions. Also, the variables in the data are likely determinants to understand the level of quality in accounting education. For instance, taken for granted that heighten experience improves practice, an accounting teacher with rich experience in teaching is highly likely to deliver quality accounting instructions and vice versa.

Males dominate (81.1%) instructional leadership in senior high school accounting. As evident in Table 5.1, only 30 of the responding accounting teachers were females. The dominance of the male accounting teachers in the study might provide some biased unassuming results that might reflect masculinity. However, suffice it to say that the distribution of the accounting teachers according to gender (in the study) is a reflection of that of the entire population and that there was no sampling error. The teaching of accounting at the senior high school is

likely to be mediated by rationality and logic (characteristics exhibited by the male counterparts). Thus, no emotions and relevant digressions are likely to be entertained in accounting classrooms. Accordingly, accounting teachers are found to be meticulous and scientific to teach in conformity with standards to ensure effectiveness and efficiency in accounting instructions.

There was a mixture of the various age groups among the accounting teachers. This implied varied levels of reasoning in terms of life experiences. The bulk (13.2+25.8+18.9) of the participants represents approximately 58% of the respondents who were between the ages 21 and 35 inclusive.

Undoubtedly, there was a lot of young generation accounting teachers in the teaching service who could be motivated, trained and maintained at post to promote instructional quality with time. As well, the system is not likely to suffer the problem of insufficient number of teachers as the potential retirees are outnumbered by the number of the younger generation of accounting teachers.

**Table 5.1: Biological Information of Respondents**

Variable	Subscale	Frequency	Percentage
Gender	Male	129	81.1
	Female	30	18.9
Age in years	Between 21 – 25	21	13.2
	Between 26 – 30	41	25.8
	Between 31 – 35	30	18.9
	Between 36 – 40	29	18.2
	Between 41 – 50	34	21.4
	Between 50 – 55	4	2.5

*Source: Field work, 2013*

Almost all the accounting teachers (80.5%) surveyed had a Bachelors’ degree each. Only a few of them had no university degree but instead technical accounting certificates such as the Higher National Diploma and some other professional qualifications. Since the majority of the respondents had academic qualification from the university, the quality of senior high school accounting education might not suffer. Even those without the academic training could just bring their technical expertise to bear in the instructional discourse. It might, however, require some collegiality, tact and ingenuity from such accounting teachers to promote understanding among students.

**Table 5.2: Educational Background of Respondents**

Variable	Subscale	Frequency	Percentage
Highest educational qualification	HND	14	8.8
	Bachelor’s degree	128	80.5
	Master’s degree	16	10.5
	Other	1	.6
Highest teaching qualification	None	21	13.2
	Cert ‘A’	10	6.3
	Diploma	13	8.2
	PGCE/PGDE	5	3.1
	BEd.	106	66.7
	MEd./MPhil	4	2.5

*Source: Field work, 2013*

It was a bit worrying to find out that there were some (n=21 out of 155; 13.2%) accounting teachers without professional teacher training. Even though most (69.2%) of the accounting teachers had higher (Bachelor and Master of Education) teaching qualification, the fact that some of the accounting teachers did not have any such qualifications revealed some loose ends in the accounting education system in the country. Even those accounting teachers with Teachers’ Certificate ‘A’, Diploma in Education and either Postgraduate Diploma or Certificate in Education were not better placed to teach accounting. By virtue of their training and the lack of appropriate training, they might not understand, imbibe, articulate and apply the pedagogical content of accounting knowledge to promote success in the instructional process. Often, such teachers without BEd. or MEd. but rather possess separate disjointed

undergraduate and postgraduate majors paired with some other diploma or certificate in education are most likely to fail to acknowledge the unique blend of the pedagogy and the content of accounting. As such they erroneously translate their knowledge to practice and confuse the instructional discourse. Content alone is not enough neither is pedagogy in isolation adequate, but the most dangerous is the disingenuous blend of the content and pedagogy each of which was separately attained. This might create a state of unsuspected harm to the educational enterprise.

The study revealed a somewhat young and early-experienced calibre of accounting teachers. More than half of the participants had taught accounting for a maximum of five years. There seemed to be an apparent inverse relationship between the number of years of teaching accounting (teaching experience) and the number of accounting teachers. There was a steep decline in the number of accounting teachers as the years of experience improved. It is an unpalatable situation if the problem is not kept in check.

**Table 5.3: Instructional Professionalism of Respondents**

Variable	Subscale	Frequency	Percentage
Teaching experience in years	0 -5	102	64.2
	6 – 15	45	28.3
	16 and above	12	7.5
Subjects taught	Financial accounting only	58	36.5
	Cost accounting only	31	19.5
	Both subjects	70	44
Number of classes taught in a term	One	5	3.1
	Two	38	23.9
	Three	54	34
	Four	54	34
	Five	5	3.1
	Six and above	3	1.9

*Source: Field work, 2013*

Taken for granted that experience improves practice, the state of affairs in accounting education in Ghana leaves much to be desired. Since a majority of the accounting teachers are

less experienced it is doubtful if significant success can be achieved in accounting education. What worsens the problem is the increased workload on the accounting teachers. In most cases, accounting teachers were made to teach both financial and cost accounting. This increases their burden and grants them little leverage to prepare adequately for the delivery of the two subjects. In some other cases, some accounting teachers were made to teach in multiple classes. This might often compel them to spread their time, effort and attention too thinly among the range of work they need to do.

### **5.3 ACCOUNTING TEACHERS' SURVEY**

The survey of accounting teachers involved a multiplicity of tools to generate comprehensive data. Accordingly, the data were sharply categorised into quantitative and qualitative.

#### **5.3.1 Quantitative Data**

The quantitative data gathered included data on accounting teachers' adoption of the accounting curriculum, descriptive configuration of the accounting curriculum, concerns of accounting teachers in implementing the senior high school accounting curriculum and teachers' preparedness to teach cost accounting.

##### **5.3.1.1 Accounting teachers' adoption of the accounting curriculum**

The results of the quantitative data gathered on accounting teachers' levels of use of the accounting curriculum are displayed in Table 5.4. It shows absolute and relative numbers of accounting teachers operating at each level of use of the accounting curriculum. A significant proportion (n=43 out of 155; 27.8%) of the accounting teachers went beyond the routine of using the accounting curriculum by assessing the impact of their efforts and making changes to increase that impact. Only a few (n=6 out of 155; 3.9%) of the accounting teachers had made the decision to adopt the new practice. Accordingly, they were actively preparing to implement the curriculum. However, quite a sizeable number (n=23 out of 155; 14.8%) of the accounting teachers surveyed took no action with regard to the implementation of the curriculum.

**Table 5.4: Accounting Teachers' adoption of the Accounting Curriculum**

Level of Use	Frequency	Percentage
Level 0, Nonuse	23	14.8

Level I, Orientation	11	7.1
Level II, Preparation	6	3.9
Level III, Mechanical	9	5.8
Level IVa, Routine	14	9
Level IVb, Refinement	43	27.8
Level V, Integration	25	16.1
Level VI, Renewal	24	15.5
Total	155	100

*Source: Field work, 2013*

In spite of the apparent inaction of some of them, other (n=25 out of 155; 16.1%) accounting teachers were actively coordinating with other colleagues to use the accounting curriculum. In addition, some more (n=24 out of 155; 15.5%) of the accounting teachers surveyed sought more effective alternatives to the established use of the curriculum. Even as most accounting teachers were essentially beginning a new cycle of Levels of Use, others (n=11 out of 155; 7.1%) were seeking information about the new accounting curriculum in use. This category of accounting teachers were not alone as another usage cohort (n=9 out of 155; 5.8%) were making attempts to use new strategies, techniques and materials for the delivery of the accounting curriculum. This is the point in the use of the curriculum at which they often felt inadequate and awkward. At best, they felt as though they were preparing a new recipe for the first time, constantly referring to the cookbook for guidance and reassurance. In this turbulence, however, some (n=14 out of 155; 9%) of the accounting teachers had established a satisfactory pattern of implementing the curriculum to make it succeed.

### **5.3.1.2 Descriptive configuration of the accounting curriculum**

The result of the data collected through the use of the ICC summarises the evidence gathered on the configuration of the accounting curriculum. These are organized in tables in accordance with specific dimensions of the accounting curriculum such as the operational patterns, content illustrations, teaching strategies, management tools and evaluation. These results depict accounting teachers' interpretation and subsequent understanding of the curriculum. Hence frequencies are used to display the number of teachers who expressed that there was no such evidence in the curriculum; those who indicated that the curriculum mentions the factor of interest; and yet others who saw evidence of and guidelines to the use of the factor of interest.

For each of the components and the subscales, the accounting syllabus as part of the accounting curriculum merely either provides for it or not. It is the accounting teachers' handbook that provides guidance as to how the component is used. Therefore, those teachers who indicate that the component is not evidenced in the curriculum are either not using the curriculum or they are using it without paying attention to detail. However, those accounting teachers who indicate that the subscales of the components are evidenced in the curriculum but the curriculum does not provide guidance on its use might be using the accounting syllabus independent of the complimentary accounting teachers' handbook.

### 5.3.1.2.1 Operational patterns

Accounting teachers' assessment of the goals and objectives of the senior high school accounting curriculum was undertaken. Accordingly, data was gathered to this effect and the accompanying results are displayed in Table 5.5. Most (n=142 out of 155; 92%) of the accounting teachers intimated that the accounting curriculum outlines the goals of the senior high school accounting curriculum. Indeed, this assessment suggests that accounting teachers are consistent in defining the enumeration of the programme goals as the curriculum intends.

**Table 5.5: Goals and Objectives of the senior high school accounting course**

	No Evidence		Evidence Exist		Evidence & Guidance	
	F	%	F	%	F	%
	1. Outlining of programme goals	13	8.4	52	33.5	90
2. Provision of the specific objectives of units	14	9.0	47	30.3	94	60.6
3. Matching unit objectives with content	15	9.7	50	32.3	90	58.1
4. Provision of guidelines of how to achieve each objective	17	11.0	75	48.4	63	40.6
5. Delineating lesson objectives from the stated unit objectives	32	20.6	82	52.9	41	26.5
6. Review of the fit between objectives crafted and content chosen	43	27.8	80	51.6	32	20.6
Average Frequency/Percentage	22	14.2	64	41.3	69	44.5

Source: Field work, 2013

Complimentarily, they (n=141 out of 155; 91%) observed that the curriculum provides specific objectives on various topic units and provides the guidelines on how teachers are to use them. However, the teachers conceived that the curriculum merely suggests that accounting teachers delineate lesson objectives from the stated unit objectives but it failed to advise how teachers are to do this exercise. Additionally, while some (n=80 out of 155; 52%) accounting teachers intimated that the curriculum merely provides the review of the fit between objectives crafted and the selected content, there were some others (n=43 out of 155; 28%) who were convinced that there was no evidence to that effect in the accounting curriculum.

### 5.3.1.2.2 Illustration of content

As part of the innovation configuration assessment with the checklist, accounting teachers were asked further to describe the content illustration of the accounting curriculum. Once again, they were asked to indicate whether evidence of the various components of illustrating contents had been provided and whether guidelines had been provided on how teachers are to employ, interpret and use them for instructional engagements. The results of the data gathered in this direction have been summarised in Table 5.6.

**Table 5.6: Content of the accounting curriculum**

	No Evidence		Evidence Exist		Evidence & Guidance	
	F	%	F	%	F	%
1. Representation of the required accounting standards	26	16.8	69	44.5	60	38.7
2. Provision of the thematic areas of concentration e.g. accounting principles and standards	15	9.7	75	48.4	65	41.9
3. Provision of relevant text books	57	36.8	57	36.8	41	26.4
4. Provision of practical field training and experience	57	36.8	69	44.5	29	18.7
5. Relate classroom experience to industry practice	56	36.1	67	43.2	32	20.6

6. Specifying areas of emphasis	42	27.1	77	49.7	36	23.2
7. Addressing the hierarchy of content presentation	34	21.9	81	52.3	40	25.8
Average Frequency/Percentage	41	26.5	71	45.8	43	27.7

*Source: Field work, 2013*

Accounting teachers seemed to have had differing descriptions of the content illustration reflecting the required accounting standards. Some were of the view that there was no evidence of the relevant accounting standards being covered in the curriculum; but others were just convinced that this had been duly addressed in the curriculum to the extent that the curriculum even provides teachers with the guidelines to interpreting such standards. Meanwhile, the simple majority (n=69 out of 155; 44.5%) of them submitted that the curriculum just presents such relevant standards without orienting teachers on their application in lessons.

This phenomenon of having diverse descriptions of the content components of the curriculum featured prominently across all the subscales in the content component of the curriculum. For instance, accounting teachers differed in accepting that relevant textbooks had been adequately referenced in the curriculum to guide practice. Indeed, although some (n=99 out of 155; 64%) of the teachers accepted that the curriculum provides for the connection between classroom experience and industry practice, only 23% (n=32 out of 155) of this number assessed the curriculum to have provided guidance to facilitate how teachers undertake this task.

### **5.3.1.2.3 Teaching strategies**

The study further looked into the descriptions accounting teachers made of the teaching strategies recommended in the accounting curriculum. These evidences were highly paramount in such curriculum documents as the accounting syllabus and teachers' handbook for senior high school accounting teachers. In essence, the analysis covered the sequencing of the activities in the syllabus and how the accounting teachers perceived the appropriateness of such chronology. This also implied the accounting teachers' analysis of the vertical integration of the activities in the curriculum.

Just like the earlier results on the configuration of the accounting curriculum, the accounting teachers were rather dispersed in viewpoints in relation to the teaching strategies as provided

for in the curriculum. The summary of the results of this is provided in Table 5.7. For instance, the teachers contrasted markedly on the ability of the accounting curriculum to provide for and focus on specific sub-skills, important prerequisites, or related skills (e.g., phonological segmenting, understanding of place value). Indeed, most (n=90 out of 155; 58.1) of the teachers believed and witnessed that the curriculum covered and focused on broad areas. However, some other teachers in their analysis of this same subcomponent of the curriculum either highly rated the curriculum to the extent that it made provision for how teachers would be guided to use such broad areas. There were yet some other (n=22 out of 155; 14%) accounting teachers who never saw any evidence of this in the curriculum. More to the point, the teachers disagreed on their description of the curriculum to be working within the instructional hierarchy in terms of accuracy, fluency, generalization, and adaptation. Nevertheless, a majority of the teachers intimated that the curriculum provided for the alignment of teaching strategies with curriculum goals and objectives.

**Table 5.7: Pedagogical Logic of the Accounting Curriculum**

	No Evidence		Evidence Exist		Evidence & Guidance	
	F	%	F	%	F	%
1. Consideration and focus on specific subskills, important prerequisites, or related skills (e.g., phonological segmenting, understanding of place value)	35	22.6	79	51.0	41	26.5
2. Consideration of and focus on broad areas	22	14.2	90	58.1	43	27.7
3. Addressing alignment of assessment or instruction on different forms of knowledge (i.e., facts, concepts, strategies)	25	16.1	64	41.3	66	42.6
4. Consideration of	58	37.4	68	43.9	28	18.1



1. Specification of what teaching and learning resources to use.	34	21.9	69	44.5	52	33.5
2. Guidelines of how to use the resources	48	31.0	59	38.1	48	31.0
3. Specification of alternative improvisation of the required teaching and learning resources	64	41.3	53	34.2	38	24.5
4. Guidelines of how to prepare it	59	38.1	60	38.7	36	23.2
5. Recommends the use of resource persons	40	25.8	61	39.4	54	34.8
6. Specification of when to use the teaching and learning resources	31	20.0	77	49.7	47	30.3
Average Frequency/Percentage	46	29.7	63	40.6	46	29.7

*Source: Field work, 2013*

Generally, accounting teachers differed in their description of the evidential existence of any provision of the needed teaching and learning resources in the accounting curriculum. Close to 41% (n=63 out of 155) of accounting teachers asserted that the curriculum merely recommended the needed instructional aids for specific topics outlined. However, some (n=46 out of 155; 29.7%) other accounting teachers were rather less charitable in their assessment when they concluded that the curriculum made no room for such a provision. Interestingly, an equal number of their colleagues shared a rather contrasting view. Such category of accounting teachers defended that the curriculum makes provision for the recommended teaching and learning resources and even provides guidelines as to how such materials are to be used in accounting lessons.

Inasmuch as most accounting teachers believed that the accounting curriculum recommends the teaching and learning resources to be used, they declined that the curriculum makes any alternative improvisations if the recommended resources are unavailable or inadequate. Even those who believed this had been covered in the curriculum, there were some who believed that the curriculum failed to suggest how to prepare such improvised teaching and learning resources. Nevertheless, the accounting teachers intimated that the curriculum provides modalities that suggest when a

particular instructional resource is used in the lesson.

### 5.3.1.2.5 Evaluation

The success of every instruction can only be assessed by potent evaluation tools. Guidelines on evaluation provided to accounting teachers would aid them to know why, what, when and how to conduct evaluation in accounting lessons. The validity of the evaluation devices helps in taking the most prudent decisions pursuant to improving instructional effectiveness and students' learning.

**Table 5.9: Assessment Procedures in Accounting**

	No Evidence		Evidence Exist		Evidence & Guidance	
	F	%	F	%	F	%
1. Review of prior records	48	30.9	75	48.4	32	20.7
2. Interview with relevant individuals	56	36.1	70	45.2	29	18.7
3. Observation of performance in appropriate settings	30	19.4	81	52.3	43	27.7
4. Administration and interpretation of test results	17	11.0	74	47.7	64	41.3
5. Selection of assessment procedures that provide the information needed to make instructional decisions	19	12.3	67	43.2	69	44.5
6. Characteristics of good formative measures	32	20.6	81	52.3	42	27.1
7. Representation of performance with graphs	62	40.0	62	40.0	31	20.0
8. Standards for comparison of performance	34	21.9	80	51.6	41	26.5
9. Aggregation of data to make individual or small-group, classwide, and schoolwide or districtwide decisions	55	35.5	69	44.5	30	19.4

Average Frequency/Percentage	39	25.2	73	47.1	43	27.7
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Source: Field work, 2013

Since accounting teachers are the users of such evaluation devices, they rated the accounting curriculum to determine whether adequate coverage and guidelines were provided in the curriculum to aid their practice. The summary of their assessment of the evaluation component of the curriculum is presented in Table 5.9. Largely, accounting teachers (n=73 out of 155; 47.1%) expressed the concern that the curriculum does nothing more apart from providing for the fact that *evaluation* should be undertaken in accounting instructions. In spite of this, some (n=39 out of 155; 25.2%) of the teachers feared that the curriculum never evidenced this subcomponent. Conversely, some other (n=43 out of 155; 27.7%) accounting teachers stressed that the curriculum did not just provide for evaluation of accounting lessons, it addressed how teachers were to carry out such evaluations.

Once again, this phenomenon of having diverse descriptions of the content components of the curriculum featured prominently across all the subscales in the content component of the curriculum. In any case, the accounting teachers differed sharply in their assessment just that the margin of difference was heavily curtailed across the various subscales in the evaluation component description. For instance most (n=81 out of 155; 52.3%) of the teachers consented that the curriculum provides for the characteristics of good formative measures to enable teachers craft effective evaluation devices. A similar number (n=80 out of 155; 51.6%) of the teachers indicated that the curriculum merely provided the standard for comparison of performance but fails to guide teachers on how the comparison is to be done.

### 5.3.1.3 Concerns of accounting teachers in implementing the senior high school accounting curriculum

Concerns of accounting teachers in implementing the accounting curriculum is capable in monitoring the quality of the implementation progress. Accordingly, data was collected from accounting teachers in the form of their concerns with regards to the implementation of the accounting curriculum. Table 5.10 shows the descriptive statistics and Figure 5.1 diagrammatise the results. There is an indication that the accounting teachers surveyed were nonusers of the accounting curriculum. With both the primary and secondary concerns as the awareness and informational stages, there is no doubt that they were not very much involved

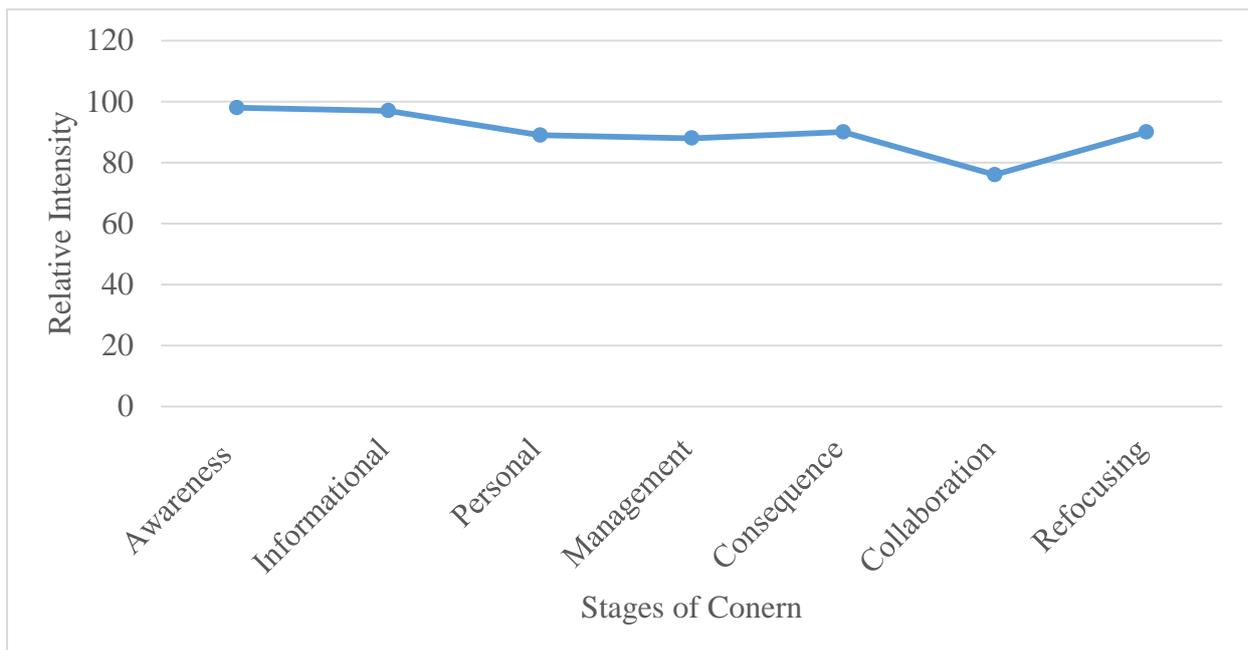
in the delivery of the curriculum. The least concern which was recorded at the collaboration stage indicates an apparent collegiality in discussing the delivery of the curriculum.

**Table 5.10: Descriptive Statistics of Total Study Sample**

SoC Value	SoC Description						Total Raw Score	Percentile
0	Awareness	4	4	4	5	4	21	98**
1	Informational	4	5	7	7	7	30	97*
2	Personal	5	5	5	7	5	27	89
3	Management	4	5	5	5	5	24	88
4	Consequence	7	7	7	5	7	33	90
5	Collaboration	5	5	5	7	5	27	76
6	Refocusing	5	5	7	5	5	27	90

\*\* Primary Concern    \*Secondary Concern

Source: Field work, 2013



**Figure 5.1: Accounting Teachers' Stages of Concern**

Source: Field work, 2013

This phenomenon is clearly articulated in the display of the frequency of accounting teachers surveyed over the stages of concern as shown in Table 5.11. The bulk (n=92) of the accounting teachers had awareness and informational concerns. One could not conclude that

these were experienced users of the curriculum who were looking forward to doing something more challenging. Rather, it is clearly evident that a majority of the accounting teachers peaked at the lower level concerns (awareness, informational and personal concerns). The seven stages were further reduced to three. The first three stages (i.e. awareness, informational and personal) were integrated to form the self-concerns; the management stage was labelled task concern; and the last three stages (i.e. consequence, collaboration and refocusing) were impact concerns. Individual respondent's primary and secondary concerns were determined. In effect, the majority (n=117 out of 155; 76%) of accounting teachers were found to be self-concern users of the accounting curriculum.

**Table 5.11: Frequency of Individual Accounting Teacher's Highest Stages of Concern**

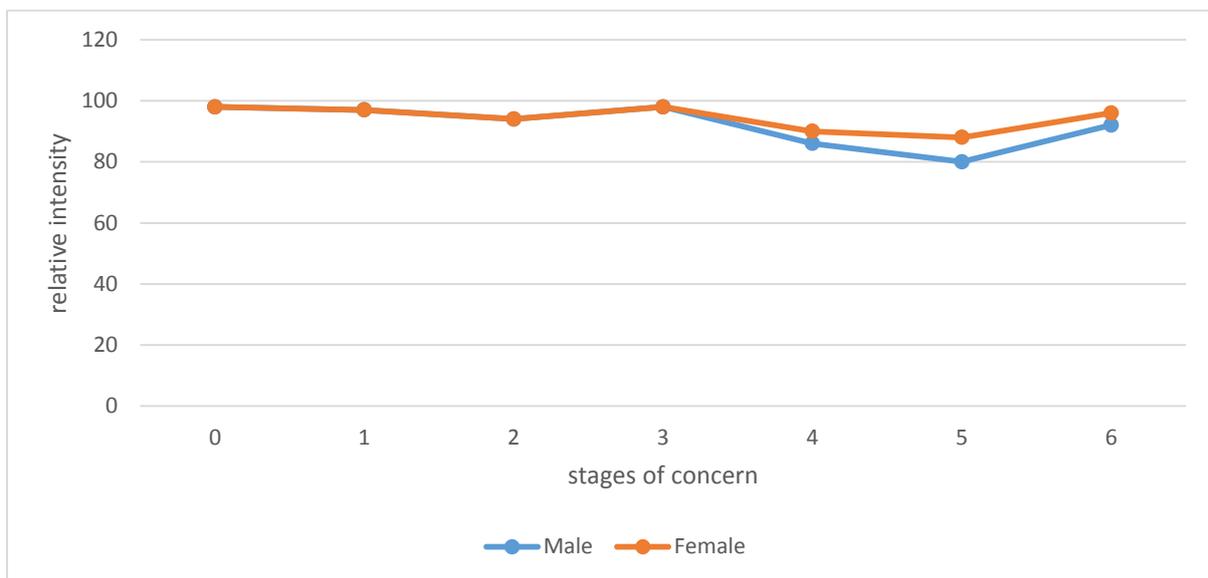
Stages of Concern	Frequency	(N)	Percentage	(%)
<i>Self-Concerns</i>	117		75.97	
Awareness		45		29.22
Informational		47		30.52
Personal		25		16.23
<i>Task Concerns</i>	3		1.95	
Management		3		1.95
<i>Impact Concerns</i>	34		22.08	
Consequence		1		0.65
Collaboration		4		2.60
Refocusing		29		18.83
Total	154	154	100	100

*Source: Field work, 2013*

Only about 2% (n=3 out of 155) of the accounting teachers were considering the support materials needed to aid the delivery of the curriculum. These were the task concern users. There, however, were some accounting teachers who were impact concern users of the curriculum and for that matter were in the state of evaluating the curriculum to determine its usefulness in the system.

### 5.3.1.3.1 Group profiles in relation to some teacher characteristics

To generate a comprehensive information of the concerns of teachers in implementing the accounting curriculum, group profiles relating to some independent variables were analysed and studied. Accounting teachers' group profiles in relation to gender, the workload measured by the number of classes taught in a term, type of accounting subject taught, teaching experience and the highest teaching qualification were all studied. The accounting teachers' group profile was analysed in relation to gender as displayed in Figure 5.2. Males' profile registered their highest concerns (98) at the awareness stage with secondary concern (98) at the management stage. The group profile of the female accounting teachers assumed a similar trend as that of the males. However, whilst the male accounting teachers' profile registered its least intense concern (80) at the consequence stage, the profile of the female accounting teachers recorded their least intense concerns (90) at the collaboration stage.



**Figure 5.2: Accounting Teachers' Gender and Stages of Concern**

*Source: Field work, 2013*

The results of the group profile of concerns in relation to gender indicated that the highest concern of both male and female accounting teachers toward the implementation of the accounting curriculum was at the awareness stage. In general, the two group profiles appear similar. The percentile means of the two group profiles are shown in Table 5.12.

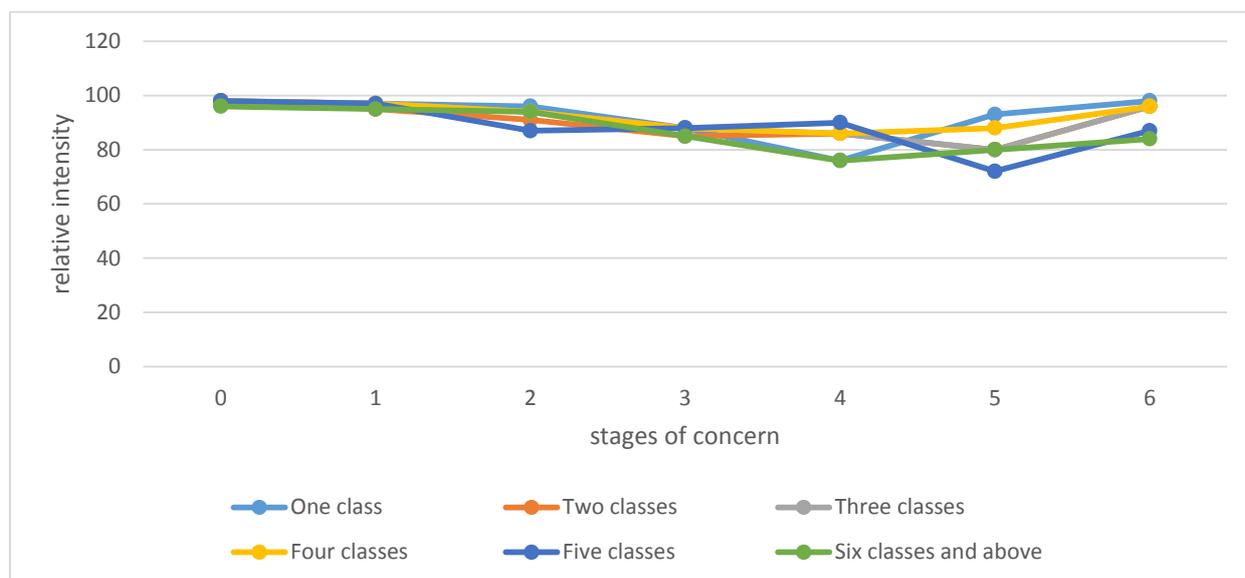
**Table 5.12: Female and Male Accounting Teachers' Percentile Means**

Stage of Concern	0	1	2	3	4	5	6
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Male	98	97	94	98	86	80	92
Female	98	97	94	98	90	88	96

Source: Field work, 2013

On the basis of accounting teachers' workload, it could be realised from Figure 5.3 and the percentile means summarised in Table 5.13 that across the various levels of workload all the accounting teachers peaked (98) at awareness concern. The only marked differences were in their secondary concerns.



**Figure 5.3: Accounting Teachers' Workload and Stages of Concern**

Source: Field work, 2013

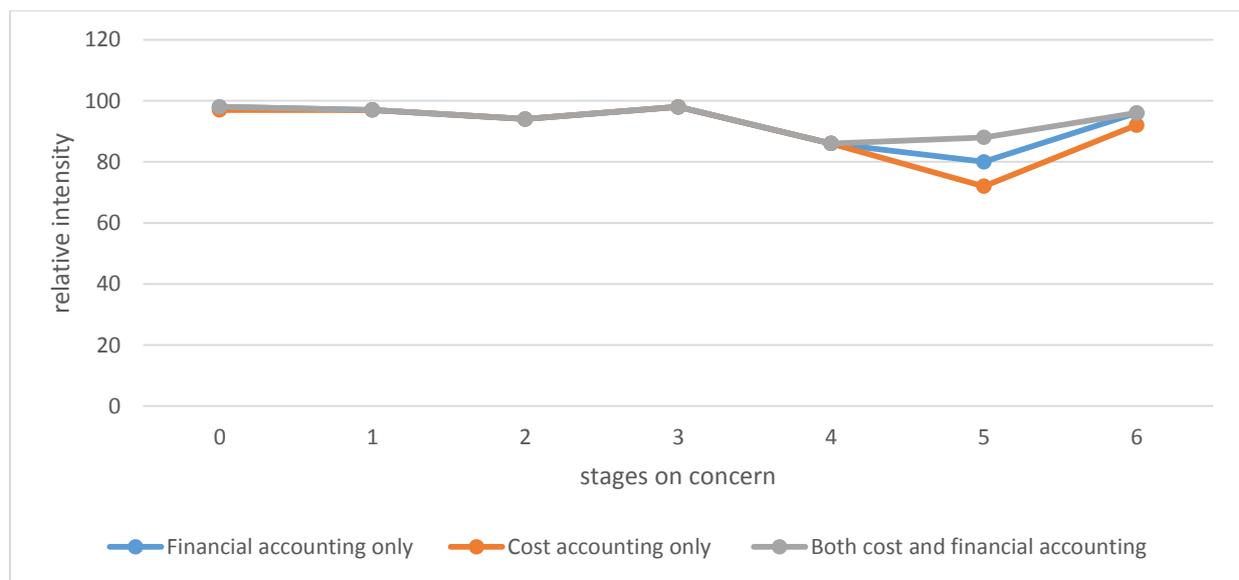
Those accounting teachers with fewer than three classes to teach had their secondary concern at the refocusing stage. However, their counterparts teaching more than two different classes had their secondary concern at the informational stage. What created significant differences in the group profiles was the least intense concerns. Accounting teachers teaching in only one and at least six classes had their least intense concern (76 in each case) at the collaboration stage. As well, their counterparts teaching in four classes had their least intense concern (86) at this same stage. However, their other colleagues teaching in two, three, four and five classes had their least intense concerns with varying degrees of intensity at the (80; 80;

**Table 5.13: Accounting Teachers' Percentile Means Relative to Number of Classes Taught**

Stage of Concern	0	1	2	3	4	5	6
One class	98	97	96	88	76	93	98
Two classes	98	95	91	85	86	80	96
Three classes	98	97	94	88	86	80	96
Four classes	98	97	94	88	86	88	96
Five classes	98	97	87	88	90	72	87
Six classes and above	96	95	94	85	76	80	84

*Source: Field work, 2013*

Further, the group profile of accounting teachers depending on the accounting subject(s) taught was obtained. The pictorial representation of the results are presented in Figure 5.4 whilst the descriptive statistics in the form of group profile percentile means are shown in Table 5.14.



**Figure 5.4: Group Profile in Relation to Accounting Subject Taught**

*Source: Field work, 2013*

**Table 5.14: Accounting Teachers' Percentile Means Relative to Accounting subject Taught**

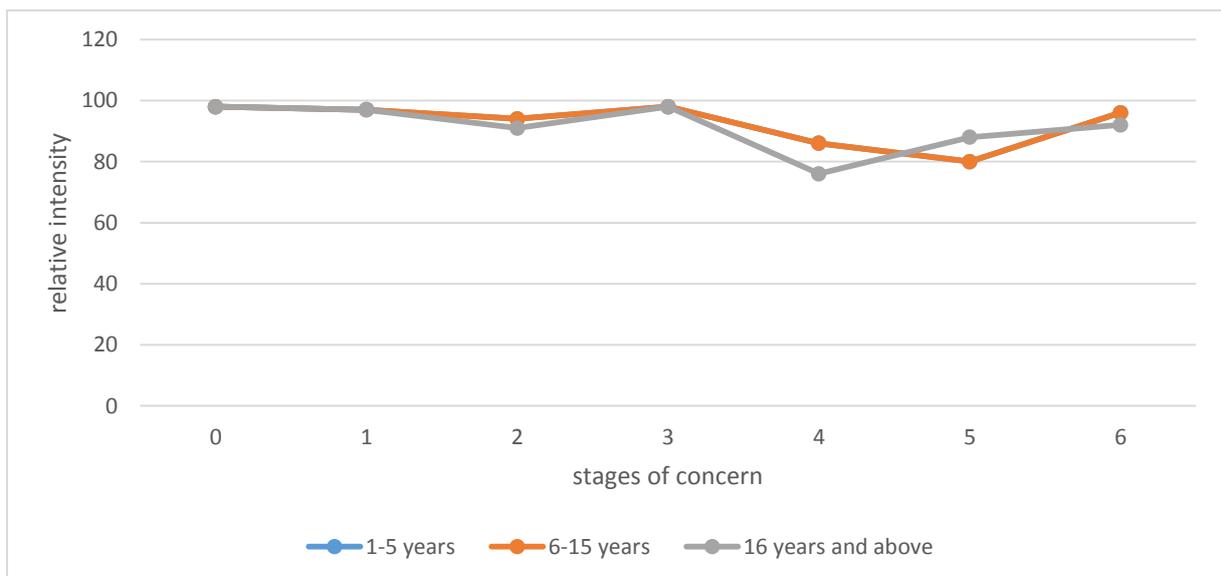
Stage of Concern	0	1	2	3	4	5	6
Financial accounting only	98	97	94	98	86	80	96
Cost accounting only	97	97	94	98	86	72	92

Both cost and financial accounting      98   97   94   98   86   88   96

*Source: Field work, 2013*

Teachers teaching cost accounting only had their concern (98) peaked at the management stage with their secondary concerns (97; 97 respectively) at the awareness and informational stages. In contrast, their colleagues teaching financial accounting only and those teaching both financial and cost accounting had their concerns in the complete reversal of those cost accounting only teachers. These two group profiles had their primary concerns (98; 98 respectively for each group profile) at the awareness and management stages and their secondary concerns (97 for each group profile) at the management stage. However, teachers teaching cost accounting only and those teaching financial accounting only group profiles all tailed (80 for financial accounting only; and 72 for cost accounting only) at the collaboration stage. Yet, teachers teaching both financial and cost accounting had their secondary concern (86) at the consequence stage.

Further analysis of the group profiles was undertaken. This involved the analysis of the group profiles on the basis of accounting teachers' teaching experience. In this study, teaching experience is gauged from the length of service in the teaching profession as an accounting teacher in the senior high schools. In effect, the results of the analysis are shown in Figure 5.5.



**Figure 5.5: Group Profile in Relation to Accounting Teachers' Experience**

*Source: Field work, 2013*

As well, Table 5.15 supports the line graph in Figure 5.5 by presenting the percentile means to support the results. Results from these two summaries indicate that there are three distinct group profiles. The first profile represents accounting teachers with a maximum of five years teaching experience; the second shows the profile of those accounting teachers with more than 5 years but not exceeding 15 years teaching experience; and the last group profile displays the category of accounting teachers with more than 16 years teaching experience. The profile of accounting teachers with a maximum of five years teaching experience displayed similar concerns as their counterparts with more than five but not exceeding years of teaching experience.

**Table 5.15: Accounting Teachers’ Percentile Means Relative to Teaching Experience**

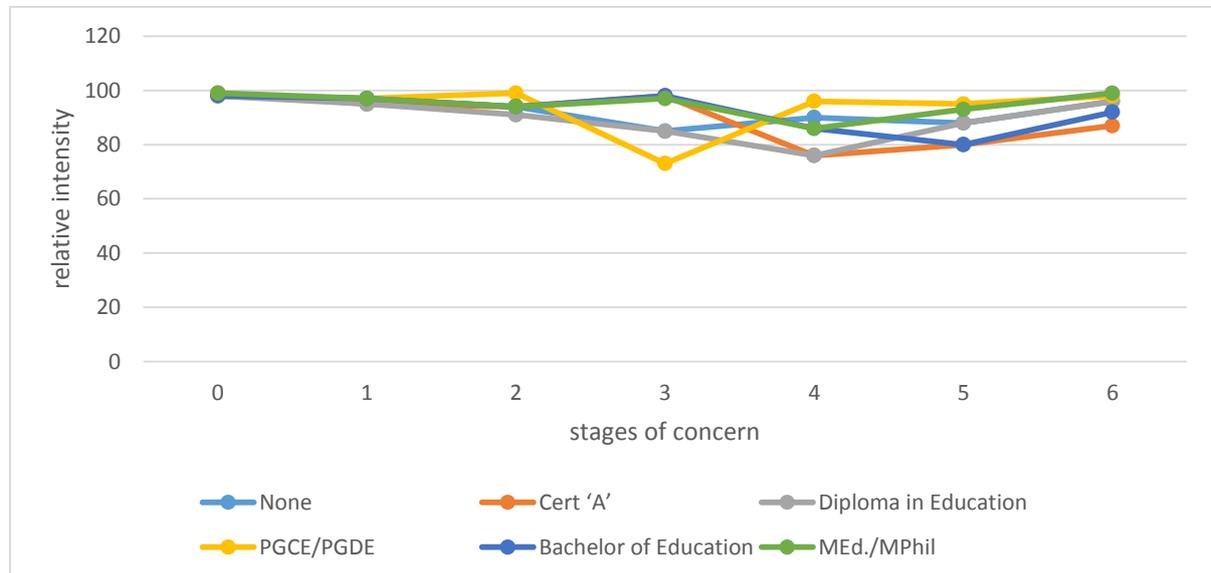
Stage of Concern	0	1	2	3	4	5	6
1-5 years	98	97	94	98	86	80	96
6-15 years	98	97	94	98	86	80	96
16 years and above	98	97	91	98	76	88	92

*Source: Field work, 2013*

Across each of the stages of concern, the two distinct group profiles harboured same concerns with same degrees of intensity. Each of these groups had their primary concern (98; 98) at the awareness and management stages. As well, they all showed their secondary concern (97; 97) at the informational stage whilst both tailed up (80; 80) with collaboration concern. Also, accounting teachers with at least 16 years of teaching experience had their primary concern (98; 98) at the same awareness and management stages. The only difference recorded in the concerns across the group profiles was the minimal concern and the degree of intensity. Whilst the first two group profiles that have been adjudged similar had their least intense concern at the collaboration stage, those accounting teachers with at least 16 years of experience recorded their least intense concern (76) at the consequence stage.

The last of the group profiles explored was the accounting teachers’ highest teaching qualifications. Six distinct group profiles emerged out of this results. These included those accounting teachers who had no professional education background; those with Teachers’ Certificate ‘A’; Diploma of Education holders; others with Post Graduate Certificate in Education or Post Graduate Diploma in Education; some others with bachelor’s degree in

education; and finally, those with higher professional education such as Master of Education of Master of Philosophy in education related discipline. The results of the group profiles are summarised in Figure 5.6 and Table 5.16.



**Figure 5.6: Group Profile in Relation to Accounting Teachers' Teaching Qualification**

*Source: Field work, 2013*

Accounting teachers without any professional teacher education training peaked (98) at awareness stage with their secondary concern (97) at the informational stage. However, their less intense concern (85) was at the management stage. Those accounting teachers with Teachers' Certificate 'A' as their highest professional qualification had their most intense concern (99) at the awareness stage and their secondary concern (98) at the management stage. This profile had their minimal concern (76) at the consequence stage.

**Table 5.16: Accounting Teachers' Percentile Means Relative to Teaching Qualification**

Stage of Concern	0	1	2	3	4	5	6
None	98	97	94	85	90	88	96
Cert 'A'	99	95	94	98	76	80	87
Diploma in Education	98	95	91	85	76	88	96
PGCE/PGDE	98	97	99	73	96	95	98
Bachelor of Education	98	97	94	98	86	80	92
MEd./MPhil	99	97	94	97	86	93	99

*Source: Field work, 2013*

Accounting teachers who were Diploma in education holders had their basic concern (98) at the awareness stage. Interestingly, they displayed their next intense concern (96) at the refocusing stage whilst their least intense concern (76) was at the consequence stage. PGCE and PGDE holding accounting teachers rather had their most intense concern (99) at the personal stage with the secondary concerns (98; 98) at the awareness and refocusing stages. However, this group of accounting teachers had their minimum concern (73) at the management stage. Yet the primary concern (98; 98) of the teachers with bachelor's degree in education recorded their intense concerns at the management and awareness stages whilst having their secondary concerns (97) at the informational stage and least intense concern (80) at the collaboration stage. Finally, accounting teachers with the highest qualification, MEd. or MPhil in education, recorded their primary concerns (99; 99) at the awareness and refocusing stages with their secondary concerns (97; 97) at the informational and management stage. This group profile tailed up (86) at the consequence stage.

#### **5.3.1.3.2 Accounting teachers' pattern of concerns in implementing the senior high school accounting curriculum**

A further analysis was carried out to determine the responding accounting teachers' pattern of concern. This was undertaken by mapping individual responding accounting teachers' peak concerns against the second highest concerns. A 3 by 3 grid was developed to match respondents' primary concerns to their secondary concerns to develop patterns of concern. In the columns are the primary concerns which could be any of self, task and impact concerns and similar concerns hereby referred to as secondary concerns are labelled on the first row. This created 9 vacant spaces within, implying 9 different patterns of concern (i.e. self-self, self-task, self-impact, task-self, task-task, task-impact, impact-self, impact-task, impact-impact concerns). However, since mere combination but not permutation was intended the 9 possible patterns were reduced to 6. All other patterns that combined more than one kind of concern were pulled together and given a generic name "mixed concern pattern". This further cut the 6 patterns to only four (i.e. self-self, task-task, impact-impact and mixed concerns patterns. Individual respondents' highest percentile, hereby referred to as the primary concern, and the second highest percentile, thus secondary concern, were obtained, plotted and tallied in the 3 by 3 grid. After exhausting all, the pattern with the highest frequency was adjudged the dominant pattern. The results have been summarized in Table 5.17.

**Table 5.17: First Highest SoC in Relation to Second Highest SoC**

Primary Concern	Secondary Concern			Total	Percentage
	Self	Task	Impact		
Self	93	11	13	117	75.97
Task	3	0	0	3	1.95
Impact	26	0	8	34	22.08
Total	122	11	21	154	100

*Source: Field work, 2013*

A majority (n=93; 60.39%) of the total participants (N=154) demonstrated self-concern pattern and only eight (5.19%) accounting teachers of the total sample size were oriented towards impact concern pattern. However there was no indication of task concern trend. The mixed concern trend (i.e. self-task concern and self-impact concern) was exhibited by about 34% (n=53) of the total accounting teachers studied. The indication that a majority of accounting teachers showed a self-concern pattern buttresses the point that the accounting teachers were indeed nonusers of the accounting curriculum.

#### **5.2.1.3.3 Measuring influences of accounting teacher characteristics on their SoC**

In full appreciation of accounting teacher concerns, a further analytical tests were administered using ANOVA to test for statistical evidence to the effect that some teacher characteristics influence accounting teachers' stages of concern in implementing the accounting curriculum. The independent factors tested with the ANOVA on the stages of concern included accounting teachers' gender; highest teaching qualification; teaching experience; and workload. The full results are displayed in Appendix I.

Almost all of the accounting teachers' characteristics tested had no influence of the teachers' stages of concern. It was only at the collaboration stage that statistically significant differences were noted in the type of accounting subject taught at the senior high school found to be influencing accounting teachers' stages of concern. Relevant excerpts from the entire ANOVA test results in relation to this establishment is shown in Table 5.18.

**Table 5.18: ANOVA: Accounting Subject Taught and Collaboration Concern**

	Sum of squares	df	Mean square	F	Sig.
--	----------------	----	-------------	---	------

Between groups	64.345	2	32.173	3.343	.038
Within groups	1453.265	151	9.624		
Total	1517.610	153			

$\rho < .05$

Source: Field work, 2013

#### 5.2.1.4 Teachers' Preparedness to Teach Cost Accounting

The results generated from the administration of the questionnaire were categorized into three themes namely; teacher readiness, attitude and administrative support to aid the implementation. A thorough analysis of the three ramified aspects of the research question is deemed to adequately throw more light on the phenomenon. The presentation of the results is done using measures of central tendency such as the mean and standard deviation. The key for the interpretation of the mean scores is provided as:

*At most 2 = Agreement*

*3 = Indecision*

*Between 4 and 5 = Disagreement*

An overall mean of means and mean standard deviation are provided to summarize the results.

It is assumed that the attitude of accounting teachers toward the cost accounting subject determines its subsequent implementation. Then it could be concluded from Table 5.19 that accounting teachers were confidently placed to adopt and teach cost accounting at the senior high school. However, they were uncertain as to whether it was easier teaching cost accounting compared to financial accounting. It seemingly might be the case that they have indifferent attitude toward teaching either subject.

**Table 5.19: Attitude to Implement Cost Accounting**

	Mean	Standard Dev.
1. I can confidently teach cost accounting.	1	.9
2. Relative to financial accounting, cost accounting is easier to teach.	3	1.4
3. It is easier to facilitate students' understanding in cost accounting.	3	1.4
4. I attach greater importance to cost accounting than	4	1.2

financial accounting.		
5. Students are desirous of learning cost accounting compared with financial accounting.	4	1.3
Mean of means/ standard deviation	3	1.2

*Source: Field work, 2013*

It is crystal clear that cost accounting has really lost its popularity among accounting teachers and their students. Undoubtedly, most of the accounting teachers were virtually unanimous in attaching greater importance to financial accounting than cost accounting. Although the accounting students did not actually respond to the item, since their teachers know them the evidence churned out by their teachers on the students behalf that accounting students are not desirous of learning cost accounting relative to financial accounting could be upheld. In sum, there is a sea of indifference in which accounting teachers find themselves in their preparedness to implementing the cost accounting curriculum.

**Table 5.20: Readiness to Implement Cost Accounting**

	Mean	Standard Dev.
1. My background permits the delivery of cost accounting.	2	1.0
2. Student numbers in cost accounting class is encouraging and motivating.	3	2.9
3. I prefer teaching cost accounting to teaching financial accounting.	3	1.3
4. Teaching cost accounting makes me feel significant in the school.	2	1.2
Mean of means/ standard deviation	3	1.3

*Source: Field work, 2013*

Although most of the accounting teachers surveyed had some background in cost accounting, they were not particularly motivated to teach the course. They never showed any clear preference for teaching financial accounting. Their somewhat relaxed readiness to implement the curriculum could not partly be explained by the ever-decreasing number of students who sign up for the course at the senior high school level. However, the responses of the

accounting teachers about whether student numbers had actual or potential effects on their level of readiness in teaching cost accounting differed markedly.

The commitment of school authorities could have a significant effect on the extent to which the subject is accepted and delivered by accounting teachers and students. Accordingly, the level of support services available to the delivery of the cost accounting was investigated. It was found that accounting teachers hardly got the teaching and learning resources to promote the teaching of cost accounting. No wonder the course has been unpopular among the accounting teachers and accounting students as well. Although the school authorities encourage the teaching of cost accounting, they fail to provide the necessary teaching learning resources necessary to make the instructional discourse less laborious and very interesting. In sum, the accounting teachers agreed that cost accounting should be made compulsory for all accounting students to read. The conclusion is that almost all the accounting teachers considered the level of administrative support for the delivery of cost accounting to be discouraging.

**Table 5.21: Support Services to Implement Cost Accounting**

	Mean	Standard Dev.
1. I get administrative support in terms of resources needed to teach cost accounting.	3	1.3
2. At the senior high school level, cost accounting is as popular as financial accounting among teachers.	3	1.5
3. At the senior high school level, cost accounting is as popular as financial accounting among students.	3	1.5
4. The school administration encourages the teaching of cost accounting.	2	1.2
5. Support materials are available for the delivery of cost accounting.	3	1.4
6. Cost accounting should be made compulsory for all accounting students.	2	1.2
Mean of means/ standard deviation	3	1.4

*Source: Field work, 2013*

### 5.3.2 Qualitative Data

The qualitative data gathered from the accounting teachers involved the use of teachers' vignette. Data gathered in this regard included data on accounting teachers' adoption of the accounting curriculum, descriptive configuration of the accounting curriculum, accounting teachers' preparedness to teach cost accounting and accounting teachers' assessment of accounting instructions.

#### 5.3.2.1 Accounting teachers' adoption of the accounting curriculum

In complementing the data gathered with the Level of Use questionnaire, qualitative evidence was sought to deeply understand the extent to which accounting teachers had adopted the accounting curriculum. It should be pointed out that the accounting teachers limited the definition of the curriculum to the syllabus. Almost all the teachers studied indicated some level of use of the accounting curriculum. However, the rate and extent of usage varied greatly among the teachers. For instance, one accounting teacher intimated;

*I used it, this is because it serves as a guide on how to plan my lesson. It also helps me to select topics which are to be taught at the senior high school level. It also helps me to select topics which meet the standards of the final examination at the senior high school level. The syllabus also serves as a guide on even the right method to be used in a particular teaching and learning situation.*

Other accounting teachers never saw the curriculum as any appropriate companion but rather use it because, they were asked to use it. Several of the participating accounting teachers espoused their blatant disregard for the intrinsic value of the accounting curriculum. This was harmoniously crafted through the candid operational experience of one accounting teacher that

*It is compulsory and mandatory for teachers to use the new syllabus.*

Another remarked

*A teacher has no option not to use the new syllabus as questions are asked based on the new one.*

The accounting teachers assigned a number of factors that influenced the level of use of the accounting curriculum. They believed that since the new accounting curriculum was replacing an existing one if there were comparative advantages the success of the new curriculum would be retrogressively phenomenal. The indicators they outlined in assessing the new curriculum were

- i. *Relevance – the relevance of the topics in the syllabus to the learners in this future life.*
- ii. *Difficulty/Ease of the topics in the syllabus*
- iii. *Familiarity of the topics in the syllabus*
- iv. *Availability of teaching aids in the school for the topics in the syllabus.*
- v. *Personal interest of the teacher*

It is interesting how the accounting teachers had adopted a working criteria to evaluate the curriculum. The curriculum documents were in short supply. Most of the accounting teachers did not have the accounting syllabus. An accounting teacher decried:

*But some tutors do not have copies of the new syllabus or are not given to them by their school and heads of Departments. Specifically speaking, I don't have. I mostly rely on the old syllabus, I only research on the topic which have been added in the new one and omitted from the old syllabus.*

It was not only those accounting teachers who did not have the new accounting curriculum who were not using it. Nevertheless, even those accounting teachers who had the new curriculum intimated:

*If however, there are limitations on some aspects of the new syllabus, one may refer to the old one.*

Some accounting teachers were still familiarizing themselves with the accounting curriculum after nearly six years of introduction. Some did not understand the contents of all the topics in totality. Such teachers were academically honest to confide that:

*There are few new topics added such as Value Added Tax and Payroll Accounting to Cost Accounting so I must be careful in making reference. Cash flow statement is no longer in financial Accounting but many books maintain it.*

Indeed, meticulousness is required to be faithful in the delivery of the curriculum as is required in a centralized school system practiced in the country.

### **5.3.2.2 Accounting teachers' description of the accounting curriculum**

In addition to the foregoing descriptions of the accounting curriculum yielded by the quantitative data, the vignette enlightened that some of the accounting teachers see the subject matter as the main item which is supposed to be covered by the teacher with the students. Another remarked that they are the main points to be taught by the accounting teacher. According to one participating accounting teacher, the subject matter is indeed seen as

*... the primary component which determines how the other component of the syllabus will be used.*

The accounting teachers see the assessment procedures as the manner in which class assessment is to be done. Such procedures, as noted by one accounting teacher, deal with the feedback from students' understanding and application of a topic taught and learnt. Thus, some accounting teachers saw assessment in senior high school accounting lessons to be focused on essentially on the learner. As such, one accounting teacher explained that:

*... various methods are used to assess the performance of learners.*

Another accounting teacher desperately evaluated the assessment component of the accounting curriculum by concluding that

*Based on new cost accounting and old financial accounting syllabus which I have, assessment is based on knowledge based questions not analysis or application. Assessment should have been based on aims and goals of the particular topic in the syllabus but assessment of student currently are channeled towards WASSCE questions and probable WASSCE questions which are not related to the aims and goals of the syllabus.*

The responding accounting teachers were enigmatic to declare that the aims and goals of senior high school accounting course are

*... what the teacher intends to achieve after the teaching and learning process has taken place.*

Accordingly, an accounting teacher intimated that the aims and goals are to ensure that both students and teacher focus on the end product of the lesson. This view permeated prominently among a range of views of the teachers studied as another accounting teacher supported that aims and goals of the accounting curriculum are

*... the main objectives of imparting a particular topic/knowledge to the students*

To find out accounting teachers' interpretation of the use of teaching and learning resources to support accounting instructions, such teachers were asked to describe how the accounting curriculum recommends the use of such resources to aid instruction. Following from this, one accounting teacher stressed

*Teaching and learning resources are items which help the teacher to deliver his/her lesson successfully.*

This view was further strengthened by the view of yet another accounting teacher who apparently echoed that the teaching and learning resources are the

*... various teaching aids that should be used to teach a particular topic*

Another accounting teacher was very particular about the ready supply of the resources by advising that

*Teaching and learning resources such as equipment such as projectors, computers, internet access and more should be made available.*

In a related development, an accounting teacher decried the inadequate supply of key teaching and learning resources exposing that

*Teaching and learning resources are only limited to white board and marker, other resources such as computer, projectors, and internet based learning are not available to accounting tutors.*

On the description of the teaching strategies, one accounting teacher explained that

*Teaching strategies are methods the teacher intends to use in his/her lesson delivery.*

Unanimously, the accounting teachers accepted that the teaching strategies deal with methodology and pedagogy of accounting lessons. This was buttressed by one accounting teacher that the teaching strategies specify the

*... various methodologies that a teacher would use to impart knowledge with the learners.*

### **5.3.2.3 Accounting teachers' preparedness to teach cost accounting**

Getting the exact words from the accounting teachers was imperative to thoroughly understand their preparedness to teach cost accounting relative to financial accounting. Some accounting teachers favoured cost accounting for a number of reasons including

- a. Unloaded syllabus as compared to financial accounting syllabus*
- b. Pass rate of students is very high than the pass rate in financial accounting.*
- c. It is easier teaching cost accounting than financial accounting because its content is well laid out in the syllabus than the financial accounting.*

However, in spite of these advantages outlined and some personal encounter with cost accounting, one accounting teacher confessed

*The in-depth knowledge I have from my secondary education and courses pursued at the University were cost accounting bias, such as Cost Accounting, Management accounting and the like. Also further studies of cost and management accounting at the Advanced Level and professional level has given me exposure, in teaching cost accounting. But frankly speaking most teachers prefer teaching Financial Accounting to Cost Accounting.*

Some other accounting teachers were indifferent to the kind of accounting courses they teach. One of such teachers explained the preparedness to teach cost accounting in

*The fact that [he/she is] comfortable with any of the business subjects.* (Emphasis added in braces)

Such confident and motivated accounting teachers had noticed their colleagues' uninterested attitude and hostility toward cost accounting. One of these confident and motivated accounting teachers shared

*I have observed, however, that many teachers rather prefer to teach financial accounting. I have always insisted that there must be the need to teach both subjects or do team teaching.*

Such confident and motivated accounting teachers displayed collegiality as evidenced in the above quote. Sharing knowledge, promoting cost accounting, instilling confidence and encouraging other colleagues to embrace cost accounting is a sign of true professionalism.

#### **5.3.2.4 Accounting teachers' assessment of accounting instructions**

As instructional leaders in accounting lessons, accounting teachers assume a strategic position to gauge the quality of accounting instructions. Hence the inclusion of their views on how successful accounting lessons are in the senior high schools in Ghana.

One accounting teacher simply said without any further evidence that accounting lessons are just improving. However, other accounting teachers were a bit generous to share greater insights of their assessment of accounting instruction. One accounting teacher provided the following copious description of the quality of accounting instruction

*Mixed influences that stem from the fact that current teachers have high qualification up to Master's degree or professional qualification and low syllabus content as compared to Advanced level pre-university course in which the short duration caused rushing through the syllabus and even overlooking some aspects of the syllabus.*

The accounting teacher cited some practically peculiar impossibility by arguing that

*for instance, how come a teacher uses only one month in the first term of first year admission to introduce Financial Accounting and by the third term, cover up to final Accounts of sole trader and adjustments of final accounts including revenue and expense owing and prepaid, provision for bad debts and provision for depreciation.*

The teacher lamented the inclusion in the syllabus some new topics

*Again included in the new syllabus is both VAT and Accounting concepts, conventions, standards and Policies.*

As a result, another accounting teacher rated the quality in accounting instructions to be a bit lower than desired or expected. The teacher assigned several reasons for the decline in quality of accounting instructions including

- a. *Continuous change to the teaching syllabus almost every three years.*
- b. *Lack of good teaching aids.*
- c. *Disparities between what is taught at the Universities for teachers and what is taught at the secondary schools make the new teachers find it difficult to teach the subject effectively.*
- d. *Overloaded syllabus for the subject making it difficult to complete within the stipulated time.*

The professionalism and commitment of accounting teachers are a suspect to support the delivery of the accounting curriculum successfully. One teacher blamed institutions of higher learning for turning out graduates who might not fit the classroom job. The accounting teacher generously analysed

*The kind of courses mounted by the various Universities such as University of Cape Coast, University of Education, Winneba for Business Education students [are not responsive to the needs of the professional teacher]. Also, the business environment is more competitive and lucrative, so the private and public Universities are framing students who will suit the demand of the other job market [rather than the teaching job]; all these factors have contributed to the quality in accounting education.*  
(Emphasis added in the braces)

Realistically, the accounting teacher suggested that the universities are losing their foci. They have all turned to gaining competitive advantage to the point where they are digressing from their missions.

## **5.4 ACCOUNTING STUDENTS' SURVEY**

Accounting students were engaged in the study to supplier some data by completing some students' vignette. The survey explored the students' motivation to study cost account; and their assessment of accounting instructions.

### **5.4.1 Students' Motivation to Study Cost Accounting**

To have a totality of understanding of the phenomenon, accounting students were asked to air their views on the extent to which cost accounting is preferred in relation to financial accounting. Almost all the students studied intimated that they were more interested in

financial accounting but not cost accounting. Some of the students noted that financial accounting has enjoyed greater popularity because it gives one a greater opportunity. Financial accounting has enjoyed greater popularity than cost accounting. One of the accounting students claimed;

*... before I chose my course in the senior high school by then I had heard so much about financial accounting more than cost accounting. And even now that I am studying financial accounting I think it is popular than cost accounting.*

In this regard, another student stated blatantly;

*Again, even there at the JHS level those who would want to read business programme are familiar with financial accounting as compared to cost accounting.*

They assigned numerous reasons why they had peculiar interest in financial accounting but not cost accounting. The accounting students noted that financial accounting offers a wider range of employment opportunities compared to cost accounting. A student remarked that financial accounting

*provides one with so many careers such as an insurance broker, tax advisor, financial analyst and so many others and so it has gained a lot of popularity and is more convenient.*

Indeed career opportunities in accounting are widespread and dynamic. But this revelation makes it evident that senior high school accounting students seemed well-informed about the career opportunities in accounting. This is indicative of the fact that students read the financial accounting on a well-informed purpose. In a related development, it was made clear by the students that financial accounting is easier to comprehend and more interesting to study. Accordingly, a student reiterated that

*For example, in my school we study financial accounting and it may be due to the fact that financial accounting is easier to understand.*

They attributed this to the fact that financial accounting is regulated by the Generally Accepted Accounting Principles (GAAPs) which provide some objective verifiable guidelines to aid understanding. Other students held the belief that it was the schools that had made cost accounting unpopular among both accounting students and their teachers. A student confided that

*I think financial accounting has gained a greater popularity than cost accounting because most schools have made financial accounting compulsory and this has helped most students learn more of it as some do not read cost accounting.*

This is reinforced by the submission of another accounting student that

*Indeed financial accounting has gained more popularity as it is the only subject of the two offered in my school.*

Financial accounting has gained more popularity than cost accounting as financial accounting is made compulsory in all schools that offer business. However, cost accounting is optional in almost all senior high schools. It can be substituted with elective mathematics. Another student opined that due to the apparent relevance of financial accounting relative to cost accounting,

*... all costing students who study cost accounting study financial accounting but not all financial accounting students study cost accounting.*

In some schools, students were not given that freedom to make a choice between elective mathematics and cost accounting. This is evident in the opinion of another accounting student that

*... cost accounting is sacrificed in many schools for economics or elective mathematics.*

These subjects are rather forced on the students. The students' freedom of choice is profoundly curtailed and thus cost accounting is sacrificed for such other subjects. Yet, it should be noted that there are key complementary accounting topics such as payroll accounting, budgeting and contract accounts, just to mention a few, in the cost accounting syllabus. Sacrificing these implies denying students the opportunity of having these relevant experiences which are not usually found in most University accounting curriculum in Ghana. Thus, accounting students are permanently robbed of these hands-on rudimentary experiences in accounting.

Accounting students had the notion that the two key university courses (Bachelor of Commerce and Bachelor of Science or Arts in Business Administration) are solely based on financial accounting. With this erroneous mind-set, accounting students had gauged these programmes and were accordingly studying financial accounting in order to make a good grade and gain entry to read them at the university. This was confirmed by an accounting student who declared that

*B.Com is one of that most popular courses everyone is aiming to read at the universities and this course is mainly bothers accounting and so therefore one must study accounting at the senior high school level to enable him/her gain admission.*

However, there were some other well-informed accounting students at the senior high school level. They rather saw cost accounting and financial accounting to be relevant in their own regard. They stressed that even though financial accounting is of great importance, facts are to be faced, that is in the tertiary institution more of cost accounting also features prominently.

The effort of senior high school administrators and accounting teachers has militated against the adoption of cost accounting by accounting students at the senior high school. The insistence of these stakeholders has led to the drastic reduction of student numbers in cost accounting lessons. A student clarified this by saying

*For instance, in my school, the number of students studying financial accounting is very great, with about 1/5 of the students showing very little interest in cost accounting.*

Two other accounting students on different occasions shared similar opinions as one intimated

*In my school for example three classes are reading financial accounting and only one class is reading cost accounting. So in all about only 20% of the business students are cost accounting.*

The other student was quite generous to share that

*... in many senior high schools in Ghana most students read financial accounting only. It's only few students who read both financial accounting and cost accounting. In my school, for example, out of the 3 business classes 2 read financial accounting only and just 1 class reads both financial accounting and cost accounting.*

Accounting teachers came in handy when a student stressed

*... teachers tell students that cost accounting is not of importance to them and those reading cost accounting are lazy.*

Some of the students had chosen financial accounting over cost accounting for the apparent reason that

*enrolment of accounting students into the university programmes was more on the basis of candidates' performance in senior high school financial accounting than cost accounting.*

Another student added that

*... universities place higher importance on financial accounting when admitting a student than on cost accounting.*

Indeed, accounting students were merely motivated to read financial accounting instead of cost accounting because of their desire to meet the demands of the university admission board. This was the most prudent decision any rational person would have made in the circumstance. However, the effect of this somewhat myopically selective decision may be far-reaching. Once, such students gain admission to the university, they might read courses in cost and managerial accounting. The prerequisite of all such courses is the senior high school cost accounting. Without this background, reading those aforementioned university courses might be more challenging.

It appears the senior high school cost accounting curriculum lacks the detail capable of meeting students' needs. It appears not to be challenging enough for the target students. This assertion is made on the basis of a witness made by a student that

*... the syllabus of cost accounting can be completed within a much shorter time, as compared to financial accounting and therefore students find it much easier and therefore may become complacent.*

Admittedly, most concepts in the senior high school cost accounting curriculum lend themselves to simple analysis and solution. They might lack those lengthy and format-like presentations that characterize financial accounting. As well, the syllabus appears not to be as loaded as that of financial accounting. However, this could have afforded cost accounting teachers and students the ample time required to exploit every avenue to make the instructional discourse successful. The students noted that financial accounting gave a broader horizon of the subject area as compared to cost accounting. However, not all the accounting students saw the simplicity in the cost accounting curriculum for a student realized that financial accounting

*... now [has] flexible and understandable syllabus for students which facilitates easy learning and retention than cost accounting.*

Another student had a rather contrasting view that

*As a financial accounting student who does not know much about cost accounting, I think financial accounting is not quite popular than cost accounting. Before I got to school all I knew was cost accounting. It was all I had heard about. It was after I got to my current school before I got to know about financial accounting as one of the types of accounting.*

This revelation was further strengthened by the pronouncement of yet another student that

*It is just an opinion [that financial accounting is popular than cost accounting] because both courses are equally important in one field or the other.*

Financial accounting contains more topics than cost accounting. Because the topics in financial accounting are many, the calculation aspect is more intense as compared to cost accounting. Since majority of students dislike calculations, they usually complain about the difficulty in financial accounting more than cost accounting. In spite of this, the accounting students were unanimous to admit that there were lots of financial accounting books in the stationery market than that of cost accounting.

#### **5.4.2 Accounting Students' Assessment of Accounting Instructions**

Students were enthused with the level of instructional resources available to improve teaching and learning. This included the kind of textbooks that existed to support the delivery of accounting lessons. A student noted that:

*... at first during accounting lessons no textbooks were used but now textbooks are provided and even computers are used.*

The level of improvement in such instructional resources has been phenomenal. Accounting students noted that the accounting textbook provides simplified explanations to concepts to foster ready understanding in independent tutoring. A student did a comparative evaluation and concluded that

*Even though I don't know how lessons in years back were, I think these days accounting lessons are better than that of the olden days. I think nowadays to purchase accounting text books are being done with ease as compared to then. Also going through some of the ancient accounting textbooks and comparing them to today's I think today's own is more simplified and better than accounting textbooks in the years back. I think with these resources accounting lessons are better than that of the ones in the years back.*

The availability of a variety of accounting textbooks from which accounting students could select depending on their needs has also improved accounting students' learning in the subject discipline. The depth of detail covered in the accounting textbooks was noted to broaden students' knowledge in accounting. A student declared that the content and structure of the modern accounting textbooks afford them the luxury of not depending entirely on the accounting teacher as was previously done. This was reiterated by a student

*... as at now, there are many different and self-teaching accounting text books which enable students to study and have fair ideas on topics so when lessons are held in class, it seems better and well understood.*

The introduction of technology has contributed positively to the success of accounting instructions. The accounting students hailed the use of computers and calculators for accounting lessons. They observed that such devices assist in the teaching and learning process. The use of calculators has facilitated understanding and accurate presentation of answers. The use of calculators and computers in solving accounting questions has made the subject easier. For computers in accounting instructions, a student explained that

*To begin with, the introduction of the application software which incorporates the spreadsheet software has made accounting lessons livelier and more practical. The software which includes Excel has made it easier for certain mathematical calculations and derivations.*

On the application of computers to accounting lessons, the students indicated that accounting lessons have become more interactive as such understanding on the path of students has been enhanced. They intimated further that they have access to internet services that grants them the opportunity to have ready access to the relevant explanations to contentious and complex concepts.

Other students based assessment on the quality and adequacy of accounting teachers available. They claimed that the calibre of accounting teachers in their schools is the reason behind the success of accounting instructions. Whilst some of the students stressed the quality others were more particular about the adequacy of the supply of accounting teachers. For example, a student confided that

*The availability of more accounting tutors these days has made studying the subject easier than those days when a single or few tutors were handling a lot of students in a school or several schools.*

Thus, the student-teacher ratio might have improved thereby ensuring that almost every academic need of the accounting students being addressed by the accounting teachers. Due to the improved ratio, accounting teachers need not spend their time too thinly across the range of students requiring to be served. Another student informed

*Well, my school has very good accounting teachers and these teachers teach the subject to our understanding. They have time for us to approach them with any difficulty.*

Other students also commented on the qualification and experience of their accounting teacher being of the desired standard. Another student noted that

*Frankly, accounting lessons are better than what they used to be some years back. More knowledge has been inculcated in the tutors and mistakes of the past have been corrected, making tuition better than how it used to be.*

A student was full of praise of their teacher when she declared

*I think accounting lessons have always been interesting for me personally. It always depends on the tutor giving the lesson. I think people use to perceive it as not better some years back because of their tutors. They might not have taught for students to fully understand but these days, understanding is much better.*

This view was supported by another student when she added

*In my school, accounting lessons are enjoyable and easily understood due to the fact that, my teacher is well-seasoned in the subject.*

Other students judged the quality of accounting instruction by virtue of the pass rate in the West African Secondary School Certificate Examination (WASSCE). In this light, one student observed that

*... students of today almost passed accounting easily in their final examination due to today's motivations and other incentives to teachers which boost their morale to teach accounting wholeheartedly as compared to some years back.*

The teacher-factor is still evident in the success of students in examination. Students attributed this perceived heightened performance of students to the improved morale of accounting teachers. An accounting student was particular about the time allocated to accounting instructions. He expressed satisfaction with instructional time

*because more time has been allocated to accounting on the time table nowadays, hence students are able to take their time to understand the concepts of accounting rather than rushing and not getting the full understanding.*

The adequacy of the contact hours for accounting lessons grants instructional participants the opportunity to exhaust the task for the lesson without compromising quality. Some of the students attributed the quality of accounting instructions to curriculum improvement that has taken place over the years. They believed that curriculum planners have been current enough

to incorporate new ideas and changes to the curriculum. In buttressing this, a student explained that

*Certain archaic terminologies have been replaced with modern ones. Example, debtors account has been replaced with accounts receivable account. Also certain old ways of recording and presenting financial reports have been modified. For example, the horizontal trading, profit and loss account has been given way to the vertical format.*

A student explained further attributing the quality instructions to simplicity imputed in the curriculum which improves with time. The student had to say that

*...accounting lessons are better than they used to be some years back because in those times there were some things added to accounting formats that made it lengthy and difficult to learn but now some things have been taken away from these formats which make learning easy and fun.*

Another student went further to laud curriculum planners for the continuous improvement in the curriculum. In addition, he implored them to continually seek such improvements when the student indicated

*It could be true because as life goes on, new ideas are introduced into the syllabus to make it a better one and I think new ones should be introduced to rid the outmoded way of handling business accounts as the world is dynamic comparing the result of the old accounting syllabus and that of the new syllabus has shown a tremendous improvement in the results due to the new methods introduced in tackling questions.*

Much of their argument of their assessment was referent to the results students obtained in their examination. This was evidenced by the numerous comments the students made one of which was

*I think accounting lessons are better than they used to be some years back. This is because, measuring the level of understanding from the WASSCE grades in the senior high school, students are doing better these days than before.*

Another student opined

*As time has proven, it now clearly shows that accounting lessons are better now than previously because comparing the results and outcomes of examinations conducted, the current results are far better than previous ones.*

One student concluded the discussion in rather a simple manner that

*I don't really know how accounting lessons were before but I enjoy my present accounting lessons.*

In fact, almost all the participating accounting students seemed appreciative with the level of quality in accounting lessons. They described accounting lessons as being enjoyable. This was attributed to accounting teachers' ability to device means to make the class interesting. Students intimated that they were much more involved in accounting lessons. In addition, they become occupied by working out a lot of practice questions which were available in the system. Indeed, from these evidences, students' motivation might be heightened to enjoy accounting lessons.

## **5.5 DOCUMENT ANALYSIS**

The comments raised by WAEC chief examiners about accounting following the grading of accounting scripts summarise the quality of implementation of the accounting curriculum. Such comments provided valuable insights into taking appropriate decisions and provide some basis for evaluating the programme quality. Accordingly, data gathered from the WAEC chief examiners of accounting in the WAEC Chief Examiners Report from 2000 to 2010 were analysed and the results presented in this section. The reports gathered and analysed, however, do not include those reports on private examinations organized by WAEC. The results of the analyses have been presented on the basis of students' knowledge of the subject matter; presentation of answers, pedagogical flaws and other general concerns.

### **5.5.1 Depth of Students' Knowledge in Accounting**

In accounting, knowledge precedes presentation. A student's ability to grasp, recall and apply what is taught and learnt is perennial to promoting success in the quest of gaining knowledge in the field of accountancy. Issues raised in the WAEC Chief Examiners Report on this matter have been conceptualized under interpretation of concepts, use of relevant accounting principles and accuracy in computations.

#### **5.5.1.1 Interpretation of concepts**

The examiners noted that the accounting students had some weaknesses which limited their ability to interpret concepts in the subject and how they translated them into calculation. The greatest weakness of candidates was the lack of knowledge of the subject matter. In most cases, candidates exhibited half knowledge. With the exception of a few candidates who were able to complete whole questions correctly, most candidates started well only to fumble mid-way. Students did not understand basic accounting principles and conventions. Some candidates showed lack of knowledge on the "importance" of the accounting concepts. In

addition, there were few others who could not state the double entry rule for Nominal Account. It was evident from some candidates' answers that the "Golden Rule" in Accounting – *Debit the Receiver and Credit the Giver*- is a generalised rule for Personal and Impersonal Accounts which is incorrect.

Majority of candidates were not able to either identify the various errors or state their effects on the trial balance. The foundation of the students is profoundly weak in this area. The few who were able to identify the errors could not explain fully how each error would or would not affect the trial balance. Most of them gave a general explanation without contextualizing their answers as normally requested. Most candidates could not state the rule of debiting profit and loss account and crediting provision for doubtful debt account. Generally, Candidates could not link the use of business documents such as debit note, credit note petty cash voucher and an invoice to preparation of accounts and keeping of accounting records. Candidates could not explain when a debit note or credit note is used in business transaction.

Interestingly, students were unable to distinguish between a reserve and a provision. Some candidates humorously defined provision as things like sugar, milk, milo and other essential commodities students take to school and explained reserve as what is left from those "provisions" at the end of the term. They attended to the questions from the common uses of the terminologies instead of the technical connotations implied.

#### **5.5.1.2 Use of relevant accounting principles**

Most of the candidates were able to use the relevant accounting principles to deal with practical problems with a few of them finding it difficult to apply the various percentages of discounts to amounts payable. Others also wasted their time calculating the discounts for the other volumes of items purchased which were not required. Students were unable to effectively apply relevant accounting principles and standards in dealing with some data. There were instances where candidates treated closing stock as opening stock. There were problems with adjustment to final accounts. Candidates also found it difficult to apply principles in questions which are not in a traditional style.

#### **5.5.1.3 Accuracy in computations**

Candidates showed complete unfamiliarity with various methods in accounting for business undertakings and transactions. At best, students were able to state formulae but were unable

to solve the problem from the information given. For instance, candidates' knowledge of the reducing balance method was tested and found suspicious. Further, the determination of the opening balance on the provision for depreciation account was a problem. The determination of accumulated depreciation in the sale of non-current assets posed a problem to the candidates. No wonder the preparation of the Asset Disposal account was poorly done. Candidates did not show a thorough understanding of the double entry and the topic "depreciation" itself.

Many candidates could only state the formula for wage rate variance and material usage variance. It was as if many candidates had not covered this subject in sufficient depth. There seemed to be an over reliance on the calculator and this resulted in candidates skipping valuable steps before coming to the answers. Answers should follow a logical sequence but a lot of candidates left out a lot of logical reasoning and went straight to their answers, thus losing valuable marks. There were many signs of inaccuracies and lack of confidence on the part of students. In most cases, candidates started a question, then half way through, abandoned it, start another section or another question abandon that also and then come to continue the earlier abandoned question on another.

Some candidates committed very unpardonable mistake which could have easily been avoided if they had been a little more composed. A typical case is where instead of candidates writing six zeroes (000,000) for a million, some candidates either wrote three zeroes (000) or four zeroes (0000). As a result of lack of composure, some candidates made avoidable mistakes in additions, subtractions, and division. The chief examiners noted that some candidates anxious to the extent that they worked this simple subtraction problem  $100 - 75$  and had answers which were different from 25.

### **5.5.2 Presentation of Answers**

Whilst some chief examiners commended candidates for the presentation of answers and neatness of work yet some others noted that majority of candidates performed poorly because they failed to go beyond stating *bullet points* even they required to explain the points. Some candidates failed to write figures well during additions and subtractions to arrive at the final answers. There evidences of illogical presentation of material, suggesting lack of confidence of candidates in the material they presented and ill preparation for the examination. A serious

revelation was made when the chief examiners found and reported that did not know how to close off the petty cash book.

There was significant incidence of poorly presented work. Candidates fail to focus on the specific requirements of the questions instead they simply provide a number of formulae relating to topics. A number of candidates were very weak in the area of presentation skills, with many submitting a list of bullet points without any explanation or comments. Some candidates failed to show workings to support the answers they had, and this caused them to lose marks. Some candidates also failed to write figures in full. This affected them when they had to make additions and subtractions. Logical presentation of relevant ideas was generally lacking. Some candidates lumped their solutions to a number of questions on one page. They did not start a new question on a fresh page.

### **5.5.3 Pedagogical Flaws**

All Chief Examiners were unanimous in reporting that candidates were not adequately prepared for the examination. Teachers should endeavour to cover all topics in the syllabuses to avoid situations where candidates are limited to topics on which they have been given guidance by their teachers. Tutors are advised to take candidates through examination techniques. These should cover rubrics, reading and understanding of the requirements of questions, assembling of points and presentation of material. The issue of poor usage of the English language should be tackled by teachers and policy makers from the basic school level as a long term measure. In the short term, however, school authorities, parents and teachers are advised to encourage prospective candidates to cultivate reading habits for magazines, story books and other educational materials that could enrich their vocabulary in the English language. Lack of understanding of the questions which suggested inadequate tuition and coverage of the syllabus was very paramount. Teachers are advised to painstakingly introduce the students to the subject from the rudiments as they have no previous knowledge of the subject from the Junior Second School level to build upon.

Although accounting is not a language course, poor application of the English language on the part of students is not an excuse. A number of candidates still find it difficult to express themselves in simple straightforward English and this adversely affected their performance. The examiners noted that the issue of poor English language spoken and written by majority of students in secondary schools who eventually become candidates for this examination need

to be seriously considered by school authorities and policy makers to ensure that a solution is found to the problem since it serves as the medium of communication in all other subjects. Candidates displayed little knowledge of the Bad Debts account. Knowledge of treatment of Bad debts written off and recovered was very poor. The approaches of majority of candidates were poor which suggests that most of the candidates did not know the items that go into the Purchases and Sales Ledger Control Accounts. Accounting teachers were, accordingly, advised to redefine their approaches to teaching the topic.

### **5.5.3 Other General Concerns**

School authorities failed to ensure that the right and recommended textbooks for the examination were available for use by candidates. Parents should be brought in for discussions to assist in this regard. School authorities and teachers are advised to acquire Chief Examiners' Reports to serve as guides to candidates in their preparation for examinations. The schools offering the subjects should ensure that the right and recommended textbooks for the examination are available for use by candidates. Some candidates appeared not to be adequately prepared for the examination. Some did not write their index numbers on the answer booklets while others failed to write the number of the question they answered.

## **5.6 DIRECT OBSERVATION OF ACCOUNTING INSTRUCTIONS**

Being an accounting teacher, the researcher wanted to get greater insight into the problem under study. Accordingly, he sought permission from authorities and those willing accounting teachers and students had their class sessions observed. The direct observation of accounting lessons were undertaken in senior high schools across the three regions selected from the three zones. In each case, the observation was undertaken for two instructional hours which is a period of 80 minutes. The observation was not done in a controlled environment. The results obtained have been partitioned into the issues pertaining to the classroom environment, academic engagement and time management, students' participation and questioning skills.

### **5.6.1 Classroom Environment**

Most classrooms were dirty and seemed not to have been painted for many years. Most electrical fittings were out of place and only few bulbs were in place thereby casting doubts on illumination when the sun becomes less merciful. There were faulty electrical gadgets and

naked electrical cables. Ventilation was appropriate but most louvre blades in the classrooms were broken and out of place. Most metal gadgets were rusty.

Some of the classrooms were overcrowded which impeded to some extent free movement of both teacher and students. Hence, some accounting teachers moved with difficulty to and fro in the class to guide students during instruction. Yet in some other schools, there was free movement during class interaction because the classroom was orderly arranged. Tables, chairs and students were well arranged to permit free movement. Albeit, generally, class control was a problem. Due to the poor illumination in the classrooms, students had difficulty in reading from the whiteboard as the sun reflection on the board made reading the board presentations problematic. In spite of this, the whiteboard was judiciously used by the accounting teachers. Their presentations on the whiteboard were bold and neat. But the whiteboards were too small in size to contain the lengthy accounting presentations. Thus, students had to keep up with the teachers always as the teachers had to often rub previous presentations to make way for new ones. This always compelled students to focus attention on writing instead of focusing on understanding of the lesson.

The appearances of the accounting teachers were monitored as well. Generally, they were poorly dressed contrary to what is needed to model the behaviour of the accounting students. For instance, one accounting teacher observed was casually dressed in Polo shirt which was not tucked in a pair of black trousers; these were matched with a pair of black sandals. There was yet another accounting teacher who also was casually dressed in a polo shirt and khaki trouser matched with some black shoe. In this case as well, the shirt was not tucked in the trousers. Another typical event was an accounting teacher who was dressed in plain long sleeves shirt tucked in a pair of khaki trousers which was firmly affixed to the waist with some black belt. These were matched with a pair of black shoes. However, the shirt and trousers looked a bit bigger on him.

### **5.6.2 Academic Engagement and Time Management**

Almost every class session observed saw distractions. For example, one class was about half-way full at the beginning of the instruction because students who defaulted the payment of their school fees were sacked from school. In another class session, students came in late from lunch break. In yet some other classes, during the lesson, another teacher popped in to make some announcement to the class. Some students walked in after about 30 minutes of the

class but the teacher showed no concern. It was a common happening to hear noise coming from the next class who were not engaged. Even when there was a teacher engaging the other class, noise from the activities of such neighbouring classes interfered with the quality of instruction. As a result, the accounting teachers had to talk on top of their voices to be clearly heard by the students. Albeit, the accounting students had their calculators and notebooks opened on their desks throughout the instruction. They displayed their attentiveness in the midst of such distractions. Apparently, they might be used to it.

The accounting teachers were confident and displayed good subject knowledge. Most of them provided alternative and detailed presentations. The teachers used various illustrations to promote understanding. They displayed mastery of the content knowledge. They dwelt on the entry behaviour of students to present facts in the topic. In most cases, they used practical examples to illustrate the key concepts and accompanying terminologies. They showed mastery of the subject matter. Often, throughout the lesson, they referred students to concepts taught and learned in earlier lessons to aid transfer of learning to facilitate understanding. The accounting students were focused, organized and comported. There was an instance where one accounting teacher missed the date of the day and was accordingly corrected by a student. Almost all the accounting teachers observed were particular about how terminologies in accounting are pronounced. They displayed practical knowledge of the subject and facilitated that in that manner.

During the instructional encounter, the accounting teachers were audible. However, the teachers often talked to the board whilst writing on the board. They were well prepared as one never referred to any material but taught the lesson in an orderly fashion. The lessons delivered were methodically presented. They were well-composed. Students were attentive as their interest was sustained throughout in most of the lessons observed. Most of the accounting teachers were particular about the grammatical construction of the students. They monitored students' understanding at every stage of the instruction. There was an instance where a teacher tactfully dealt with the responses of students by describing some irrelevant response as the result of *over-learning*.

In the course of the lesson, the teachers asked intermittently whether students had any questions to ask. Most of the teachers were serious and business-minded. In one case, a teacher set the rules of engagement that the teacher was not supposed to answer every

question posed by students but other students should attempt to answer such questions as well. Accordingly, the teacher referred the students to the internet to find the meaning of *Cash Float*, a question a student asked. The teacher further explained that either students answered the question immediately or it be given as an assignment. Generally, the accounting teachers appeared disciplined and orderly. But one of the teachers often failed to give clear instructions to students thereby creating disorder in class. Another teacher often used “OK” to find out whether students understood the lesson. This was almost like some mannerism because the teacher abused the use of it during the instruction. In addition, almost all the teachers observed were found always to be repeating responses given by students.

The teachers used both the written and spoken languages to enhance students’ understanding. Thus, both whiteboard and oral presentations were used to appeal to students’ understanding. No other teaching and learning resources were used apart from the marker and the whiteboard. In one session, the teacher’s board presentations were difficult to read by students as the characters were small. In another session, the marker used by the teacher stained the whiteboard so subsequent board illustrations were difficult to see. Almost all the whiteboards were inadequate in size. One accounting teacher was in gross difficulty in using the board to aid the teaching of *Ledger Accounts*. The presentation of the ledger accounts and the entries made therein were not so visible. The teacher had to *squeeze* them such that all relevant accounts could be contained on the whiteboard at a time. Although the teacher made use of the board, the board was too small to contain the lengthy presentation in accounting. Time management was a problem for all the accounting teachers observed. In one observation session, the lesson ended 20 minutes before the expiry of the official instructional period. Consequently, the teacher could not complete the practical illustration question purported to be discussed with students before the expiry of the instructional time.

### **5.6.3 Students’ Participation**

Students’ participation in most of the accounting lessons observed was encouraging. Their involvement in the lesson presentation was mainly through answering questions posed by the teacher. Students volunteered to respond to such questions. Generally, students’ participation was limited as such they were passively looking on as the teachers continued with the lesson. In this wise, the level of students’ participation was limited to reading aloud notes on questions for the teacher to interpret. However, the students were enthusiastic to respond to the lesson. In other sessions, the participation of the students was reduced considerably as the

teacher dominated the lesson with lots of talking. In that sense, almost all the teachers responded to all questions posed by students without giving the class the opportunity to attempt some responses. In one session, responses of students to questions posed by the teacher were referred to the class for confirmation or otherwise. Students were asked by the teacher to refer to some accounting text but not all the students had it available for such exercise.

In some cases, students got involved in the lesson by undertaking some directed computations with their calculators. They displayed understanding of the lesson through oral participation. But in other sessions, some teachers asked students to determine accounts involved in transactions noting those to be debited and others to be credited. Students participated enthusiastically. The teachers further stimulated deep understanding by asking students why they used specific terminologies in responding to some questions. In most cases, teachers interfered with students' responses by interrupting them with comments. Teachers ensured that students who asked questions were satisfied with the responses given by asking such students whether they were satisfied. Some teachers encouraged some low achieving students to assimilate the lesson.

There, however, was some difficulty with a teacher engaging all the students in the lesson. Some students were not attentive but the teacher never noticed them because the class size was large (69). The interference from the instructional activities of teachers and students in the neighbouring classes affected the attention of some students as they complained of the noise. Some students managed to copy the presentation the teachers were illustrating on the board whilst others were orally contributing to the lesson. However, some students seemed to have their minds wandering. As the lessons progressed, few students were paying attention and following it. Students were rather relaxed during the latter part of the instruction.

#### **5.6.4 Questioning Skills and Motivational Strategies**

The teacher evenly distributed questions but they often displayed poor questioning skills as they kept asking general questions such as "Who can ...?" Students sat in a rather lazed atmosphere. Those students who were paying attention played along by joining other students in unison to chorus responses to the questions the teacher asked. Teacher contributed to this by posing questions that demanded choral answers. To a limited extent, teachers used

leading, focusing and prompting questions to motivate the students to generate right responses.

Appropriate responses were reinforced. Some teachers provided occasional reinforcements in the form of asking the class to clap for a student who put up the appropriate behaviour. One teacher encouraged students to respond to the lesson using words and/or phrases like ‘Yes! Try! Try!! I will give you GHS 1’. Teacher handed over the motivational contract of GHS 1 promised the deserving students after the class. Whilst one accounting teacher used such motivational contract to motivate performance, another was rather demotivating and insulting. The teacher demeaned the students by openly rating them as inferior after comparing their performance with some so-called better students.

## **5.7 DISCUSSION OF DATA**

The study focused on the quality in senior high school accounting education in Ghana. It used accounting teachers’ description and interpretation of the accounting curriculum, accounting teachers’ level of use of same curriculum, their concerns about the implementation of the curriculum, all which are components of the Concerns-Based Adoption Model. It also explored examiners’ concerns about the level of students’ performance in accounting examinations, teacher preparedness to implement the cost accounting curriculum and instructional engagement in the classroom as proxy in gauging the quality in accounting education at the senior high school level. This was done using a mixed method design. Outcomes of the study are discussed for every research question.

### **5.7.1 Level of Use of Senior High School Accounting Curriculum**

The success of the accounting curriculum in senior high schools is greatly but not wholly dependent on the accounting teachers who are considered the agents of its dissemination. The assessment of the rate of adoption of the accounting curriculum is therefore perennial in gauging the quality of its implementation in the catchment senior high schools. In tracking the extent to which accounting teachers were adopting and using the curriculum for their instructional engagement with accounting students Research Question One was formulated to guide this quest. It accordingly read as

*What is the level of use of the accounting curriculum by accounting teachers and how comfortable are they in using the curriculum?*

This research question was addressed by both quantitative and qualitative means. Thus both quantitative and qualitative methods of data collection were used in surveying the responding accounting teachers. Accordingly, the data to address the research question reflect the evidence generated by the accounting teachers' survey (5.2.1.1 Accounting teachers' adoption of the accounting curriculum and 5.2.2.1 Accounting teachers' adoption of the accounting curriculum).

Almost all the teachers studied indicated some level of use of the accounting curriculum. However, the rate and extent of usage varied greatly among the teachers. Other accounting teachers never saw the curriculum as any appropriate companion but rather used it because they were asked to. Several accounting teachers expressed their blatant disregard for the intrinsic value of the accounting curriculum. The teachers assigned a number of factors that influenced the level of use of the accounting curriculum. They believed that since the new accounting curriculum was replacing an existing one if there were no comparative advantages the success of the new curriculum would be retrogressively phenomenal.

Generally, there was an indication that accounting teachers made use of the accounting curriculum. They were actively involved in the use of the curriculum for instructional delivery. They actively coordinated with others to use the innovation. In addition, they sought more effective alternatives to the established use of the curriculum. In fact, the accounting teachers used the curriculum primarily because they had been asked as it was expected of them to use for instructions. This was the case, even though, some teachers knew the benefits of using the curriculum. In any case, the accounting teachers undertook their own evaluation of the curriculum before accepting it for use. It was only natural that some of the accounting teachers rejected some portions of the curriculum. Those teachers who were not using the curriculum could not be blamed as the supply and dissemination of the curriculum materials was problematic.

The curriculum documents were in short supply. Some of the accounting teachers did not have the accounting syllabus. It was not only those accounting teachers who did not have the new accounting curriculum who were not using it. Nevertheless, even those accounting teachers who had the new curriculum still referred to the old curriculum. Some accounting teachers were still familiarizing themselves with the accounting curriculum after nearly six years of introduction. Some did not understand the contents of all the topics in totality.

However, meticulousness is required to be faithful in the delivery of the curriculum as is required in a centralized school system practiced in the country.

The level of use of the accounting curriculum, though not absolute, was appreciable. Accounting teachers were developmentally progressing through various level of use given the time of introduction of the reform. To the best of their knowledge and insofar as available logistics could permit, accounting teachers were vigorously engaged in the delivery of the curriculum. Thus, they resorted to some other means as articulated by most of them for their instructional needs. But Tunks and Weller (2009) noticed that with continued support, most of the participating teachers could achieve routine levels of use, which such teachers will be able to sustain beyond the implementation of the programme.

Nevertheless, the teachers did not follow through the developmental level of use of the curriculum because the needed support was lacking. Indeed, given this time since the introduction of the 2007 Education Reform, it was professionally insensitive for accounting teachers to have honestly and exhaustively used the curriculum to identify defects that needed remediation such that accounting teachers initiated their own refinement of the curriculum. Accordingly, Wang (2013) intimates, at this stage, teachers could be implementing the new curriculum largely at mechanical use and routine use.

It is doubtful whether those accounting teachers who indicated some level of use were really genuine with their assessment. This was only obvious as the other evidence (example, short supply of curriculum documents) available pointed to the fact that there were practical problems in the use of the curriculum. Taken for granted that teachers were not genuine, then their use of the curriculum was a suspect. More so, it appears that the accounting teachers had progressed too quickly in the use of the curriculum. This increases the doubt in the assessment. After all, according to Oosterheert, Swennen and van Rijswijk (2005), in each developmental phase of the concerns theory, a certain concern is not exclusive, but dominant to some degree. Readily, it is conceivable after all, the concerns theory has failed to validly gauge how teachers are progressing in the delivery of the curriculum.

Even though the curriculum enjoyed high level of patronage, the fact that a significant number of accounting teachers had reservations in using it and actually failed to use it creates suspicion on the quality cycles in senior high school accounting education. Indeed, the study

confirms that of Owino (2013) on the grounds that negative attitude of teachers towards the subject taught and learnt is detrimental to the success of the implementation. Refined usage or partial adoption is capable of militating against the core of the curriculum rationale and thereby defeat its purpose. This attitude of accounting teachers was noted by Kiplagat (2012) as the key among other institutional factors influencing implementation of curriculum change. The lack of fidelity of accounting teachers' implementation of the accounting curriculum implies disloyalty to the curriculum dictates and is therefore injurious to the success of the curriculum in schools. This disloyalty only creates an atmosphere of confusion between what is planned and that which is executed.

Following from this, one could not expect any good quality teaching and learning as the accounting students who were central to the determination of the success of the curriculum implementation might be found wanting in sitting examinations based on the curriculum. Blame cannot be apportioned to the students because the principle of *garbage in, garbage out* is operational in this instance. Accounting teachers delivered curriculum other than the recommended, or better still the prescribed, curriculum on which examination questions are based. Situations like this occur because the background of accounting teachers fails to support the change. Therefore, accounting teachers may lack the motivation to successfully implement the accounting curriculum with confidence. This supports the literature that teacher's failure to use the curriculum is the result of low teacher motivation and schools tradition (Juma, 2009).

### **5.7.2 Accounting Curriculum Configuration**

As part of generating solution to the entire research problem, the study sought to find out accounting teachers' understanding of the descriptive characteristics of the accounting curriculum they used. This was the quest of research question two posed as:

*What descriptive configurations exist among the accounting teachers who have indicated a level of use?*

The data to address this research question was gathered through the accounting teachers' survey (5.2.1.2 Descriptive configuration of the accounting curriculum and 5.2.2.2 Accounting teachers' description of the accounting curriculum). Some of the accounting teachers saw the subject matter as the main ideas which are supposed to be covered by the teacher with the students. The accounting teachers saw the assessment procedures as the manner in which class assessment is to be done. Thus, some accounting teachers saw

assessment in senior high school accounting lessons to be focused essentially on the learner. According to the accounting teachers, the aims and goals are to ensure that both students and teachers focus on the end product of the lesson. This view permeated prominently among a range of views of the teachers studied. The accounting teachers accepted that the teaching strategies deal with methodology and pedagogy of accounting lessons.

However, the fidelity of implementation of the accounting curriculum is a suspect. Across all the components of the accounting curriculum the accounting teachers described, there was none in which unanimous congruence was obtained. In reality, each accounting teacher constructed their own interpretation of the components of the accounting curriculum. Their descriptions of the same curriculum differed markedly and thus shrouded in and clouded by subjectivity. Whilst Berg and Ros (1999) stress the importance of the subjective reality of teachers during reform, causing each person to participate in his or her own manner, it is imperative to lament that phenomenal fidelity of implementation of the accounting curriculum is not tenable in these circumstances.

This is further buttressed by the fact that accounting teachers always evaluated the curriculum based on their own specified criteria before accepting, adopting and owing the curriculum for implementation. Additionally, for the fact that their level of involvement in the conception, design and development of the curriculum was profoundly curtailed, they might rather have some militating mentality against the successful fruition of the curriculum. Therefore, their underlying assessment of the curriculum might not be in favour of the formal curriculum. Whilst most of them were likely to degrade the curriculum for the mere reason that they were not adequately consulted and/or represented in the production of the curriculum, others might have genuine concerns to disregard the curriculum wholly or partially. The reason for the latter cohort might be that their present professional outlook might not support the delivery of the new curriculum. Thus, the passage of time might have made them obsolete.

Since all these categories of teachers were maintained at post, the result was unauthorized and unofficial alteration to the curriculum which might in the long run defeat the purpose and internal logic of the curriculum. This should be long expected as the development of teacher-proof curricula, according to Elbaz (1991), always breeds resentment and stirs contempt among teachers who are the implementing agents of the curriculum. This, in part, explains the reason for the abysmal instructional quality engagement in accounting lessons.

From the turn of events, instructional supervision seems to be lacking in the schools. Granted that supervisors were responsibly executing their tasks, noncompliance on the part of accounting teachers could be surmounted and the culpable accounting teachers dealt with. Accordingly, Tuwei (2013) rather attributed the unwarranted freedom granted teachers in curriculum implementation to wide variation in the instructional supervisors' perceptions of the meaning of the subject taught. Because the heads of business departments and heads of senior high schools might be deficient in the content knowledge of accounting, they might think accounting teachers in their schools were teaching at the right depth and width including the quality of coverage. Thus, most senior high school accounting lessons had ineffective or insufficient instructional supervision.

### **5.7.3 Stages of Concern of Accounting Teachers**

Further, the study sought to unearth the concerns of teachers in their bid to implement the senior high school accounting curriculum. These concerns were necessary to determine the success rate of the implementation progress. Merely descriptive evidence was required to describe such teacher concerns and accordingly the following research question was posed;

*At what stage, as determined by the Stages of Concern, are accounting teachers in implementing the accounting curriculum?*

This research question was addressed using the data (5.2.1.3 Concerns of accounting teachers in implementing the senior high school Accounting Curriculum) gathered through the use of the SoC questionnaire.

The Stages of Concern report revealed a similar trend as in the case of the Levels of Use of the accounting curriculum report. It also gave an indication that the accounting teachers were nonusers of the accounting curriculum. With both the primary and secondary concerns at the awareness and informational stages, there was no doubt that they were not very much involved in the delivery of the curriculum. The teachers were primarily concerned about the rudimentary aspects of the delivery of the curriculum. As such they should be recognized as those who were considering the possibility of using the curriculum. Implicit in this is the fact that as at the time of the survey they were not considered as actual users of the accounting curriculum.

One thing stood out clearly in the various group profile results analysed and studied. Awareness concern featured prominently in all of them. The degree of intensity in each case was phenomenal to authenticate the concern. There, however, were some situations where some other concerns denoting some level of use of the accounting curriculum were reported. Nevertheless, each of the group profiles reported points to the fact that the first three (awareness, informational and personal) concerns were characteristics of the accounting teachers studied. To gauge the concerns very well to permit informed judgements, it was instructive to cultivate the pattern of concerns to determine the structure of concerns of accounting teachers.

Accounting teachers were considered as nonusers of the accounting curriculum. They had awareness, informational and personal concerns. These lower level concerns were indicative of their non-use of the curriculum. This confirms the finding of Tunks and Weller (2009) that many of the teachers' concerns progressed from self/task toward impact rather than focused on the task stage (Christou, Eliophotou-Menon and Philippou, 2004). For the fact that most of the accounting teachers had these self-concerns, they apparently failed to use the accounting curriculum. In fact the situation is not any better than before because Kwarteng (2009) asserted earlier that accounting teachers had their main concerns at the awareness and personal stages but low concern at the refocusing stage.

These were the general concerns, yet the individual peaked at different stages. And thus further validating Donovan and Green's (2010) study that, as a group, teacher participants had high-level of awareness, management, and impact concerns, yet highest concerns for individual teachers vary. Hence there was need to be responsive to individual accounting teacher's needs to encourage adoption of the curriculum. Both (2010) warned that self, task and impact concerns can occur at one moment in time and return throughout teachers' professionalization, especially if teachers are confronted with new problems and chance upon some opportunities. This implies the strengthening of instructional supervision and monitoring to keep up with developments in teacher development in the light of the implementation of the accounting curriculum.

Hence the idea of centralising the development of the curriculum and disseminating it across senior high schools to be implemented with utmost fidelity is defeated. In a centralized school system as practiced in Ghana the lack of the fidelity of implementation of the

curriculum spells phenomenal concerns worthy of discussion. What then do accounting teachers do in the classroom if they fail to employ the basic working tool prescribed for them by the Curriculum Research and Development Division of the Ghana Education Service?

No matter how best the alternative approaches the accounting teachers take to instruct their accounting students, the teachers have caused a fundamental conditional breach of their professional psychological contract with their employers. Compliance with the policy directive that accounting teachers use the accounting curriculum is primarily fundamental to the professional practice. Accordingly, the non-compliance makes it difficult, if not impossible, to assign any practical significance to the accounting instructional engagements in senior high schools in the country.

Quality of the accounting curriculum implementation is more suspicious. The very standard measure which has been established as blueprint for practical guidance has been almost neglected and relegated. The unwarranted freedom awarded themselves by the accounting teachers only creates an atmosphere of disorder in the practice. This could, however, be linked to the level of instructional supervision of accounting instructions. It is just not enough for the supervisor to be physically present but s/he must have adequate knowledge of the subject matter to ensure that the instructional intercourse is focused on the accounting syllabus.

Furthermore, accounting teachers appeared to have a negative view of the accounting curriculum and its implementation. However, this was contrary to the study of Wang (2013) that the teachers held a positive view towards new curriculum, that their concerns were characteristic of three stages - management, personal concerns and consequence. Having all these accounting teachers with negative view of the curriculum still at post leaves no excuse for doubting the fidelity of implementation and success of the accounting curriculum delivery in the senior high schools. Interestingly, if accounting teachers were not using the basic guide for instructional needs, what then did they use to guide their practice? Were school authorities aware of this state of affairs? Even if they were aware, how committed were the authorities in improving patronage of the accounting curriculum in resolving individual teacher's concerns. There seemed to be more questions to be answered.

Indeed, in this state it was suspicious the kind of instructional discourse that proceeded in the senior high school accounting classrooms. The attitude of accounting teachers to the implementation of the curriculum militates against the curriculum's success. Therefore, the instruction was not likely to follow the prescribed accounting curriculum. Consequently, unplanned learning might result. Hence the quest to achieve the desired quality in the senior accounting education might prove elusive.

Accounting teachers' collaboration concern was noted be a function of the nature of the accounting course taught. This finding is consistent with that of Lau and Shiu (2008) where they identified participants' experience as an oral examiner having a significant influence on collaboration concern. However, generally, accounting teacher concerns were not mediated by their gender, highest teaching qualification, teaching experience, or their workload. Thus, accounting teacher stages of concern was noted not to be a function of their gender, highest teaching qualification, teaching experience or workload they execute. Accordingly, the findings of Pigge and Marso (1989) that gender has a significant impact on concerns is debunked. The study rather supports the fact established by Ghaith and Shaaban (1999) that gender has no effect on teachers' concerns. In fact, the study has as well refuted Watzke's (2003, 2007) findings that teacher concerns may not be universal for all teachers, but rather dependent on the individual teacher's experiences and surrounding contexts. Again, both Guillaume and Rudney's (1993) and Boz's (2009) arguments failed to obtain the support from this study. Similarly, the findings failed to support the findings of Christou, Eliophotou-Menon and Philippou (2004) who found that there were significant differences in the concerns of teachers across years of teaching experience but not across years of implementation. Yet, the study findings confirmed some findings of other researchers such as Ankomah and Kwarteng (2010) who found teaching experience to be independent of accounting teachers' concerns in implementing the accounting curriculum; and Alshammari (2000) who noted that teachers' concerns are not related to their teaching experience.

#### **5.7.4 Preparedness to Implement Cost Accounting Curriculum**

The subject of research question four was to investigate accounting teachers' preparedness in implementing the cost accounting curriculum. Accordingly, the following research question was formulated:

*How prepared are accounting teachers and accounting students to deliver the cost accounting curriculum in the senior high schools?*

To fully address this research question, accounting teachers' and accounting students' survey were used to gather quantitative (5.2.1.4 Teachers' preparedness to teach cost accounting) and qualitative (5.2.2.3 Accounting teachers' preparedness to teach cost accounting and 5.3.1 Motivation to Study Cost Accounting) evidences. These multiple approaches were used in order to ensure comprehensiveness of the data to thoroughly address the research question.

#### **5.7.4.1 Students' Preparedness to Learn Cost Accounting Relative to Financial Accounting**

Almost all the students studied intimated that they were more interested in financial accounting but not cost accounting. They assigned numerous reasons why they had peculiar interest in financial accounting but not cost accounting. Some of the students noted that financial accounting has enjoyed greater popularity because it gives greater opportunities. They noted that financial accounting offers a wider range of employment opportunities compared to cost accounting. Indeed, career opportunities in accounting are widespread and dynamic. But this revelation makes it evident that senior high school accounting students seemed well-informed about the career opportunities in accounting. The finding supports the conclusion of Tan and Laswad (2009) that a higher proportion of accounting students than other business students decide on their major prior to university study. This is indicative of the fact that students read the financial accounting on a well-informed purpose which appeared to be derived from self-motivation. Indeed, the study confirms that of Sugahara and Boland (2009) that major influence affecting the choice for accounting students was based on intrinsic values.

In a related development, it was made clear by the students that financial accounting is easier to comprehend and more interesting to study. This confirms the findings of Lightbody (1995) and Haskins and Crum (1985) that many students perceive cost accounting topics to be more difficult to learn and understand. They attributed this to the fact that financial accounting is regulated by the Generally Accepted Accounting Principles (GAAPs) which provide some objective verifiable guidelines to aid understanding. However, blame this on the accounting teachers' insensitivity to cost accounting. By their training, accounting teachers are expected to use their skills and knowledge to make learning less difficult and enjoyable among students. Accounting teachers' inability to use the appropriate strategies to motivate students

to learn cost accounting with ease is an indictment on their professionalism. Apparently, the teachers failed to apply the recommendations of the Accounting Education Change Commission (AECC, 1990) to actively engage accounting students in the learning process whereby accounting teachers emphasise and actually live by learning by doing.

Other students held the belief that it was the schools that had made cost accounting unpopular among both accounting students and their teachers. The effort of senior high school administrators and accounting teachers has militated against the adoption of cost accounting by accounting students at the senior high school. The insistence of these stakeholders has led to the drastic reduction of student numbers in cost accounting lessons. Tan and Laswad (2006) observed this earlier that students' intentions to study accounting are influenced by a key referent. Financial accounting has gained more popularity than cost accounting because financial accounting is made compulsory in all schools that offer business. However, cost accounting is optional in almost all senior high schools. It can be substituted with elective mathematics. In some schools, students were not given that freedom to make a choice between elective mathematics and cost accounting.

The popularity of financial accounting relative to that of cost accounting is particularly the result of making financial accounting compulsory in all senior high schools for business accounting students. However, the making of cost accounting an optional subject choice in senior high schools has contributed immensely to its reduced patronage. Mohammed (n.d.) has been emotional to intimate that this core challenge leaves room for accounting education to be treated with levity.

This infringes on the students' rights of freedom of choice of subjects. The bottom line being sacrificing cost accounting for some other subjects that are not perennially complementary to financial accounting. Yet, it should be noted that there are key complementary accounting topics such as payroll accounting, budgeting and contract accounts in the cost accounting syllabus. Sacrificing these implies denying students the opportunity of having these relevant experiences which are not usually found in most University accounting curriculum in Ghana. Thus, accounting students are permanently robbed of these hands-on rudimentary experiences in accounting.

Interestingly, accounting students had the notion that the two popular university accounting courses (Bachelor of Commerce and Bachelor of Science or Arts in Business Administration) were solely based on financial accounting. With this erroneous mind-set, accounting students had gauged these programmes and were accordingly studying financial accounting in order to make a good grade to gain entry to read them at the university. However, there were some other well-informed accounting students at the senior high school level. They rather saw cost accounting and financial accounting to be relevant in their own regard. They stressed that even though financial accounting is of great importance, facts are to be faced, that is, in the tertiary institution, cost accounting also features prominently.

Indeed, accounting students were merely motivated to read financial accounting instead of cost accounting because of their desire to meet the demands of the university admission board. Kwarteng (2009) noted this earlier by detailing that senior high school accounting students were particular about financial accounting, economics, elective mathematics but not cost accounting in order to satisfy admission requirements to the universities. This was the most prudent decision any rational person would have made in the circumstance. However, the effect of this somewhat myopically selective decision may be far-reaching. Once, such students gain admission to the university, they might read courses in cost and managerial accounting. The prerequisite of all such courses is the senior high school cost accounting. Without this background, reading those aforementioned university courses might be more challenging.

It appears the senior high school cost accounting curriculum lacks the detail capable of meeting students' needs. It appears not to be challenging enough for the target students. Admittedly, most concepts in the senior high school cost accounting curriculum lend themselves to simple analysis and solution. They lack those lengthy and format-like presentations that characterize financial accounting. As well, the syllabus appears not to be as loaded as that of financial accounting. However, this could have afforded cost accounting teachers and students the ample time required to exploit every avenue to make the instructional discourse successful. The students noted that financial accounting gave a broader horizon of the subject area as compared to cost accounting. However, not all the accounting students saw the simplicity in the cost accounting curriculum.

Financial accounting contains more topics than cost accounting. Because the topics in financial accounting are many, the calculation aspect is more intense as compared to cost accounting. Since majority of students dislike calculations, they usually complain about the difficulty in financial accounting more than cost accounting. In spite of this, the accounting students were unanimous to admit that there were lots of financial accounting books in the stationery market than that of cost accounting.

#### **5.7.4.2 Teachers' Preparedness to Teach Cost Accounting**

Some accounting teachers were indifferent to the kind of accounting courses they teach. Few accounting teachers favoured cost accounting for its simplicity, pass rate of students, and ease with which it is taught in schools. Such confident and motivated accounting teachers had noticed their colleagues' uninterested attitude and hostility toward cost accounting. These confident and motivated accounting teachers displayed collegiality by their readiness to share knowledge, promote cost accounting, instil confidence and encourage other colleagues to embrace cost accounting.

It is crystal clear that cost accounting has really lost its popularity among accounting teachers. Accounting teachers attach greater importance to financial accounting than cost accounting. There is a sea of indifference in which accounting teachers find themselves in their preparedness to implement the cost accounting curriculum. Even those accounting teachers with some background in cost accounting were not particularly motivated to teach the course. They never showed any clear preference for teaching cost accounting. Their somewhat relaxed readiness to implement the curriculum could partly be explained by the ever-decreasing number of students who sign up for the course at the senior high school level. This confirms the study by Wells and Fieger (2005) where they found that NZ high school accounting teachers have a low opinion of accounting as a career option for university-bound high school students. The attitude of the accounting teachers only demotivates ambitious students to change career options.

The commitment of school authorities could have a significant effect on the extent to which the subject is accepted and delivered by accounting teachers and students. Accounting teachers hardly got the teaching and learning resources to promote the teaching of cost accounting. School authorities failed to provide the necessary teaching and learning resources necessary to make the instructional discourse less laborious and very interesting. However,

those accounting teachers who embraced cost accounting did so for reasons such as the reduction of the workload, ease with which it could be taught and the rate at which students pass external examination in cost accounting.

Accounting teachers' low level preparedness indicates that they were incapable of meeting the challenges the cost accounting curriculum presents. As a result, the quality of cost accounting instructions in senior high schools was greatly threatened. In spite of their preparation and qualifications, including pre-service and continued learning and work environments, accounting teachers were challenged by the 2007 reform initiatives to meet new requirements that had not been part of the conventional repertoire of expectations for effective classroom teaching and for which many of the accounting teachers had not been adequately prepared during their professional training. This finding further strengthens Kwarteng's (2009) evidence that most of the accounting teacher's background knowledge was not consistent with the delivery of the accounting curriculum.

#### **5.7.4.3 Summary**

Both accounting teachers and their students had developed some rather myopic conception of the accounting subject to imply mainly financial accounting and thus neglecting cost accounting. Naturally, students lacked the motivation to study cost accounting because their accounting teachers who were supposed to inspire them to embrace the subject were disillusioned to teach it. Adler, Milne and Stringer (2000) pointed to this impediment of a lack of student readiness which is highly likely to be the product of inadequate teacher support mechanisms, and nonreflective teacher practices in the classroom. This might be explained by the apparent lackadaisical attitude staged by school authorities to route for cost accounting to succeed in the senior high school curriculum.

School management bodies contributed their quota to this by failing to give cost accounting the needed recognition and support to let it thrive and survive. School administrative arrangements had been made in such a way that financial accounting was made compulsory with cost accounting as an elective subject for accounting students. Leaving students with this freedom of choice of cost accounting among a host of others militates against the internal logic of accounting as a discipline. Cost accounting is complementary to financial accounting. One cannot get a total understanding of accounting if one fails to study the two subjects. This unhealthy state of affairs, therefore, creates some imbalances in senior high

school accounting education as the financial accounting is stressed more than the complementary cost accounting. It is merely corollary that external examination bodies have issued countless reports that portray that students' performance in accounting, both financial and cost, are discouraging.

School authorities often failed to provide the needed logistics to promote cost accounting in the senior high schools. Accordingly, teachers' and students' interest in the subject had waned. This lack of instructional resources coupled with accounting teachers' limited knowledge of cost accounting might stir some anxiety in accounting teachers and students and reduce their motivation in cost accounting instructions. The bottom line of this is what Mohammed (n.d.) described as haphazard implementation of the accounting education and thus treating cost accounting with levity compared to financial accounting. Anxiety in accounting instructions was noted by Buckhaults and Fisher (2011) as a possible explanation for the decline in senior high school accounting education. However, the authors attributed such anxiety to the teaching methodology and the fact that the accounting teachers are not more familiar with course material. Nevertheless, Ahmad and Gao (2004) rather attributed the low preparedness of accounting teachers to the inappropriateness of imported syllabuses to the peculiarities of the economy and the unfit marriage of academic teaching and professional training in the accounting curricula.

### **5.7.5 Examiners' Concerns about Students' Performance**

The determination of the success of any educational enterprise greatly hinges on the quality of its graduates. Graduate quality is often measured by the extent to which such graduates have achieved the desired outcome measured with the use of relevant assessment tools. In a centralized school system like that practiced in Ghana, uniformity and integration are promoted through commonalities in instruction and examination. That is why the West Africa Examination Council (WAEC) has standardized and harmonized Basic School Certificate and Senior High School Certificate Examinations in all subjects including accounting. It is expedient to explore the extent to which performance in accounting examinations matches expectations. Accordingly, the following research question was posed:

*What are the concerns of examiners' on students' performance in accounting in the West Africa Senior Secondary Certificate Examination?*

Data organised from the document analysis (5.4 DOCUMENT ANALYSIS) was used to address this research question.

In deed accounting students were deficient in the interpretation of accounting concepts. They were unable to effectively apply relevant accounting principles and standards in dealing with some transactions. The examiners' assessment revealed students' gross lack of the subject matter of accounting. Students did not show a thorough understanding of the double entry either. They were at best able to memorise and state formulae but not able to use them in solving practical problems.

It was as if many students had not covered the accounting syllabus in sufficient depth. There seemed to be an over reliance on the calculator and this resulted in students skipping valuable steps in the presentation of solution to questions. In the accounting discipline, answers should follow a logical sequence but a lot of students left out a lot of logical reasoning and went straight to their answers. They, thus, failed to present the extent of details required in presentation of financial statements. Students' answers to questions lacked detail. Whilst some chief examiners commended students for the presentation of answers and neatness of work, some others noted that majority of accounting students performed poorly because they often failed to go beyond stating *bullet points* even when they were required to explain the points.

There were many signs of inaccuracies and lack of confidence on the part of students. In most cases, students started a question, then half way through, abandoned it, started another section or another question abandon that also and then came to continue the earlier abandoned question on another. As a result of this apparent lack of composure, accounting students made avoidable mistakes in simple additions, subtractions, and division. These unpardonable mistakes could have easily been avoided if students were a little more composed.

Accounting students mostly failed to write figures well during additions and subtractions to arrive at the final answers. There were evidences of illogical presentation of material, suggesting a further lack of confidence of students in the material they presented and ill preparation for the examination. This was so because accounting students failed to study for deep knowledge and understanding. The concentration had always been on the assimilation of principles and concepts leading to the creation of mechanical knowledge that lacks the virtue of critical analysis. This revelation supports that of Booth, Lockett and Mladenovic (1999) that accounting students had relatively higher surface and lower deep learning approach.

Students displayed little knowledge of double entry principles. Most of them confused principles and could not decipher the difference between the assumptions and the limitations of break-even analysis. Additionally there was lack of understanding of basic concepts and terminologies of cost accounting. For example, explanation of cost accounting, cash budget, standard cost, recorded cost, etc. was poorly handled by the students.

The performance of the students suggested inadequate coverage of syllabus. As such the examiners implored accounting teachers and candidates to try to cover the syllabus rather than banking their hopes on few areas. It was observed that very few students attempted specific questions. This suggests that teachers were either too brief in teaching topics or tried to rely on a few topics with their students. It should be noted that though the syllabus was brief on some topics like *partnership*, it has clearly stated that emphasis should be laid on matters that affect the agreement between partners and the accounting records. This means that teachers should beef up the scanty core points supplied in the syllabus.

Following the weaknesses in the pedagogical interactions in the accounting classes, the examiners made some serious recommendations to both accounting teachers and students. For instance, they indicated that students must be encouraged to read more on the *theory of cost* and practice with a lot of past questions in order to improve on their ability to answer questions. Also, teachers need to teach students how to go about an examination including holding discussions on the rubrics, reading and understanding the requirements of questions, assembling points, good communication skills and handwriting.

Teachers should endeavour to cover all aspects of the syllabus to prepare candidates adequately for examination. On specific content, accounting teachers were advised to explain vividly to students the adjusting of partners' profit sharing ratio whenever the partners agree to do so. Accounting teachers must be made to teach the different ways of computing Break-even point. Students should be taught and given more exercises on the concepts and terminologies of cost accounting. It is hoped that the regular exercises will also help students to improve their writing skills. It was apparent that the chief examiners might have doubted the competence of some regular accounting teachers. So they recommended to school authorities to engage the services of part-time accounting teachers where such specialised teachers were in short supply.

Convincingly, it is clear that students' progress in accounting education is not encouraging. The success of instructional progress in senior high school accounting education is structurally and fundamentally deficient. This is highly blameable on the pedagogical flaws in accounting instructions and the selective tuition accounting teachers offered to students. Accounting teachers cannot be excused in this sense because, according to Kwarteng (2009), accounting teachers' knowledge base in the subject matter was not encouraging to deliver the changes in the accounting curricula. Mohammed (n.d.) laments further that the poor academic performance bedevilling accounting education has the teacher at the centre. Accounting teachers have long suffered this criticism for the fact that Mohammed (n.d.) considers them not to be meticulous but rather haphazard in implementing the accounting.

The issue of poor communicative skills was yet another problem. It was apparent that teachers failed to assist students on the correct use of the English language. At this point, the English language teachers seemed to have missed the mark. Their failure stems from students' lack of understanding of the questions and their requirements. Although accounting is not a language course, poor application of the English language on the part of students is not an excuse. A number of students still find it difficult to express themselves in simple straightforward English and this adversely affects their performance. However, Ainsworth (2001) noted that accounting curricula must emphasise communication skills (oral communication, written communication, interpersonal communication and listening) among others. Therefore, the irresponsiveness of the accounting curriculum to address students' communicative skills is indicative of the poor implementation strategies accounting teachers adopt for pedagogical conduct. On this, Owino (2013) stressed that this poor choice of teaching that disregard total students' development contributes little to the academic success of the students.

#### **5.7.6 Instructional Engagement in Accounting**

The overall assessment of the accounting education at the senior high school level in Ghana is summed up in the quality of instructional intercourse. The quality time spent by accounting teachers to engage the accounting students in a conducive classroom environment with the right teaching and learning resources is key in eliciting desired results of the curriculum. To fully explore the extent of quality in accounting instructions, the following research question was crafted as a guide:

*How successful are accounting lessons to improve quality accounting education at the senior high school level?*

In addressing this research question, three different kinds of evidence were gathered to give a more comprehensive picture of the phenomenon. The evidence of the instructional process was gathered from the perspective of accounting teachers (5.2.2.4 Accounting teachers' assessment of accounting instructions), and accounting students (5.3.2 Accounting Students' Assessment of Accounting Instructions) as the key respondents. Also, direct observation (5.5 DIRECT OBSERVATION OF ACCOUNTING INSTRUCTIONS) of classes in session was used to gather a more detailed and somewhat first hand evidence not mediated by any party.

#### **5.7.6.1 Instructional resources**

Students were enthused with the level of instructional resources available to improve teaching and learning. This included the kind of textbooks that existed to support the delivery of accounting lessons. The level of improvement in such instructional resources has been phenomenal. Accounting students noted that the accounting textbook provided simplified explanations to concepts to foster ready understanding in independent tutoring. The availability of a variety of accounting textbooks from which accounting students could select depending on their needs had also improved accounting students' learning in the subject discipline. The depth of detail covered in the accounting textbooks was noted to broaden students' knowledge in accounting. The content and structure of the modern accounting textbooks afforded accounting students the luxury of not depending entirely on the accounting teacher as was previously done.

The influx of relevant textbooks is noted to be associated with the progress in accounting education. The supply of and access to these texts were not problematic. They abound in various prices and volume. Students were capable of affording these. Accounting students testified that the accounting textbooks provided simplified explanations to concepts to foster ready understanding in independent tutoring. Tuwei (2013) concluded that implementation of curriculum suffers due to inadequacy of textbooks for students, but the proliferation of textbooks for accounting students in the country is a positive sign.

The introduction of technology has contributed positively to the success of accounting instructions. The accounting students hailed the use of computers and calculators for accounting lessons. They observed that such devices assisted in the teaching and learning

process. The use of calculators facilitated understanding and accurate presentation of answers. It made solving accounting questions easier. The students intimated further that they had access to internet services that granted them the opportunity to have ready access to the relevant explanations to contentious and complex concepts. The application of computers to accounting lessons made accounting lessons more interactive as such understanding on the path of students was enhanced. These learning materials as established by Kiplagat (2012) have the potency to strongly influence the implementation of the accounting curriculum.

However, the instructional observation recorded that the physical facility in the senior high school classrooms impeded the delivery of quality education. Most of the gadgets were not well maintained and students were overcrowded in the classroom. Without the desired level of comfort getting students to focus on the lesson would be almost impossible. The attendant difficulty in class control was ordinarily expected. The classrooms were poorly resourced and thus inhibiting the smooth progress of instruction. The rampant rubbing of board presentations to make room for the copious illustrating accounting entries that competed for space made students have divided attention. It was frustrating for students to focus on core concepts of the lesson whilst being compelled to write to avoid any salient principle to escape their attention.

In most cases, senior high schools use white-slatted boards that were affixed to the front wall of the classes. This permitted accounting teachers to use board markers of different colours. Generally, the whiteboard illustrations were difficult to read because the whiteboards were stained. Almost all the whiteboards were inadequate in size. Accounting teachers were always in gross difficulty in using the board to aid the teaching. For instance, the teaching of *Ledger Accounts* involves a lot of illustrations and entries where an accounting teacher might be compelled to squeeze all relevant accounts that could be contained on the whiteboard at a time. This might force the teacher to reduce the font of characters which eventually affects visibility. Also, due to the poor illumination in the classrooms, students had difficulty in reading from the whiteboard as the sun's reflection on the board made reading the board presentations problematic. This poor quality whiteboard impacts negatively on the success of accounting instructions. Juma (2009) noted and deemed it apt not just to address the adequacy of instructional resources but heeded the resource quality to achieve satisfactory implementation of the curriculum.

Because the whiteboards were too small in size to contain the lengthy accounting presentations, accounting students had to keep up with the teachers always as the teachers had to often rub previous presentations to make way for new ones. Students were always compelled to focus attention on writing instead of focusing on understanding of the lesson. The inadequacy of instructional resources inhibits the quest for tolerable margins of deviation in the accounting curriculum implementation. Owino (2013) shared a similar view on the grounds that limited use of instructional resources impacts negatively on instructional implementation. Other researchers like Kiplagat (2012) and Mohammed (n.d.) evidenced similar observations that the lack of instructional resources makes accounting lessons less interesting and unsuccessful.

#### **5.7.6.2 Teacher quality**

Admittedly the number and certification of the accounting teachers on the field was encouraging. Administratively, the accounting teachers in senior high schools in the country were most qualified to teach. Evidence was provided to the effect that the teachers had the required qualification to function as such. Rutere (2012) analytically pointed that academic qualifications, professional qualifications and teaching experience of teachers influence the implementation of curriculum. Accordingly, most accounting students assessed the quality of accounting education on the quality and adequacy of accounting teachers available. The students claimed that the calibre of accounting teachers in their schools was the reason behind the success of accounting instructions.

Whilst some of the students stressed the quality of teachers, others were more particular about the adequacy of the supply of accounting teachers. The accounting classrooms in senior high schools in Ghana then do not suffer the high student-to-staff ratios pointed out by de Lange and Watty (2011). Accounting students witnessed that the student-teacher ratio might have improved thereby ensuring that almost every academic need of the accounting students were addressed by the accounting teachers. Due to the improved ratio, accounting teachers needed not spend their time too thinly across the range of students requiring to be served. Thus, accounting teachers were afforded the time and energy to allow students to approach them with any difficulty.

Whilst most of the students surveyed agreed that they had good quality accounting teachers, some of the accounting teachers lamented the preparation of the accounting teachers. In fact,

the accounting teacher education programmes in the Universities in the country must be overhauled. The accounting teacher education programme seems to have lost touch with classroom demands. Instead of focusing much on the pedagogical content knowledge of the accounting teacher education, almost all the accounting teacher education programmes strive for marketability instead of professionalism. The focus has been on increasing patronage and enrolment into the degree. Providers of accounting teacher education concentrate on courses that are irrelevant and less responsive to the needs of the classroom teacher at the senior high school. This is an attempt to meet prospective client needs instead of ensuring programme dictates and functionality.

Although the numbers were there, it is still doubtful whether the accounting teachers were not just adding to the numbers. Blame this again on the insensitivity of the accounting teacher education programmes to adequately prepare student-teachers for future practice. This supports the finding of Wang (2013), Gathumbi (2013) and Kiplagat (2012) that lack of quality teacher training hinders the implementation of curriculum in classrooms. However, the Ghana Education Service also appeared to have failed in providing effective Continuous Professional Development for accounting teachers to get them acquainted with the demands of the curriculum. Stressing the importance of in-service training relative to implementation of the curriculum, Molla and Lee (2012) buttressed the need for teachers to be given in-built training for implementing curriculum. However, this capacity building programme was either not supplied or ineffectually delivered.

#### **5.7.6.3 Instructional process**

During the instructional intercourse, the accounting teachers were audible. However, the teachers often talked to the board whilst writing on the board. They were well prepared as one never referred to any material but taught the lesson in an orderly fashion. The lessons delivered were methodically presented. The teachers were well-composed. Students were attentive. Teachers were particular about the grammatical construction of the students. They monitored students' understanding at every stage of the instruction.

The observation recorded that accounting teachers were confident and displayed good subject knowledge. Most of them provided alternative and detailed presentations. They used various illustrations to promote understanding. As opposed to Owino's (2013) realisation that teachers have poor conceptualization of subject matter, accounting teachers displayed

mastery of the content knowledge. They dwelt on the entry behaviour of students to present facts in the topic. In most cases, they used practical examples to illustrate the key concepts and accompanying terminologies. They showed mastery of the subject matter. Often, throughout the lesson, they referred students to concepts taught and learned in earlier lessons to aid transfer of learning to facilitate understanding. Almost all the accounting teachers observed were particular about how terminologies in accounting were pronounced. They displayed practical knowledge of the subject and facilitated in like manner.

It was evident in the direct observation that students' participation in some of the accounting lessons was a little above discouragement. In most cases, teachers interfered with students' responses by interrupting them with comments. Students' involvement in accounting lesson presentation was mainly through answering questions posed by the teacher. Students volunteered to respond to such questions. Generally, students' participation was limited as such they were passively looking on as the teachers continued with the lesson. In this wise, the level of students' participation was limited to reading aloud notes on questions for the teacher to interpret. In other sessions, the participation of the students was reduced considerably as the teacher dominated the lesson with lots of talking. In that sense, almost all the teachers responded to all questions posed by students without giving the class the opportunity to attempt some responses. Students were asked by the teacher to refer to some accounting text but not all the students had it available for such exercise.

However, the students were enthusiastic to respond to the lesson. In fact, almost all the participating accounting students seemed appreciative with the level of quality in accounting lessons. They described accounting lessons as being enjoyable. This was attributed to accounting teachers' ability to device means to make the class interesting. Students intimated that they were much more involved in accounting lessons. In addition, they become occupied by working out a lot of practice questions which were available in the system. Indeed, from these evidence, students' motivation might be heightened to enjoy accounting lessons. Thus, on the basis of Molla and Lee's (2012) assertion that the success of programme implementation depended on students' interest, there was some level of success in accounting instructions. However, this was inadequate to generate the desired learning.

Almost every class session observed saw distractions. For example, one class was about half-way full at the beginning of the instruction because students who defaulted the payment of

their school fees were sacked from school. In another class session, students came in late from lunch break. In yet some other classes, during the lesson, another teacher popped in to make some announcement to the class. Some students walked in after about 30 minutes of the class but the teacher showed no concern. It was a common happening that next door class of students who were not engaged by any teacher were disturbing the class with noise. Even where there was a teacher engaging the other class, noise from the activities of such neighbouring classes interfered with the quality of instruction. As a result, the accounting teachers had to talk on top of their voices to be clearly heard by the students.

Actors in accounting instructions in senior high schools in Ghana did not get the needed concentration to aid instructional success. The distraction in the classrooms was too tempting. This normally stemmed from institutional arrangements. Schools where discipline was upheld saw fewer distractions. However, discipline suffered in most accounting classrooms at the senior high school level in Ghana. Surprisingly, accounting teachers seemed not to care. They were rather busily dispensing with the subject without caring for other modalities necessary to ensure instructional success. The bottom line was the loss students suffer in grasping concepts and principles to promote learning among them.

Accounting lessons had lost focus. Accounting lessons had been positioned to the point where accounting teachers fitted the lesson to their needs instead of focusing on the accounting students. Accounting teachers merely displayed their knowledge in delivering the subject matter and failed to engage students in purposeful activities that ignited passion and enthusiasm in accounting students. Accounting teachers seemed to have lost touch with the relevant teaching strategies and techniques that were potent to promote students' learning. Indeed, the teacher education programmes turning out accounting teachers in the country needed to be overhauled. Otherwise, accounting teachers would need constant in-service training programmes to enable them stay relevant on the job.

Nevertheless, questioning skills of the accounting teachers were commendable. They used a mixture of higher order and lower order questions. Focusing, and prompting questions were very much used in the instructional engagement to get students' attention on the key concepts for discussion. Accounting teachers ensured equal opportunity question distribution to engage almost every student in the lesson. This compelled all students to stay alert throughout the

instruction. There was an instance where a teacher tactfully dealt with the responses of students by describing some irrelevant response as the result of *over-learning*.

The use of leading, focusing and prompting questions motivated the students to generate the right responses. Appropriate responses were reinforced in accounting lessons. Although some teachers provided occasional reinforcements in the form of asking the class to clap for a student who put up the appropriate behaviour; other accounting teachers used positive words to shower praises on students to reinforce desired behaviour. Yet some other accounting teachers used motivational contracts to exact obedience and participation of students. Whilst most accounting teachers used such motivational contracts to motivate performance, few others were rather demotivating and insulting. One of such issues is where the accounting teachers demeaned the students by openly rating them as inferior after comparing their performance with some so-called better students. This generated some calm in class which bred tension, capable of stirring hatred and encouraging enmity between the teacher and the students.

#### **5.7.6.4 Time constraints**

Some accounting students noted that the adequacy of the contact hours for accounting lessons granted instructional participants the opportunity to exhaust the task for the lesson without compromising quality. However, the instructional observation proved otherwise. Time management was a problem for accounting teachers. Wang (2013) warns of inadequate time schedules allotted to the instructional engagement to be a major hindrance to successful curriculum implementation. The limited time periods for accounting lessons did not free teachers to exhaustively cover what they planned to teach. It even happened that accounting teachers did not complete illustration questions that they started discussing with the class before the expiry of the instructional time. This can be attributed to the overloaded content that the accounting teachers were expected to deliver exhaustively within the instructional time of 40 minutes. This makes it practically impossible for most accounting teachers to meaningfully teach to meet the time requirements without sacrificing quality. It compels accounting teachers to choose between working within instructional time and covering the target content for the lesson.

Aside the problems with the duration of the daily instruction vis-à-vis the content coverage, another major problem identified with the time was the content to be covered in a term as

required or expected. Too much was expected from the teachers to the extent that accounting teachers covered up to *final accounts of sole trader* and *adjustments of final accounts* including *revenue and expense owing and prepaid, provision for bad and doubtful debts and provision for depreciation* for a first year class. This is far too loaded a task for accounting teachers to handle competently and confidently while sustaining quality. In this case, nothing but what Mohammed (n.d.) described as haphazard implementation of the accounting education is expected.

#### **5.7.6.5 Final assessment of senior high school accounting instructions**

Some accounting teachers confirmed that the quality in accounting instructions was a bit lower than expected. The reasons for the decline in quality of senior high school accounting education noted by some accounting teachers included capricious curricular changes; short supply of teaching and learning facilities; irrelevant accounting teacher education programmes; and overly ambitious syllabic content. The 2007 Education Reform became operational from the year 2007. That was when the 4-year senior high school education system was introduced into the country. At that time, the arrangement was that students started their elective vocational subjects from the second year. However, in 2009, the 4-year senior high school system was reverted to three years. This was suddenly initiated probably after teachers had familiarised themselves with the 4-year system. Indeed, accounting teachers have stressed this continuous curricular and the associated syllabic change as some disturbance militating against their smooth teaching agenda.

Students somewhat disagreed to the accounting teachers' modest assessment. The students were rather positive in their assessment of the quality in senior high school accounting education. They attributed the quality of accounting instructions to curriculum improvement that has taken place over the years. They believed that curriculum planners have been current enough to incorporate new ideas and changes in the curriculum. The simplification of the content of the senior high school accounting syllabus had been perennially beneficial to students. The replacement of terminologies such as *debtors' account* with *accounts receivable* has enhanced uniformity. This was merely essential to stay up with current developments in the field of accountancy. The incorporation of the new ideas to the curriculum made it relevant to solving societal problems. This enhanced the curriculum's acceptance to students because it was only through the usefulness of the curriculum that students were motivated to invest time in its study. The ease with which the curriculum

accommodated new concepts made it flexible. In the final analysis, the curriculum was deemed to succeed on the basis of Molla and Lee's (2012) secondment that the flexibility in the structure of the curriculum increases the success of the curriculum.

In fact, almost all the participating accounting students seemed appreciative with the level of quality in accounting lessons. They described accounting lessons as being enjoyable. This was attributed to accounting teachers' ability to device means to make the class interesting. Students intimated that they were much more involved in accounting lessons. In addition, they became occupied by working out a lot of practice questions which were available in the system. Indeed, from these evidence, students' motivation might be heightened to enjoy accounting lessons. This is consistent with Makena's (2011) finding that teaching strategies influence teacher effectiveness in curriculum implementation.

Taking the teachers word against that of the students, it is prudent to be circumspect and recognise the unique placement of the teachers to make a more credible assessment. In addition, the direct observation taken authenticates the teachers' assessment. Undeniably, some success has been recorded in accounting instructions, the students' assessment seemed to overly heighten the level of quality of senior high school accounting education.

## **5.8 SUMMARY**

Considering the level of usage of the senior high school accounting curriculum, accounting teachers' interpretation of such accounting curriculum components, the concerns accounting teachers harboured regarding the implementation of the accounting curriculum, there seemed to be some apparent disregard for the level of quality implied in the senior high school accounting education. The apex of the problem is the instructional engagement which was found to be lacking the essence required to impute and sustain some appreciable level of quality in such an accounting educational enterprise.

The numerical summary of the quality limits of senior high school accounting education can be gauged from Table 6.1. The summary of the quality analyses gives a rather synoptic view of the reality. The descriptive statistics appear too simple and misleading. Careful scrutiny and rigorous analytical procedures need to be employed to comprehensively digest the phenomenon. The absolute majority (n=92; 59%) of the accounting teachers appeared to be providing sustainable quality of education that proves worthwhile and endures with

appreciable time period. However, few (n=9 out of 155; 6%) of the teachers still experiment with the curriculum.

**Table 6.1: Quality Pattern in Senior High School Accounting Education**

Quality Description	Frequency	Percentage
Poor	40	25.8
Turbulence	9	5.8
Good for the occasion	14	9
Sustainable	92	59.4
Total	155	100

*Source: Field work, 2013*

As noted earlier, circumspection and meticulousness are paramount not to conclude on the basis of the face value of the descriptive statistics that senior high school accounting education is of highest quality that is enduring. Contrary to noticing the majority of the accounting teachers to be operating within the domain of sustainable accounting education, their heightened self-concerns, defiance of fidelity of implementation, lack of commitment to implementing the cost accounting curriculum, coupled with the concerns raised about the external examiners in terms of falling standards in accounting education, makes one unsure to embrace the fact painted by the descriptive quality criteria of accounting education.

Consequently, without absolutely dismissing the fact that quality is lacking in accounting education in senior high schools in Ghana, an attention is drawn to the host of other factors that proved otherwise. Results from every sub-problem except the levels of use results pointed out that the quality in accounting education was suspicious. The inconsistencies between the levels of use and stages of concern, in particular, as ramified in the Concerns-Based Adoption Model is worthy of attention. The validity of the applicability and interpretation of the LoU and SoC results is therefore questionable. Referent to this study, no congruence was obtained between the two results. Whilst the levels of use of the accounting curriculum indicated intensive use, the stages of concern results in sharp contrast unearthed that accounting teachers failed to use the same curriculum. However, because all other results pointed to poor quality in senior high school accounting education in Ghana, the LoU results which may not be accurately valid is disregarded. Further, it was discovered that not all

accounting teachers went through the same developmental process as postulated by the concerns theory. The study thus supports Ghaith and Shaaban (1999) in calling for further research on Concerns-Based adoption Model.

Ultimately, the study identified that, in principle, accounting teachers failed to use the accounting curriculum for their accounting instructions. They ended up using the old curriculum in spite of the availability of the new curriculum. As well, accounting teachers had their own interpretation of the accounting curriculum components. The effect was the breaking of the uniformity of practice and the subsequent corruption of the fidelity of the curriculum implementation. This was further confirmed by the teachers' stages of concern which rather revealed that the accounting teachers, indeed, failed to use the curriculum.

It was further acknowledged that the desire to teach the totality of accounting in the senior high school accounting education was almost negligible. Accounting teachers expressed the desire to teaching financial accounting but not cost accounting. No wonder, students failed to perform as expected of them in accounting examinations. At least, what could be expected for garbage in, garbage out? Is it not only fair that students perform abysmally as witnessed? More corroborative evidence in connection with pedagogical lapses in accounting instructions added to the negative assessment made of the quality of senior high school accounting education. Indeed, the whole analysis pointed out the fact that accounting education had suffered without immunity at the senior high school level. It is therefore pointless to argue any quality limits the curriculum could merit in its current form.

In spite of the apparent lack of the desired quality in senior high school accounting education, there has been some modest strides in its quality assessment. There are a number of factors that have contributed positively to this degree of success. These factors are collectively referred to as facilitators of quality senior high school accounting education. These are effectiveness of teaching strategies; proliferation of quality textbooks and technology; teacher availability and quality; content simplification; teacher confidence, composure and content knowledge; and active students' participation.

The state of poor quality senior high school accounting education is explicable on the basis of some factors that had negatively mediated the instructional progress in the classroom. Several of these factors abound with varying degrees of intensity in terms of how they retrogressively

impacted the quality dimensions of the accounting education system. In this study, however, the degree of intensity of the factors is not fathomed. The concentration has been on their identification.

The factors of poor quality senior high school accounting education, hereby referred to as inhibitors, identified in this study were teacher dominance in accounting instructions; irresponsive accounting teacher education; teachers' motivation to use the accounting curriculum; teacher concerns in adopting the accounting curriculum; selective implementation of accounting education; ineffective pedagogical interactions and poor communicative skills; constrained instructional time; and poor quality of physical facility.

## **CHAPTER SIX**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 INTRODUCTION**

This is the final chapter of the study report. The summary of the research report is presented here. Based on the key findings, conclusions are reached to aid the generation of appropriate recommendations to resolve the research questions formulated to guide the study. Thus, on the basis of the conclusions to be reached on the level of quality of senior high school accounting education, intervention measures that are capable of improving the quality are suggested for adoption.

#### **6.2 SUMMARY OF THE STUDY**

This is made up of two parts. First, the summary of the research process is presented. This component of the summary covers the research questions and a summary of the methodology used in the study. Second, is the summary of the key findings where the main findings of the study are summarised and reported. It presents the summarised findings reflecting the research questions. As well, some critical observations made considered perennial, though not part of the research questions, are presented.

##### **6.2.1 Summary of the Research Process**

The 2007 Education Reform staged in Ghana left in its wake several modifications or total overhaul in some components of the accounting curriculum. The content of financial accounting was affected in terms of content modifications, horizontal and vertical integration, increased workload, some changes in pedagogy. These changes in the curriculum might have changed accounting teachers' role, increased their workload, or required an update of their pedagogical content knowledge. However, the extent of consultation of accounting teachers

in the planning and development of the curriculum is not appreciable to warrant their total devotion to its success.

In spite of the curricular change, the needed human and material supplies needed to facilitate the implementation of the curriculum are not forthcoming. Most of the curriculum materials such as the supporting text books and hard copies of the syllabuses were not readily available to the accounting teachers (Ankomah & Kwarteng, 2010). Even those accounting teachers who have such documents are unsure about their ability to implement such changes thoroughly without any guidance (Ankomah & Kwarteng, 2010). Additionally developing the curriculum independent of the accounting teachers might decrease their morale to implement a working tool that they are not a party to its development (Kwarteng, 2013). This state of affairs might impair accounting teachers' ability to position themselves strategically to implement the change without compromising quality.

As such the success rate of the implementation of the accounting curriculum in senior high schools might be a suspect. Therefore, it has implications on the quality of accounting education at the senior high school level. Accordingly, an investigation was staged to determine the level of quality of implementation of the accounting curriculum in senior high schools in Ghana. Using accounting teachers' level of use of the accounting curriculum; their description of the components of the accounting curriculum; their concerns in implementing the curriculum; their preparedness to implementing cost accounting curriculum relative to the financial accounting curriculum; examiners' concerns about students' performance in accounting in the West African Senior Secondary Certificate Examination; and the level of instructional quality of accounting education as proxies, the quest was achieved through the following research questions which were subsequently addressed in the study:

1. What is the level of use of the accounting curriculum by accounting teachers and how comfortable are they in using the curriculum?
2. How do accounting teachers describe the components of the accounting curriculum they are using and how do their descriptions affect the quality of accounting education?
3. At what stage, as determined by the Stages of Concern, are accounting teachers implementing the accounting curriculum?
4. How prepared are accounting teachers in implementing cost accounting curriculum relative to the financial accounting curriculum?

5. Why do accounting examiners raise concerns on accounting students' performance in the West African Senior Secondary Certificate Examination?
6. How are accounting teachers teaching to improve quality accounting education at the senior high school level?

The study was descriptive survey that drew from both quantitative and qualitative methods of research. This involved the use of questionnaire, observation, vignette and documentary analysis. The population consisted of accounting teachers and students from 413 public senior high schools offering accounting education in Ghana. Simple random sampling was used in the selection of the schools whose accounting teachers and final year accounting students participated in the study. For the purpose of this study, the country was zoned into three. Thus, each region was captured in one of the three zones as in Southern (Central, Greater Accra, Volta and Western Regions), Middle (Ashanti, Brong Ahafo and Eastern Regions) and Northern (Northern, Upper East and Upper West Regions) zones. From each zone, one representational region was selected randomly by lottery draw. All senior high schools from each of the selected regions had their accounting teachers and students participating in the study.

The participation of a school and its responding accounting teachers and students was voluntary. Respondents who were willing to participate after they had been assured of their anonymity and confidentiality were included in the study. Even so, any respondent who gave his/her prior consent to participate or actually starts but along the way liked to drop out of the study was permitted to do so without any penalty or reprisal.

Four methods were used to gather primary data. These included questionnaire which comprised an adaptation of the stages of concern and levels of use questionnaires by Hall, George and Rutherford (1998); the innovation configuration checklist and accounting teacher preparedness to teach cost accounting questionnaire, both of which were developed by the researcher. As well some self-developed vignette and the observation guides were developed and used to complement the data collection.

The quantitative data yielded by the questionnaire were analysed into descriptive statistics such as mean, standard deviations, percentages and frequency counts and line graphs. Inferential statistics such as ANOVA were employed to measure the statistical influence of

some variables as determinants of quality indicators of accounting education. The report by the accounting Chief Examiners of the West African Examination Council (WAEC) were subjected to analysis to content analyses; whilst narratives and themes were used in analysing the vignette and observation data respectively.

### **6.2.2 Summary of Key Findings**

Generally, the study revealed that accounting education lacks the quality standards expected to be imputed to it. Apparently, accounting teachers do not get the need administrative support in implementing the accounting curriculum. Accounting teachers do not use the curriculum, the basic tool for instructional guidance, for accounting instructions. Instructional engagement in accounting lessons lack the essence required to impute and sustain some appreciable level of quality in the accounting educational enterprise. The individual findings, reflecting the various research questions, which contributed to this overall assessment of the lack of desired quality in accounting education are further provided in some depth.

1. Accounting teachers are developmentally progressing through various level of use given the time of introduction of the reform. To the best of their knowledge and insofar as available logistics could permit, accounting teachers are vigorously engaged in the delivery of the curriculum. Thus, they resorted to some other means as articulated by most of them for their instructional needs.
2. The fidelity of implementation of the accounting curriculum is a suspect. Across all the components of the accounting curriculum the accounting teachers described there was none in which unanimous congruence was obtained. In reality, each accounting teacher has their own interpretation of the components of the accounting curriculum. Their descriptions of the same curriculum differed markedly and thus shrouded in and clouded by subjectivity.
3. Accounting teachers are considered as nonusers of the accounting curriculum. They have awareness, informational and personal concerns. Simply, they were self-concerns, who apparently failed to use the accounting curriculum. These lower level concerns are indicative of their non-use of the curriculum.
4. Accounting teachers were ill-prepared to implement the cost accounting curriculum. They were incapable of surmounting the challenges the cost accounting curriculum presents. This partly due to the fact that among accounting teachers and their students cost accounting had lost popularity. The rather deteriorating situation of the cost

accounting instruction was well explain the lackadaisical attitude staged by school authorities to support cost accounting to succeed in the senior high school curriculum.

5. The chief examiners lamented the abysmal display of content knowledge of accounting students in interpreting accounting concepts and the effective application of relevant accounting principles and standards in dealing with transactions. The examiners further noted that accounting students merely memorise and state formulae without being able to translate knowledge to solve practical problems. As well, the examiners were emphatic about the lack of details in students' responses and the illogical conclusions in students' reasoning. It was noted that students were not meticulous in the presentation of answers, as such they made several errors in their write-ups.
6. Distractions in the classrooms inhibited accounting teachers and students to get the needed concentration to aid instructional success. Discipline suffered in accounting classrooms at the senior high school level in Ghana but accounting teachers seemed not to care. They appeared to have lost touch with the relevant teaching strategies and techniques that are potent to promote students' learning. Accounting teachers fitted the lesson to their needs instead of focusing on the accounting students. They displayed their knowledge in dispensing with the subject matter and failed to engage students in purposeful activities that ignite passion and enthusiasm in accounting students.

Form the results, a critical observation was undertaken to unearth the factors that influenced the extant level of quality in senior high school accounting education. The factors were examined to determine whether they propelled or slowed the implementation of the accounting curriculum based on which the level of quality in senior high school accounting education. The following factors facilitated the implementation of the senior high school and thus heightened the quality in the senior high school accounting education:

1. Accounting teachers' questioning skills
2. Proliferation of quality textbooks and technology
3. Accounting teacher availability and quality
4. Accounting curriculum content simplification
5. Confidence, composure and content knowledge of accounting teachers

The state of poor quality senior high school accounting education is explicable on the basis of some factors that have negatively mediated the instructional progress in the classroom. There were some factors that were noted to have militated against the success of the accounting curriculum implementation. These factors abound with varying degrees of intensity in terms of how they retrogressively impacted the quality of the senior high school accounting education in Ghana. The factors were referred to as inhibitors of the accounting curriculum. They included:

1. Teacher dominance in accounting lessons
2. Irresponsive accounting teacher education
3. Teachers' motivation to use the accounting curriculum
4. Teacher concerns in adopting the accounting curriculum
5. Selective implementation of accounting education
6. Ineffective pedagogical interactions and poor communicative skills
7. Constrained instructional time
8. Frequent curricular changes
9. Poor quality of instructional facility

## **6.3 CONCLUSIONS**

The independent findings enumerated in the summary of the key findings are discussed highlighting their implications on quality senior high school education. The conclusions of the critical factors that were noted to have contributed to the abysmal quality in senior high school accounting education are also presented. This is to create an ultimate appreciation of the level of quality in senior high school accounting education. Also, the critical appraisal of the constructed modelled in the study is presented to make a further refinement in its applicability.

### **6.3.1 Quality in Senior High School Accounting Education**

Apparently, accounting teachers indicated some level of use of the accounting curriculum. However, since their use of the curriculum is seriously constrained and shaped by the inadequate instructional resources available, the situation is not any better. It only gives the accounting teachers the latitude to operate in a way reasonable to them granted the circumstance. In effect, the fidelity of implementation of the accounting curriculum is a suspect. It is therefore ordinary for the accounting teachers to describe the curriculum in their own way depending on their unique circumstances. At the end, there is no uniformity in the

description of components of the curriculum. Every accounting teachers does when seems most contingently beneficial. This element of subjectivity in the description and subsequent use of the curriculum reduces the success rate of the curriculum. Accounting teachers merely experiment with the curriculum and satisfice instructional decisions for the freedom granted them.

This situation could easily be averted if instructional monitoring and supervision are judiciously applied in the classroom situation. Their potency could have unearthed the concerns that accounting teachers have in implementing the accounting curriculum. However, because such concerns are not identified and addressed the curriculum suffers some defects. For instance, the fact that accounting teachers have awareness, informational and personal concerns simply implies the non-use of the curriculum. It only connects to the fact that their physical presence in the classroom does not necessarily translate to the total use of the curriculum. However, little is known to the effect that school authorities are aware of these concerns and have put modalities in place to address them. Apparently, the potency of these unaddressed accounting teachers' concerns in affecting teacher morale and preparedness to implement the accounting curriculum in totality cannot be underestimated.

This might, in part, explain why accounting teachers are ill-prepared to implement the cost accounting curriculum. Failure on the part of the authorities to identify and address the concerns of accounting teachers in the implementation of the curriculum militates against the quality of the accounting education at the senior high school level. Accounting teachers cannot have the boldness to surmount the challenges the cost accounting curriculum presents because they are not better placed due to their unresolved concerns. The simplicity stemming from objective analysis in financial accounting presents fewer challenges than the teaching of cost accounting. As opposed to financial accounting which has standards, conventions and principles guiding practice and teaching, cost accounting which is replete with technical, diagnostic and conceptual explanations devoid of objectivity presents greater challenge. In fact, guidance is really needed to enable accounting teachers build connections with industry to impact students' understanding in the instructional discourse. In reality, the spate of affairs in the guidance given to teachers only creates more challenges to teachers' effectiveness in cost accounting instructions. It is only natural for accounting teachers to be ill-prepared to teach cost accounting. However, it should be noted that the totality of accounting in the senior high school is the combination of both financial and cost accounting. Therefore, the

failure of cost accounting resulting from its unpopularity in senior high schools in Ghana impacts negatively on the quality of accounting education in senior high schools in the country.

Accordingly, students' performance in the external examinations is not encouraging. Accounting teachers focused on specific aspects of the curriculum that they are much comfortable in teaching. They are selective in content delivery and thus fail to focus on the total development of the students. This robs accounting students of that deep knowledge and understanding accounting education should afford them to enable them deal with hands-on practical problems. The effect is needless avoidable mistakes in examinations that betray accounting teachers' questionable conduct in accounting instructions. For the fact that accounting teachers failed to instruct accounting students in the manner expected, accounting students perform poorly in comprehensive examinations staged by parties other than their teachers. This, indeed, puts the credibility of the effectiveness of accounting instruction.

Judgementally, the quality of accounting instructions in senior high schools in Ghana cannot offer anything superior to the current quality level for the fact that classroom actors are often disturbed to focus on quality. The current level of students and teachers' motivation, the level of logistical support, physical distractions in the classrooms, the spate of indiscipline and accounting teachers' use of inappropriate teaching strategies and techniques cause more harm to the level of quality in senior high school accounting education. Accounting teachers lacked the pedagogical content knowledge necessary to bring the desired learning in students. Fundamentally, the quality of senior high school education has not assumed the requisite quality imputed to and expected of it in the curriculum document.

### **6.3.2 Influences on Senior High School Accounting Education**

There, however, are some factors that contributed the current level low quality of senior high school accounting education. It cannot be reduced to the fact that there was nil quality in the accounting education assessed. The extent of low quality, nevertheless, was positively impacted by some factors that facilitated the minimal quality senior high school accounting education boasts of. Senior high schools have recruited the right calibre of accounting teachers in their right numbers. Averagely, these certificated teachers have the psychological urge to succeed on the job because they appear well composed and confident. But only to some extent, accounting teachers have adequate content knowledge of accounting and the pedagogy as well. They lack the pedagogical content knowledge relevant to manage

accounting instructions. Only to some extent are accounting teachers able to use appropriate questioning skills to involve students in lessons.

The state of poor quality senior high school accounting education is explicable to the extent that accounting teachers dominated accounting lessons thereby curtailing students' involvement in the lesson. This can be further explained by the teachers' quest to finish the delivery of a particular instruction within a given instructional time. Because of this time constraint accounting teachers selectively teach specific contents that they consider relevant. Another possible explanation for this selective implementation of the accounting curriculum is the irresponsive accounting teacher education and training. Accounting teacher training institutions fail to focus attention on the trainee teachers' ability to deliver the senior high school accounting curriculum. As well, when there are curricular changes, the Ghana Education Service fails to equip accounting teachers with the repertoire of knowledge and skills to improve practice. The government and some school authorities failed to provide the needed instructional resources to the extent most the accounting teachers generate some concerns about the functionality of the accounting curriculum. Eventually, they get disillusioned to improvise instructional. As such, they end up using ineffective pedagogical strategies that do not appeal to students' understanding.

### **6.3.3 Instructional Quality Construct: Evidence-based Critique and Refinement**

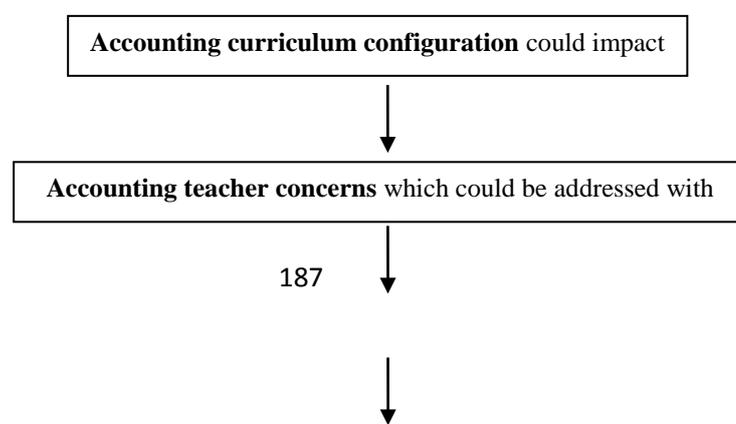
The instructional quality construct modelled by the author needs to be checked through a juxtaposition of the assumptions made on it and the results obtained. The observation made in this direction would provide the basis to further refinement to improve its validity for use. The level of use of the accounting curriculum was hypothesised to follow the developmental sequence where the nature of the accounting curriculum configuration and its interpretation by teachers are said to impact teachers' concerns. These concerns of teachers were noted to be addressed by the relevant instructional supports provided by the school authorities to impact teachers' beliefs and attitudes towards the curriculum. Once the loyalty of teachers are won for the curriculum, it was hypothesised to succeed.

However, it was noted in the study that the fidelity of implementation of the accounting curriculum was heavily corrupted by the descriptions accounting teachers gave to the components of the accounting curriculum. Additionally, since the involvement of accounting teachers in the planning and the development of the curriculum greatly limited, there serious

concerns of teachers in implementing the accounting curriculum. This was the reason for non-use of the curriculum. Also, school authorities failed to provide the necessary support services teachers required to execute the curriculum as planned. There were serious logistical challenges. As such accounting teachers could not use the curriculum as expected of them. It was therefore concluded that the level of quality in accounting education was not encouraging.

What was noted to missing in the construct was teacher motivation which was not stressed. It was, however, realised in the study motivation of teachers was key in eliciting compliance from teachers. This needs not be just monetary or monies worth packages. Continuous teacher development was considered as a potent intrinsic motivator. If teachers' pedagogical content knowledge is weak, no matter excellent the conditions of service, quality implementation might suffer.

Another appropriate refinement is the adjustment for students' motivation in the model. It was realised in the results that students' readiness to learn a subject contributes significantly to the success of accounting education. That is, a well-motivated teacher inspires enthusiasm in the students and whet their appetite for the lesson. These adjustments are therefore made to the initial construct which has been shown in Figure 6.1. The new construct is now refined to suggest that the nature and personal descriptions accounting teachers give to the accounting curriculum could impact their concerns. But any heightened concerns could be addressed with the provision of appropriate material, equipment, physical, monetary or mental motivational packages. These would reduce tensions teachers might experience behind their concerns and thus focus their attention on the business of ensuring that the curriculum succeeds. Once teachers have their concerns addressed, they would in turn seek the interest of students and get them ready and motivated for the accounting instructions. Consequently, the level of use of the curriculum by teachers would progress smoothly and within the least expected period most teachers would be operating as refined users of the curriculum. Accordingly, the desired quality of the accounting education could be achieved.



Aids to accounting instruction and potent motivators to appeal to

Accounting teachers' and students' beliefs and attitudes towards the curriculum to determine the

### **Figure 6.1: Instructional Quality Construct: Refinement**

*Source: Author's refined construct, 2013*

## **6.4 RECOMMENDATIONS**

The use of the stages of concern questionnaire to monitor an implementation process is an invaluable tool to provide useful information for informed policy modification and improved practice. Teachers as well as curriculum designers may have several gaps in their work filled by the proposed recommendations based on the findings of the study. Recommendations on the stages of concern findings and the incidental findings are presented. The standard interventions proposed for addressing any situation in relation to stages of concern findings as proposed by Hall et al. (1979) were adapted. In addition, recommendations on the other findings that have no bearing on the Concerns-Based Adoption Model have also been provided. Recommendations are made to respond the various actions to be taken by key stakeholders in accounting education.

### **6.4.1 Accounting Teachers**

As arbiters of the accounting curriculum, teachers wield much influence in determining the success or otherwise of curriculum. It is therefore recommended that accounting teachers:

1. inspire enthusiasm in the delivery of cost accounting lessons. They should be positive about cost accounting and refrain from using derogatory remarks on it.

2. should improvise teaching and learning resources where authorities fail to provide the needed instructional resources.
3. be Committed to the teaching career and identify with it.
4. should study the WAEC Chief Examiners' Report seriously to enable them prepare the students very well for the examination.
5. must recognise that students' inability to effectively use the English language to express themselves calls for a concerted effort. Accounting teachers should liaise with the English Language teachers and collectively devise means of addressing it. Teachers should be particular about the correctness of students' use of the language where ever possible.

#### **6.4.2 Accounting Students**

Having the role that students play in the implementation of the curriculum they need to be actively involved in every part of the discussion. For present and future accounting students, it is recommended that they:

1. opt for cost accounting because cost accounting has its own value. It serves to reinforce and complement financial accounting. It is therefore expedient for students to embrace cost accounting and not to avoid it because it is not interesting. But for the fact that it has its own value to contribute to the totality of students' development in accountancy, it needs to be given the needed attention.
2. disabuse their minds and erase the erroneous mentality that cost accounting is not interesting. Accounting students need to stop the subject stereotyping and rather encourage their colleagues to sign up for cost accounting.

#### **6.4.3 Senior High School Authorities**

Senior high school authorities have peculiar role to play in improving the quality of senior high school accounting education. Therefore, it is recommended for the school authorities to:

1. acknowledge that lack of awareness is expected and reasonable, and that no questions about the curriculum are foolish. No matter how simple or less laborious the accounting curriculum may be, it is not surprising that quiet a number of accounting teachers may fail to get involved in the implementation process. Some of them may be having genuine questions which may appear stupid. It calls for patience on the part of policymakers to cajole the accounting teachers and answer the seemingly stupid questions that they may raise about the curriculum and its eventual implementation.

2. encourage unaware teachers to talk with colleagues who know about the curriculum. School heads and administrators should promote collegiality to accelerate the circulation of information about the curriculum among peers. However, care must be taken to ensure that the information shared is in favour of the curriculum and its subsequent implementation. Take steps to minimize gossip and inaccurate sharing of information about the curriculum. Where formal communication channels are not effectively operational, rumour, grapevine and misinformation are the order of the day. School administrations should employ the open-door policy of communicating such vital information about the accounting curriculum. This may minimize any gossips and the spread of inaccurate information about the curriculum.
3. make provisions for continuous professional development to capacitate accounting teachers to holistically implement the entire curriculum to avoid the selective implementation.
4. monitor and supervise accounting instructions. They must use supervisors who are knowledgeable in accounting to ensure that effective monitoring and supervision are carried out.

#### **6.4.4 Ghana Education Service**

The high awareness concern which implied accounting teachers' apparent lack of interest in and lackadaisical attitude toward implementing the new accounting curriculum could be addressed by policy makers taking these steps:

1. If possible, involve accounting teachers in discussions and decisions about the curriculum and its implementation. Although they are involved, the extent of accounting teachers' involvement in planning the curriculum is limited. It is pertinent that the CRDD increases the representation of accounting teachers and considers the views of such teachers during discussions and planning of curricular issues in the subject area. Once a fair number of accounting teachers are part of the planning and development team, they will endeavour to implement the accounting curriculum to which they are part in its planning and development.
2. Share enough information to arouse interest, but not so much that it overwhelms. Once conscious efforts are made to organize in-service training programmes, seminars, workshops and forums to provide enough information on the new accounting curriculum to the accounting teachers, it will rid them of the vacuum created as a result of the information gap. This will then put them in a better position

to gather all the necessary pertinent information about the curriculum to thoroughly understand and implement it as planned.

#### **6.4.5 Universities and other Institutions of Higher Learning**

Universities and other institutions of higher learning shape the motives and aspirations of senior high school students. Any senior high school student who is desirous of pursuing a career aims at one institution of higher learning or the other. Therefore, institutions of higher learning in Ghana

1. need to recognise cost accounting and incorporate it in admission requirements to motivate senior high school students who are potential applicants to study it.
2. should rethink accounting teacher education programmes and make it relevant and pedagogically professional to place teachers strategically to teach accounting effectively in the senior high schools.

#### **6.4.6 Other Researchers**

Future research efforts should be concentrated on:

1. Further refinement of the instructional quality construct by testing its validity and applicability.
2. Extensive research on the teaching and learning resources for accounting lessons delivery. This attempt will unearth the state of affairs and generate more discussion to help improve the standard and quality of accounting education.
3. Further validation of the Concerns-Based Adoption Model in monitoring curriculum implementation.
4. Pre-university accounting education in general and cost accounting education in particular. This will more likely create the awareness of the declining popularity of cost accounting and cause stakeholders to act immediately.

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## APPENDICES

### APPENDIX A

#### CONSENT FORM FOR SENIOR HIGH SCHOOL ACCOUNTING TEACHERS

I am Joseph Tufuor Kwarteng, a Doctoral Candidate in the College of Education, University of South Africa, Pretoria, South Africa. I am investigating the “**Quality in Senior High School Accounting Education in Ghana**” with Professor Kofi Poku Quan-Baffour as my promoter. The purpose of this research study is to obtain information on the extent of implementation of the senior high school accounting education in Ghana in order to judge the quality of such accounting education. Accordingly, I will like to gather data from you where your class will be observed, and as well, you would be engaged to complete some questionnaire, checklist and vignette. All data collected from you will be kept in a coded form. The data may be kept indefinitely and that I have no plans to completely destroy that data set. I may reproduce your written statements in my thesis and for other publications relating to this research. You will not be identified in any way in these reproductions.

Your participation is totally voluntary and that you may withdraw from this study at any time without penalty. Further, your name will not appear on any results and that my information will always remain confidential. Completion of the survey will take most participants approximately 20-30 minutes and the observation will last the whole instructional session. There is a minimal level of risk and modest personal benefit involved with participation in this study. The completion of the survey may produce undesirable levels of anxiety or other unwanted emotions. I will be available in person, by phone and email to consult with you about any emotional discomfort you may experience and that if the level of discomfort exceeds that which you desire to tolerate, you can voluntarily remove yourself from the study without penalty.

You may withdraw this consent at any time without prejudice or penalty. Your confidentiality will be preserved to the extent allowed by law. You have the right to ask and have questions answered concerning the study and that these questions, if any, have been answered to your satisfaction. You may contact me on 0209394916 or through brainsmann@yahoo.com. If you have questions about your rights as a participant in this research, or you feel you have been placed at risk, you can contact my promoter, Professor Kofi Poku Quan-Baffour, ABET,

College of Education, University Africa, Pretoria, South Africa (Phone: 0027823522703) for answers to any and all questions about this research. Results will be sent to you upon request.

I, ....., willingly agree to participate.

Signature.....

Countersigned .....

Joseph Tufuor Kwarteng  
(DEd Candidate)

## APPENDIX B

### CONSENT FORM FOR SENIOR HIGH SCHOOL ACCOUNTING STUDENTS

I am Joseph Tufuor Kwarteng, a Doctoral Candidate in the College of Education, University of South Africa, Pretoria, South Africa. I am investigating the “**Quality in Senior High School Accounting Education in Ghana**” with Professor Kofi Poku Quan-Baffour as my promoter. The purpose of this research study is to obtain information on the extent of implementation of the Senior High School Accounting Education in Ghana in order to judge the quality of the accounting education.

Accordingly, I will like to gather data from you where your class will be observed, and as well, you would be engaged to complete some vignette. All data collected from you will be kept in a coded form. The data may be kept indefinitely and that I have no plans to completely destroy that data set. I may reproduce your written statements in my thesis and for other publications relating to this research. You will not be identified in any way in these reproductions.

Your participation is totally voluntary and that you may withdraw from this study at any time without penalty. Further, your name will not appear on any results and that my information will always remain confidential. Completion of the survey will take most participants approximately 10-15 minutes and the observation will last the whole instructional session.

There is a minimal level of risk and modest personal benefit involved with participation in this study. The completion of the vignette and observation exercise may produce undesirable levels of anxiety or other unwanted emotions. I will be available in person, by phone and email to consult with you about any emotional discomfort you may experience and that if the level of discomfort exceeds that which you desire to tolerate, you can voluntarily remove yourself from the study without penalty.

You may withdraw this consent at any time without prejudice or penalty. Your confidentiality will be preserved to the extent allowed by law. You have the right to ask and have questions answered concerning the study and that these questions, if any, have been answered to your satisfaction. You may contact me on 0209394916 or through brainsmann@yahoo.com. If you have questions about your rights as a participant in this research, or you feel you have been placed at risk, you can contact my promoter, Professor Kofi Poku Quan-Baffour, ABET, College of Education, University Africa, Pretoria, South Africa (Phone: 0027823522703) for answers to any and all questions about this research. Results will be sent to you upon request.

I, ....., willingly agree to participate.

Signature.....

Countersigned .....

Joseph Tufuor Kwarteng  
(DEd Candidate)

## APPENDIX C

### MEMO

TO: All SHS Headmasters

From: Joseph Tufuor Kwarteng

Date:

Subject: Permission to Engage Accounting Teachers and Students in Survey

I, Joseph Tufuor Kwarteng, am a doctoral candidate of the College of Education of the University of South Africa, Pretoria, South Africa. I would like to engage your accounting teachers and students in a study by engaging them to complete a set of questionnaire and checklist and allowing me to observe classes in session for the purpose of writing a thesis on the topic “**Quality in Senior High School Accounting Education in Ghana**” as a requirement of Doctor of Education Degree programme.

Participation is voluntary and participants may withdraw from the study at any time without reprisal and that confidentiality and anonymity will be upheld. You may contact the researcher, Joseph Tufuor Kwarteng, on 0209394916 or through [brainsmann@yahoo.com](mailto:brainsmann@yahoo.com).

I should be grateful if you would kindly allow me to collect the information from your institution. While anticipating your co-operation, I thank you for any help that you may be able to give.

**APPENDIX D**  
**PERMISSION LETTER TO THE DIRECTOR GENERAL OF GHANA EDUCATION**  
**SERVICE**

Department of Arts and Social Sciences Education  
Faculty of Education  
University of Cape Coast  
Cape Coast

*Date to be provided*

The director general  
Ghana Education Service  
National Headquarters  
Accra

Dear Sir,

**PERMISSION TO ENGAGE ACCOUNTING TEACHERS AND STUDENTS IN A**  
**SURVEY**

I, Joseph Tufuor Kwarteng, am a doctoral candidate of the College of Education of the University of South Africa, Pretoria, South Africa. I am undertaking investigation into the “**Quality in Senior High School Accounting Education in Ghana**” as a requirement in fulfilment of the award of Doctor of Education Degree in Curriculum Studies. My promoter is Professor Kofi Poku Quan-Baffour.

I would like to engage the senior high school accounting teachers and final year accounting students in the country in completing a set of questionnaire, vignette and checklist and allowing me to observe classes in session for the purpose of writing the thesis. Participation is voluntary and participants may withdraw from the study at any time without reprisal and that their confidentiality and anonymity will be upheld.

If there are issues to clarify or questions to address, you may contact me through the address above or on 0209394916 or through [brainsmann@yahoo.com](mailto:brainsmann@yahoo.com). You may also contact

my promoter, Professor Kofi Poku Quan-Baffour, ABET, College of Education, University Africa, Pretoria, South Africa (Phone: 0027823522703) for answers to any and all questions about this research.

I would be grateful if you would kindly grant me the permission to engage the accounting teachers and final year accounting students in this exercise. While anticipating your co-operation, I thank you for any help that you may be able to give.

Yours faithfully,

Joseph Tufuor Kwarteng  
(DEd Candidate, UNISA)

## **APPENDIX E**

### **Questionnaire for Accounting Teachers**

#### **Cover letter**

Dear Respondent,

I am conducting a research study and would like to ask for your help. If you are willing to participate, it should take about 10-15 minutes of your time. I am asking you to complete a questionnaire which seeks to measure your present concerns regarding the implementation of the new accounting curriculum and the related quality in accounting education.

The questionnaire is divided into four parts. The first part seeks to obtain your background information. It contains some items that will require that you make a tick in the appropriate bracket. Others may require that you provide some responses on your own. The items in the second part were developed from typical responses of school and college teachers who ranged from no knowledge at all about various programmes to many years' experience using them. The third part seeks your motivation to implement cost accounting curriculum relative to the financial accounting curriculum. Finally, the fourth part seeks information on the extent of use of the accounting curriculum.

Thank you for taking time to complete this task.

## Demographic instrument

### Part I: Background Information

1. Gender
  - Male { }
  - Female { }
2. Age in years (as at last birthday)
  - Between 21-25 { }
  - Between 26-30 { }
  - Between 31-35 { }
  - Between 36-40 { }
  - Between 41-50 { }
  - Between 51-55 { }
  - Between 56-60 { }
  - Other (please, specify): .....
3. Highest Educational Qualification:
  - HND { }
  - Bachelor's degree { }
  - Master's degree { }
  - Other (Specify): .....
4. Highest teaching qualification:
  - None { }

Cert “A” { }

Diploma in Education { }

PGCE/PGDE { }

Bachelor of education { }

M. Ed/M. Phil { }

5. Number of years teaching accounting (experience):

1-5 { }

6-15 { }

16+ { }

6. Type of accounting course taught

Financial accounting only { }

Cost accounting only { }

Both cost and financial accounting { }

7. Average number of classes handled in a term

One { }

Two { }

Three { }

Four { }

Five { }

Six and above { }

### **Part I: Concerns Questionnaire**

The purpose of this questionnaire is to determine what people who are using or thinking about using various programs are concerned about at various times during the innovation adoption process. The items were developed from typical responses of school and college teachers who ranged from no knowledge at all about various program to many years experience in using them. Therefore, a good part of the items on this questionnaire may appear to be of little relevance or irrelevant to you at this time. For the completely irrelevant items, please circle “0” on the scale. Other items will represent those concerns you do have, in varying degrees of intensity, and should be marked higher on the scale.

For example:

This statement is very true of me at this time 0 1 2 3 4 5 **6** 7

This statement is somewhat true of me now. 0 **1** 2 3 **4** 5 6 7

This statement is not at all true of me at this time. **0** 1 2 3 4 5 6 7

This statement seems irrelevant to me. 0 1 2 3 4 5 6 7

Please respond to the items in terms of your present concerns, or how you feel about your involvement or potential involvement with service learning. We do not hold to any one definition of this program, so please think of it in terms of your own perceptions of what it involves.

Remember to respond to each item in terms of your present concerns about your involvement or potential involvement with service learning.

Thank you for taking the time to complete this task.

**0= irrelevant, 1-2= not true of me now, 3-4= somewhat true of me now, and 5-7= very true of me now**

- |  |                 |
|--|-----------------|
| 1. I am concerned about students' attitudes toward the new curriculum.             | 0 1 2 3 4 5 6 7 |
| 2. I now know of some other approaches that might work better.                     | 0 1 2 3 4 5 6 7 |
| 3. I am more concerned about another curriculum.                                   | 0 1 2 3 4 5 6 7 |
| 4. I am concerned about not having enough time to organize myself each day.        | 0 1 2 3 4 5 6 7 |
| 5. I would like to help other faculty in their use of the new curriculum each day. | 0 1 2 3 4 5 6 7 |
| 6. I have a very limited knowledge of the new curriculum.                          | 0 1 2 3 4 5 6 7 |
| 7. I would like to know the effect of reorganization on my professional status.    | 0 1 2 3 4 5 6 7 |
| 8. I am concerned about conflict between my interests and my responsibilities.     | 0 1 2 3 4 5 6 7 |
| 9. I am concerned about revising my use of the new curriculum.                     | 0 1 2 3 4 5 6 7 |

- |  |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|
| 10. I would like to develop working relationships with both our faculty and outside faculty using this new curriculum. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. I am concerned about how the new curriculum affects students.  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. I am not concerned about the innovation at this time.  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. I would like to know who will make the decisions about what to teach in the new system.                            | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. I would like to discuss the possibility of using the new curriculum.   | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. I would like to know what resources are available if we decide to adopt the new curriculum.                        | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. I am concerned about my inability to manage all that the new curriculum requires.                                  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. I would like to know how my teaching or administration is supposed to change.                                      | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. I would like to familiarize other departments or persons with the progress of this new curriculum.                 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. I am concerned about evaluating my impact on students.   | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. I would like to revise the strategy for teaching in the new curriculum.  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. I am preoccupied with things other than the new curriculum.  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. I would like to modify our use of the new curriculum based on the experiences of our students.                     | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. I spend little time thinking about the new curriculum.   | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. I would like to excite my students about their part in delivering the new curriculum.                              | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. I am concerned about time spent working with non-academic problems related to the new curriculum.                  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. I would like to know what the use of the new curriculum will require in the immediate future.                      | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. I would like to coordinate my efforts with others to maximize the curriculum's effects.                            | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

28. I would like to have more information on time and energy commitments required by the new curriculum. 0 1 2 3 4 5 6 7
29. I would like to know what other faculty are doing in this area. 0 1 2 3 4 5 6 7
30. Currently, other priorities prevent me from focusing my attention on the new curriculum. 0 1 2 3 4 5 6 7
31. I would like to determine how to supplement, enhance, or replace the teaching strategy dictated by the new curriculum. 0 1 2 3 4 5 6 7
32. I would like to use feedback from students to change the programme. 0 1 2 3 4 5 6 7
33. I would like to know how my role will change when I am using the new curriculum. 0 1 2 3 4 5 6 7
34. Coordination of tasks and people is taking too much of my time. 0 1 2 3 4 5 6 7
35. I would like to know how the new curriculum is better than old curriculum. 0 1 2 3 4 5 6 7

### Part III: Preparedness to Teach Cost Accounting

	SA	A	U	SD	D
1. My background permits the delivery of cost accounting.					
2. I can confidently teach cost accounting.					
3. Relative to financial accounting, cost accounting is easier to teach.					
4. I get administrative support in terms of resources needed to teach cost accounting.					
5. It is easier to facilitate students' understanding in cost accounting.					
6. At the senior high school level, cost accounting is as popular as financial accounting among teachers.					
7. At the senior high school level, cost accounting is as popular as financial accounting among students.					

8. The school administration encourages the teaching of cost accounting.					
9. Student numbers in cost accounting class is encouraging and motivating.					
10. I prefer teaching cost accounting to teaching financial accounting.					
11. Support materials are available for the delivery of cost accounting.					
12. I attach greater importance to cost accounting than financial accounting.					
13. Students are desirous of learning cost accounting compared with financial accounting.					
14. Cost accounting should be made compulsory for all accounting students.					
15. Teaching cost accounting makes me feel significant in the school.					

#### Part IV: Level of Use of the Accounting Curriculum

Please, read and mark **ONLY ONE** category that best indicates your overall level of use of the accounting curriculum.

1. I have little or no knowledge of accounting curriculum, no involvement with it, and I am not doing anything toward becoming involved.	
2. I am seeking or acquiring information about the accounting curriculum.	
3. I am preparing for the first use of the accounting curriculum.	
4. I focus most effort on the short-term, day-today use of the accounting curriculum with little time for reflection. My effort is primarily directed toward mastering tasks required to use the accounting curriculum.	
5. I feel comfortable using the accounting curriculum. However, I am putting forth little effort and thought to improve the accounting curriculum and its consequences.	

<p>6. I vary the use of the accounting curriculum to increase the expected benefits within the classroom. I am working on using the curriculum to maximize the effects with my students.</p>	
<p>7. I am combining my own efforts with related activities of other teachers and colleagues to achieve impact in the classroom.</p>	
<p>8. I re-evaluate the quality of use of the accounting curriculum, seek major modifications of, or alternatives to, present innovation to achieve increased impact, examine new development in the field, and explore new goals for myself and my school.</p>	

## APPENDIX F

### Accounting Curriculum Configuration Checklist for Accounting Teachers

**Instructions:** Place an **X** under the appropriate variation implementation score that meets the criteria specified, from 0 to 2. Score and rate each item separately. The scores and their interpretations are as shown below:

**Score 0:** There is no evidence that the component is included in the accounting curriculum.

**Score 1:** Accounting curriculum mentions content related to the component

**Score 2:** Accounting curriculum mentions component and provides guidelines on its application.

Essential Components	0	1	2
<b>A. Identification of Content to Teach in Accounting Class</b>			
7. Consideration of and focus on broad areas			
8. Consideration and focus on specific subskills, important prerequisites, or related skills (e.g., phonological segmenting, understanding of place value)			
9. Addressing alignment of assessment or instruction on different forms of knowledge (i.e., facts, concepts, strategies)			
10. Consideration of difficulties arising from skill deficits or performance deficits			
11. Working within the instructional hierarchy: accuracy, fluency, generalization, adaptation			

12. Alignment with or writing of goals and objectives			
13. Analysis of student work			
<b>B. Assessment Procedures in Accounting</b>			
14. Review of prior records			
15. Interview with relevant individuals			
16. Observation of performance in appropriate settings			
17. Administration and interpretation of test results			
18. Selection of assessment procedures that provide the information needed to make instructional decisions			
19. Characteristics of good formative measures			
20. Representation of performance with graphs			
21. Standards for comparison of performance			
22. Aggregation of data to make individual or small-group, classwide, and schoolwide or districtwide decisions			
<b>C. Teaching and Learning Resources in Accounting Instructions</b>			
23. Specification of what teaching and learning resources to use.			
24. Guidelines of how to use the resources			
25. Specification of alternative improvisation of the required teaching and learning resources			
26. Guidelines of how to prepare it			
27. Recommends the use of resource persons			
28. Specification of when to use the teaching and learning resources			

<b>D. Goals and Objectives of the SHS accounting course</b>			
29. Outlining of programme goals			
30. Provision of the specific objectives of units			
31. Matching unit objectives with content			
32. Provision of guidelines of how to achieve each objective			
33. Delineating lesson objectives from the stated unit objectives			
34. Review of the fit between objectives crafted and content chosen			
<b>E. Content of the accounting curriculum</b>			
35. Representation of the required accounting standards			
36. Provision of the thematic areas of concentration e.g. accounting principles and standards			
37. Provision of relevant text books			
38. Provision of practical field training and experience			
39. Relate classroom experience to industry practice			
40. Specifying areas of emphasis			
41. Addressing the hierarchy of content presentation			

## APPENDIX G

### Vignette for Accounting Teachers

Dear Sir/Madam, I am conducting a research and would like to ask for your help. If you are willing to participate, it should take about 10-15 minutes of your time. I am asking you to complete a vignette which seeks to assess the rate of adoption of the new accounting syllabus. Thank you for taking time to complete this task.

***GUIDELINE: Given your circumstances as an accounting teacher, complete each of the FOUR stories in no more than 10 sentences in YOUR OWN WAY.***

#### *Story 1:*

The new accounting syllabus has differing components such as its subject matter, assessment procedures, aims and goals, teaching and learning resources and teaching strategies. The success of the use of the curriculum depends on my understanding of these components. Accordingly, as I use the accounting syllabus I have the following understanding and definitions of each of these components.

#### *Story 2:*

Since the introduction of the new accounting syllabus, some accounting teachers consistently used it and others do not use it. The reasons that account for the decision to use or not to use it are context bound. In my case, my decision is influenced by several factors some of which are expressed below.

*Story 3:*

By training every accounting teacher is strategically placed to teach both financial accounting and cost accounting. However, there are several factors that account for teachers' readiness to teach cost accounting relative to financial accounting. My preparedness to teach cost accounting is influenced by...

*Story 4:*

There are countless problems that accounting teachers face in their bid to ensure instructional quality. Several attempts have been made by various stakeholders in education to address such problems. Currently, I deem the level of quality in accounting education as...

## APPENDIX H

### Vignette for Accounting Learners

Dear Respondent, I am conducting a research study and would like to ask for your help. If you are willing to participate, it should take about 10-15 minutes of your time. I am asking you to complete a vignette which seeks to assess the rate of adoption of the new accounting syllabus.

Thank you for taking time to complete this task.

***Guideline: Given your circumstances as an accounting student, complete each of the TWO stories in no more than 10 sentences in YOUR OWN WAY.***

*Story 1:*

*Financial accounting has enjoyed greater popularity than cost accounting.* This statement is an opinion rather than an established fact. As such in my opinion, with the following reasons I conclude that...

Story 2:

Today, accounting lessons are better than what they used to be some years back. This has been the debate for some time now. I join the debate with these evidences from my school:

## APPENDIX I

### Statistical Results

1.GENDER		AWARENESS	INFORMATI ONAL	PERSONAL	MANAGEM ENT	CONSEQUEN CE	COI
MALE	Mean	12.1102	16.6535	16.9685	13.8031	18.0000	
	N	127	127	127	127	127	
	Std. Deviation	2.88463	2.51780	2.55398	3.18737	2.22539	
FEMALE	Mean	11.5556	16.8519	16.5185	13.5926	18.8519	
	N	27	27	27	27	27	
	Std. Deviation	2.43900	1.58609	2.73679	3.11645	1.26198	
Total	Mean	12.0130	16.6883	16.8896	13.7662	18.1494	
	N	154	154	154	154	154	
	Std. Deviation	2.81217	2.37778	2.58341	3.16598	2.11061	

### GENDER ----- ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
AWARENESS	Between Groups	6.851	1	6.851	.865	.354
	Within Groups	1203.123	152	7.915		
	Total	1209.974	153			
INFORMATION AL	Between Groups	.876	1	.876	.154	.695
	Within Groups	864.163	152	5.685		
	Total	865.039	153			

PERSONAL	Between Groups	4.509	1	4.509	.674	.413
	Within Groups	1016.615	152	6.688		
	Total	1021.123	153			
MANAGEMENT	Between Groups	.987	1	.987	.098	.755
	Within Groups	1532.597	152	10.083		
	Total	1533.584	153			
CONSEQUENCE	Between Groups	16.158	1	16.158	3.691	.057
	Within Groups	665.407	152	4.378		
	Total	681.565	153			
COLLABORATION	Between Groups	3.200	1	3.200	.321	.572
	Within Groups	1514.410	152	9.963		
	Total	1517.610	153			
REFOCUSING	Between Groups	19.331	1	19.331	3.091	.081
	Within Groups	950.520	152	6.253		
	Total	969.851	153			

## Means

### AWARENESS INFORMATIONAL PERSONAL MANAGEMENT CONSEQUENCE COLLABORATION REFOCUSING \* CLASS

#### Report

CLASS		AWARENESS	INFORMATIONAL	PERSONAL	MANAGEMENT	CONSEQUENCE
ONE	Mean	12.0000	17.0000	17.8000	14.2000	17.0000
	N	5	5	5	5	5
	Std. Deviation	2.34521	1.73205	1.09545	4.14729	2.34521
TWO	Mean	11.5278	16.1111	16.4444	13.0000	18.0000
	N	36	36	36	36	36
	Std. Deviation	2.67780	2.49317	2.80249	2.77746	1.66667
THREE	Mean	12.2679	16.7500	16.9286	14.1786	18.0000

	N	56	56	56	56	
	Std. Deviation	2.79929	2.71862	2.52160	3.06954	1.
FOUR	Mean	12.2245	17.0000	17.2653	13.8776	18
	N	49	49	49	49	
	Std. Deviation	2.93162	2.03101	2.51475	3.37041	2.
FIVE	Mean	12.0000	17.2000	15.2000	13.8000	18
	N	5	5	5	5	
	Std. Deviation	3.08221	.83666	3.42053	3.56371	2.
SIX AND ABOVE	Mean	9.6667	16.0000	16.6667	12.6667	16
	N	3	3	3	3	
	Std. Deviation	3.51188	2.00000	2.08167	4.72582	2.
Total	Mean	12.0130	16.6883	16.8896	13.7662	18
	N	154	154	154	154	
	Std. Deviation	2.81217	2.37778	2.58341	3.16598	2.

**ANOVA Table**

		Sum of Squares	df	Mean Square
AWARENESS * CLASS	Between Groups (Combined)	30.822	5	6.164
	Within Groups	1179.152	148	7.967
	Total	1209.974	153	
INFORMATIONAL * CLASS	Between Groups (Combined)	20.183	5	4.037
	Within Groups	844.856	148	5.708
	Total	865.039	153	
PERSONAL * CLASS	Between Groups (Combined)	32.703	5	6.541
	Within Groups	988.421	148	6.679
	Total	1021.123	153	
MANAGEMENT * CLASS	Between Groups (Combined)	35.838	5	7.168
	Within Groups	1497.746	148	10.120
	Total	1533.584	153	
CONSEQUENCE * CLASS	Between Groups (Combined)	12.133	5	2.427
	Within Groups	669.432	148	4.523
	Total	681.565	153	
COLLABORATION *	Between Groups (Combined)	43.000	5	8.600

CLASS	Within Groups	1474.610	148	9.964
	Total	1517.610	153	
REFOCUSING * CLASS	Between Groups (Combined)	37.844	5	7.569
	Within Groups	932.006	148	6.297
	Total	969.851	153	

**AWARENESS INFORMATIONAL PERSONAL MANAGEMENT CONSEQUENCE  
COLLABORATION REFOCUSING \* TYPE**

**Report**

TYPE		AWARENESS	INFORMATIO NAL	PERSONAL	MANAGEME NT
FINANCIAL ACCOUNTING ONLY	Mean	12.2857	16.7460	16.8413	13.8413
	N	63	63	63	63
	Std. Deviation	2.76749	2.59633	2.65917	3.26371
COST ACCOUNTING ONLY	Mean	11.2800	16.8000	16.5600	13.5200
	N	25	25	25	25
	Std. Deviation	2.96536	1.50000	3.05614	3.26752
BOTH COST AND FINANCIAL ACCOUNTING	Mean	12.0303	16.5909	17.0606	13.7879
	N	66	66	66	66
	Std. Deviation	2.78993	2.45562	2.33290	3.07604
Total	Mean	12.0130	16.6883	16.8896	13.7662
	N	154	154	154	154
	Std. Deviation	2.81217	2.37778	2.58341	3.16598

**ANOVA Table**

		Sum of Squares	df	Mean Square
AWARENESS * TYPE	Between Groups (Combined)	18.137	2	9.069
	Within Groups	1191.837	151	7.893
	Total	1209.974	153	

INFORMATIONAL * TYPE	Between Groups (Combined)	1.148	2	.574
	Within Groups	863.891	151	5.721
	Total	865.039	153	
PERSONAL * TYPE	Between Groups (Combined)	4.793	2	2.397
	Within Groups	1016.330	151	6.731
	Total	1021.123	153	
MANAGEMENT * TYPE	Between Groups (Combined)	1.901	2	.951
	Within Groups	1531.683	151	10.144
	Total	1533.584	153	
CONSEQUENCE * TYPE	Between Groups (Combined)	5.977	2	2.988
	Within Groups	675.588	151	4.474
	Total	681.565	153	
COLLABORATION * TYPE	Between Groups (Combined)	64.345	2	32.173
	Within Groups	1453.265	151	9.624
	Total	1517.610	153	
REFOCUSING * TYPE	Between Groups (Combined)	14.660	2	7.330
	Within Groups	955.191	151	6.326
	Total	969.851	153	

**AWARENESS INFORMATIONAL PERSONAL MANAGEMENT CONSEQUENCE  
COLLABORATION REFOCUSING \* YEARS**

**Report**

YEARS		AWARENESS	INFORMATIO NAL	PERSONAL	MANAGEME NT	CONSEQUEN CE	CO
1 - 5	Mean	11.9423	16.5288	16.7596	13.7212	18.0673	
	N	104	104	104	104	104	
	Std. Deviation	2.73711	2.51966	2.61992	2.94103	2.27380	
6 - 15	Mean	12.2273	17.0682	17.3864	13.8409	18.4773	
	N	44	44	44	44	44	

	Std. Deviation	2.96384	2.03913	2.08222	3.45027	1.69113
16+	Mean	11.6667	16.6667	15.5000	14.0000	17.1667
	N	6	6	6	6	6
	Std. Deviation	3.38625	2.16025	4.54973	5.09902	1.72240
Total	Mean	12.0130	16.6883	16.8896	13.7662	18.1494
	N	154	154	154	154	154
	Std. Deviation	2.81217	2.37778	2.58341	3.16598	2.11061

**ANOVA Table**

			Sum of Squares	df	Mean Square
AWARENESS * YEARS	Between Groups (Combined)		3.260	2	1.630
	Within Groups		1206.714	151	7.991
	Total		1209.974	153	
INFORMATIONAL * YEARS	Between Groups (Combined)		8.997	2	4.498
	Within Groups		856.042	151	5.669
	Total		865.039	153	
PERSONAL * YEARS	Between Groups (Combined)		24.201	2	12.101
	Within Groups		996.922	151	6.602
	Total		1021.123	153	
MANAGEMENT * YEARS	Between Groups (Combined)		.785	2	.392
	Within Groups		1532.800	151	10.151
	Total		1533.584	153	
CONSEQUENCE * YEARS	Between Groups (Combined)		11.225	2	5.613
	Within Groups		670.339	151	4.439
	Total		681.565	153	
COLLABORATION * YEARS	Between Groups (Combined)		4.017	2	2.009
	Within Groups		1513.593	151	10.024
	Total		1517.610	153	
REFOCUSING * YEARS	Between Groups (Combined)		7.180	2	3.590
	Within Groups		962.670	151	6.375
	Total		969.851	153	

**AWARENESS INFORMATIONAL PERSONAL MANAGEMENT CONSEQUENCE  
COLLABORATION REFOCUSING \* TEACHING**

**Report**

TEACHING		AWARENESS	INFORMATIO NAL	PERSONAL	MANAGEME NT
NONE	Mean	12.3846	17.0000	16.8846	13.4231
	N	26	26	26	26
	Std. Deviation	2.81534	2.28035	2.68815	3.34871
CERT A	Mean	13.2222	16.3333	16.6667	13.7778
	N	9	9	9	9
	Std. Deviation	2.63523	3.20156	2.82843	3.66667
DIPLOMA IN EDUCATION	Mean	12.4000	15.9000	16.0000	13.1000
	N	10	10	10	10
	Std. Deviation	3.68782	2.76687	3.97213	4.04008
PGCE/PGDE	Mean	12.0000	17.0000	20.0000	11.0000
	N	1	1	1	1
	Std. Deviation	.	.	.	.
BACHELOR OF EDUCATION	Mean	11.7429	16.7143	16.9619	13.8571
	N	105	105	105	105
	Std. Deviation	2.72816	2.33170	2.42948	3.01735
M.ED/M.PHIL	Mean	13.3333	16.6667	17.0000	16.6667
	N	3	3	3	3
	Std. Deviation	3.78594	2.08167	1.00000	2.30940
Total	Mean	12.0130	16.6883	16.8896	13.7662
	N	154	154	154	154
	Std. Deviation	2.81217	2.37778	2.58341	3.16598

**ANOVA Table**

		Sum of Squares	df	Mean Square
AWARENESS * TEACHING	Between Groups (Combined)	31.141	5	6.228
	Within Groups	1178.833	148	7.965

	Total		1209.974	153	
INFORMATIONAL * TEACHING	Between Groups (Combined)		10.044	5	2.009
	Within Groups		854.995	148	5.777
	Total		865.039	153	
PERSONAL * TEACHING	Between Groups (Combined)		18.622	5	3.724
	Within Groups		1002.501	148	6.774
	Total		1021.123	153	
MANAGEMENT * TEACHING	Between Groups (Combined)		41.259	5	8.252
	Within Groups		1492.326	148	10.083
	Total		1533.584	153	
CONSEQUENCE * TEACHING	Between Groups (Combined)		35.741	5	7.148
	Within Groups		645.824	148	4.364
	Total		681.565	153	
COLLABORATION * TEACHING	Between Groups (Combined)		46.781	5	9.356
	Within Groups		1470.830	148	9.938
	Total		1517.610	153	
REFOCUSING * TEACHING	Between Groups (Combined)		40.053	5	8.011
	Within Groups		929.798	148	6.282
	Total		969.851	153	

**AWARENESS INFORMATIONAL PERSONAL MANAGEMENT CONSEQUENCE  
COLLABORATION REFOCUSING \* EDUCATION**

**Report**

EDUCATION		AWARENESS	INFORMATIO NAL	PERSONAL	MANAGEME NT	CO
HND	Mean	12.5333	16.5333	16.3333	13.5333	
	N	15	15	15	15	
	Std. Deviation	3.02056	2.82506	4.23703	3.66190	
BACHELORS DEGREE	Mean	11.8730	16.7063	16.9524	13.6984	
	N	126	126	126	126	
	Std. Deviation	2.79710	2.40022	2.40286	3.13246	
MASTERS DEGREE	Mean	12.7692	16.6923	16.9231	14.6923	
	N	13	13	13	13	
	Std. Deviation	2.74329	1.65250	1.89128	2.98286	
Total	Mean	12.0130	16.6883	16.8896	13.7662	
	N	154	154	154	154	
	Std. Deviation	2.81217	2.37778	2.58341	3.16598	

**ANOVA Table**

		Sum of Squares	df	Mean Square
AWARENESS * EDUCATION	Between Groups (Combined)	13.965	2	6.982
	Within Groups	1196.009	151	7.921
	Total	1209.974	153	
INFORMATIONAL * EDUCATION	Between Groups (Combined)	.401	2	.201
	Within Groups	864.637	151	5.726
	Total	865.039	153	
PERSONAL * EDUCATION	Between Groups (Combined)	5.153	2	2.576
	Within Groups	1015.971	151	6.728
	Total	1021.123	153	
MANAGEMENT * EDUCATION	Between Groups (Combined)	12.542	2	6.271
	Within Groups	1521.042	151	10.073
	Total	1533.584	153	
CONSEQUENCE * EDUCATION	Between Groups (Combined)	1.511	2	.755
	Within Groups	680.054	151	4.504
	Total	681.565	153	
COLLABORATION *	Between Groups (Combined)	6.689	2	3.345

EDUCATION	Within Groups	1510.921	151	10.006
	Total	1517.610	153	
REFOCUSING *	Between Groups (Combined)	26.372	2	13.186
EDUCATION	Within Groups	943.479	151	6.248
	Total	969.851	153	