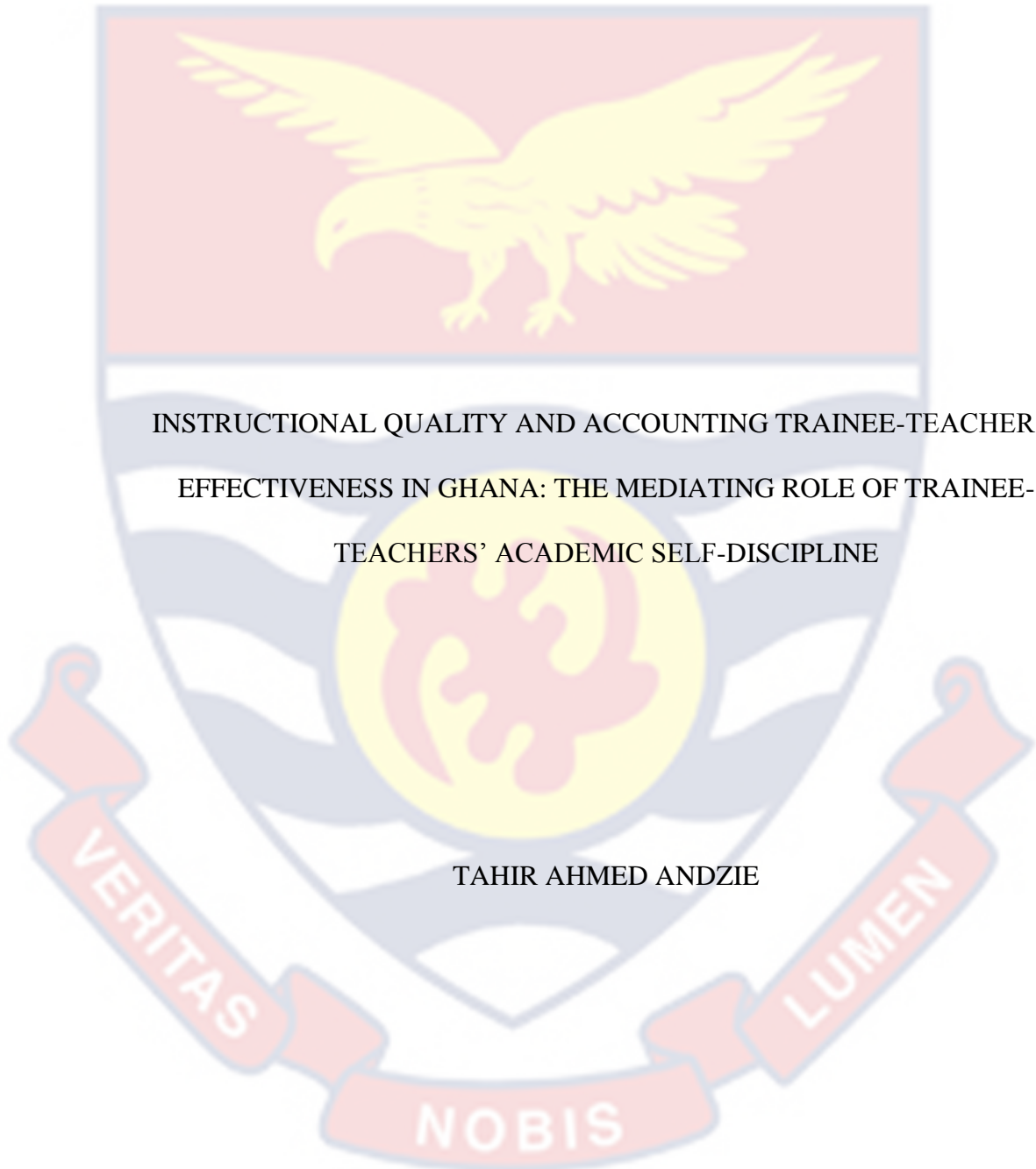


UNIVERSITY OF CAPE COAST



INSTRUCTIONAL QUALITY AND ACCOUNTING TRAINEE-TEACHERS'
EFFECTIVENESS IN GHANA: THE MEDIATING ROLE OF TRAINEE-
TEACHERS' ACADEMIC SELF-DISCIPLINE

TAHIR AHMED ANDZIE

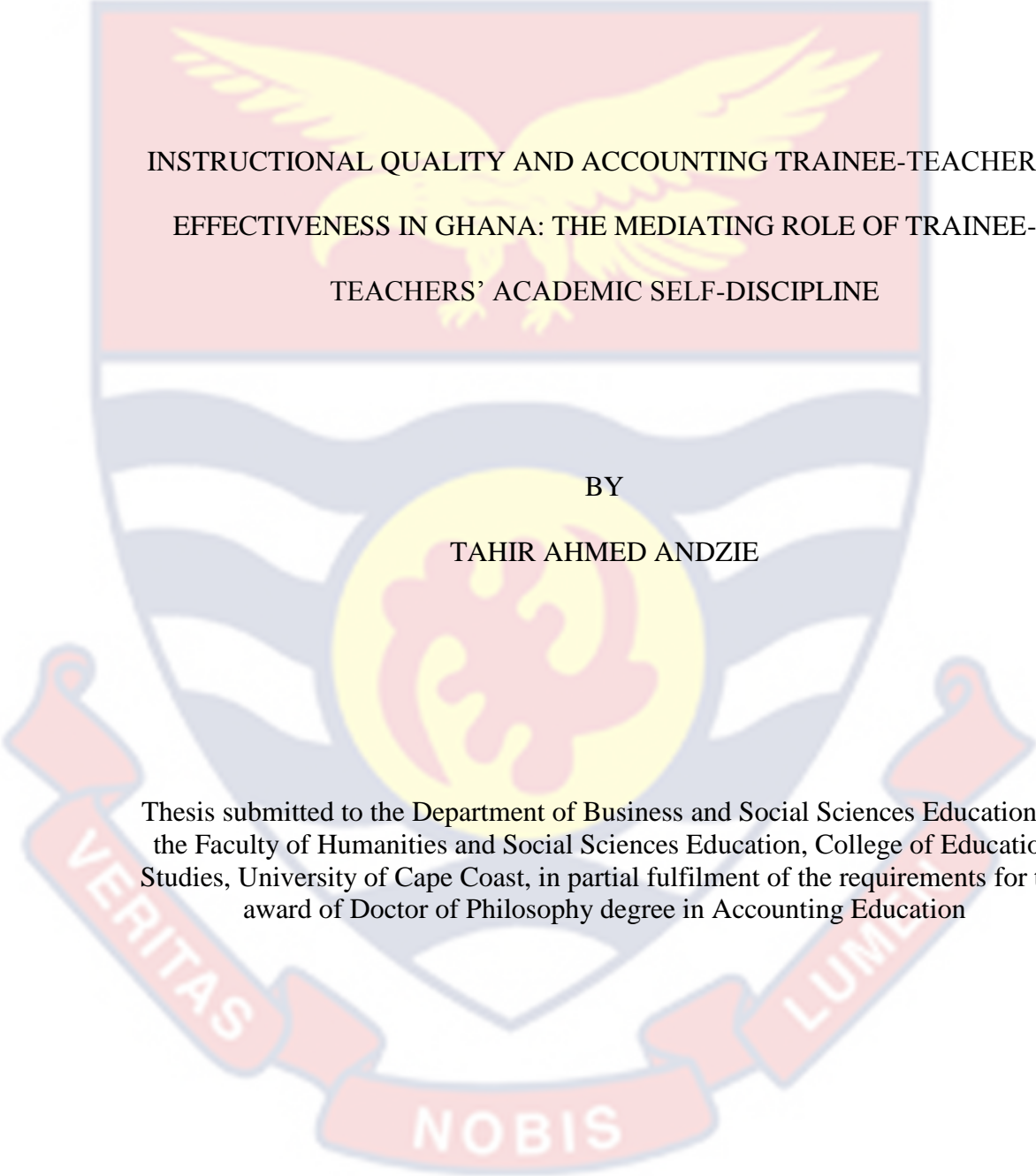
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INSTRUCTIONAL QUALITY AND ACCOUNTING TRAINEE-TEACHERS'
EFFECTIVENESS IN GHANA: THE MEDIATING ROLE OF TRAINEE-
TEACHERS' ACADEMIC SELF-DISCIPLINE

BY

TAHIR AHMED ANDZIE

Thesis submitted to the Department of Business and Social Sciences Education of the Faculty of Humanities and Social Sciences Education, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Doctor of Philosophy degree in Accounting Education

SEPTEMBER 2022

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

Name: Tahir Ahmed Andzie

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: Date:

Name: Rev. Dr. George Tackie

Co-supervisor's Signature: Date:

Name: Prof. Bethel Tawiah Ababio

ABSTRACT

The study examined the influence of instructional quality on accounting trainee-teachers' effectiveness in Ghana, taking into consideration the mediating role of trainee-teachers' academic self-discipline. The study also compared conventional and non-conventional modes of instructional delivery. Cross-sectional survey design with mixed methods approach was used. The sample was 626, made up of 576 final year trainee-teachers, 42 mentors and eight duty bearers. Questionnaires and interview guide were the instruments used. The quantitative data were analysed using multivariate analysis of variance (MANOVA), hierarchical multiple regression analysis and Hayes (2018) mediation analysis while the qualitative data were analysed thematically. The study revealed that trainee-teachers from conventional mode are able to demonstrate good instructional qualities and high level of professional values, attitudes, knowledge and practices that promote learner interactions as compare to those from non-conventional mode. The study concludes that the higher the instructional quality imbibed by a trainee, the higher he/she is able to demonstrate high level of effectiveness in the delivery of education, a phenomenon which will make him/her become a competent teacher. However, this influence becomes more potent when they are able to possess high level of academic self-discipline. Thus, academic self-discipline is able to mediate the relationship between instructional quality and trainee-teachers' effectiveness. It is recommended to management of the universities through the head of departments/units to enhance the measures put in place to boost the academic self-discipline of trainees through effective mentoring and counselling interventions.

KEY WORDS

Academic self-discipline

Accounting education

Conventional

Instructional quality

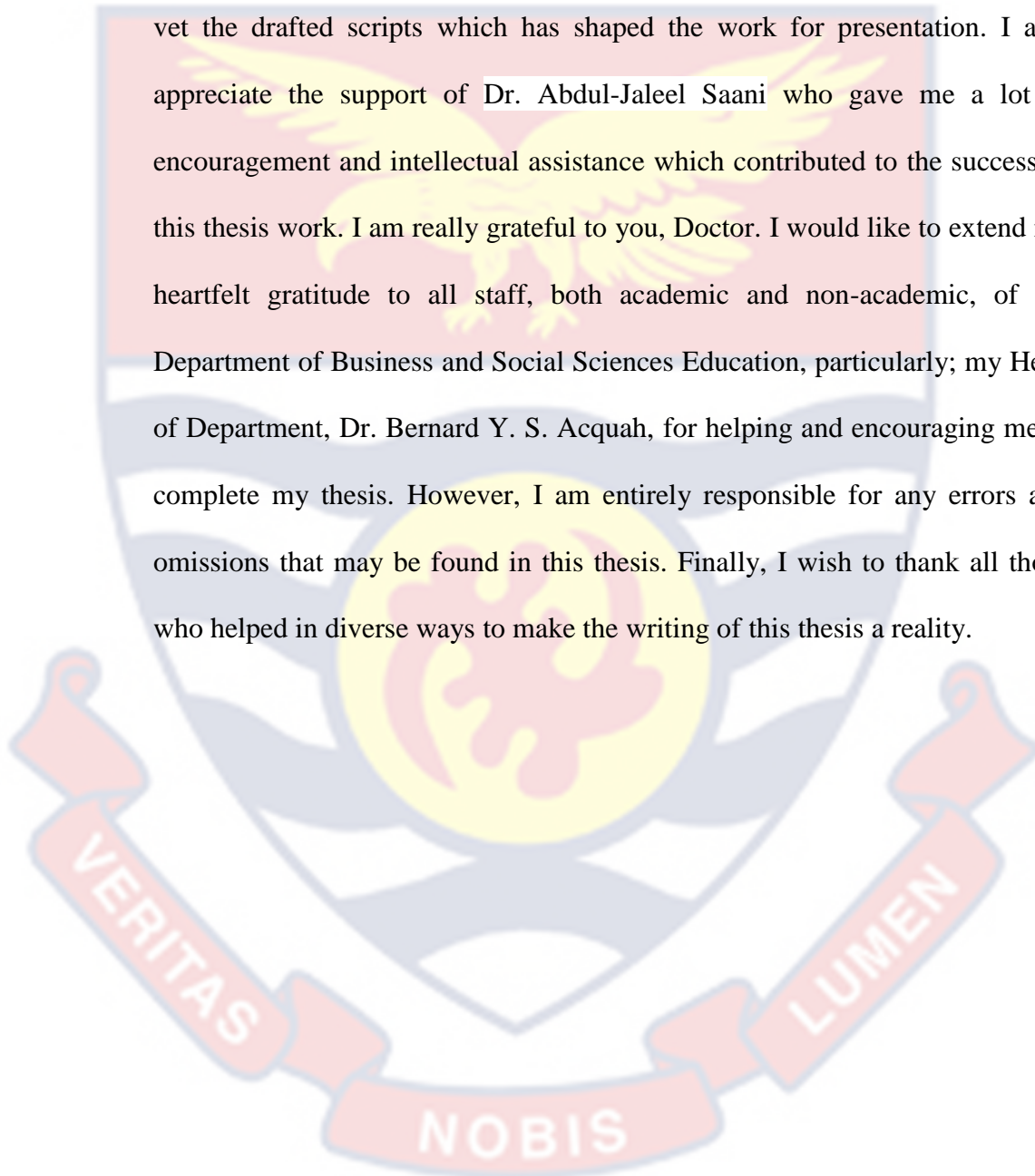
Non-Conventional

Preservice preparation



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DEDICATION

To my wife, Ms Hafsatu Ahmed Andoh, and my lovely daughters; Naimah,
Nafisah, Hilal Ama and Basmah.



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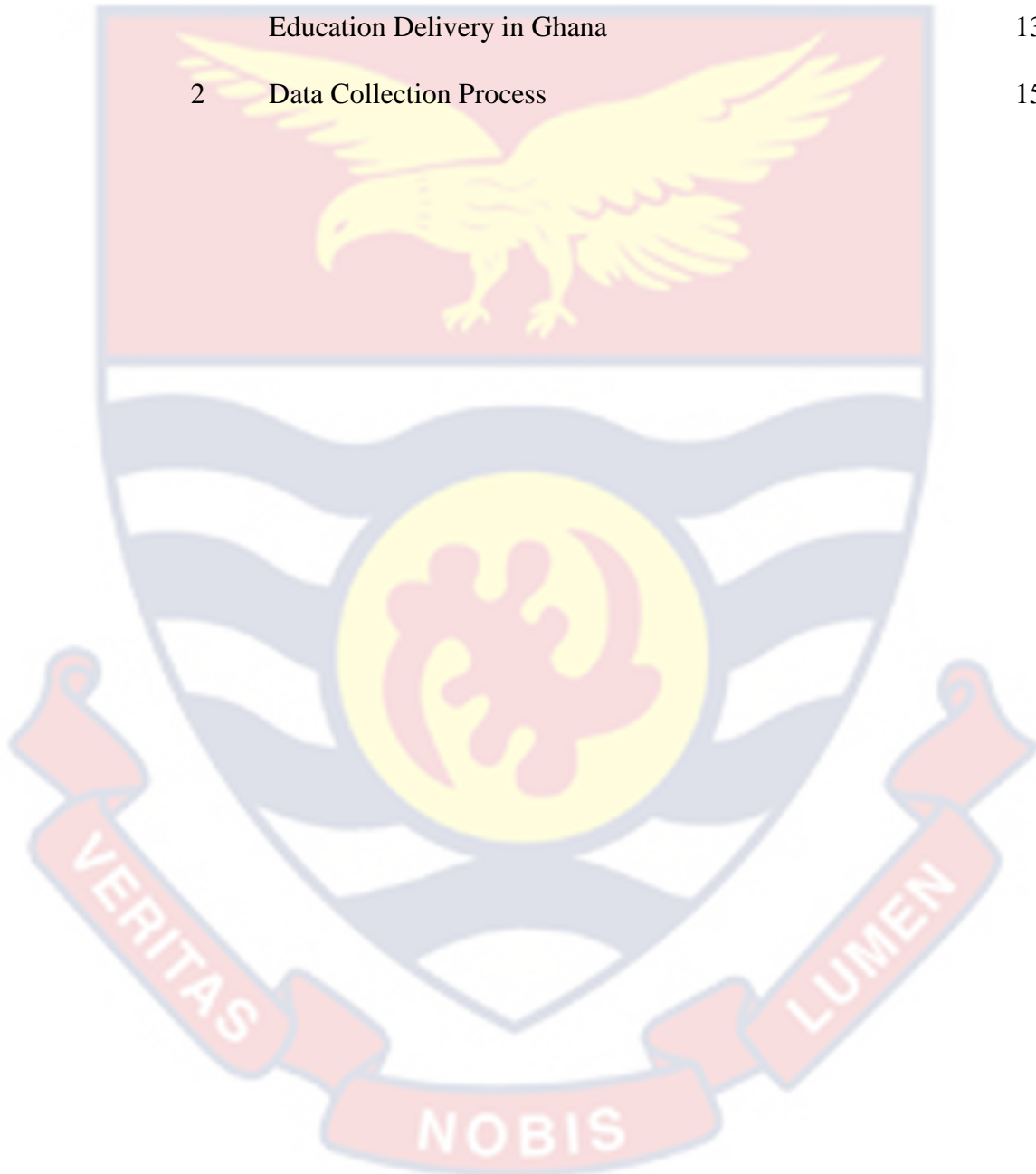
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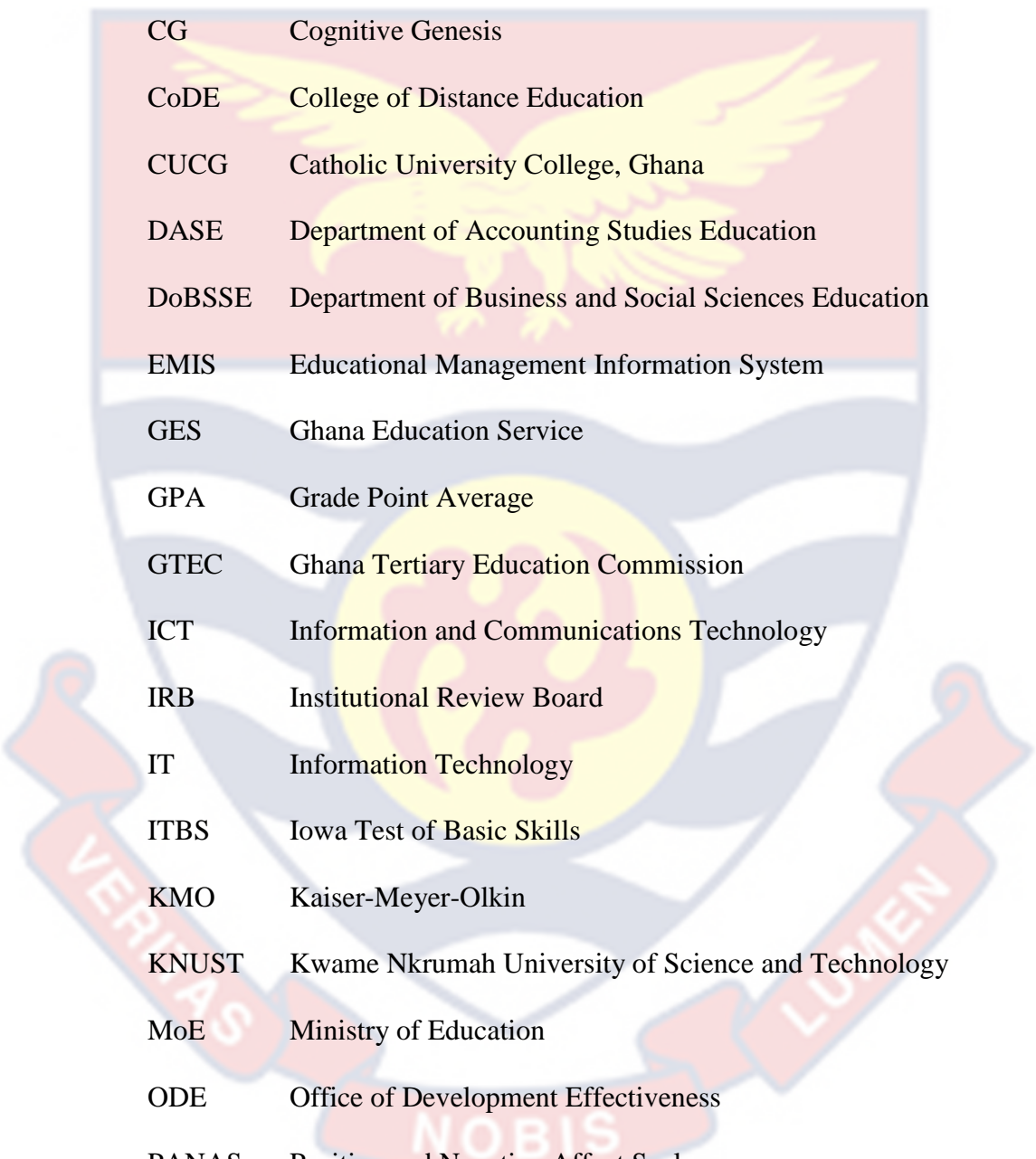
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LIST OF ACRONYMSThe logo of the University of Cape Coast is a watermark in the background. It features a shield with a yellow eagle with spread wings in the center. Below the eagle is a yellow sun. The shield is flanked by two red banners with white text: 'VERITAS' on the left and 'LUMEN' on the right. At the bottom of the shield, the word 'NOBIS' is written in white. The shield is set against a light blue background with wavy lines.

ANOVA	Analysis of Variance
BTS	Barlett's Test of Sphericity
CBAM	Concerns-Based Adoption Model
CG	Cognitive Genesis
CoDE	College of Distance Education
CUCG	Catholic University College, Ghana
DASE	Department of Accounting Studies Education
DoBSSE	Department of Business and Social Sciences Education
EMIS	Educational Management Information System
GES	Ghana Education Service
GPA	Grade Point Average
GTEC	Ghana Tertiary Education Commission
ICT	Information and Communications Technology
IRB	Institutional Review Board
IT	Information Technology
ITBS	Iowa Test of Basic Skills
KMO	Kaiser-Meyer-Olkin
KNUST	Kwame Nkrumah University of Science and Technology
MoE	Ministry of Education
ODE	Office of Development Effectiveness
PANAS	Positive and Negative Affect Scale
PASW	Predictive Analytic Software
PCA	Principal Components Analysis
PLS	Partial Least Squares

The background of the page features a large, semi-transparent watermark of the University of Cape Coast logo. The logo is a shield-shaped crest with a yellow eagle with outstretched wings in the center. Below the eagle is a yellow circle containing a red and white emblem. The shield is flanked by two red banners with white text: 'VERITAS' on the left and 'LUMEN' on the right. At the bottom of the shield is a red banner with the word 'NOBIS' in white.

PTR	Pupil-Teacher Ratio
SEM	Structural Equation Modelling
SETE	Student Evaluation of Teaching Effectiveness
SHS	Senior High School
SHSs	Senior High Schools
SPQQ	Students Perceived Quality Questionnaire
TAfS	Test Analysis for Surveys
TALIS	Teaching and Learning International Survey
TAM	Technology Acceptance Model
TCI	Teaching Competence Instrument
TLMs	Teaching and Learning Materials
UCC	University of Cape Coast
UDS	University for Development Studies
UEW	University of Education, Winneba
UG	University of Ghana
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VIF	Variance Inflation Factor
VLE	Virtual Learning Environment
VVU	Valley View University

CHAPTER ONE

INTRODUCTION

Over the last decade, scholars have argued about the gap in Accounting education delivery (Srdar, 2017). This gap may be the reason for the perceived ineffectiveness in accounting graduate teachers (Amoono, 2019). According to Amoono, this challenge can be blamed on the incremental number of people being admitted by the universities to be trained as Accounting teachers with limited facilities. In narrowing or eliminating this difficulty, universities such as University of Cape Coast (UCC) and University of Education, Winneba (UEW), have introduced non-conventional modes of education such as distance learning to complement the conventional mode and to train more Accounting teachers professionally, without compromising on quality. The problem with this intervention, however, is the issue of achieving parity among conventional and non-conventional modes in terms of effective Accounting education delivery (Amoono, 2019; Worley-Davis, 2016).

Background to the Study

Generally, governments all over the world have come to realise that educating their citizens by whatever means feasible and legitimate is key to national socio-economic transformation needed for growth and development. However, research has shown that governments and universities all over the world do not have adequate facilities to accommodate even half of the teeming populations who want to have access to university education through the face-to-face on-campus conventional mode (Agyemang, 2014). According to Moore and Kearsley (2017), there are about 88 million people in the world who could not access university education due to geographical, social and

cultural barriers. It is in the light of this that countries are gravitating their efforts toward non-conventional mode of tertiary education such as distance learning by employing technology to help break the barriers (Faidley, 2018).

According to United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2019), most countries in Africa have seen the need to counter the devastating effects of lack of access to higher education on their teeming populations' through non-conventional modes in order to beef up the manpower needs of their countries, especially teacher education in the business fraternity. It is gratifying to note that the trend in West Africa with regard to multiple modes of tertiary education is very bright (Akrofi, 2019).

Accounting and business education in general has many manifest and latent relevance in the economy of countries. It is seen as the panacea to accounting skills acquisition for self-employment and sustainable development. According to Asonitou (2021), accounting education in universities and other tertiary education institutions incorporates packages of instructional programmes for learning outcome, designed to dedicate “would be” accountants, managers, accounts personnel etc, to make them versatile and adaptable to any of the numerous roles, they may be called upon to play after graduation.

Cunha et al. (2022) added that such education among other things, seeks to develop, concepts, rules, skills, procedures, theories and general knowledge for solving accounting problems in the economy and the society at large. Within the context of Ghana and other African countries, it is a known fact that accounting education is one of the major options in business education unit/department which prepares teachers who will in turn prepare

secondary school students to become accounting teachers, accountants, accounting officers, cost managers, cashiers, treasurers and managers of enterprises both in private and public sectors of the economy (Engel, 2020; Foster, 2019; Moore & Felo, 2022; Tsiane & Motebang, 2022a).

Furthermore, the relevancies of accounting education to an economy include the act of keeping better records for personal and home use, understanding financial accounting records and reports, understanding the concept of assets, liabilities and proprietorship so that the fluctuation in cycles may be correctly interpreted, interpreting and analysing business papers and records in terms of customers, and positioning trainees in accounting/book-keeping occupations (Murphy & Hassall, 2020; Tsiane & Motebang, 2022b). Accounting education also help in creating business units, delivering business of their babes, nursing business, wedding and joining business units, and burying dead and unproductive business (Dolce, Emanuel, Cisi & Ghislieri, 2020; Mah'd & Mardini, 2020).

In Nigeria, Ghana, the Gambia, Sierra Leone and other African countries, different modes of tertiary education are employed by universities to train the future generation (Filho, 2021). For example, in the case of distance education, it is delivered through print in the form of modules or hand-outs, and audio-visual platforms to about 100,000 students (Akrofi, 2019). In most of these countries, attention of non-conventional modes of education was initially directed at training of teachers. Currently, these countries provide tertiary education programmes to many categories of people including professional teachers, bankers, nurses, artisans and other professionals (UNESCO, 2019).

Considering the challenges of education and development in Ghana, it is not surprising that employing non-conventional mode in delivering tertiary education is seen as an important intervention that is complementing the conventional mode and also making significant contribution towards solving the problem of access, quality and equity in education (Anamuah-Menasah, 2015). It was appropriate on the part of stakeholders in education when they ensured that non-conventional modes of education such as distance learning formed part of our tertiary education system since it is giving opportunities for those qualified students, workers and other professionals who cannot join the conventional school to have tertiary education (Agyemang, 2014; Busari, 2017; Dankyi, 2016).

In the view of Laryea (2018), Ghana's basic school teachers who want to become subject teachers in Accounting and other areas prefer distance education for many reasons. These include less cost than the conventional system, flexibility to get higher educational qualification, less competitive to gain admission, family commitments which make it difficult for them to leave home, and difficulty in getting study-leave with pay. As a result, the introduction of multiple modes of tertiary education in the country has seen large number of the Ghanaian working population upgrading themselves through distance learning.

Currently, some universities in Ghana including UCC, UEW, University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST), and University for Development Studies (UDS) have fully embraced non-conventional mode of education such as distance learning. According to Ghana Tertiary Education Commission (GTEC, 2021), there has

been a tremendous increase in the enrolment of students of distance education in these institutions ranging from 17% - 43% as at 2018/2019 academic year. This shows a typical scenario of the surge in preference for non-conventional mode of education. However, the effectiveness of non-conventional programmes and their products must be considered in terms of major stakeholders' perceptions and their satisfaction, to ensure continuous quality education delivery (Laryea, 2018; West, 2015).

Within the teaching fraternity, there has been continuous negative perception towards non-conventional mode of education such as distance education and its products (teachers), which when not looked at may influence enrolment negatively in the various universities (Laryea, 2018; Hannay & Newvine, 2016). This perception is more severe among subject teachers, particularly accounting teachers (Ahinful et al., 2019; Amoono, 2019). This perception may be as a result of the perceived ineffectiveness in teacher instructional quality interventions which largely can affect the effectiveness of these teachers negatively (Akeke et al., 2020).

This calls for the need to evaluate what goes into the pre-service teacher preparation with regard to pedagogical content knowledge, quality of faculty, assessment techniques, classroom management, and guidance and counselling in order to enhance instructional quality. When these facets of preservice teacher preparation are enhanced to ensure quality, it may boost the effectiveness of accounting education delivery at the various modes of education, and to a large extent ensure parity between conventional and non-conventional modes of education delivery at the tertiary level. This

intervention in the long run will help in enhancing trainee-teachers academic self-discipline which will in turn enhance their effectiveness as a whole.

Teacher instructional quality means an institutionally approved quality guidelines to assess a teacher. It also refers to the policies and measures that ensure sound physical and technology infrastructure as well as the provision of physical spaces (Senyamator, 2018). It also includes the availability of what is expected as teaching according to the unvaried established standards of a university, desired standard of teaching, adequate number and level of teaching per week. Within the context of this study, instructional quality is within the confinement of pedagogical content knowledge, quality of faculty, assessment techniques, classroom management, and guidance and counselling.

All other things being equal, effective instructional quality helps in shaping the behaviours that learners possess to enable them become persevering in all it takes to properly behave academically, that is, academic self-discipline. According to Laryea (2018), if trainee-teachers are able to demonstrate high level of academic self-discipline, they are likely to exhibit high level of effectiveness in their academic work and teaching which will also lead to effective education delivery as a whole.

The value of education is characterised by its instrumental goodness and intrinsic goodness (Antoniou, 2018). Largely, the effectiveness of accounting education delivery can be measured using the effectiveness of the beneficiary teachers of the programme (Senyamator, 2018). Teacher effectiveness is a measure of process involving factors that include the designing and understanding of the needs of students for quality instruction. By designing and implementing the process properly the result will reach a

real effective stage where the teacher will be able to demonstrate meaningful level of professional knowledge, values, attitudes and practices (Blikstad-Balas, Klette & Tengberg, 2021).

In most cases, effective teachers are those who achieve the goals which they set for themselves or which have been set for them by others (Antoniou, 2018). As a consequence, those who study and attempt to improve teacher effectiveness must be cognisant of the goals imposed on teachers or the goals that teachers establish for themselves or both. This calls for the need to ensure that teachers demonstrate effectiveness in the area of professional values, attitudes, knowledge and practices (Antoniou, 2018; Bhat, 2020).

Accounting teachers are the pivot of accounting education delivery in all societies, and the effectiveness of instruction of these teachers depends mostly on the quality they possess and their academic self-discipline. Academic self-discipline is a behaviour that a preservice accounting teacher possesses to enable him or her become persevering in all it takes to properly behave academically and professionally (Foster, 2019; Mah'd & Mardini, 2020). Therefore, to ensure effective Accounting education delivery at the various Senior High Schools (SHSs), there is the need for Accounting teachers trained for these schools to demonstrate positive professional values, attitudes, knowledge and practices toward the teaching profession (Wilson & Floden, 2019). The effectiveness of prospective Accounting teachers is a must for qualitative growth in secondary school Accounting education delivery of our country and beyond. Therefore, implementing effective instructional quality programme in the various modes of education programmes of UCC and UEW is very important if we want to produce effective professional Accounting

teachers through these modes of education (Amoono, 2019; Hill & Hawk, 2017).

The two universities (UCC and UEW) are the two major universities in Ghana that offer Accounting education at the undergraduate level through both conventional and non-conventional modes. In these universities, trainee-teachers are assessed based on the number of units or contents covered in their study (Fuudia, 2019). In the case of non-conventional or distance mode, questions for both quizzes and examinations are set by chief examiners of the universities who wrote the modules or course hand-outs. However, in the case of conventional or regular mode, it is done by the lecturer in question and moderated by a board. Every student pursuing Accounting education programme in UCC and UEW is required to do both on-campus and off-campus teaching practices.

In both universities, all third years of the degree programmes do on-campus-teaching practice for a semester before entering the final year. The off-campus teaching practice is done in the first semester of final year of training. In the case of non-conventional mode, the on-centre-teaching practice is organised, supervised and assessed by the course facilitators (tutors) while the off-centre-teaching practice is supervised and assessed by senior members of the university and retired GES teachers or lecturers who serve as mentors (Amoono, 2019). For non-conventional mode students, course facilitators determine the level of effectiveness of students using a likert-scale teacher effectiveness assessment form known as 'Form A'. Senior members and mentors also do same for regular students with regard to on-campus and off-centre teaching practices.

Despite all these interventions regarding Accounting education delivery by UCC and UEW, many Accounting trainee-teachers still experience difficulties with irregular and untimely feedback of assessment results from the afore-mentioned assessors, resolution of students' problems concerning incomplete results and untimely supply of study modules, particularly regarding the non-conventional mode (Amoono, 2019). Amoono further indicated that some students also complain about insufficient duration of time for doing the teaching practice, course facilitators too complain about the huge number of students that they have to supervise every two weeks. Some senior members and mentors also fingered that some students demonstrate very low level of efficiency in teaching practices and sometimes some of them even fail in their teaching practices (Fuudia, 2019).

All the assertions indicated by the various stakeholders can affect the effectiveness of the universities' Accounting education programmes on the various modes. Therefore, an area of concern to many stakeholders has to do with the quality of the teachers churn out by the various modes. In order to ensure high level of Accounting education delivery, there is the need to ensure that the preservice Accounting teacher is able to demonstrate high level of professional values, knowledge, and practices during his or her preservice preparation programme.

Statement of the Problem

Given the financial benefits and possibility of enrolment increase, it is not surprising that universities are offering more Accounting education courses using both conventional and non-conventional modes (Akrofi, 2019). Many universities, including UCC and UEW, agree that their campuses are

not big enough to accommodate the increasing number of students who are yearning to have tertiary education (Busari, 2017). As a result, policy makers and educators in teacher education have welcomed the multiple modes of tertiary education. This is so because it is helping in training more graduate teachers for the SHSs. However, they are concerned with the effectiveness and quality of education delivery through the non-conventional modes such as distance, particularly regarding teachers' professional values, attitudes, knowledge and practices (Amoono, 2019; Bird, 2017).

Again, the advent of multiple modes in the training of Accounting teachers has produced a shift from the teaching methods, which according to Srdar (2017), questioned the nature, effectiveness and relationship between teaching and learning strategies adopted by the lecturers in the non-conventional mode. Consequently, teaching methods and other facets of instructional quality are now being re-examined and re-assessed because of changes in the world of work and society as a result of new technologies. This demands that tutors teaching in the various modes could shift from teacher-centred to student-centred teaching methods in order to make the teaching and learning more pleasant for trainee-teachers (Ahinful et al., 2019; Antoniou, 2018; Bhat, 2020; Fuudia, 2019).

One of the problems, therefore, is that despite the perceived benefits of Accounting education to individuals, institutions and the country at large, the pre-service preparation of Accounting teachers, particularly through non-conventional mode, in Ghanaian public universities (UCC and UEW) appeared not to have been effective over the years (Amoono, 2019; Fuudia, 2019). Particularly, regarding the instructional quality of non-conventional

mode of training accounting teachers (Mah'd & Mardini, 2020; Tsiane & Motebang, 2022b) and the trainee-teachers' effectiveness in accounting education instructional delivery (Asonitou, 2021; Blikstad-Balas et al., 2021). However, through the conventional mode, these universities have succeeded immensely in fulfilling their mandate in the production of thousands of effective teachers and even other professionals in business and commerce to man the various sectors of the Ghanaian economy (Ahinful et al., 2019; Amoono, 2019; Tsiane & Motebang, 2022a).

Nevertheless, an area of concern, through investigative experience and observation, which needs to be addressed, has to do with the effectiveness of the various facets of teachers' preservice preparation in terms of pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling (Afalla & Fabelico, 2020). These challenges need to be addressed in order to enhance academic self-discipline of preservice Accounting teachers. Likewise, these lacunas must be addressed in order to enhance the professional values, attitudes, knowledge and practices of Accounting teachers produced through the various modes in order to improve Accounting education delivery.

Furthermore, many researchers (Ahinful et al., 2019; Akeke et al., 2020; Faidley, 2018; Srdar, 2017) have asserted that the best way to ensure that Accounting teachers are concerned about their responsibility towards quality Accounting education delivery is through quality preservice Accounting instruction and sustainability education. This shows that the best way to instil the ethos of professionalism in the teaching of Accounting is through the classroom. Therefore, the preservice preparation of Accounting

teachers, either through conventional or non-conventional mode, must be assessed constantly to ensure its effectiveness in the delivery of quality Accounting education.

Engel (2020) conducted a review of literature on Accounting education and realised that Accounting education has been given much attention in the literature in the developed nations but not in developing nations, most especially in West African countries such as Ghana. This calls for the need to examine the preservice preparation programme of the institutions at the institutional, curricular and pedagogical levels. In addition, Preston (2017) avers that the subject content of university-based teacher preparation in most countries still remains technically oriented in that Accounting educators are still interested in educating students on financial reporting issues with less attention paid to 'soft' issues such as ethics, professional values, attitudes, knowledge and practices. Hence, it is relevant that Accounting education in Ghana be looked at on the whole to assess the extent by which the preparation programme is ensuring quality Accounting education delivery.

Other researchers have also posited that the most significant challenging factors that universities providing non-conventional modes are facing are poor instructional quality and poor professional knowledge and practices demonstrated by trainees (Agyemang, 2014; Akrofi, 2019; Fuudia, 2019; Laryea, 2018; Mbwesa, 2014; Senyamator et al., 2020). In the case of the UCC and UEW, Laryea (2018), Senyamator (2018), and Fuudia (2019), indicated that these challenges culminate into the negative perception that stakeholders are having towards distance education graduates. However, with appropriate pre-service preparation programmes in place, in addition to the

effort of students and their academic self-discipline, trainee-teachers could enhance their effectiveness in the area of professional values, attitudes, knowledge and practices irrespective of the mode used in training or preparing them.

Furthermore, Amoono (2019), Fuudia (2019) and Senyamator et al. (2020) indicated that quite apart from the mode used, demographic factors such as study institution and trainee-teachers' prior teaching experience could influence teachers' effectiveness with regard to their professional values, attitudes, and practices. Also, challenges including ineffective supervision of teaching practices, lack of library facilities at the study centres to support instructional activities, low students' academic self-discipline, and poor students' support services at the study centres affect trainee-teachers' effectiveness (Agyemang, 2014; Akrofi, 2019; Senyamator, 2018). These challenges largely affect the effectiveness of Accounting education delivery in the long run.

According to Akrofi (2019), 31.7% of Senior High School (SHS) graduates pursuing distance education programmes in accounting, who did not have any initial teacher training from Colleges of Education, and were not already practicing as non-professional teachers in the classroom, had challenges with professional preparation of lesson plans. This is an indication of low effectiveness since lesson plans are the genes or blueprints and form 50% of quality teaching (Amoono, 2019; Mbwesa, 2014). This shows that there are significant challenges confronting some of the modes of Accounting education programmes used to prepare trainee-teachers. It appears there is no uniformity and homogeneity between conventional and non-conventional

modes used to prepare teachers in Accounting education, even though the same curriculum is used. This perceived problem is one of the drives for carrying out this study in order to comparatively examine the two main modes of providing Accounting education in Ghana.

The perceived differences that exist in the two modes used by the UCC and UEW can be better understood when the issues are analysed synchronically with regard to preservice preparation interventions such as pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling (Fuudia, 2019; Senyamator, 2018). Also, there is the need to comparatively examine the effectiveness of trainee-teachers in the delivery of Accounting education with regard to their professional values, attitudes, knowledge and practices (Fuudia, 2019; Senyamator et al., 2020). Unfortunately, it appears that there has not been any comparative scientific study in existing literature in Ghana on the effectiveness of key facets of instructional quality in Accounting education and preservice teachers' effectiveness on the job which in the long run help boost Accounting education delivery in Ghana, not to mention the effects of multi-group analysis on effectiveness of Accounting education delivery.

Furthermore, it appears there is no study that has examined synchronically the various modes used to prepare Accounting education teachers at the undergraduate level, and the role trainee-teachers' academic self-discipline plays in mediating the relationship between the facets of instructional quality and effectiveness of Accounting education delivery in the area of professional values, attitudes, knowledge, and practices (Akrofi, 2019; Fuudia, 2019; Laryea, 2018; Mbwesa, 2014; Senyamator, 2020).

The question one would like to seek an answer to is whether there are significant differences between the modes used to prepare Accounting education teachers with regard to their effectiveness. Also, whether there is a link between the preservice teacher preparation strategies of the universities and the overall quality of instruction by the various modes as well as graduates effectiveness. It is to answer these questions and also fill these voids in research that this study was carried out to comparatively examine conventional and non-conventional modes of Accounting instructional delivery in Ghana, focusing on the undergraduate accounting education programme in Ghana and also taking into consideration the mediating and controlling roles of trainee-teachers' academic self-discipline and background factors respectively.

Assumptions of the Study

The study was carried out based on the following assumptions:

1. Trainee-teachers teaching Financial Accounting or Accounting during on-campus/centre and off-campus/centre teaching practices responses to the survey reflected their best effort and truthfulness.
2. Trainee-teachers who exhibit meaningful level of academic self-discipline would have high levels of effectiveness in their teaching practices with regard to managing the learning environment, teaching and learning, and assessment to excel in the university.
3. Trainee-teachers with high level of academic self-discipline would have high levels of effectiveness with regard to their professional values, attitudes, knowledge and practices to excel in the university.
4. Trainee-teachers can assess the effectiveness of the universities' Accounting education programmes.

5. Effective teacher education programmes in the delivery of Accounting education could lead to high level of teacher effectiveness which in turn would lead to effective Accounting education delivery in Ghana.
6. The variables of interest to the researcher are measured latently and numerically using multiple discrete scale manifest items.
7. The subjects of the study are homogeneous and normally distributed.

Purpose of the Study

Generally, the study examined the influence of instructional quality on the effectiveness of accounting trainee-teachers' instructional delivery in Ghana, taking into consideration the mediating role of trainee-teachers' academic self-discipline. The study also compared conventional and non-conventional modes of education in relation to instructional quality and effectiveness of accounting education trainee-teachers' instructional delivery focusing on University of Cape Coast (UCC) and University of Education, Winneba (UEW).

Objectives of the Study

In line with the purpose of the study, four specific objectives of the study were formulated to direct the study. These objectives were to:

1. analyse comparatively the levels of instructional quality in the training of Accounting teachers using conventional and non-conventional modes with regard to pedagogical content knowledge, assessment techniques, quality level of faculty, classroom management, and guidance and counselling;
2. examine the level of effectiveness of accounting instructional delivery using conventional and non-conventional models in relation to

professional values and attitudes, professional knowledge, and professional practices (managing the learning environment, teaching and learning, and assessment);

3. assess the effects of background characteristics (study institution, gender and prior teaching experience) of trainee-teachers on the five facets of accounting education delivery in Ghana;
4. examine the relationship between instructional quality and trainee-teachers' effectiveness in the delivery of accounting education instruction in Ghana; and
5. examine the mediating role of trainee-teachers' academic self-discipline on the link between the five facets of instructional quality and effectiveness of accounting education delivery in Ghana.

Research Questions

Based on the stated specific objectives of the study, the following research questions were outlined to guide the study:

1. Comparatively, what are the levels of instructional quality in the training of Accounting teachers using conventional and non-conventional modes with regard to pedagogical content knowledge, assessment techniques, quality level of faculty, classroom management, and guidance and counselling?
2. What is the level of effectiveness of accounting education delivery using conventional and non-conventional modes in relation to professional values and attitudes, professional knowledge, and professional practices (managing the learning environment, teaching and learning, and assessment)?

3. In what ways do study institutions, gender and prior teaching experience of trainee-teachers affect the five facets of accounting education delivery in Ghana?
4. What is the relationship between instructional quality and trainee-teachers' effectiveness in the delivery of accounting education instruction in Ghana.
5. In what ways does trainee-teachers' academic self-discipline mediate the link between the five facets of instructional quality and effectiveness of accounting education delivery in Ghana.

Significance of the Study

The rapid economic changes in the world in recent years, requires Accounting education to keep pace with these developments in order to produce graduates who meet the rapid development changes and requirements. This can be achieved when emphasis is placed on the effectiveness of Accounting education delivery at the secondary school level. Therefore, training professional graduate teachers in Accounting to teach in the various SHSs is a must if we are to enhance Accounting education delivery in Ghana and beyond. The majority of Accounting education studies highlighted the technical and professional aspects and also students' performance (Ahinful et al., 2019; Antoniou, 2018; Bird, 2017; Srdar, 2017). Limited studies highlight the Accounting education gap between instructional quality and practice in the literature. The importance of the current study derives from the widespread coverage of preservice teachers' preparation and Accounting instruction delivery issues in developing countries such as Ghana.

In Ghana, the adoption of both conventional and non-conventional modes of education in Accounting has boosted the country's ability to train more professional Accounting teachers. This situation has caused rapid change in the teaching and education environments, which in turn has made fulfilling the requirements of the teaching and learning environment difficult for Accounting graduates in the teaching fraternity who were exposed to non-regular modes of education. First this research is significant for both Ghana and other developing countries in the region that may share the same circumstances as Ghana regarding the training of Accounting teachers using non-conventional modes, where the issue of the gap between instructional quality and teacher effectiveness in the delivery of Accounting education needs to be identified.

Again, the study would contribute to the literature on effectiveness of Accounting instructional delivery in several ways. First, given the dearth of research on the factors influencing non-conventional modes of education delivery, trainee-teachers' choice of course delivery method, and the lack of such studies in Accounting education, the results help explain trainees' choice of course format. Second, this study adds to the scant research on non-conventional modes of delivery in teacher education with regard to Accounting by assessing their effect on trainee-teachers' effectiveness which in the long run advances the effectiveness of education delivery.

Third, the results would provide Accounting educators with comparative information on the differences between conventional and non-conventional modes of Accounting education delivery. Further, contrary to several Accounting education studies that compared either blended

programmes with the traditional in-class format, this investigation controls for some ascriptive factors, with practical implications for institutions seeking to improve their course offerings to satisfy non-traditional trainee-teachers' need for more flexibility.

Furthermore, the outcome of this study would serve as a blueprint for universities mandated to train Accounting teachers via multiple modes. It would also enlighten stakeholders on issues affecting quality learning and instruction in the delivery of Accounting education in Ghana using both conventional and non-conventional modes. Again, the study would significantly add to the development of knowledge on the issue of teachers' preservice preparation, instructional quality, and effectiveness of Accounting education delivery in Ghana by these modes. As part of visibility and dissemination of the outcome of the study, seminars will be organised for course tutors and lecturers on the need to go the extra mile in helping trainee-teachers not only to develop effective learning styles and be academically discipline, but also improve their instructional quality for improved teacher effectiveness.

Also, this study contributes to the body of research in understanding the effectiveness of non-conventional instruction compared to a conventional face-to-face method of instruction. The methodology in this study may prove beneficial to other faculty desiring to measure the trainee-teachers' instructional quality and effectiveness in Accounting education delivery, both conventional and non-conventional modes. The emphasis is to measure and compare trainee-teachers instructional quality and effectiveness in Accounting

education delivery across various methods of instruction to ensure parity among the modes and enhance quality education delivery as a whole.

Similarly, this study would help academic institutions and the teaching profession in identifying strategies, procedures and teaching methods to be adopted in different modes of delivery and professionalism into the Accounting curriculum in order to ensure a significant change in the attitude, values, knowledge and practices of Accounting trainee-teachers. This would help to ensure that these academic institutions remain relevant in terms of providing future Accounting teachers to meet the growing demand of professional Accounting teachers and Accountants who are concerned about 'soft' issues.

Furthermore, the findings would help enhance the output of non-conventional modes of Accounting education in the country which in the long run will narrow the problem of not being able to admit students into the mainstream system as a result of the inadequate facilities. Also, results would assist instructional designers, trainers, educators, and developers of non-conventional mode of education in increasing the effectiveness of non-conventional education curriculum and design with regard to Accounting education. Finally, the study would serve as a source of literature to future researchers in academia and other analogous organisations who intend to embark on similar research works pertaining to multiple modes of Accounting undergraduate education.

Delimitation

This study was delimited to five facets of instructional quality variables during preservice preparation stage. These facets were pedagogical

content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling, and they were treated as independent variables. Similarly, the study was delimited to five dimensions of effectiveness of Accounting instruction delivery variable. These variables were professional values and attitudes, professional knowledge, professional practices regarding the management of learning environment, professional practices regarding teaching and learning, and professional practices regarding assessment. These variables were pooled together and treated as dependent variable. The study also considered students' academic self-discipline as a mediator and three controlling variables which were study institution, gender and prior teaching experience.

Regarding study institution, the study was delimited to UCC and UEW. Since the pre-testing was conducted in UDS, UCC and UEW remain the only public universities in Ghana that are currently running conventional and non-conventional modes of Accounting teacher education programmes effectively (Fuudia, 2019). These universities run both business and education programmes in most of their study centres. In relation to respondents, this study was delimited to all accounting trainee-teachers who have done their on-centre or on-campus teaching practice and were currently doing their off-centre or off-campus teaching practices.

Limitations

The study would have been conducted to cover all final year Accounting students in the various universities in Ghana, however, the researcher was not in a good position to undertake such a venture due to limited time and logistical constraints. The limited area of study coupled with

the sampling procedure may affect the generalisation of the findings of the study to all final year Accounting education students since only those in UCC and UEW were considered. It would have been more interesting to consider private universities for effective comparative analysis. Catholic University College, Ghana (CUCG) and Valley View University (VVU) are private universities that also produce graduate teachers in Accounting. The results of the study can best be generalised to the study population.

Furthermore, the variables used in the study were measured latently using multiple items with numerically measured responses. This may lead to unintended consequences or explanations. However, the negative effect of this limitation was reduced by ensuring that appropriate statistical tools were used and also the assumptions of the tools were satisfied. Lastly, the findings and conclusions of the study may not be projected for the future since issues related to Accounting instruction delivery, instructional quality and preservice preparation interventions keep changing with time and place.

Operational Definition of Terms

For the purpose of the study, the under listed terminologies were defined operationally to enhance the understanding of the study:

Academic self-discipline is a behaviour that a preservice Accounting teacher possesses to enable him or her become persevering in all it takes to properly behave academically and professionally.

Accounting education is the imparting and acquiring of knowledge through teaching and learning in order to become professional teacher in Accounting.

Assessment refers to activities and policies concerned with periodic students' learning assessment and feedback including trainee evaluation of their instructors (facilitators).

Classroom management refers to the capacity of an instructor to keep order in the classroom, involve students in learning, and seek the participation of students in all classroom activities. It is the responsibility of the teacher to control students' behaviour in the classroom and coordinate their learning experiences for students to attain positive academic excellence.

Conventional mode refers to university education where learners have to attend classes on a definite time and have to participate in the teaching and learning process via face-to-face. It is an in-class real-time traditional teaching and learning process.

Guidance and counselling services deals with policy and guidelines for technical, financial, psychological, social, and administrative supports provided to instructors and learners, and tailored to suit their current needs.

Instructional quality refers to an institutionally approved quality guidelines, policies and measures that ensure sound instruction. It includes the availability of what is expected as teaching according to the unvaried established standards of a university, desired standard of teaching, adequate number and level of teaching per week.

Non-Conventional mode refers to university education where teaching and learning activities are offered other than the on-campus with fixed time

classrooms. For example; distance learning and online teaching and learning activities.

Pedagogical content knowledge refers to learning activities and instructional methods that promote learner interactions in various forms of distance learning as well as delivery of suitable and quality content to learners.

Quality of faculty refers to well trained and highly qualified lecturers or facilitators who are able to demonstrate high level of professionalism, knowledge, skills and competencies in teaching, and engagement of students effectively.

Quality teaching refers to the availability of what is expected as teaching according to the unvaried established standards of a university, desired standard of teaching, adequate number and level of teaching per week.

Support services refer to teacher-student policies and guidelines for technical, financial, psychological, social, and administrative support, flexible fee payment systems, timely provision of study materials that are individualised and tailored to suit current needs and trends of students and tutors.

Teacher effectiveness is the process of designing and understanding the need of the students for quality instruction. By designing and implementing the process properly the result will reach a real effective stage where the teacher will be able to demonstrate meaningful level of professional knowledge, values, attitudes and practices.

Teacher efficiency refers to the extent to which trainee-teachers' level of teaching achieves or meets pre-specified standards and goals set by an institution or a country. It can also be seen as a tutor's belief in his or

her students' personal ability to execute the courses of action needed to positively affect their work performance.

Trainee-teachers refer to undergraduate learners or students undergoing training to be full-fledged professional teachers upon completion of their Bachelor of Education programme of study.

Organisation of the Study

The study is organised into five chapters. Chapter One is the introduction which covers the background to the study, a statement of the problem, assumptions of the study, purpose of the study as well as research questions. It also presents the significance of the study, delimitation and limitations of the study. Chapter Two focuses on the review of existing relevant and related literature on the study. The review is organised under three major areas, namely the concept, theoretical and empirical reviews of both predictor and criterion/outcome variables.

Chapter Three also describes the research methods that are used in the study. This includes the study research design, institutions, approach and philosophy of the study, the population, sample and sampling procedures, research instruments, validity and reliability of instruments, data collection, data processing and analysis procedures and ethical issues. Chapter Four presents the analysis of data, results and the discussion of the findings. The final chapter, which is chapter Five, presents the summary, conclusions, and recommendations. The chapter further presents the contributions to theory, implications of the study to practice and suggestions for further study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter presents the review of relevant and related literature on the concept of instructional quality, academic self-discipline, and effectiveness of Accounting instruction delivery, focusing on conventional (regular) and non-conventional (distance) undergraduate programmes in Ghana. This chapter provides a better understanding of the problem motivating the study, and most importantly generate appropriate methods. It covers review of relevant concepts and theoretical framework underlying the study. The chapter also presents empirical review and the conceptual framework suitable for the assessment of variables in the study objectives.

Conceptual Review

This section presents the review of related concepts explaining key concepts in the study. It provides the study with an overview of concepts relevant to the course of the study. They include conventional and non-conventional modes of instruction and Accounting education, meaning of instructional quality, teacher training and development in Ghana, the nature of the Accounting curriculum, university Accounting education and teaching in Ghana, and effectiveness of Accounting education delivery. With respect to the examination of the gap in Accounting education, the study reports on gap in curriculum, gap in students' skills and teaching methods and gap in information technology alignment. The others include researchers' attempts at bridging the gap and trainee-teachers' academic self-discipline.

Conventional and Non-Conventional Modes of Accounting Education

The teaching of Accounting has been done, mostly, by conventional (traditional) or slightly sophisticated teacher-centred methods rather than modern student-oriented applications and techniques while the transmission of knowledge and information has been realised with the usual form of lectures or discussions requiring physical presence of both student and the teacher. Conventional or traditional mode of teaching Accounting education conform to the socially acceptable customs of behaviour or style in the teaching profession where face-to-face teaching is the norm of the day. The teacher is the initiator of teaching-learning activities and the pedagogy is largely teacher-centred approach (Stejskalová et al., 2019).

However, non-conventional mode is largely learner-centred and in most cases medium of interaction is not face-to-face, rather technologies are used to facilitate teaching-learning activities (Stejskalová et al., 2019). The teaching methods used in conventional and non-conventional modes of Accounting education may differ in terms of the degree of influence on active learning. According to Yıldırım (2021), conventional modes usually employ teacher-centred method which includes the use of lectures and discussions. However, recent developments in Accounting, such as the role of Accountants in companies and organisations, the increased use of technology and the implementation of complex Accounting practices have allowed a number of important changes in teaching Accounting using the conventional mode (Abeysekera, 2019).

Non-conventional mode of education such as distance learning has become one of the talking points in the 21st century. Emergence of technology

has provided the avenue for education to be readily accessible at all levels over the past two decades through non-conventional mode. According to Danciu (2014), the early stage of non-conventional mode of education required usage of access to print materials that were emailed or sent to students and/or teachers. However, Shobhana et al. (2014) reported that the development of e-learning management systems and web resources, as a result of technological advancement has transformed non-conventional mode of education by boosting the pace at which information can be disseminated and digested.

Learning is a social activity that involves people who interact with the learning environment. Initially, formal education requires students and teachers to meet at a physical place, usually referred to as a classroom. This is because the technologies that existed at the dawn of civilisation or formal education could not make it possible for lessons to be conducted online. Consequently, most of the educational books written before the 21st century addressed classroom learning. Although non-conventional mode of education such as distance learning has gained some popularity in recent times; however, it is essential to know that classroom learning remains predominant, even in advanced countries like UK, China, the US, and others (Abeysekera, 2019; Adey et al., 2012; Williams et al., 2019).

Conventional mode of education takes place in school, and there is a calendar or timetable and rules and regulations that stipulate how teaching and learning should be done. It requires students to be active in the learning environment. Students and tutors need to be physically present in the lecture room for the teaching and learning to take place. Thus, the tutor or lecturer

regulates and moderates information and knowledge flow. It provides the platform for open exchange of ideas and face-to-face interaction between the students and the lecturers which promotes socialisation between the lecturers and the students and also among the students.

Globally, academic institutions have invested time and money on the introduction of Information and Communication Technology (ICT) in education. This innovation has helped in enhancing the quality of non-conventional mode of education. According to Chen et al. (2013), the technological development of the media has provided the bases of transforming the face-to-face education to distance learning. The distance learning is the result of the evolution of interactive media and technology and has broad applications in the teaching of different disciplines.

Tele-education includes the use of interactive telecommunications to conduct teaching and learning through non-conventional mode of education (Faidley, 2018). Web technology in general and information technologies were adopted primarily by tutors participating in programmes often offered to widely dispersed student populations. These tools made possible the spreading of knowledge and the cultivation of learning among adults based far from the tutor (Larmuseau et al., 2019; Malan, 2020; Markova et al., 2017).

Soon, ICT seemed to also attract people involved with the conventional mode of education. In today's educational system, ICT is seen as a significant tool proved to be ideal for teaching students operating within a digital context. Against the above, it should be noted however, that Chen et al. (2013) found that students attending the Accounting direction courses prefer the conventional mode as opposed to non-conventional mode such as distance

learning and interactive television use. Specifically, Chen et al. (2013) conducted a survey between two groups of Accounting students attending a class delivered by the same tutor using a different means each time; in fact, the only difference was the means of teaching the students. The latter felt that the online teaching did not promote teacher-student interaction as good as conventional teaching did; yet, no significant difference between the two groups of students was found. That is, one group taught with the traditional method and the other group with the use of online for distance learning in terms of their performance in the exams.

Most institutions have started to replace or blend their conventional mode of teaching with notes, slides and books with tools drawn from the Virtual Learning Environment (VLE). This environment is used as the only tool in distance teaching or as supplementary means to the conventional mode of education (Mutaka, 2018). The VLE uses internet technology for communication and information dissemination aiming to promote learning (Shobhana et al., 2014).

Coupled with the development of ICTs and their integration into the educational process, there is now the need to create new learning strategies that offer students all the necessary knowledge and skills required by the market, irrespective of the mode. These strategies include the development of more modes of education that embraces learner-centred, rather than teacher-centred learning activities, while their main goal, in addition to understanding the subject of accountancy, is the cultivation of various other skills as well. Some institutions are moving toward a hybrid mode where a combination of various media and face to face instruction are used (Simonson et al., 2020).

Within the context of this study, conventional and non-conventional modes of Accounting education effectiveness was assessed using professional values, attitudes, knowledge and practices regarding classroom management, lesson interactivity, and assessment. The variables mentioned above were used to measure the effectiveness of Accounting education delivery because institutions such as UCC and UEW use these variables for trainee-teachers' appraisal of courses every semester. These variables are explained under the conceptual framework of the study and the sub-header, effectiveness of Accounting instructional delivery.

The effectiveness of learning interaction in a non-conventional context has been widely argued in past literature. Some authors have argued that non-conventional mode such as online interaction promotes student-centred learning and encourages participation more than conventional mode such as classroom learning (Aragon et al., 2012; Chen et al., 2013; Faidley, 2018; Rönnlund et al., 2021). According to Garrison (2019), the conventional mode of education setting is more intimidating and exerts pressure on students; hence they may not participate appropriately in a lesson. Thus, students who find it challenging to participate in learning activities may feel isolated, affecting their performance. In light of this, Malan (2020) found that the more the interaction in an online learning platform among fully online accounting degree students, the higher their performance.

In relation to cost, several literature reviews cited the lower cost as a reason to expand non-conventional mode of Accounting education, provided a quality online course content is developed by instructors and technical staff. Chen et al. (2013) observed one cost benefit is the ease of expansion because

online is not hampered by requiring a brick-and-mortar location to instruct students. Markova et al. (2017) indicated online classrooms were 13 per cent more effective for teaching declarative knowledge and 20 per cent more effective in teaching procedural knowledge than face-to-face instruction. Markova et al. (2017) stated that well-controlled studies of the cost effectiveness of non-conventional to conventional mode of instruction are rare.

Farajollahi et al. (2017) revealed that the cost of online appears cheaper than face-to-face because many universities fail to consider the fixed costs of large classrooms when analysing cost. Many universities viewed buildings and land as fixed costs and not subject to analysis. The focus was on variable costs. Online instruction did not experience economies of scale because the constraint was faculty hours spent in online education versus infrastructure for traditional instruction including buildings that may be depreciated. Quality was frequently compromised to lower costs because instructors were paid by how much time they invested into an online class, causing universities to advocate faculty not over-involving themselves in online courses. Moreover, quality was compromised because many universities have specific online instructors who do not meet the rigour of traditional instructors as many do not possess terminal degrees.

Instructional Quality

Instructional quality has become an increasing phenomenon in the educational landscape such that no education policy or programme can do away with. Instructional quality increasingly is defined by measuring its positive influence on student learning outcomes (Rahman et al., 2019). In most cases, emphasis is on the quality level of instruction with regard to

pedagogical skills, teacher qualification, infrastructure, student-teacher interaction, evaluation, student support services, and teachers' support services (Perez, 2013; Ogunleye, 2013). Value added studies, measuring student achievement levels that are matched with individual teachers over a number of years, have suggested that there are significant differences in teacher effectiveness for improving student learning. The evidence for this, however, is not unanimous (Bird, 2017).

Instructional quality is critical in achieving the ultimate aim of improved student outcomes. It requires the use of a variety of teaching and learning strategies, methods, and/or practices that potentially enhance student achievement (Harris & Sass, 2017). Although throughout the literature, there are several successful ways to approach teaching, meta-analysis studies and theoretical frameworks recently have provided strong evidence about specific instructional practices that constitute instructional quality (Blazar, 2016; Okoiye et al., 2020).

In general, instructional quality includes teaching and learning strategies that also align with principles of learning. These strategies specify the importance of prior knowledge, real-world applications, and active participation to one's own learning (Darling-Hammond, 2014). Even though the labels and categories defining high-quality instructional practices differ across the literature, there are three dimensions that are important: well-structured classroom management, supportive student-oriented classroom climate, and cognitive activation with challenging content (Azkiyah, 2017; Emmer & Stough, 2015; Ertmer, 2015; Fong-Yee & Normore, 2017; Nicole, 2017; Wanjala & Wanjala, 2017). As a result, instructional quality is

manifested as a collective and inclusive way of using multiple teaching practices and dimensions, which are adapted and used throughout this study.

Instead of using one approach over the other, the literature suggests a combined approach to instruction in order for students to be successful (Kwarteng, 2018; Manzar-Abbas & Lu, 2013; Muijs & Reynolds, 2019). The advantage of considering instructional quality from the three-dimension perspective is that the dimensions represent a group of practices that are based on behaviourist, cognitivist, and constructivist approaches to teaching and learning. The first dimension of instructional quality is demonstrating well-structured classroom management strategies, which often incorporate many behaviourist theories by integrating the key components of direct instruction into the learning environment.

This behaviourist approach to classroom management covers a wide variety of aspects of the classroom atmosphere such as preventing disruptions, establishing clear rules and systematic procedures in the classroom, and creating a supportive and facilitative environment for academic and socio-emotional learning (Office of Development Effectiveness, 2014; Okoye & Umezuluike, 2018). An example of a well-structured classroom management strategy is the check for student understanding through questioning.

The second dimension of instructional quality is providing a supportive student oriented classroom climate, most of which refers to teaching practices based on cognitivism. These strategies help create a learning environment by which students are motivated, their emotions are stimulated, and their eagerness to learn is supported. Moreover, such a supportive climate in the classroom fosters students' sense of belonging, security, and relaxation (Fullan

& Stiegelbauer, 2017; Rivkin et al., 2015). Examples of instructional strategies that reflect this approach include small-group work, ability grouping, collaborative and cooperative groupings.

The third dimension of instructional quality is cognitive activation with challenging content, which embraces a constructivist approach to learning. These instructional strategies often incorporate deep content knowledge with the use of higher order thinking skills. Activating students' cognition during lessons utilises their evaluative thinking skills, which increases the validity and ingenuity of their problem-solving abilities (Wang & Walberg, 2018; Wenglinsky, 2014). Two examples of cognitive activation with challenging context are long-term projects and written assignments that focus on reasoning. These three dimensions of instructional quality apply for all subject areas. Moreover, the manifestation of these three dimensions showed a similar pattern across schools in diverse countries (Ishola et al., 2020; Wisneski et al., 2017).

Quality instruction on the part of the trainee-teacher is proposed to be residual, additive and cumulative (Abderahman, 2012). Measuring such causal claims with value-added studies has been shown to be inconclusive, where causal arguments and validity may be questioned (Azkiyah, 2017). As a result, the definition of effectiveness of Accounting education delivery, which is largely influenced by instructional quality, remains consistent, being judged according to achievement levels of trainees over a number of years. How those achievement levels are measured and understood, and by inference how quality instruction is identified, is more obscure. This is because quality instruction as a concept lacks clarity, in that quality itself is stakeholder

relative (Fuudia, 2019; Helms-Lorenz et al., 2017). For example, students, teachers, parents, and the wider community all may have differing perceptions of quality instruction.

Despite these variations, quality instruction is understood as student centred and its purpose is for high quality student learning outcomes, both social and academic (Albemarle, 2015). Using these studies and measures, effectiveness of Accounting education delivery is not marked by a set of criteria or teaching standards, but measured or judged according to achievement levels over a number of years, focusing on professional values, attitudes, knowledge, and practices (Helms-Lorenz et al., 2017).

As a response to the public concern surrounding Accounting education, most countries including Ghana, have redefined the requirements that are intended to ensure a quality Accounting education for all students in second cycle institutions. One of such areas of definition included in most policy documents aimed at teacher qualifications and instructional quality (Yai & Wang, 2012). Societies require all students to be taught by highly qualified Accounting teachers. That is, teachers with professional qualifications who are able to demonstrate subject-matter competence for the Accounting courses they teach. In order to produce such teachers, there is the need to ensure that there is quality instruction in the various institutions that produce professional Accounting teachers (Antoniou & Kyriakides, 2013).

Research has shown that the teacher is the most important school-related variable in student achievement (Wenglinsky, 2014; Wilson & Floden, 2019). Therefore, ensuring that there is high level of instructional quality among trainee-teacher is a key pillar in ensuring that there is high level of

effectiveness with regard to education delivery (Ishola et al., 2020). Although there is consensus that qualified teachers with high level of efficiency are essential among policy makers, educational leaders, and researchers, there is little consensus about what characteristics a highly qualified and effective teacher possesses. Most of the qualities that the trainee-teacher possesses can be assessed during teaching practice. The instructional quality of a teacher largely influences his/her efficiency positively which in the long run helps boost the effectiveness of education delivery as a whole. The next sub-topic to consider, therefore, is accounting teacher training and development in Ghana.

Accounting Teacher Training and Development in Ghana

Basically, the only way to maintain quality and effectiveness in the teaching fraternity is to ensure quality at the start of the process of recruitment and the quality of training (preservice and in-service) the recruits receive. The survival of the quality of the nation's education depends largely on the kind of training teachers receive during their initial training as well as on-the-job training. Currently, there are three public and two private universities in Ghana which provide graduate teacher training in Accounting education. These universities are UCC, UEW, UDS, CUCG and VVU. All these universities have a national focus even though they are scattered all over the regions in Ghana.

Currently, all these universities are autonomous and they award their own certificates. However, they are all regulated and supervised by Ghana Tertiary Education Commission (GTEC). They run bachelor degree programmes through their colleges, faculties and departments. They use both generalist and specialist approaches in training Accounting teachers.

Accounting education graduates from these universities are prepared for and sent to SHSs. Universities are employing both conventional and non-conventional modes of education to train Accounting teachers, which to some extent are leading to the proliferation of alternative paths to Accounting teacher certification. This phenomenon was met with an increase in the demand for professional Accounting teachers (Kwarteng, 2018).

The concerns over the years have been whether the pathways to Accounting teacher education do matter and that whether their experiences of teaching differ with different institutions and modes. Supporting this assertion is Mutaka (2018) who stated that the selectivity of the institution a teacher attended and the mode of education (conventional or non-conventional) have significant effects on the output as it may partially be a reflection of the cognitive and pedagogical abilities of the Accounting teacher. In Ghana and other developing countries, the challenge has been how to produce Accounting teachers who feel better prepared to penetrate the profession and have the intention to remain in the teaching profession for a longer period of time (Chen et al., 2013; Engel, 2020; Kwarteng, 2018; Mutaka, 2018).

Engel (2020) avers that the growing demand for Accounting teachers in a labour market with funding inequalities and deployment problems has led to a compromise in entry requirements and overall quality. However, many of the non-conventional (distance) modes of teacher preservice preparation actually do little to prepare teachers adequately to deliver quality education (Engel, 2020; Hudson, 2019). According to Engel (2020), such alternatives provided less opportunity for practical teaching and require no internship which renders the Accounting teacher deficient for effective delivery. As

noted by Fuudia (2019), today, the non-conventional mode of Accounting teacher education is no longer a second option but has become a mainstream mode producing a high numbers of Accounting teachers. The study of Accounting teacher education programme outcomes is a strategy that may provide new direction for quality discourse.

The above assertions show that the need for a well-trained, committed Accounting teacher with adequate knowledge of the subject matter, updated on the latest and new trends in the teaching profession, cannot be ignored. Some challenges over the years have bedevilled teacher training in the country. Some of the challenges were identified as follows: admitting applicants with weak passes, lack of coordination among distance-learning providers, inability of the institutions to produce enough teachers for the SHSs, insufficient alternative modes for training Accounting teachers, and insufficient investment in Accounting education (Browne et al., 2018; Dolce et al., 2020; Engel, 2020; Foster, 2019; Metcalfe et al., 2019).

Quality of Accounting education delivery in a country is as good as the teachers delivering it. According to Engel (2020), quality Accounting education depends largely on the availability of qualified Accounting teachers to teach. One of the critical issues about the availability of these teachers is the management of staffing of schools with these teachers and their preservice preparation. Ghana continues to do her best to ensure a fair deployment of Accounting teachers to all parts of the country, but the problem of equity in terms of numbers, experience, and qualifications still remains a challenge for the government and other policy implementation agencies.

In 2017, the Deputy Minister of Education at a study tour of selected SHSs in Ghana stated that the Pupil-Teacher Ratio (PTR) in rural and underserved districts is very high, while there is a comparative surplus of Accounting teachers in the urban centres (Mutaka, 2018). The introduction of 'free' SHS education among other interventions has led to an increase in the enrolment of students in secondary education, particularly regarding business programmes (Mutaka, 2018). The challenge, therefore, is how to ensure adequacy in the supply of Accounting teachers to meet the expanded enrolment rates. However, Oyalle (2019) posits that the challenge to professional Accounting teacher shortage is as a result of high rate of their attrition and limited number of universities in Ghana training professional Accounting teachers for SHSs.

In some cases, poor living and working conditions, as well as increased workload with the demands of several education reforms, deter Accounting teachers from accepting postings to deprived areas (Peters, 2018). According to Fuudia (2019), teachers posted to deprived areas try all means to switch to urban centres even if it is a private school. Educational Management Information System (EMIS, 2020) report reveals that teacher surplus at the pre-tertiary level (24,179) can offset the overall teacher shortage for the subsector. Yet, there is still deployment problem at the pre-tertiary level. The data analysed suggested that there are some SHSs which have over subscription of Accounting teachers whilst other SHSs are grossly understaffed with regard to Accounting teachers. The reason Accounting for this disparity may be the perceived interference of high-ranking officials (both politicians and technocrats).

Among all educational resources, teachers' training is especially a critical contributor to educational outcomes and consequently the success of a nation to advance in its socio-economic and political environments. Therefore, in the training and development of teachers, instructional quality of teachers is paramount to policy makers and implementers. Preservice teachers must, therefore, be trained to know and understand a wide range of things about teaching and learning and in their social and cultural contexts (Fong-Yee & Normore, 2017). Also, they must be prepared to play multiple roles and taking their rightful positions in the teaching-learning environment to confidently face the challenging classroom situations.

Improving the quality of Accounting education worldwide for students suggests that Accounting teachers must be trained with the required skill sets, knowledge, and experiences needed for the times (Adeyemi & Adu, 2012; Amabile et al., 2019; Corbin, 2017; Darling-Hammond, 2014). Attempts by successive governments to provide greater access to teacher education should not in any way affect the quality of it; otherwise, the purpose of teacher education will be defeated, and the populace will only receive teacher education that makes them alien in their own land. Making education more relevant to the needs of society is among the reasons why quality of teacher education was the concern of the country's educational reform.

University Accounting Education and Teaching in Ghana

In order to meet Ghana's needs for Accounting, it is necessary to consider the process of Accounting education which can create academic and professional cadres capable of filling the needs of the work environment that seem to develop very quickly in particular economies. The need for qualified

Accounting teachers has become increasingly more important, especially in developing countries such as Ghana. However, very few studies have investigated the development of the Accounting education programmes in accordance with the state of these countries' economies, and whether their Accounting education outcomes are capable of producing graduate Accounting teachers to meet the workplace needs. For example, Srdar (2017) attempted to investigate the gap between learning and teaching in Accounting education, focusing on the Saudi Arabian experience. Srdar added that Accounting education as a professional system should be identified according to the environmental factors, which can be economic, social, or cultural.

Consequently, it is of interest to investigate Accounting education programme in a country like Ghana, which is considered as an emerging economy. The modernisation of the country's economy following the discovery of oil have changed the economic features of the country and also given rise to the need to develop the country's financial and economic systems to keep pace with the change. This calls for the need to train more qualified Accounting teachers who will in turn train people in Accounting. This is so because Accounting systems in Ghana and other West African countries have become one of the imperatives that should be improved in order to keep pace with constant change in the economic environment (Okoye & Umezuluike, 2018).

In Ghana, there are about five universities, both public and private, offering a four-year Bachelor's degree programmes in Accounting teacher education. Due to the emergence of new universities and the expansion of the organisations, who request more Accounting education graduates, the number

of universities and students who are studying Accounting education has increased during the last five (5) years (Mutaka, 2018). However, each of the universities in Ghana has its own curriculum and there is no unified curriculum for all universities offering Accounting teacher education. In addition, there is no involvement of any Accounting professional bodies in any of the universities' curricula (Mutaka, 2018). Mutaka's work indicated that universities are not preparing Accounting teachers adequately to handle Accounting courses in the various pre-tertiary schools. This calls for the need to investigate the instructional quality of these universities in order to assess the influence of the training on the trainees' acquisition of 21st century skills.

Mutaka (2018) only examined the curriculum and not the whole Accounting education system. Also, he did not state particular reasons for his result statements. Mutaka's study failed to comprehensively look at the instructional quality of the universities in order to assess the effectiveness of Accounting education delivery as a whole. This will have helped to provide a complete picture of the cause of the inefficiency of the Accounting education programme in the country. When evaluating a particular system, all internal components should be analysed in addition to the external surrounding factors (Aaronson et al., 2017). Since, each element of the internal components would be affected by external factors and this influence would affect the progress of the operation of the system, in addition to the outcomes of the system. Therefore, this study aims to examine the dimensions of instructional quality and effectiveness of Accounting education delivery in Ghana, focusing on conventional and non-conventional modes of education.

Teaching as a concept, is an attempt to assist students in acquiring or changing some skill, knowledge, idea, attitude or appreciation. Bruner (as cited in Burgess, 2017) defines teaching as an effort to assist or shape growth through the actions of someone who is trying to assist others to reach their fullest potential in all aspects of development. This shows that teaching is the systematic series of activities through which the teacher seeks to interpret his or her specific task in relation to modification of the learner's state of knowledge. No doubt, teaching is the action of a person to make learning possible. Facilitating learning is the purpose of teaching. Successful teaching must be methodical, well planned, result from resourcefulness on the part of the teacher, activity-based and related to the learner's experience (Blazar, 2016; Mangalamma & Vardhini, 2017).

In the teaching of Accounting, the teacher should have a clear mental picture of the exact changes he or she wants to bring about in the learner. There are various methods in teaching which the teacher could select. It is important to note that no single method would suit all occasions in teaching Accounting. However, whatever method the teacher adopts, he or she must ensure that what is taught is associated with the student's imaginative experience. In addition, the topic must be within the understanding of the students (Marzuki et al., 2017).

In relation to preparing for Accounting teaching, planning the teaching in this context goes beyond just preparing lesson notes. Planning entails detailed study of the Accounting curriculum as well as the syllabus, which must be well constructed to meet the demands of the society (Khan, 2017). There must also be a break-down of the content to be covered into

instructional units. The instructional units would be broken into individual lesson plan having the following sections:

- a. A clear statement of objectives, which must be defined in behavioural terms.
- b. The different procedures of the lesson
- c. The learners' and teachers' activities
- d. Appropriate materials to be utilised
- e. Evaluation procedures
- f. The estimate of time to be spent on each phase of the lesson.

It is through planning that the teacher can determine the scope and sequence of units, topics and lessons; identify and use basic resources for enriching students' understanding of the subject; and finally, set objectives appropriate to the content, students' growth and the different levels of understanding. Planning usually results in better teaching of Accounting.

There are a number of factors considered as challenges of teaching Accounting in the various second cycle schools. Therefore, there is the need to improve the instructional quality in the various teacher education institutions in order to help boost the effectiveness of the trainee-teachers and in the long run help boost Accounting education delivery as a whole. The first factor to consider is poor application of teaching methods. Many teachers, especially the non-professional ones are not conversant with the proper methods of teaching in Accounting hence adopt the lecture method mainly at the expense of the learners or the students (Engel, 2017). Some do not make use of the opportunity they have in the classroom to present a demonstrative method when it is most needed.

In examining the strategies considered effective for teaching Accounting courses by business educators in tertiary institutions in Delta State Nigeria, Ezenwafor and Akpobome (2017) emphasised that teaching should proceed from the simple to the complex. The teacher should keep up the interest of the students in the lesson by presenting easier and simpler material to be followed later by complex and difficult material. Whatever material taught to the learners should graduate from one level to another. The teacher's most important role is that of establishing attainable goals and objectives which will arouse the learners' interest to participate fully without reservation.

One other factor considered to be affecting the teaching and learning of accounting is inadequate funding. Accounting as a subject honestly requires constant and enough funding so as to buy facilities and equipment, maintain the existing ones, buy stationeries, provide incentive to the teachers, buy text-book, and provide comfortable libraries. Insufficient funding is a major palaver in Ghanaian senior high schools (Ahinful et al., 2019). If teachers are not motivated toward proper incentives, they are likely not to be effective, which invariably would affect the students negatively, and in the long run affect the Accounting education delivery as a whole. This shows that to achieve the desired policy objectives of our current system of education, enough funding is required to be provided which would encourage and support people that will implement and deliver Accounting education generally.

Structural Features of Accounting Teacher Preparation Programme

Programme requirements are the central mechanism through which teacher preparation programmes influence what types and how much coursework teacher candidates take and the format and duration of their field

experiences. As programme requirements set the floor for the amount of each structural feature a teacher experiences, it is important to determine whether any programme requirements are associated with measurable objectives (Albemarle, 2015). Further, utilising these programme requirements to estimate the relationship of structural features to student achievement provides better information for institutions to make decisions as to how to best structure their programmes than do other sources of data such as teacher reports of their experiences in a preparation programme (Alharbi, 2017; Mah'd & Mardini, 2020). For example, if a teacher education programme believes pedagogical preparation is important for effective teaching and wants to increase the amount of pedagogical preparation for its teacher candidates, the programme must increase the required number of pedagogy credit hours.

The structural features of teacher preparation programmes fall primarily into two categories: coursework and field experiences. At the undergraduate level, a teacher preparation programme is typically the last two (2) years of study. Teacher candidates complete general education coursework, prerequisites for admission to teacher education, and some content area coursework in their first two (2) years of study, prior to formal admission to the teacher preparation programme (Senyamator, 2018; Tsiane & Motebang, 2022a). Teacher candidates then complete programme requirements to be recommended for the country's teacher licensure.

Often some foundations coursework is a prerequisite for admission to the programme for undergraduates. According to Geelan (2020), there are typically five categories of coursework: subject matter, pedagogy, foundations of education, technology, and other required courses (e.g., teacher leadership

or research methods). Two categories of field experiences complement this coursework: early field experiences that occur throughout a programme, but prior to student teaching, and student teaching itself. The amount of each structural feature required varies by teacher preparation programme, but this variation has not been systematically documented, nor have the relationships between these features and teacher effectiveness been widely studied in spite of well over a decade of calls for such research (Abderahman, 2012; Grasha, 2016).

Subject matter coursework: Teachers should have content knowledge that is deeper than that of a “mere subject matter major,” including specific sections of content area courses for teacher candidates that would promote deeper understandings of content than general subject matter courses (Ahinful et al., 2019). In reality, teacher candidates primarily fulfil their subject matter coursework requirements outside of a school of education, in courses intended for a broad student audience, rather than in courses designed for teacher candidates to develop deep content knowledge. Research provides some support for the importance of subject matter knowledge, but little detail to indicate how much subject matter coursework is most beneficial, or at what point diminishing returns set in (Engel, 2017). This shows that subject matter expertise may be a necessary, but not sufficient, condition for teacher effectiveness; pedagogy coursework must supplement subject matter coursework.

Pedagogical coursework: This is primarily designed to increase pre-service teachers’ pedagogical knowledge and pedagogical content knowledge. Coursework in Accounting methods for pre-service teachers has been linked to

increased Accounting knowledge for teaching, a subject specific area of pedagogical content knowledge, and to student understanding and achievement in Accounting (Ezenwafor & Akpobome, 2017; Fortin et al., 2019). Unfortunately, there is limited support for the importance of pedagogical coursework in the preparation of effective teachers, particularly for subject-specific courses like the pedagogy of Accounting instruction and there is some evidence for a negative relationship between Accounting pedagogy coursework and teacher effectiveness (Gunarathne et al., 2020). As a whole, research on pedagogical coursework is unclear as to what types and amounts may be beneficial for student understanding and achievement.

Foundations coursework: This includes knowledge of learners and their characteristics, knowledge of educational contexts, and knowledge of educational ends, purposes, and values, diversity, and motivation, including courses on the philosophy of education, sociology of education, and educational psychology (Saani, 2019). In some analyses, teacher preparation programmes regarded as exemplary have extensive course requirements for human development and foundations courses including philosophical, sociological and psychological contexts. According to Wisneski et al. (2017), foundations coursework should be the hallmark of a teacher pre-service preparation programme, because such courses target total and holistic development of the teacher.

Technology coursework: Given the ubiquity of technology and a recent federal focus on equipping all classrooms with appropriate educational technology and making sure teachers are trained on the advantages of such technology, some teacher pre-service preparation programmes require their

teacher candidates to take a separate course like “Computer Application in Education,” while others infuse technology throughout professional education coursework (Rahman et al., 2019; Yai & Wang, 2012).

Research suggests if instruction on using educational technology is to impact practice, it should be integrated throughout a teacher pre-service preparation programme, rather than in a discrete class, including integration into early field experiences and student teaching (Purdy, 2017). This shows that knowledge, skills and competencies in ICT should be embedded in the preservice preparation programmes of teachers and not treated as a course. Therefore, the teacher should be prepared to be able to demonstrate 21st century skills in ICT in all aspect of the profession and education in general.

Effectiveness of Accounting Education Delivery

Effectiveness of Accounting education delivery thrives on conscious planning, great effort, huge expenditure, and commitment of stakeholders. Central to these requirements for successful education enterprise is planning. There is a myriad of plans to consider in education; a key one being the curriculum plan. Each school system has an approach to curriculum planning and implementation. In centralised school systems as practised in Ghana, curriculum is centrally planned and delivered primarily by fidelity of implementation. According to Kwarteng (2018), this is, among other reasons, to achieve uniformity in content taught and learnt, and to facilitate the transferability of students from one school to the other.

Fidelity of curriculum implementation is adhered to when the school curriculum is implemented in the exact manner the programme designers have provided guidance for it. It does not tolerate any deviation from the guidance

given because the outcome of the curriculum must reflect the original design that will provide evidence of effectiveness (Adeyemi & Adu, 2012). The nature of the Accounting discipline provides for universal recognition and treatment of similar transactions in the same manner to ensure uniformity in practice. Therefore, fidelity of implementation of the Accounting curriculum presents itself as the only approach that could deliver the content of the subject to minimise any undesirable unplanned learning outcomes.

The nature of Accounting calls for minimum deviation from the standard procedures that are established to guide practice. Trainee-teachers must develop the required skills and habit needed to teach and master the reporting principles and standards and conform to the common conventions that guide the practice of Accounting (Engel, 2017). This uniformity enhances standardisation in financial reporting which in turn creates a wider market appeal for Accounting teachers.

To continually uphold this uniformity, Accounting teachers must ensure strict adherence to the principles, standards, and conventions of the discipline. This, more or less, implies indoctrination and thus does not give room for creativity. Hence a realist Accounting curriculum is often created where students are made to memorise and reproduce concepts without having to question what they learn. This results in teacher-centred lessons where the teacher is presented as a *know-it-all* (Feist & Rosemberg, 2017). The duty of the teacher is to train students through discipline of the mind to expose them to the onerous *wisdom* that the teacher possesses. Therefore, by design, the traditional Accounting curriculum aims at nothing but the creation of technical Accounting experts.

However, several factors including the diversity of student body, technological and economic change and external pressures from employers no longer support, if not militate against, the training of students in this manner. Therefore, the education system should pursue quality of use of the Accounting curriculum but not dependability of its implementation. Quality of use measures the extent to which teachers' conduct in classroom seeks beneficial interest of students even if that means deviating from the official plan (Ezenwafor & Akpobome, 2017). Accordingly, the quality of use is circumstantial. Therefore, it is increasingly needful and possible that Accounting teachers modify the use of the Accounting curriculum to appeal to students' needs.

Khan (2017) averred that in many developing countries lecture method is the dominant and traditional method of instruction. The lecture method can be seen as education through the transmission of information and knowledge which is like an object that can be transferred from teacher to the learner. The lecture method is quite economical and especially in handling large classes. This could account for its preference by some Accounting education lecturers.

An earlier study conducted by Kwarteng (2018) to assess the concerns of Accounting teachers in implementing school Accounting curriculum in Ghana revealed that most Accounting teachers were in the category of *non-users* of the curriculum. Using Concerns-Based Adoption Model (CBAM) this study, therefore, sought to examine Accounting teachers' quality of use of the (Ghana) Ministry of Education supplied Accounting curriculum. In Ghanaian tertiary institution, teacher-centred and student-centred methods are being used by lecturers for teaching Accounting courses although some prefer using

the teacher-centred such as lecture to student-centred method such as discussion.

The student centred teaching, according to Bird (2017), is an instructional approach in which students influence the content, activities, materials and pace of learning. This learning model places the student (learner) in the centre of the learning process. For example, Accounting teacher/students can teach or learn from each other either in the class or with the aid of ICT facilities such as Power Point, videoconferencing, teleconferencing among others based on the current information age.

Correspondently, Ezenwafor and Okoli (2015) noted that a very important role of education is the preservation and updating of knowledge and skills of students in line with changes in society. In this case ICT is not a strategy but a means of communication or support to teaching and learning. For example, the Accounting teacher can discuss the various processes of Accounting with the use of spread-sheet in the classroom or ICT device the most important thing is how to manage the class irrespective of the location. In this case, a teacher may have necessary ICT competencies but cannot teach effectively with suitable strategies.

The teacher-centred and student-centred teaching methods and strategies have some advantages and disadvantages but what is important is which of these advantages are long lasting and short term. A method can have numerous advantages but not effective for achieving desired competencies in the student. It could be that Accounting lecturers in tertiary institutions who prefer the lecture method are not duly aware of its short term advantages. Consequently, Marzuki et al. (2017) averred that the reason most students

prefer the lecture method is that it enables them to listen passively while teachers organise the subject matter for them and prepare them well for tests.

In Ghanaian tertiary institutions there is need for Accounting education teachers to make use of appropriate methods and strategies that are challenging to the Accounting education students in order to achieve the desired goal of Accounting education. Okoiye et al. (2016) reported that teachers use inconsistent teaching methods and strategies that always fail to take into consideration differences in ability and capability of students. This ultimately defeats the aim of teaching Accounting education courses in Ghanaian institutions. According to Okoye and Umezulike (2018), suitable method and strategies are required and recommended for teaching and learning because, they go a long way to stimulate students for proper learning to take place and equip students with saleable skills for the world of work and not passing examination.

Despite the fact that Accounting education equips the recipients with saleable skills that prepare them for dual jobs as Accounting teacher or personnel in a business organisation, business educators seem to be employing more of the traditional teacher centred methods such as the lecture method in teaching and learning Accounting courses in tertiary institutions (Fuudia, 2019). Business educators in the context of this study are those individuals that have undergone training in business education in colleges of education and universities and who have been certified to teach in any of the educational institutions. In order to ensure that there is effective Accounting education delivery in the country, there is the need for teachers in the various tertiary

institutions to adopt and employ appropriate teaching strategies that will help boost trainee-teachers' academic performance.

The wide use of teacher-centred method by Accounting teachers could be responsible for the low level of performance by Accounting education students in tertiary institutions in Ghana, particularly among distance learners. Fuudia (2019) noted that the issue of low academic performance of distance students in Ghana has been of much concern to all and sundry. Fuudia further noted that this problem has led to the widely acclaimed falling standard of distance education and Accounting is an integral part of the total distance education system. Traditional teacher-centred methods and strategies of teaching and learning could also be responsible for distance Accounting students not being able to secure jobs in the world of work or becoming self-employed.

Senyamator (2018) observed recent developments in Ghana and indicated that about 80 per cent of the distance education graduates from higher institutions find it difficult to get employment every year. In view of all the above, there is need to examine the instructional quality of these institutions and its implications on the effectiveness of education delivery. Both conventional and non-conventional modes of education are now being used to prepare Accounting teachers for SHSs. Therefore, there must be some level of parity among the modes and the institutions that prepare the teachers. This means, examining the level of instructional quality and education delivery in the institutions and in the different modes is a must, if we want to ensure that there is some level of homogeneity among trainees.

Examination of the Gap in Accounting Education

Globally, the most difficult challenges that face the reform movement in Accounting education is an attempt to reconcile the conflicting two parties; that is, academics and practitioners. Walters (2019) found that academics in Ghana still believe in the classical framework, which believes that accountants work in a stable environment away from risk and volatility. On the other hand, practitioners adhere to the new framework, which believes that the work environment is unstable and risky. Thus, bringing together the views of the two parties is in itself an obstacle to the reform movement in Accounting education. This conflict has also made research in Accounting education ineffective (Buzdar & Ali, 2018; Walters, 2019).

Another challenge that could face the reformation is the way in which the business environment is changing over the years. It has become more complex and faster over the years. Agellozo and Williams (2017) refer the change in the business environment to three factors: technology, globalisation, and concentration of power in certain market investors.

The rapid spread and acceptance of globalisation and the enormous developments in information technology has led to dramatic changes in the business environment. These changes require that education institutions should modified and improve their curriculum and instructional quality in order to produce graduates who can adapt to these changes and become more competent and relevance in modern society.

In relation to Accounting education gap, Srdar (2017) recommended for the “*reorientation*” of Accounting education as a solution to the dramatic changes in the business environment. This calls for the need for collaboration

between academic Accounting education researchers and the Accounting profession as a solution. This will help to explore the gaps from different perspectives, such as the inefficiency of the curriculum, deficiencies in the skills of Accounting education students, teaching methods, and the alignment of Information Technology systems (Gunarathne et al., 2020; Marzuki et al., 2017).

Gap in curriculum

In Ghana, meaningful systems have been put in place by the state to handle all curriculum, including the Accounting curriculum and work on the development and maintenance of Accounting education. However, current evidence in the Ghanaian economy shows that the Accounting students lack the necessary skills that the 21st Century workplace needs (Engel, 2017; Fortin et al., 2019). However, there is still a significant amount of disagreement towards Accounting curriculum changes. Engel blame Accounting education systems and accuse them of applying a traditional system that is based on "*limited ontology*", which focuses on financial transactions that limit the possibility of their application in terms of the perspective of the real work environment.

It is crucial to clarify that Accounting learning textbooks used in the various second cycle institutions in Ghana have a significant impact on the preparation and readiness of Accounting students for the work environment and also the quality of Accounting education teachers. Thus, several studies have explored the curriculum as an attempt at bridging the gap (Ezenwafor & Akpobome, 2017). Most universities in Ghana have tended to work towards modifying the current university Accounting education curricula. Bukari

(2019) affirms that the traditional Accounting education curriculum should be replaced with more multi-disciplinary education subjects in general business, management, sciences and other social or humanities areas in order to meet the work environment and stakeholders' needs.

Bukari (2019) added that this will create room for the graduate to acquire the requisite knowledge, skills and competencies that will help them teach more than one subjects in the business education fraternity. Also, there is the need for the integration of critical thinking within the curriculum and use of unstructured problems for Accounting education students. These interventions will help to narrow or eliminate the gap in Accounting education between learning and practice.

Gap in students' skills and teaching methods

Some research and studies indicate that there is a “perceived skills gap” within Accounting education’s required skills (Bukari, 2019). It is important to state that Accounting education students are one of the components in the teacher education system. Their inability to acquire the requisite knowledge, skills and competencies in the teaching of Accounting can contribute to the gap between Accounting education and practice. Since, the gap between university education and the work environment has caused uncertainty between graduates and employers, with regard to the required skills needed at the job market, most of them are unaware of the employment reality. They are unprepared to adapt to the working environment (Bukari, 2019). Also, they sometimes find it difficult to cope with their job responsibilities. Similarly, those who enter the teaching profession end up

teaching contents that do not create room for students to meet the employment reality as expected (Bukari, 2019).

Without any doubt, the success of the Accounting education system will not just belong to the changing and improving Accounting curriculum stage, but will require students to improve their skills whether by depending on what they are taught or by improving their skills themselves. Certainly, Accounting education students and the Accounting education curriculum are two important elements within Accounting education systems besides educators; they have to work adequately together in order to achieve harmonisation between learning and practice in Accounting education (Ali, 2019).

This calls for the need for educators, curriculum experts in Accounting, colleges of education and universities, and institutions of Accounting to start altering the Accounting education curriculum in order to prepare Accounting teachers and graduates with a good range of skills and attributes for both the teaching and business work environment. Accounting education students need to obtain skills such as analytical skills, communication skills, interpersonal skills, teamwork skills, and professionalism.

In terms of teaching, Bukari (2019) indicated that the gap between students' quantitative skills and the skills that are required in the work environment is as a result of academic teaching methods, since the educators emphasise more the '*mathematical techniques*' and ignore other techniques. Apparently, the failure and the weakness that previous and other studies discovered leads to the so called expectation gap between learning and practice in Accounting. Metcalfe et al. (2019) posit that there is a significant

gap that exists between theory “*what educators teach*” and practice “*what is require at work environment*”. Metcalfe et al. added that there is a gap between teachers and students due to the lack of communication between them, causing a sort of superficial education in terms of transfer of information, rather than a solid transformation.

Overall, one may argue that if universities continue to use the traditional teaching methods of Accounting education, which is based on memorisation and other sterile means, the inevitable result will be the failure of Accounting education. This is so because the students may not be able to demonstrate high level of knowledge, skills and competencies in Accounting and its related concepts and principles. The students must be trained using both traditional and non-traditional methods to cooperatively and collaboratively engage them in a more accommodative and friendly manner. This dynamics in a long run will help boost the trainee-teachers’ effectiveness. The kind of teaching methods employ by trainers largely influence the knowledge and competency levels of trainees, all other factors being equal.

Gap in information technology alignment

Finally, rapid change and developments in Information Technology (IT) could play a role in the gap between learning and practice in recent years. Lack of familiarity with IT resources could lead in turn to the gap in Accounting education. Metcalfe et al. (2019) stress that mastering IT skills are important for Accounting education students since it prepares them for the IT-based teaching and non-teaching work environment. Further, Metcalfe et al. argue that accountants and Accounting teachers should improve their competency level in IT skills to meet market requirements. Also, they suggest

that the current Accounting education system cannot fulfil the needs of modern society because of the lack of integration of IT in Accounting education.

In order for business/organisations to fulfil improvement of their IT in recent decades, and to survive in the global competition, they tend to invest more money in developing their IT systems. The development of business IT systems includes the Accounting information system. In addition, it is widely acknowledged that IT plays an important role in the field of Accounting; IT can be a strategic weapon to support the object and strategy of organisations (Alhassan, 2019). Hence, using IT in Accounting education needs to be part of the development of the Accounting system, both academically and professionally, and educators should emphasise more the importance of IT.

For the purpose of producing Accounting teachers, who are more adapted to developments in recent business environments, Alhassan (2019) suggests that Accounting education students should master some of the following technologies: spread sheet software, word-processing software, Windows, world wide web, presentation software, data base software, e-commerce, information systems planning and strategy, file and directory management, communication software, graphics software, in addition to Accounting packages. Acquiring the needed knowledge, skills and competencies in these technologies would make them more competent and relevant in both the teaching and Accounting professions. Therefore, integrating IT, as an educational tool within the Accounting education courses, could produce knowledgeable Accounting education graduates; also it can increase their Accounting and teaching capabilities such as communication

skills and writing skills. In addition, it can prepare the students to be better teachers, financial statement analysts, and better decision makers.

Researchers' Attempts at Bridging the Gap

Accounting education researchers tend, after discovering and proving the gap, to give suggestions or advice about what might bridge this gap. Some researchers move towards the idea that prior knowledge and experience for Accounting education students might have a role in filling the gap between learning and practice in Accounting education. In 2016, Amabile and DeJong (2016) conducted a study with 161 undergraduate students to examine the effect of direct work experience on subsequent knowledge acquisition. From that sample, only 69 of the students had prior experience in a tax course. They noted that the students that had direct experience with tax were more competent in the learning process of the unstructured task, than the inexperienced students. In other words, students who have prior experience are more flexible in dealing with irregular transactions (transactions of the real world) than inexperienced students. Amabile and DeJong concluded that direct learning experiences could feed the students' knowledge and skills.

Furthermore, in an attempt to develop proposals on how to avoid or reduce the gap between Accounting education and teaching practice, Carr (2017) conducted a study and distributed a questionnaire to two groups, academics and business teachers. The purpose was to identify whether a gap exists between content being taught in business education courses and business teachers' needs. The results found high agreement and recommendations from both groups to use case studies and practitioners as guest lecturers in business education courses.

For the purpose of improving Accounting education students' skills, earlier research suggests that educators can integrate generic skills into the Accounting curriculum by linking specific skills to an assessment task (Chen, 2018). Chen criticised Accounting education approaches and call for reform of the Accounting education curriculum. Consequently, he adopted an approach that tends to encourage Accounting educators to build strategic planning that examines their existing Accounting programmes precisely, in order to consider any change in their programmes in the future, particularly technology integration.

Chen (2018) further claimed that a narrow but deep education approach is better than a broad based education approach in teaching Accounting education in universities. This calls for the need to adapt holistic approach to connect Accounting education to the contemporary teaching and business environment. That can be achieved by ensuring that there is high level of instructional quality that is more accommodative and adaptable. Such an intervention would help produce Accounting teachers and accountants who would have the ability to adapt to the rapid changes that are taking place in today's world.

In summary, much has been written about the existence of an Accounting education gap in general. Researchers have identified several factors that can contribute to this gap; however, there is an absence of research about the instructional quality and the requirements of effective Accounting education delivery in this 21st century. Current Accounting teachers are expected to acquire and demonstrate the 21st century skills in their teaching and work in general. These skills include information and communication

technology literacy, critical thinking, multicultural teaching skills, collaboration and creativity (Clotfelter et al., 2019).

Solving the problem of the expectation gap can contribute to the convergence of views between Accounting educators, teachers and employers by identifying what Accounting education students have to learn and what employers require. Hence, researchers can determine the areas of the gap in different aspects of the Accounting education system and provide appropriate solutions to bridging this gap. Also, with high level of academic self-discipline on the part of the trainee-teacher, the instructional quality demonstrated by the training institutions may have positive impact on trainee-teachers acquisition of the needed skills and competencies in the teaching of Accounting (Deci, 2019). This situation in the long run would help boost the effectiveness of Accounting teachers and Accounting education delivery in general.

Trainee-Teachers' Academic Self-Discipline

Academic self-discipline is the way to keep ourselves focused on our study and other academic activities. Trainee-teachers' academic self-discipline had shown to have a significant impact on academic performance (Aragon et al., 2012; Marzuki et al., 2017; Maulana & Opdenakker, 2019; Mbaluka, 2017; Walker, 2016; Yai & Wang, 2012). Maulana and Opdenakker (2019) did two longitudinal studies to investigate the impact of self-discipline on academic achievements. In the two studies, self-discipline and self-control were used interchangeably, and were both defined as “the ability to suppress pre-potent responses in the service of a higher goal and further specifying that such a choice is not automatic but rather requires conscious effort.

In order to suppress innate responses to focus on a desired goal, calls for self-discipline, which students need to exercise throughout their academic years. Without academic self-discipline a student would engage in any activities that feel more exciting compared to studying diligently for long hours. On the part of a student, self-discipline involves focusing on activities that are helpful in attaining academic success, such as completing school assignments on time, reviewing notes, listening to teachers in class instead of engaging in tendencies that destruct from accomplishing academic assignments (Maulana & Opdenakker, 2019).

For most undergraduate students in modern Ghana, playing games, watching entertainment programmes on television or texting friends is more exciting than solving math problems or studying history chapters to complete class assignments. Yet, students need to spend more time on school work than they do on entertainments in order to excel in school (Walker, 2016). Self-regulation works closely together with self-discipline in academic achievement.

Self-regulation involves engaging oneself in school related activities such as reviewing notes, going for extra coaching, doing assignments, studying and watching educative programmes instead of going for entertainment (Maulana & Opdenakker, 2019). To regulate oneself and to focus on school work until academic goals are achieved requires self-discipline. It is no wonder that less academic self-disciplined students achieve low academic achievements compared to highly disciplined students. Regardless of its importance in academic performance, self-discipline is not without critics.

Many research findings in the social sciences, pedagogy and education argue for the strong relationship between academic self-discipline and academic performance, with lack of discipline considered as a factor in declining academic performance (Aragon et al., 2012). Scholars are fairly unanimous in their conclusion that the introduction of effective disciplinary practices in school is crucial to ensuring academic success together with a safe learning environment, cultural environment that retains the priority of knowledge and understanding the child's personality and giving great attention to the child's needs (Ng & Rao, 2018; Orvis et al., 2017).

According to Aragon et al. (2012), academic self-discipline which can be considered equivalent to "self-discipline", refers to behaviour springing from discipline. It entails perseverance, meeting time schedules, goal-setting and planning for goal achievement, and completion of unpleasant tasks. Concurrent with its explanation of academic performance, the results can provide teachers, principals and parents with the tools necessary to improve performance in school which in the long run will help enhance education delivery. These characteristics of academic self-discipline have a positive influence on teachers' effectiveness (Corbin, 2017). This implies that a well behaved academic self-discipline trainee-teacher is most likely to perform academically as against discipline problem students since that behaviour is a potential factor to contribute to a decline in effectiveness.

Academic self-discipline includes perseverance, meeting schedules, and completion of unpleasant tasks. The first to consider is perseverance. This skill of academic self-discipline refers to the degree to which a person is able to perform a task over an extended period of time (Aragon et al., 2012). A task

or assignment is completed only when the final objective is reached. Perseverance is, therefore, applied to every field of endeavour, beginning with games and continuing on to learning or employment. Academic excellence is the fruit of perseverance because learning is a lengthy process that demands continuous study and practice, beginning with the preparation of daily homework assignments and extending to the organised study of all subjects of the curriculum (Ng & Rao, 2018).

The second academic self-discipline considered is meeting schedules. This type of academic self-discipline requires conscientiousness and the ability to complete assignments on time. Conscientiousness is a necessary but insufficient trait because in learning as in life, numerous tasks must be completed in a short period of time (Orvis et al., 2017). The trait used here is not being referred to as trait such as alacrity or speed, but rather the ability to execute tasks in designated periods of time. Students who take five hours to complete their homework, in the course of which they eat, talk on the telephone and watch television, are incapable of meeting schedules and often find it difficult even to copy information from the blackboard, let alone complete an assignment or finish an examination on time. A student's success in his or her studies is assessed according to his or her performance in a specified period of time.

The last academic self-discipline considered was the completion of unpleasant tasks. This is being referred to as the ability to execute more or less frustrating or monotonous task, such as maths or spelling exercise (Ghazi et al., 2018). Although deemed detrimental to the child-centred paradigm, this skill is crucial for successful learning. University education and distance

education curricula for that matter encompass a broad range of subjects; it is reasonable to assume that not all subjects will be equally enjoyable to every student. Nonetheless, students are expected to successfully learn them all. The completion of unpleasant task can therefore, be expected to be an integral part of learning.

Lack of discipline is expressed as stated, by non-compliance with the lecturer's instructions in the lecture room and with the parents' rules in the home, with both reflecting each figure's loss of authority. As a result of this loss, the learner feels it unimportant to apply the discipline skills that are, in effect, components of self-discipline. He or she, therefore, does not respond to lecturer and parental demands to persevere in completing tasks, to abide by a time schedule, to set goals and, most importantly, to complete monotonous and unpleasant homework (Jeronimus et al., 2019).

Focusing on causes of academic self-discipline problem, most researchers have indicated that school-environmental factors and student-related environmental factors are some of the major causes of discipline problems that can decline education delivery in the country (Ceci & Konstantopoulos, 2019; Jepsen & Rivkin, 2019; Worley-Davis, 2016). According to Jepsen and Rivkin, there is a negative relationship between class size and academic self-discipline. For Jepsen and Rivkin, there are more discipline problems and low academic performance in classes of large size. This further explains that discipline problems were found in their study to be prevalent in larger classes already exhibiting low achievement levels.

However, it appears that classes of small size provide better opportunities to prevent discipline problems (Januszka & Dixon-Krauss,

2017). This shows that the problem of low academic performance on the part of distance learners can be linked to the large class size they have. This is so because the review shows that large class size leads to low academic self-discipline which in turn leads to low education delivery in the long run.

Theoretical Framework

The theoretical framework of the study was made up of four related theories that were reviewed and analysed to form a theoretical structure that supported the argument of this study. These theories are interconnected ideas that condense and organise knowledge about the problem. It forms a collection of interrelated ideas based on theories used to explain instructional quality and its influence on Accounting education delivery, taking into consideration the mediating role of trainee-teachers' academic self-discipline within both conventional and non-conventional modes of education. This theoretical framework helped the researcher to see clearly the construct and argument of the study. It also provided the researcher with a general framework for data analysis. The theories reviewed were theory of autonomy and independent study, effective schools model, theory of constructivism, and self-determined theory.

Theory of Autonomy and Independent Study

Theory of autonomy and independent study was the first theory considered in this study. Michael Grahame Moore in the early 1970s conceptualized the European Theory of Independent Study in which he gave a road map for the development of the autonomy and independent perspectives. This was later developed by Charles Wedemeyer in the early 1980s and known as the American Theory of Independent Study. The assumption of the

theory is that learning and discovery of knowledge that is self-directed with very little or no supervision and guidance is most lasting and the best for distance education (Simonson et al., 2013). This assumption is used to underpinned the first and second objectives of the study

According to Simonson et al. (2013), various forms of teaching and learning arrangements in which teachers and learners carry out their essential tasks and responsibilities apart from another, communicating in a variety of ways promotes more lasting and meaningful learning. Its purpose is to give distance learners the opportunity to continue learning in their own environments. This shows that when distance learners are given the expected quality instruction during their pre-service preparation, they are likely to demonstrate high level of effectiveness in their learning and performance which in the long run will help boost the effectiveness of education delivery.

Holmberg (2014) also stressed that independent study includes different forms of teaching learning arrangements in which instructors and learners carry out their essential tasks and responsibilities independent of another, communicating in a variety of ways with learners in the comfort of the learners own environment. The theory, therefore, considered the autonomy of the individual learner to be the thrust of distance learning (Sharma, 2014). Holmberg outlined some important ingredients of independent learning which includes giving greater student responsibility, sufficient available instruction, effective mix of media and instructional approaches, adjusting to individual differences, and a multiplicity of start, stop, and learn times.

Basically, there are four common elements of every teaching-learning situation: a teacher, a student, search image (subject matter to be taught to

learners) and a communication system (medium or mode through which the search image is transmitted to the learner). This calls for a reorganisation of these elements that would accommodate physical space and allow for greater learner freedom. Simonson et al. (2013) are of a firm conviction that the development of the student-teacher relationship is key to the success of distance education. Peters (2016) could not agree more with Simonson et al. when he outlined two important variables in distance educational programmes: the amount of learner autonomy and the distance between teacher and learner.

Peters (2016) posits that in traditional school settings learners are very dependent on teachers for guidance and that in most programmes the teacher is active while the student is passive. In distance education, there is a gap between teacher and student, so the student must accept a high degree of responsibility for the conduct of the learning programme (Jumani, 2017). The autonomous learner needs little help from the teacher, who may be more of a respondent than a director. This is in tandem with Brunner (as cited in Parijat & Bagga, 2014) who came out with the discovery approach in which the student bears the biggest responsibility of learning most concepts and unearthing knowledge on their own through exploration of other concepts and principles.

Some adult learners, however, require help in formulating their learning objectives, identifying sources of information, and measuring objectives through the application of reception learning approach where the instructor bears the responsibility to fish out relevant information about the subject matter, repackage and delivers to the learners (Jumani, 2017; Peters, 2016). Most adult learners on distance education programmes need this

approach or its blend with the discovery approach in order to succeed. This shows that in the distance education programme, learning does not happen until the learner involves himself or herself in the study and learning activities. It situates the learner at the centre of the teaching process. Therefore, to ensure effectiveness in education delivery, there is the need for the learner to be independent in his or her learning activities after receiving quality instruction. This calls for self-academic discipline on the part of the learner.

On the limitation of the theory of autonomy and independent study, over emphasizing the independence of learners in distance learning under Wedemeyer's (1981) independent study paradigm is capable of obstructing instructional design and quality. However, he also provides an explanation to the special and critical role of the instructor in this distance learning concept (Simonson et al., 2013). This exclusively presents this theory as a unique framework from that of distance self-study and shows usefulness for instructional design today. The overwhelming body of evidence in the application of the theory of autonomy and independent study emphasizes the importance of an instructional role in distance learning (Garrison, 2017; Jumani, 2017; Meyer, 2003; Simonson et al., 2013; Swan & Shih, 2005; Wu & Hiltz, 2004). For instance, Garrison (2017) establishes a correlation between teacher presence and student satisfaction, perceived learning, and community spirit.

The indicated assertions suggest that the assumptions of the theory of autonomy and independent study are relevance in the assessment of instructional quality and effectiveness of non-conventional mode of education such as distance education or online education delivery. It provides a solid

ground for the granting of independence to learners in distance learning while paying attention to instructional quality on the part of teachers and programme managers. The wide acceptance of the framework in Accounting education investigations coupled with the foregoing made its highly appropriate for this current study.

Effective Schools Model

The effective schools model was developed by L. W. Lezotte in 2010. The author assumes that an effective school is one that can establish the existence of both quality and equity in terms of measured student accomplishment. Lezotte (2010) suggests seven correlates for effective schools: sound instructional leadership, a clear and concise mission, safe and orderly schools, an environment of high expectations for performance, regular monitoring of learner progress, excellent home-school interactions, and time on task. Effective instructional leaders, according to Lezotte et al. (2012) are attentive and seek assistance in developing team leadership and a culture favourable to learning and professional growth. In an effective school, the principal and others serve as instructional leaders, effectively communicating and modelling the school's goal to staff, parents, and students.

With a clear and focused vision and mission, everyone understands where they are headed and why they are going there. A focused approach aids in the alignment of programmes and activities for school development. To appropriately select a specific emphasis, school leaders and stakeholders work together to identify goals and then develop clarity around them. A safe and orderly school is defined as one with acceptable behavioural standards,

consistent and fair implementation of rules and regulations, and caring, responsive interactions between professionals and children (Kosgei, 2015).

Irrespective of the modes, either conventional or non-conventional, classrooms are welcoming and friendly, and learning activities are relevant, engaging, and meaningful. Individualised learning settings are designed to foster good interactions between students and teachers. Students have a sense of belonging in the college community, and are respected and honoured; their origins and backgrounds are seen as “assets,” not liabilities. According to Lezotte et al. (2012), in a high-stakes environment, the phrase “all students can learn” must be accompanied with instructional practices and teacher behaviour that indicate that instructors believe in the students, trust in their own ability to teach them to exacting standards, and will persevere in educating them. Training advanced skills and teaching for comprehension, are necessary for every learner to accomplish at elevated levels. Such elevated performances demands greater instructional quality.

Monitoring teaching and learning on a regular basis depicts paying attention to both learning outcomes and the efficacy of school and classroom practices (Kosgei, 2015). Learning is tracked by keeping track of a range of assessment results, including as test scores, student-created products, performances, and other signs of learning. Instructors monitor and evaluate their own teaching through self-reflection, and so do supervisors for programme and teacher assessment. Assessment findings are utilised to design individual student teaching as well as school-wide decision making and planning. Data-driven changes are made to classroom and school procedures.

According to Lezotte (2010), family and community participation is a broad phrase that encompasses a wide range of activities, initiatives, and programmes that draw together parents, businesses, and other stakeholders to promote student learning in schools. Families and other adults may participate in learner's education by participating in a range of activities that emphasize the significance of education and express guidance and assistance of students' learning (Zamir, 2020). These are valid methods of engagement that do not necessitate parents spending time at the school.

The term “opportunity to learn” and “student time on a task” simply refer to the fact that learners tend to learn the bulk of the lessons on which they spend time. Time on task indicates that each instructor in the school understands the main student goals, “grade-by-grade and subject-by-subject” (Nyagosia, 2011). Learners should be given time to learn what they should be studying once it is obvious what they should be acquiring. Teachers devote a substantial amount of classroom time to teaching the fundamental abilities in an effective school. Students of all abilities, ethnicities, genders, and socioeconomic backgrounds have equal access to education (Zamir, 2020).

The effective school model partly serves the course of this study by highlighting the relevant of effective instructional quality for enhanced-education delivery. The seven elements presented in the framework partly explained some of the variables in Mbwesa (2014). According to Mbwesa, assessment of instruction cannot be done without consideration to quality standards and variables established to guide instruction in higher education. As a result, he outlined 10 quality dimensions which influenced me in adapting her instructional quality dimensions for this study. The dimensions

were faculty support, student support, interactive tasks, pedagogical, evaluation and assessment, infrastructure, institutional quality assurance mechanism, institutional credibility and accreditation, course development, and information and publicity dimension.

The application of the effective schools model in empirical settings (Afalla & Fabelico, 2020; Kosgei, 2015; Lezotte, 2010; Lezotte et al., 2012; Nyagosia, 2011; Scheerensa & Demeuse, 2005; Zamir, 2020) further provided the study with an unshaking impetus to leverage on it to support the assumptions of objectives one and two. Likewise, the assumptions of the schools model help this current context of assessing the effectiveness of instructional quality in the area of Accounting and effectiveness of Accounting education delivery in Ghana. The study focuses on both conventional and non-conventional modes of education. Also, the academic self-discipline of the trainee-teachers was considered.

Theory of Constructivism

The third related theory considered was constructivism. The theory of constructivism can be traced to the various works of Jean Piaget in the 1970s. Constructivism, as a psychological paradigm, emerged from the field of cognitive reasoning, precisely the later work of Jean Piaget just before his passage to the eternity in 1980, the socio-historical study of Lev Vygotsky and his supporters, and the work of Jerome Bruner, Howard Gardner, and Nelson Goodman, among others, who researched the importance of representation in learning. Boddy et al. (2003) believe that humans learn through the construction of one logical structure after another.

The implications of cognitivism and how it is applied have shaped the foundation for constructivist teacher education. Dewey (as cited in Boddy et al., 2003) called for teacher education and general education to be grounded in real experience. According to Dewey (as cited in Adey et al., 2012), if you have doubts about how learning happens, engage in sustained inquiry: study, ponder, consider alternative possibilities and arrive at your belief grounded in evidence. Inquiry is a key part of constructivist learning.

Constructivism is basically a theory, based on observation and scientific study about how people learn. It says that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences (Appleton, 2009). The theory is based around the idea that trainee-teachers are active participants in their learning and professional journey; as a result, their knowledge in the teaching of Accounting or Financial Accounting in the various SHSs is constructed based on their experiences (Bada & Olusegun, 2015; Hudson, 2019). This makes on-campus or on-centre and off-campus or off-centre teaching practices key elements and input in the preservice preparation of Accounting teachers in both conventional and non-conventional modes of education. As events occur, each preservice teacher or trainee-teacher reflects on his or her experience and incorporates the new ideas with his or her prior knowledge.

When we encounter something new, we have to reconcile it with our previous ideas and experience, may be changing what we believe, or may be discarding the new information as irrelevant. To do this, we must ask questions, explore, and assess what we know. Both cognitivism and constructivism hold that people actively construct their own knowledge, and

that reality is determined by the experiences of the knower, rather than existing as an objective truth distinct from the individual (Ayaz & Sekerci, 2015; Toraman & Demir, 2016).

Constructivism learning theory enhances trainee-teachers' logical and conceptual growth regarding their effectiveness of Accounting education delivery. The underlying concept within the constructivism learning theory is the role which experiences or connections with the adjoining atmosphere-play in trainee-teachers education. Just like that of Piaget, two of the key concepts within the constructivism learning theory which create the construction of an individual's new knowledge are accommodation and assimilation (Allen, 2015; Gross & Gross, 2016). Assimilating causes an individual to incorporate new experiences into the old experiences; while accommodation relates to re-framing the world and new experiences into the mental capacity already present. Individuals conceptualise a particular fashion in which the world operates, and this causes the individual to develop new outlooks, rethink what were ones misunderstandings, and evaluate what is important, ultimately altering their perceptions. The assumptions of the theory support the first, second and fifth objectives of the study.

Constructivism transforms the trainee-teacher from a passive recipient of information to an active participant in the learning process. Always guided by the tutor, trainee-teachers construct their knowledge actively rather than just mechanically ingesting knowledge from the teacher or the textbook. The constructivist view of learning in most general sense, usually means encouraging trainee-teachers to use active techniques to create more knowledge and then to reflect on and talk about what they are doing and how

their understanding is changing. The teacher makes sure he or she understands the students' pre-existing conceptions, and guides the activity to address them and then build on them (Miller, 2013). In the constructivist classroom trainee-teachers are expected to be "expert learners" at the end of teaching and learning activity. This gives them ever-broadening tools to keep learning in order to be effective in the delivery of education.

Furthermore, the constructivism learning theory allows learners to develop the skills and confidence to analyse the world around them, create solutions or support for developing issues, and then justify their words and actions, while encouraging those around them to do the same and respecting the differences in opinions for the contributions that they can make to the whole of the situation. Classroom applications of constructivism support the philosophy of learning which build students' and teachers' understanding of concepts from known to unknown and from general to specific (Miller, 2013).

The theory has been criticised on various grounds. Some of the charges that critics level against it are that it is elitist (Toraman & Demir, 2016). Critics say that constructivism and other "progressive" educational theories have been most successful with learners from privileged backgrounds who are fortunate in having outstanding teachers, committed parents, and rich home environments (Brooks & Brooks, 2013). This shows that disadvantaged children, lacking such resources, benefit more from more explicit instruction. Critics say the collaborative aspects of constructivist classrooms tend to produce a tyranny of the majority, in which a few students' voices or interpretations dominate the group's conclusions, and dissenting students are

forced to conform to the emerging consensus (Ellis & Hunt, 2015; Funa & Talaue, 2021; Miller, 2013).

The assertions so far show that in order to enhance the instructional quality of conventional and non-conventional undergraduate programmes in Accounting education and the effectiveness of Accounting education delivery in general, facilitators should practicalised instruction, and guide learners to go through the professional processes of teaching (Ayaz & Sekerci, 2015; Ishola et al., 2020). The professional process include; statement of behavioural objectives, relevant previous knowledge, introduction, development of teacher-learner activity, questioning skills, lesson closure and evaluation (Funa & Talaue, 2021; Kunter et al., 2017).

With high level of instructional quality exposure, trainee-teachers should be able to demonstrate high levels of professional values and attitudes, professional knowledge, and professional practices in the area of managing the learning environment, teaching and learning, and assessment. When developing an Accounting education programme for both conventional and non-conventional modes students, according to constructivism theory, designers must create stimulating environments that capture learners and enable them to formulate knowledge and derive meaning and experience for themselves (Funa & Talaue, 2021; Kunter et al., 2017). These environments allow for collaboration between learners and the facilitator, and encourage meaningful dialogues so that understanding can be individually constructed.

Concerning the application of the theory of constructivism and the success of its adoption in education, available evidence suggest substantial support for its relevance (Bada & Olusegun, 2015; Carpenter & Fennema,

1992; Duffy et al., 1986; Funa & Talaue, 2021; Liu & Zhang, 2014; Shi, 2012; Zhou & Wang, 2016). Constructivism has been generally accepted by various educational disciplines, making it relevant for assessment of conventional and non-conventional modes of education delivery. The powers of the constructivist paradigm to explain the influence of conventional and non-conventional learning ecology in impacting knowledge through experience made it appropriate for this current study. It also provided detailed analysis of some of the variables in the objectives of the study. The study, therefore, gave credence to the constructivist theory in assessing instructional quality and Accounting education delivery.

Self-Determined Theory

Self-determined theory was propounded by Edward L. Deci and Richard M. Ryan in the mid-1980s. They posit that people have innate psychological needs that are the basis for self-motivation that drives them to persist in an activity in order to achieve planned external goals (Senyamator, 2018). As a macro theory of human motivation, “self-determination theory addresses such basic issues as personality development, self-regulation, universal psychological needs, life goals and aspirations, energy and vitality, non-conscious processes, the relations of culture to motivation, and the impact of social environments on motivation, affect, behaviour, and wellbeing” (Deci & Ryan, 2011, p.486). It is concerned with the motivation behind choices people make without external influence and interference. The principal basis of this theory is the degree to which an individual’s behaviour is self-motivated and self-determined (Deci & Vansteenkiste, 2004).

Milestone research works that resulted in the development of self-determined theory included research on intrinsic motivation (Deci & Ryan, 2008; Senyamator, 2018). Intrinsic motivation refers to initiating an activity for its own sake because it is interesting and satisfying in itself, as opposed to doing an activity to obtain an external goal. Different types of motivations have been described based on the degree they have been internalised. Internalisation refers to the active attempt to transform an extrinsic motive into personally endorsed values and thus assimilate behavioural regulations that were originally external (Deci & Ryan, 1991; Wisneski et al., 2017).

According to Deci and Vansteenkiste (2004), there are three psychological needs that motivate people to commence an activity and specify nutriments that are essential for psychological health and well-being of an individual. These needs are innate and if satisfied, ensure growth, efficiency and success of trainee-teachers. These needs are linked to intrinsic motivation and self-efficacy (Deci & Ryan, 2011). These needs are said to be universal, innate and psychological and include the need for competence, autonomy, and psychological relatedness.

Competence seeks to control the outcome and experience mastery. Giving trainee-teachers unexpected positive feedback on a task increases their intrinsic motivation to perform and succeed. Positive feedback, therefore, fulfils people's need for competence (Deci & Ryan, 2011). In fact, giving positive feedback on a task served only to increase people's intrinsic motivation and decreased extrinsic motivation for the task. Chirkov et al. (2013) found that negative feedback has the opposite effect. That is,

decreasing intrinsic motivation by taking away from people's needs and desires for competence and success.

Relatedness is the universal want to interact, be connected to, and experience caring for others. During a study on the relationship between infants' attachment styles, their exhibition of mastery-oriented behaviour and their effect during play attest to this (Frodi et al. as cited in Abdus-Salam, 2015). According to Abdus-Salam, Frodi et al. failed to find significant effects, perhaps somewhat surprising was the finding that the quality of attachment of trainee-teachers assessed at 12 months failed to significantly predict mastery, motivation and competence. However, other investigators have demonstrated an association between mastery and motivation and practice of teaching in groups where group members critique, commend and suggest better alternatives for trainees (Peters, 2018). People always strive to give their best in groups in order to gain recognition and praise. Thus people under training need well connected and related groups for effectiveness.

Autonomy is causal agents of one's own life and act in harmony with one's integrated self. Offering people extrinsic rewards for behaviour that is intrinsically motivated undermined the intrinsic motivation as they grow less interested in it. Initially, intrinsically motivated behaviour becomes controlled by external rewards, which undermine their autonomy. Arnt et al. (2016) found other external factors like deadlines, which restrict and control, also decrease intrinsic motivation. Circumstances that give autonomy as opposed to taking it away also have a similar link to motivation. They are necessities that are innate, not learned (instinctive), and seen in humanity across time, gender and culture ((Wortman et al., 2018).

According to Sprinthall and Sprinthall (as cited in Senyamator, 2018), there are three other essential elements of self-determined theory that promote self-determination and success of learners. However, some may be more salient than others at certain times and are expressed differently based on time, culture, or experience. These elements are that (1) humans are inherently proactive with their potential and mastering their inner forces (such as drives and emotions), (2) humans have an inherent tendency toward growth, development and integrated functioning, and (3) optimal development and actions are inherent in humans but they do not happen automatically.

To actualise their inherent potential, they need nurturing from the social environment. Therefore, these innate elements have to be activated through effective theoretical and practical skill training in schools. Tutors and facilitators in charge of training teachers need to give effective practical guidance and training in order to activate their needs for success. If this happens there are positive consequences (e.g. well-being and growth) but if not, there are negative consequences. Self-determined theory emphasizes humans' natural growth toward positive motivation, however, this is thwarted if their basic needs are not fulfilled (Koomson et al., 2017; Leman et al., 2017).

Several researchers have applied the self-determined framework in various endeavours (Ariani, 2017; Gagne' & Forest, 2008; Guay et al., 2008; La Guardia & Patrick, 2008; Yerdelen et al., 2014) with the majority of such studies reporting significant acceptance. These studies are impressive based on the quality of the evidence that supports them, and perhaps even more notably, they show that extensive theorising, when supported by a history of

scientifically extensive examination, can potentially produce changes in social activities and the wellbeing of persons and the communes in which they are situated.

The general acceptance and application of the self-determined paradigm are its potentials in explaining trainee-teachers' motivation. Motivated trainee-teacher becomes persevering in all it takes to properly behave academically and professionally, irrespective of mode of delivery. This assertion positioned the relevancy of the theory used. Emphasising competence, relatedness and autonomy in the two learning model provides a platform for the assessment of both intrinsic and extrinsic motivations in explaining academic self-discipline. Considering the gains associated with the adoption of the self-determined framework, this current study adopted it in response to its last objective in order to assess the mediating role of trainee-teachers' academic self-discipline on the link between the five facets of instructional quality and effectiveness of Accounting education delivery in Ghana.

Empirical Review

To understand the current concepts and issues under study much better, the researcher reviewed some empirical studies. This helped in gaining better knowledge on the issues by means of direct and indirect observation or experience of previous researchers or studies. The records of other researchers' observation or experience were analysed quantitatively and qualitatively to gain more information about the concepts under study. The empirical review concentrated on issues related to the specific purposes. Thus, they are organised according to the themes in the research questions.

Modes of Instruction and Education Delivery

Didactic teaching remains a conventional method of undergraduate education till date. Studies had been done to assess the knowledge acquired by the student group. Shobhana et al. (2014) assessed students' perception by comparing conventional and non-conventional teaching practices in medical ethics. Their study was conducted in a group of 30 students to assess the difference in acquiring knowledge and understanding the subject. This was done by taking two classes on topics related to medical ethics in a didactic mode and in the next two sessions same set of students were guided to participate in a role play with preparation on topics of medical ethics, and also review was asked from the students side based on the usefulness of interactive learning among them.

Comparison was made in students about the understanding and learning the subjects and receiving the feedback in the form of questionnaire. Shobhana et al. (2014) concluded that interactive teaching and role play forms a better module as an add-on tool for implementing medical education for traditional methods as compared to non-traditional methods. Even though Shobhana et al. comparatively looked at the issues, they did not consider instructional quality of the modes by only looking at teaching practices, not to mention the mediating role of respondents' academic self-discipline. Also, the sampling technique employed by Shobhana et al. should have taken into consideration the proportional representation of students in both conventional and non-conventional teaching practices to ensure equity in representation.

Danciu (2014) also looked at specificity and efficiency in using non-conventional methods for adolescent education. Having controversial

characters, both within the familial and educational environments, being almost mature but nevertheless childish, with sudden mood changes, fluctuations, and hormonal imbalances causing psychic liability, bad moods and anxiety; being vulnerable, yet fevered to launch oneself into a rational and harmonious life, although living the least emotionally balanced phase of life, the adolescent is perfectly framed into this initiating period, also called intergenerational conflict. Being a non-conformist, one can hear him/her often saying that she or he hates school, but loves education. Finding the most effective ways to respond to his or her cognitive, affective and relational, needs and values is an urgent necessity.

Danciu (2014) approached these issues by studying the methods used in non-formal education, the strategies used in instructional assistance, as well as the way adolescent valorisation is reinforced. Danciu focused on conventional and non-conventional methods of teaching and not conventional and non-conventional modes of education, as in the case of this study. However, some of the teaching methods used in conventional teaching methods are used in non-conventional modes of education such as face-to-face interaction in distance education. Also, experience of the respondents was not taken into consideration; however, it is a variable that can influence the views of the respondents regarding the teaching methods.

Online education continues to evolve and grow dramatically at colleges and universities across the globe. Today's society comprises people who are increasingly busy with work and family obligations and who are looking for more flexible and expedited avenues for higher education. Institutions seek to meet these new demands by offering online distance

educational opportunities while increasing cash flow for their college. Unfortunately, the pitfalls to this rush to meet online demand results in what some researchers assert are inadequate quality content and curriculum. Others indicate there are not significant differences in the outcomes from online learning compared with traditional face-to-face classes (Faidley, 2018).

According to Faidley (2018), much of the research works on modes of education have been conducted on non-quantitative courses, quantitative courses with small sample sizes, or large sample sizes that are not controlled for quality of online content, delivery, or verification of learning. Faidley (2018) compared learning outcomes from online and face-to-face two Principles of Accounting courses using quasi-experimental ex-post-facto design. The online content for both courses was developed with assistance of academic technology professionals at the participating university. Student learning was measured as final course grade where all exams were administered by a testing centre in a proctored environment. The sample size included 124 students from the online sections and 433 students from the traditional face-to-face sections. Eight research questions were examined using independent samples t-test for six of the analyses, Analysis of Variance (ANOVA) for the first question, and multiple regression for predictors of mean final course grade.

The results that emerged from Faidley's (2018) study indicated that students performed significantly better in the face-to-face classes than the online sections. Also, female students scored significantly higher than male students in both methods of instruction. Accounting composite score, Accounting math score, Grade Point Average (GPA), gender, and method of

instruction all were significantly related to final course grade. Age was not a significant predictor of final course grade but in the online sections non-traditional students (age 25 and older) scored significantly higher than students under the age of 25.

The findings that emerged from Faidley's (2018) study are consistent with the perception that instructional quality and effectiveness of Accounting education delivery in a conventional face-to-face mode of education are higher than those of non-conventional modes such as distance education. However, Faidley did not look at the issues from both subjective and objective perspectives. Similarly, Faidley did not consider the mediating role of perceived feasibility factors such as academic self-discipline, as in the case of this study. However, the results were comparatively analysed.

Stejskalová et al. (2019) investigated student adoption of a non-traditional teaching method in Accounting, focusing on how previous experience impedes willingness to change. They examined a new teaching method consisting of a real-life case study that is used in Accountancy and its introduction at two universities. The research was conducted at universities that specialise in preparing students to become managers. The main focus of the study was to examine the different ways that students might accept the new teaching method. They considered the utilisation of an active form of teaching, as opposed to a passive form, which is the more prevalent form of teaching Accountancy in the Czech Republic. Since the use of active forms of teaching brings a range of advantages, case studies are rarely used, so Stejskalová et al. (2019) were interested to see the students' reaction.

The research was conducted over two consecutive academic years and the main factors that were examined to assess the introduction of real-life case studies were country, gender and previous experience with Accountancy education at secondary school. The results that emerged from Stejskalová et al. (2019) study show that men accept the new way of teaching better than women. Students with previous experience perceived case studies negatively. The results of the study indicate that when introducing changes to teaching, the need to introduce the changes must be appropriately clarified. This means, when introducing non-conventional modes of education such as distance education, the preservice preparation strategies, instruction and assessment must be properly clarified to help prospective students imbibe the concept.

Even though the study of Stejskalová et al. (2019) looked at differences among respondents with regard to their country, gender and previous experience with Accountancy education at secondary school, they did not consider analysing comparatively traditional and non-traditional teaching methods in Accounting, not to mention the modes. Similarly, they considered a one-dimensional method in measuring teaching method, which largely can affect the validity of the construct. They could have considered multidimensional way of measuring teaching method or instructional quality, as in the case of the current study. Also, a single approach was used to tackle the problem identified. It will have been better to employ mixed methods approach in order to understand the issues from both subjective and objective perspectives, as in the case of this current study.

Learning has been identified as a critical tool for the achievement of sustainable development. But whereas the literature predominantly focuses on

the use of classroom-based teaching methods and approaches, there is a perceived need to shed some light on the potential role which can be played by non-conventional learning or mode of education (Filho, 2021). Based on the relevance of addressing this need, Filho's (2021) study describes the role of non-conventional learning methods in supporting the achievement of the UN Sustainable Development Goals. In particular, it discusses the contribution of non-conventional teaching as a catalyst for a more active participation of learners, and also shows some of the trade-offs. Filho's (2021) study considered only non-conventional mode and a single approach. Therefore, he was unable to compare modes of education, not to mention analysing the issues from both subjective and objective perspectives.

Accounting Education and Accounting Teachers' Effectiveness

The teacher is most essential in the education field and he/she is the most important pillar in the development of schooling. Therefore, issues relating to teachers' instructional quality are concern to researchers and policy makers. In line with this need and interest, Mangalamma and Vardhini (2017) examined teacher effectiveness of secondary school teachers in relation to their teaching ability in order to understand the issues much better and also to appreciate the relationship that exists between these two variables. According to Mangalamma and Vardhini, instructional quality of teacher is a significant issue in teaching and learning progress. As a result, for a society to boost its human capital, there is the need to ensure that there is quality education. The corner stone of quality education is the teacher. Therefore, understanding teachers' instructional quality is a must for all modern societies.

Mangalamma and Vardhini's (2017) study employed the quantitative approach using the positivists paradigm. In relation to design, the descriptive survey was deemed appropriate. The sample comprised 100 teachers in the various secondary schools at Bangalore South District. The individual subjects or teachers were selected using simple random sampling technique. However, Mangalamma and Vardhini failed to indicate specifically which of the simple random sampling technique was used. The nature of the study demand parametric sampling technique. Therefore, using non-parametric may affect the conclusions. Nevertheless, they adopted a good scale to measure ability of teachers.

Based on the nature of the study and the adopted paradigm, it is appropriate for Mangalamma and Vardhini (2017) to employ inferential statistical tools to analyse data from such a study. As expected, they made use of Pearson's Product Moment Coefficient of Correlation and independent samples t-test and f-test to analyse the data in order to deal with the stated specific objectives of the study. These statistical tools were used appropriately to analyse the data in order to test the stated research hypotheses.

The findings that emerged from Mangalamma and Vardhini's (2017) study show that there is a statistically significant relationship between teacher effectiveness and teaching ability of secondary school teachers. Also, the results of the t and f tests show that gender and type of school management factors have significant influence on effectiveness in teaching. This means, the gender of a teacher and the managerial factors employed by a school can affect a teacher's ability and in the long run his/her effectiveness in teaching.

Though Mangalamma and Vardhini's (2017) study was able to generate good and meaningful results, it however, failed to consider certain predetermined environmental factors that affect the teachers. Example, the prior experience of teachers and the location of the school. Also, they failed to consider the judgemental role of teachers' perceived feasibility factors such as academic self-discipline in predicting their effectiveness. The betterment of a teacher is largely based on how discipline he or she is. Therefore, to understand teachers' effectiveness better, there is the need to create room for the mediating role of their academic self-discipline since it helps to enhance the effectiveness of the teacher.

Within the teaching fraternity, business teachers are perceived not to be doing well in their teaching activity (Ezenwafor & Akpobome, 2017). This situation may be as a result of the demand-driven nature of the area, which calls for more teachers to be trained in order to fill the lacuna in teacher production within business studies, particularly Accounting. According to Ezenwafor and Akpobome, tertiary institutions are trying to meet the demand of applicants who want to have business education, particularly teacher education. These demands are forcing institutions to compromise standards in order to meet the demands of the market. According to Ezenwafor and Akpobome, some institutions are admitting less qualified candidates while others are lessening the course structure for the students. These dynamics motivated Ezenwafor and Akpobome to conduct their study in order to improve business education students' performance in Accounting courses.

In carrying out the study, Ezenwafor and Akpobome (2017) employed the descriptive survey design that called for the positivists' philosophy.

However, the study population was not clearly defined, even though tertiary institutions in Delta State were the focus. They explored the opinions of 65 business educators (Accounting option) in tertiary institutions in Delta State on strategies they considered effective for teaching Accounting courses. Two research questions guided the study and two null hypotheses were tested. Survey research design was adopted and the entire population was studied without sampling because the size was small.

A 5-point rating scale questionnaire which was validated by three experts in the field was used by Ezenwafor and Akpobome (2017) for data collection. Internal consistency method was used to establish the reliability of the instrument. Data collected were analysed with Cronbach alpha and reliability coefficients of 0.86 and 0.83 were obtained for the two sections with an overall coefficient of 0.85. Copies of the instrument were administered to the respondents of the study in their institutions by the researchers. The instrument and measurement scales used were appropriate. Also, the questionnaire used was deemed to be reliable as indicated by the reliability coefficient.

Data were analysed with mean and standard deviation to answer the research questions and determine the homogeneity or otherwise of the respondents while the z-test was used to test the null hypotheses at 0.05 level of significance. Findings revealed that the respondents considered questioning and group discussion strategies effective for teaching Accounting courses. Gender did not significantly influence their mean ratings on the effectiveness of questioning strategies but did on the effectiveness of group discussion strategies for teaching Accounting courses. Ezenwafor and Akpobome (2017) concluded that the two strategies are effective irrespective of the influence of

gender. It was recommended among others, that Accounting teachers at all levels of the education system should use the two strategies for effective teaching of Accounting courses to adequately equip the products for success in employment.

Ezenwafor and Akpobome's (2017) findings are inconsistent with that of Biswas (2017) who indicated that gender, location and academic stream are factors that have effects on teachers' effectiveness with regards to secondary school teachers. Ezenwafor and Akpobome's findings are, however, meaningful and are able to fill some of the gaps in literature with regard to instructional quality, teacher education, and teacher effectiveness. However, the study failed to measure the teaching of Accounting using a more robust measurement facet. The current study will employ multiple dimensions of instructional quality in order to evaluate appropriately the input put in place to prepare the trainee-teacher. Also, trainee-teachers' academic self-discipline was considered as a mediator that can help to boost the link between instructional quality and trainee-teachers' effectiveness in Accounting education delivery.

Kwarteng's (2018) study also gauged the quality of use of pre-tertiary Accounting curriculum in Ghana's secondary schools. He used concerns-based adoption model level as a proxy. Using an equivalent status sequential mixed methods design, 155 out of a population of 402 senior high school Accounting teachers were selected at random to participate in the study. Both questionnaire and interview guide were used to collect data. All the teachers responded to the questionnaire. Out of the 155, only 30 of them were selected

on purpose to participate in the interview. Data was analysed with help of frequencies, percentages, and themes.

Kwarteng's (2018) study found that even though most teachers implemented the Accounting curriculum sustainably, others' use of the curriculum was mediocre. The quality of use of the curriculum was shaped by teachers' perceived relevance of the curriculum, level of difficulty of topics, availability of teaching aids, interest of the teacher, availability of curriculum materials, and freedom offered teachers to implement the curriculum.

Nigam and Arora's (2018) study also tried to explore the teaching effectiveness of secondary school teachers on the basis of their gender and work experience. A representative sample of 240 teachers from the secondary schools of New Delhi was randomly selected. Teaching effectiveness scale was used to assess teaching effectiveness of the secondary school teachers. The study revealed that there was a significant difference between teaching effectiveness of secondary school male and female teachers. However, no significant difference was found between the teacher effectiveness of the secondary school teachers with more than 10 and less than 10 years of teaching experience. Nigam and Arora (2018) employed only quantitative approach, as a result could not examine the issues from subjective angle.

Doğana and Yurtseven's (2018) study examined the effect of teachers' professional learning opportunities on instructional quality, which represents a combined approach of behaviourist, cognitivist, and constructivist principles in teaching. They incorporated professional learning communities, professional development days, as well as three professional development types (traditional, reform-based, and informal) to provide a comprehensive

account of teachers' professional learning opportunities. Using the extant large-scale data, the Teaching and Learning International Survey (TALIS), from 3,213 middle school teachers in Turkey, Doğana and Yurtseven found that professional learning communities and reform-based professional development activities produced statistically significant effects on instructional quality, ranging from high to moderate effects, all other professional development variables held constant.

Discussion on the results was centred on the schools for being a venue for professional learning and the potential of collaborative structures to promote teachers' development. Doğana and Yurtseven (2018) measured instructional quality using bi-dimensional variable quantitatively. The current study uses multi-dimensional to measure instructional quality using mixed methods approach. Also, they did not consider the mediating role of respondents' academic self-discipline in linking instructional quality to effective education delivery as in the case of this study.

Bhat (2020) also investigated the effect of preservice teacher education on teaching effectiveness of prospective teachers in relation to their gender and stream. The sample consisted of 200 pupil teachers of central universities of Delhi. Teacher effectiveness scale was used. The results show that the impact of pre-service teacher education training on teaching effectiveness of the pupil-teachers was found to be significant at 0.01 level of confidence. There was no significant effect of gender on teaching effectiveness of the pupil-teachers. It was found that effect of stream on teaching effectiveness of pupil-teacher was significant. The conclusions made by Bhat (2020) was

meaningful, however, he did not consider the subjective and humanistic views of the participants, not to mention the triangulation of data for confirmability.

Effectiveness of Instructional Quality in Education Delivery

In response to improving instructional quality, Ngware and Ndirangu (2006) report on the efficacy of teaching and feedback mechanisms in Kenyan higher education institutions in order to assist management in establishing a robust quality control system. An exploratory descriptive design was used in their instructional quality study. The participants were chosen at random from three public and two private universities. Seventy-nine respondents were selected from the five universities for the study using a random sampling technique. The primary data collection tool was a questionnaire distributed to all participating universities.

Regardless of its significance in quality control, Ngware and Ndirangu's (2006) study found no consistent university policy on evaluating teaching quality and its effectiveness. Without other assessment support systems, student evaluation of teaching effectiveness (SETE) was found to be ineffective, despite being commonly used where evaluation prevailed. One cannot underestimate challenges posed by the use of a small sample size in quantitative studies of this kind. Moreover, the assessment of teaching effectiveness from lecturers' perspectives instead taking the views of independent evaluators such as students and school managers is capable of presenting biases in the evaluation.

Similarly, Greimel-Fuhrmann and Geyer (2013) investigated the factors that influence student assessment of teachers. Unlike several earlier studies, the influence of possible bias on global ratings was investigated in the

sense of teaching behaviour. They considered that biases such as learners' interest in the subject or their liking for the instructor may be the product of good teaching behaviour and should not be dismissed as a simple bias of student assessment. Additionally, it focused on the students' attitudes toward assessing their teachers.

Greimel-Fuhrmann and Geyer's (2013) study adopted qualitative interviews with 40 learners from Austrian commercial colleges and quantitative survey of 2,121 students of the same institutions who were asked to rate their Accounting instructors. According to structural equation models, learners' global ratings of teachers are primarily determined by their behaviour. Notwithstanding, learners' attitudes to assessing their instructors, as well as their liking of them and interest in the subject of Accounting, all have an effect on global ratings. The findings in the study are limited the instructional quality of teaching and learning in Austrian commercial colleges.

On quality of education practices, Mollel (2015) investigated the quality of education practices in Tanzania, using Arusha District Council community secondary schools as the study area. The study aimed to analyse the measures of quality education in the selected community secondary schools; assess how schools have worked to achieve quality education in the schools in the study area; and determine what schools can do to achieve quality education in the area. The research used both quantitative and qualitative approaches in response to the objectives. The data was gathered from 83 respondents who were reached through questionnaires and interviews.

The results that emerged from Mollel's (2015) study show that the members of the community including the teachers in Arusha District are aware

of quality education indicators such as textbooks, nutrition, and infrastructure. Furthermore, the study found that the practice of achieving quality education in the district is hampered by a lack of science laboratories and science textbooks. Using 83 sample size for a quantitative study cannot guarantee generalisation of the findings of the study. Therefore, the findings in this study are restricted to the community secondary schools in the Arusha District Council.

With respect to quality of curriculum, Kwarteng (2018) assessed the quality of use of pre-tertiary Accounting curriculum in Ghana's secondary schools using concerns-based adoption model level of use as a proxy. Using an equivalent status sequential mixed methods design, 155 out of a population of 402 senior high school Accounting teachers were selected at random to participate in the study. Both questionnaire and interview guides were used to collect data. All the teachers responded to the questionnaire. Out of the 155, only 30 of them were selected on purpose to participate in the interview. Data were analysed with the help of frequencies, percentages, and themes. The study found that even though most teachers implemented the Accounting curriculum sustainably, others' use of the curriculum was mediocre.

The quality of use of the curriculum was shaped by teachers' perceived relevance of the curriculum, level of difficulty of topics, availability of teaching aids, interest of the teacher, availability of curriculum materials, and freedom offered teachers to implement the curriculum. Even though the work of Kwarteng (2018) produced reliable results, the study did not examine the specific facets of teachers' quality and the pre-tertiary Accounting curriculum. This will have helped to understand better which of the facets of pre-tertiary

Accounting curriculum in Ghana's secondary schools is influencing teachers' quality positively or negatively. Also, the effort and personal self-control of the teachers were not considered, not to mention the controlling roles of their background characteristic variables. Again, the methodology adopted created room for the researcher not to examine the issues from inductive and phenomenological perspectives.

Nigam and Arora (2018) also tried to explore the teaching effectiveness of secondary school teachers on the basis of their gender and work experience. A representative sample of 240 teachers from the secondary schools of New Delhi was randomly selected. Teaching effectiveness scale developed by Kumar and Mutha (as cited in Nigam & Arora, 2018) was used to assess teaching effectiveness of the secondary school teachers. The study revealed that there was a significant difference between teaching effectiveness of secondary school male and female teachers. No significant difference was found between the teacher effectiveness of the secondary school teachers with more than 10 and less than 10 years of teaching experience. Nigam and Arora's study, however, failed to look at the effect of controlling variables such as age and marital status on the study variables. Also, the study adopted quantitative approach which created room for the researchers not to examine the issues from a more humanistic perspective.

Effectiveness of Accounting Education Delivery

Comparatively, Chen et al. (2013) investigated whether the effectiveness of online Accounting education versus conventional in-class delivery varies with course level. The study polled students administered to read Accounting or Financial Accounting courses to offer their perspectives

on the various dimensions of instructional quality. The findings indicate that the course level is relevant when determining whether or not to offer online Accounting courses. When adjusting for other factors, the outcomes analysed in advanced courses were substantially more desirable for conventional classroom environments than for online, whereas the delivery method was not relevant in principles courses.

The findings emanating from the study by Chen et al. (2013) indicate that the course level is relevant when determining whether or not to offer online Accounting courses. When controlling for other factors, the outcomes analysed in advanced courses were substantially more desirable for conventional classroom environments than for online, whereas the delivery method was not relevant in principles courses. The findings also extend support to the idea that blended learning, or providing a few on-campus class meetings for a mostly online course, might be ideal irrespective of course level, but that course level is theoretically significant when settling on the combination of face-to-face versus online teaching.

Since randomisation and experimental modification would be practically impossible for any analysis of this kind, the Chen et al. (2013) study was unable to assume confidently that delivery method influenced performance. There were no students from a principles-level financial Accounting course in the study. As a result, the study cannot investigate potential three-way associations between delivery channels, subjects, and course level.

Students' satisfaction is critical in assessing education service quality at higher institutions. In order to stay competitive with other higher education

institutions (both public and private), the institution must constantly develop, retain, develop ties and determine the level of student satisfaction with distance education. Gonu and Agyapong (2016) determined the satisfaction of students with present services provided by the College of Distance Education (CoDE) at UCC, and also the association between quality of service dimensions and student satisfaction. The study adopted a descriptive survey design under the quantitative research approach. The study collected data from 300 CoDE, UCC students in the Upper East Region through a self-administered questionnaire using a simple random sampling technique.

To investigate the extent of student satisfaction and the correlation with service quality, both descriptive and inferential statistical analyses were used by Gonu and Agyapong (2016). All in all, the findings show higher level of student satisfaction. Also, the results suggest a strong nexus between student satisfaction and the quality of service provided under the distance education programme. The assessment of the learner satisfaction in this context is limited to just CoDE, UCC students in the Upper East Region of Ghana, making it impossible to generalise the findings of the study, not to mention comparing such a non-conventional mode to traditional face-to-face mode of education. Also, single approach was used which did not create room for the researchers to examine the issues from multidimensional perspectives.

Using online platforms to deliver educational content, some institutions have developed blended courses that combine the advantages of online instruction with traditional face-to-face teaching. Fortin et al. (2019) compared Accounting student performance and satisfaction in two blended formats with similar content and design, that is, face-to-face versus online plus

courses. It also assesses the characteristics of students who choose the latter option over face-to-face plus courses. Students in four advanced Accounting subjects were surveyed and their course performance was obtained.

Results from Fortin et al. (2019) study indicate that the main determinants of students' decision to register for an online plus course are retaking the course, increased weekly work hours, and belief that this type of blended course facilitates learning. Furthermore, the results show that students in advanced Accounting courses with equivalent content and design perform similarly and have the same level of course satisfaction across course delivery formats, as hypothesised under equivalency theory. Again, this study examined the issues from only a positivists' perspective. Examining the issues using mixed methods would help the researcher to understand the issues from a broader and insider perspective.

Influence of Instructional Quality on Accounting Education Delivery

Among the numerous studies investigating influence of learner background information and instructional variables on learning outcomes, only a few of them have examined the effect of these variables and their intervening roles on students' learning in Accounting education context. The examination of the intervening role of trainee-teachers' background characteristics in the nexus between their perspectives on instructional quality and Accounting education delivery has become a necessary journal in the face of the numerous factors discovered by researchers in the literature of distance education. This sub-section provides the review of empirical studies relevant to the course of learner background information and instructional variables on Accounting education outcomes.

With respect to learning outcome within a blended learning environment, Lim and Morris (2009) assessed how instructional and learner variables affected learning outcomes in a blended education programme for undergraduate students. A sample of undergraduate students participating in a learner and programme evaluation course at a south eastern university in the United States were polled in this study to evaluate student learning performance. The participating students were 21 male and 39 female making a total of 60 students. Of the 60 participants, 38 were freshmen or sophomores, while 22 were juniors or seniors.

The analysis of the field data that emerged from Lim and Morris's (2009) study suggest that age, prior teaching experience with distance learning opportunities and average study time are the learner antecedents that differentiate learning outcomes among categories of students. The findings also show that the effect of learner, instructional, and motivational variables on learning outcomes was discovered to be consolidated around a variable in learning application. Relevant learner-specific variables such as age, gender, and marital status were not considered in the assessment of learning outcomes in a blended education programme.

Dankyi and Dankyi (2013) examined the perceived impact of UCC distance education on teacher productivity in Kwahu West Municipality basic schools. The design of the study included both quantitative and qualitative research approaches, as well as a descriptive survey. Both stratified and purposive sampling techniques were used to sample 201 participants, which included 46 headteachers, 154 junior high school teachers from the municipality's seven circuits, and the centre's coordinator. The study

instruments were a questionnaire and an interview schedule. Both descriptive and inferential statistics were used to analyse the data in response to the study objective.

The findings, as presented by Dankyi and Dankyi (2013) show that the CoDE of UCC's distance teacher education programme is achieving its goal of improving the academic and professional competencies of a significant number of teachers in the area's primary schools, increasing their performance levels in subject matter knowledge, instructional preparation, lesson delivery mode, and student evaluation. These positive outcomes are not without limitations, such as good time management and the ability to effectively balance work and study. The source of the successes chalked by the CoDE of UCC's distance teacher education programme has not been thoroughly examined in the study as a result of the authors' failure to deeply delve into instructional quality from both positivists and naturalists' perspectives. Similarly, they could have looked at the performance of the teachers trained through both conventional and non-conventional modes comparatively to have a better understanding of the issues and to know which of the mode is more viable.

Mbwesa (2014) reported that the assessment of instruction in distance education could not be done without giving credence to quality standards and variables established to guide instruction in higher education. As a result, she outlined ten instructional quality dimensions namely faculty support, student support, interactive tasks, pedagogical, evaluation and assessment, infrastructure, institutional quality assurance mechanism, institutional credibility and accreditation, course development, and information and

publicity dimension. The current study adapted these facets of instructional quality to measure the instructional quality exposed to trainee-teachers in Accounting education in both conventional (regular) and non-conventional (distance) modes of education.

Mbwesa (2014) investigated the instructional quality constructs as viewed by distance learners, as well as the impact of this perception on learners' satisfaction with the distance education course. Emphasis was not on conventional students, not to mention the comparative analysis of the two modes. The researcher's questionnaire, Students Perceived Quality Questionnaire (SPQQ), was the tool for the primary data collection. The data for the study was gathered through a random selection of 248 students enrolled in a Bachelor of Education (Arts) programme under distance learning at the University of Nairobi in Kenya. The findings aptly illustrated that the theory predictors were all directly associated with students' perceived satisfaction with the distance education course. Learners appeared to value fair and consistent learning evaluation criteria, as well as regular assessments of teaching and learning. Regarding the limitations of the study, the instrument of data collection was questionnaire designed using only close-ended items which does not pave way for respondents to provide detailed views.

The importance of the role of a competent instructor as a proxy for quality of faculty is also seen as a significant predictor of education delivery systems worldwide. To provide empirical evidence for quality of faculty, Peterson (2015) examined the impact of teacher competence on students' performance. Specifically, Peterson looked at instructor competence in terms of his/her ability to demonstrate effective command over possession of subject

matter knowledge, lesson presentation skills (methods and questioning skills), class management and control and lesson note preparation. The study, therefore, focused on investigating the competence levels of second cycle school teachers in the aforementioned four areas of instructor competence at Komenda Adina Aguafo Abirim district of the Central Region of Ghana. A sample of 112 teachers was obtained from an accessible population of 121.

The simple random sampling technique was used by Peterson (2015) to select the sample. Descriptive design was used. Also, a modified Botswana's Teaching Competence Instrument (TCI) as well as 50-item observation guide with reliability coefficients of 0.93 and 0.83 respectively were used to collect data. The findings show that majority of the teachers demonstrated low level of competence. Also, teacher competence was central to the students' success. Again, the study found that most instructors demonstrated low level of effectiveness in lesson plan preparation and lesson evaluation. Peterson's (2015) finding parallels that of CoDE (2016) monitoring and survey of report which found 30 per cent of trainee-teachers to have challenges with professional preparation of lesson plans. There was serious absence of instructional materials which affected quality instruction and students' performance.

Again, most teachers failed to use teacher-learner materials. Peterson (2015), therefore, recommended refresher and in-service programmes for teachers from time to time in order to enhance their competence and quality of lessons delivery. However, a serious flaw in the study was that he did not compare opinions as expressed through the questionnaires with the actual classroom observations made in the form of triangulation. This could not

minimise respondents' exaggerations with respect to the self-appraisal items used in the study. This in fact, had serious implication for validity of the findings of the study.

With respect to certain barriers that affect the overall quality of distance learning, Markova et al. (2017) reported on some quality dimensions. The objective of Markova et al. was to report on the findings of a study carried out at the Ural State University of Economics and the Ural Federal University in Russia on learner-focused quality measures such as interaction and collaboration, instructional design and delivery, student evaluation, and learner support services. Approximately 800 distance learning degree students were sampled for the study. They completed a 26-question online questionnaire to ascertain areas where university administrators, employees, and technicians should develop to achieve greater online distance education delivery.

Furthermore, the study of Markova et al. (2017) showed that while degree students generally view their distance learning experiences strongly, they encounter some learning challenges, especially in terms of productive teaching practices and patterns of communication. The study failed to regress instructional quality dimensions such as interaction and collaboration, instructional design and delivery, student evaluation, and learner support services on distance education delivery.

Heck (2017) also examined the relationship between teacher quality as an organizational property of schools and students' achievement and growth rates. A sample of 315 at Florida Atlantic University was used. One of the specific objectives of the study examined new roles for student support

services in distance learning. From respondents' perspective, the study revealed some quality variables of support services that were relevant for their satisfaction. The study revealed that quality infrastructure and learner support service have a significant positive relationship with students' achievement and growth rates. However, gender, age and marital status of students were seen as variables without any impacts on infrastructure quality and students support services. Nevertheless, respondents' study institution does have an impact on the study variables. However, the author did not specify the population and criteria for their sample selection as well as the delimitation of the study for readers to appreciate the representativeness of the sample and the authenticity of the findings.

Fong-Yee and Normore (2017) also examined the impact of instructional quality on student achievement. The work shows that quality teachers; that is, teachers with high level of educational and professional qualifications, have more positive impact on students' academic achievement than low-qualified ones. Similarly, Khan (2017) also examined the professional development of teachers, focusing on the field-based teacher development programmes in Chitral, Pakistan. One of Khan's objectives examined student support systems in distance learning, which revealed that when students were asked to name the factors that played an important role in aiding their learning and success, they cited the highly qualified facilitator. When students were asked to name the significant barriers to their learning experience, they named the poor or incompetent facilitator.

However, as indicated in Khan's (2017) study, gender, age and marital status have no statistical effects on students view on their teachers' quality

with regard to educational and professional qualifications. Therefore, the facilitator or instructor in distance learning system can either make or break the system, so important consideration must be given to the role the instructors play in such a system (Khan, 2017).

Gyimah et al. (2018) investigated the factors that influence students' choice of non-conventional programme of study at the CoDE, UCC. From a positivist perspective, the research took a pragmatist philosophy. The study employed a descriptive research design using the simple random sampling technique to select 2324 students at all levels from the 63 study centres of distance education programmes located across Ghana. A self-administered questionnaire was used to collect data and analysed using the descriptive statistics (frequencies and percentages). The research found that students' personal interest in a particular course, aspirations in life, and the reputation of the institutional certificate all affect their choice of a course of study at UCC-CoDE. The study failed to assess the effect of demographic variables such as type of institution, gender and prior teaching experience, among others on students' teaching effectiveness.

Both conventional and non-conventional modes of education are critical to expanding educational access and growing higher education opportunities, particularly distance education. However, the effectiveness of any Accounting education programme is dependent on several factors with instructional quality being championed as the most often cited predictor (Fong-Yee & Normore, 2017; Heck, 2017; Mbwesa, 2014; Peterson, 2015; Vermula, 2013; Walters, 2019). Instructional quality dimensions play specific role in fast-tracking Accounting education programme, therefore, taking a

critical look at specific factors is tantamount to providing some satisfactory measurement for quality of educational instruction and delivery.

Also, the study of Clotfelter et al. (2019) revealed that gender and age have significant effects on instructional quality dimensions. Gender and age differences in the perception of quality in distance learning suggest a need for considering these differences in developing, delivering, and supporting distance learning. The study revealed that the female students, compared with the male students, perceived all quality domains and dimensions as being more important in evaluating distance learning quality. Also, old students perceived all quality dimensions more positively than young students. In addition, lack of support for female learners was found in the perceived barriers to distance learning advancement.

The findings that emerged from Clotfelter et al. (2019) study imply that even though distance learning has contributed to widening access to education and reducing the gender disparity in education, there still exists a lack of gender-considerate supports in Asian distance education. Clotfelter et al. (2019) could have employed mixed methods approach to understand the issues from both objective and subjective perspectives. Also, they could have considered the views of teacher-students who are in the conventional mode such as regular face-to-face mode of education delivery. This would have helped in analysing the issues comparatively for better understanding.

Considering how students' perceptions of non-conventional mode (online learning) environments affect their acceptance and use, Larmuseau et al. (2019) investigated the perceived instructional design quality with a focus on Merrill's First Principles of Instruction and learners' acceptance of the

Technology Acceptance Model (TAM) based on perceived usefulness and perceived ease of use. The study's first specific objective was to look into the impact of perceived quality of instructional design on student acceptance. The second goal was to examine the effect of learner acceptance and instructional quality on the quantity (i.e., course activity) and quality (i.e., course performance) of usage. A Moodle-based online learning community for learning French as a foreign language was investigated in this study.

Furthermore, the study of Larmuseau et al. (2019) was conducted in the Flemish region of Belgium. The respondents were 161 university students in their first year of study in Psychology and Educational Science. According to the study's structural equation modelling (SEM), perceived instructional quality has a substantial positive influence on students' acceptance. Moreover, learners' perceived instructional quality influences the quality but not the quantity of use, while their acceptance of the online learning has no effect on use. The study's assessment of acceptance and use of online distance education is not synonymous with effective distance education delivery. This calls for a holistic examination of the influence of perceived instructional quality on Accounting education delivery, focusing on both conventional (regular) and non-conventional (distance) modes in order to compare.

In relation to the impact of mentors' support services and infrastructure qualities on effectiveness of education delivery, Walters (2019), examined the effect of availability and utilisation of educational facilities on trainee-teacher performance in two public universities in the Central region of Ghana namely, UCC and UEW. The study aimed at finding whether the institutions have the required educational facilities to support tutors and trainees to ensure quality

instruction and trainee-teacher effectiveness. The descriptive design was used for the study. The study purposively sampled 139 respondents. Trainee-teachers were, however, randomly sampled. Even though, the sampling procedure was comprehensive, the total population of trainee-teachers sampled and how it was selected were not specified.

Walters' (2019) study made use of both descriptive and inferential statistical tools in analysing the data. The results show that quality infrastructure and learner support services of the institution have significant positive relationship with trainee-teacher effectiveness and the delivery of education in general. However, the trainees' gender, age and study institution have no significant effect on their effectiveness and their perceptions toward the institutions' infrastructure and learner support services qualities.

On the basis of the findings, Walters (2019) recommended that the various library facilities in the institutions should be stocked with current books for trainee-teachers. Also computer laboratories should be established to enable science tutors demonstrate to trainees how certain science concepts are taught. The study, however, did not perform any homogeneity test to find out whether the distribution was normal or skewed. Therefore, one cannot tell whether it was appropriate for the study to use mean, standard deviation, Pearson product moment correlation and the linear multiple regression analysis since these statistical tools are used when the distribution is normal.

Senyamator et al. (2020) investigated the predictive ability of instructional quality on trainee-teacher efficacy in distance education delivery in Ghana, with a focus on CoDE, UCC. A quantitative approach was used in conjunction with the descriptive survey design. A total population of 51,456

people was sampled, including 1,837 CoDE course tutors and all CoDE learners at 76 study centres providing education programmes. Out of the total population, the study sampled 726 people, including 397 trainee teachers and 329 course tutors. The proportionate stratified random sampling technique was adopted to sample the participants. The data was analysed using the PASW Version 21.0, Test Analysis for Surveys (TAFS).

The data were analysed using linear multiple regression. The findings from the study of Senyame et al. (2020) showed that the dimensions of instructional quality that most accurately predicted trainee-teacher effectiveness were pedagogical quality and quality evaluation. Also, as trainee-teachers show a high degree of competence in subject expertise, lesson presentation skills, class management and control, and preparing lesson notes, they enhance the magnitude by which their level of instruction meets the college's pre-specified goals and expectations. They reduced distance education delivery to just trainee-teacher effectiveness by omitting other relevant measurement of teaching service effectiveness delimits the contribution of the study to policy and practice. Also, using single approach to analyse the issues makes it less acceptable to the society as compared to the use of mixed methods approach that uses both the positivists and naturalists paradigms.

Andoh et al. (2020) examined the insights of postgraduate distance education students at UCC. The authors looked specifically at the relationships between UCC postgraduate distance students' characteristics and satisfaction, as well as their perceptions of physical facilities, staff-student relationships, facilitator quality, and learner support services. The factors that influence

student satisfaction with physical facilities, the staff-student relationship, facilitator efficiency, and student support services were also investigated.

Andoh et al. (2020) study conducted a census using a questionnaire to gather data from 125 students. Satisfaction was found to be significantly linked to study location and semester of study but insignificant for age, gender, or course of study. The participants were generally highly satisfied with the physical facilities, the staff-student relationship, and the facilitator quality, but they were dissatisfied with the learner support services. The three areas that inspired students were considered to be predictors of their satisfaction. About the study's limitations, its findings cannot be generalised given the fact that it sampled students from Tamale, Takoradi, and Sunyani postgraduate study centres of UCC postgraduate distance education, 2016/2017 academic year. Also, only non-conventional mode of education such as distance was considered. As a result, they could not compare the perspectives of students from both conventional and non-conventional modes.

Background Characteristics and Trainee-Teachers' Effectiveness

Background characteristics are quantifiable measures of a given population at a defined place, such as age, gender, education, and prior experience. These characteristics provide researchers with demographic details on their sample and make the classification of the sample meaningful and the analysis of the findings meaningful (Zikmund, 2019). Trainee-teachers demographic factors have been described as significant in the evaluation of their instructional delivery and quality of instruction they received. These variables have the potential to increase the effectiveness of trainee-teachers accounting education instructional delivery (Mah'd & Mardini, 2020). There

are a number of demographic variables that can be considered as controls, but this study focused on gender, prior teaching experience and study institution.

Studies have related these variables to instructional quality, academic self-discipline and teacher effectiveness (Ezenwafor & Akpobome, 2017; Faidley, 2018; Stejskalová et al., 2019; Wortman et al., 2018). However, research investigating the impact of demographic characteristics on trainee-teachers perceived instructional quality and the effectiveness of their instructional delivery. A research conducted by Faidley (2018) to compare learning outcomes from online and face-to-face accounting courses found that students performed significantly better in the face-to-face classes than the online sections. Also, female students scored significantly higher than male students in both methods of instruction. Accounting composite score, Accounting math score, Grade Point Average (GPA), gender, prior teaching experience and method of instruction all were significantly related to final course grade.

Some researchers move towards the idea that prior knowledge and experience for Accounting education students and their study institution might have a role in filling the gap between learning and practice in Accounting education. In 2016, Amabile and DeJong conducted a study with 161 undergraduate students to examine the effect of direct work experience on subsequent knowledge acquisition. They noted that the students that had direct experience with tax were more competent in the learning process of the unstructured task, than the inexperienced students. In other words, students who have prior experience are more flexible in dealing with irregular transactions (transactions of the real world) than inexperienced students.

Amabile and DeJong concluded that direct learning experiences could feed the students' knowledge and skills.

Furthermore, the results that emerged from Stejskalová et al. (2019) study show that male teachers and also teachers with relevant prior experience accept the new way of teaching better than female teachers and teachers with no prior teaching experience respectively. This means male trainee-teachers and trainee-teachers with prior teaching experience are able to demonstrate high level of effectiveness in their instructional delivery. The results of the t and f tests that emerged from Mangalamma and Vardhini's (2017) study also show that gender and type of institution have significant influence on effectiveness in teaching. This means, the gender of a teacher and the managerial factors employed by a school can affect a teacher's ability and in the long run his/her effectiveness in teaching.

Contrary to other finding from researchers, Stejskalová et al. (2019) found that there is no significant difference in the perception of respondents with regard to their instructional quality and effectiveness of instructional delivery. Also, even though the study of Stejskalová et al. looked at differences among respondents with regard to their gender and previous experience with Accountancy education at secondary school, they did not consider analysing comparatively traditional and non-traditional teaching methods in Accounting, not to mention the modes. Ezenwafor and Akpobome (2017) also concluded that irrespective of the influence of gender, teachers perceived their instructional quality and instructional delivery in the same direction and level. Ezenwafor and Akpobome's (2017) findings are inconsistent with that of Biswas (2017) who indicated that gender, location

and academic stream are factors that have effects on teachers' effectiveness with regards to secondary school teachers.

Bhat (2020) also investigated the effect of preservice teacher education on teaching effectiveness of prospective teachers in relation to their gender and stream. The sample consisted of 200 pupil teachers of central universities of Delhi. The results show that the impact of pre-service teacher education training on teaching effectiveness of the pupil-teachers was found to be significant at 0.01 level of confidence. There was no significant effect of gender on teaching effectiveness of the pupil-teachers. It was found that effect of stream on teaching effectiveness of pupil-teacher was significant. The conclusions made by Bhat (2020) was meaningful, however, he did not consider the subjective and humanistic views of the participants, not to mention the triangulation of data for confirmability.

The Role of Trainee-Teachers' Academic Self-Discipline in the Nexus between Instructional Quality and Accounting Education Delivery

Learning entails letting go of habits and things that make studying tedious and stressful, and adopting habits and ideas that make studying more comfortable and productive. Learners are in the business of fighting for the best grades and competencies to secure jobs, but many do not know that all these come naturally if the emphasis is on the enthusiasm to study with self-discipline. The preceding suggests the need to establish the role of students' self-discipline and effectiveness in the influence of instructional quality on Accounting education delivery.

The purpose of Celik's (2015) study was to investigate the mediating and moderating effects of the academic self-efficacy in the relationship

between student academic support and personal growth initiative. The Turkish version of the Personal Growth Initiative Scale, the Student Academic Support Scale, and the Academic Self-efficacy Scale were administered to a sample of 237 university students, between the ages of 18 and 23. The results showed that academic self-efficacy and student academic support were positively related to personal growth initiative. Regression based mediation analysis indicated that the effect of student academic support on personal growth initiative was mediated by academic self-efficacy.

However, the effect of student academic support on personal growth initiative was not moderated by academic self-efficacy. These findings suggested that the student academic support was both direct and indirect effects on personal growth initiative. The methodological approach used in analysing the mediating and moderating effects, with regard to quantitative analysis, is in line with the current study. However, the study variables are not the same. The literature reviewed show that most researchers have not analysed the mediating or moderating effects of academic self-discipline.

According to Simba et al. (2016), in Muhoroni Sub-County, Kenya, pupils' academic performance has received little attention in relation to academic self-discipline. They, therefore, determined the level of academic self-discipline and extent of impact of it on academic performance among class eight pupils in the sub-county's public primary schools. The study adopted descriptive survey and correlational research designs. The study population comprised 2,450 class eight pupils in the sub-county's public primary schools. From 34 randomly selected schools, 817 pupils were selected by stratified random sampling. Questionnaires were used to collect data on

academic self-discipline and academic performance of the pupils. Reliability coefficients of the questionnaires were 0.83 and 0.97 for questionnaire on discipline and academic performance respectively. The face and content validity of the questionnaire were ascertained by experts' judgements.

Results that emerged from Simba et al. (2016) study indicated that 46 (5.6%), 214 (26.2%), 413(50.6%) and 144 (17.6%) of the pupils had low, moderate, high, and very high academic self-discipline respectively. Also, academic self-discipline related positively with, and accounted for 23% of variance in the pupils' academic performance ($R = .480$, $\beta = .480$, $R^2 = .230$, $p < .05$). The study recommended enhancement of academic self-discipline among the pupils for improvement of their academic performance. This may mean that academic self-discipline can mediate effectiveness of trainee-teachers, therefore, it is appropriate to examine it within the context of trainee-teachers' instructional quality and Accounting education delivery.

Non-conventional mode of education such as e-learning environment makes learning process more efficient and attractive. However, the possibility of learning anytime and anywhere in e-learning environment requires additional attention to motivate students to acquire knowledge and prevent drop-outs (Gorbunovsa et al., 2016). The study of Gorbunovsa et al. aimed at proving that academic self-discipline in daily routine knowledge acquisition process could be considered as a key parameter to improve learning outcomes. They prove this statement by data analysis of learner activity levels within collaborative e-learning environment and achieved appropriate competence levels.

Gorbunovsa et al. (2016) found that academic self-discipline has positive impact on learning outcomes. Achievements at the end of the learning course do not depend on student initial competence levels. Contrariwise, academic self-discipline is the key factor which influences learners and allows them achieving main goals. Accordingly, academic self-discipline in daily school routine knowledge acquisition process is the key indicator to improve learning outcomes. On one hand, teaching staff ought to care about student motivation and make steps to strengthen this spirit during whole educational process.

On the other hand, Gorbunovsa et al. (2016) have to keep in mind that the motivation needs to be replenished in order to maintain it at least at the previous level. To achieve the goals, crucial importance ought to be dedicated to the academic self-discipline of learners. Therefore, it is appropriate for the current study to look at the mediating role of academic self-discipline in the relationship between instructional quality and trainee-teachers' Accounting education delivery.

According to research on self-regulated learning, self-regulation of effort mediates the association between individual traits and academic performance. Academic self-efficacy and conscientiousness are two individual traits that predict academic performance in college students. Less attention has been given to the mediation links and the confounding effect of traits on self-regulation of effort. Jung et al. (2017) defined self-regulation of effort in academic settings as academic self-discipline and examined the relationships between non-cognitive predictors, cognitive predictors, traits, and academic outcomes.

Jung et al. (2017) found academic self-discipline mediated the relationship between academic self-efficacy and academic performance, after controlling for conscientiousness and performance scores. The importance of academic self-discipline in academic performance was addressed. However, they failed to look at it from the subjective perspectives. Also, Jung et al. only controlled for the academic self-discipline facet of conscientiousness, but did not consider its mediating or moderating roles.

Mbaluka (2017) also investigated the impact of student's self-discipline and parental involvement on academic performance. The study sought to determine whether student's self-discipline and parental involvement in student's academic activities have any impact on student's Iowa Test of Basic Skills (ITBS) scores or on their GPA. The study was a quantitative, cross-sectional study in which multiple regressions were used to investigate the relationship(s) between student self-discipline and parental involvement with students' ITBS scores and GPA. Due to challenges of collecting sufficient data, the study was done in two phases: a preliminary study involving 16 students in schools in the Texas Conference of the Seventh day-Adventists and later a primary study which utilised archived data from the Cognitive Genesis (CG) study.

Results from Mbaluka's (2017) study indicated that students' self-discipline and parental involvement are significantly correlated with students' ITBS scores and GPA. Yet, some variables showed stronger correlation with the dependent variables than others. Students' self-discipline had a higher correlation with GPA than ITBS scores. On the other hand, parental involvement showed a higher correlation with ITBS than GPA. Of all the

scales of self-discipline, student's diligence presented the highest correlation with ITBS scores while parenting had the strongest correlation with ITBS scores among all the parental involvement scales. Students' diligence, parenting and volunteering have a significant positive correlation with ITBS at $p < .001$ each.

Mbaluka (2017) concluded that students' self-discipline and parental involvement are crucial factors in academic performance. Among the subscales of self-discipline, diligence showed the highest positive correlation with academic performance while distractions showed the highest negative correlation with academic performance. Combined, students' self-discipline and parental involvement revealed significant impact on academic performance. Boys showed to be more prone to distractions, hence portraying less self-discipline than girls. In Mbaluka's study, students' academic self-discipline was treated as independent variable. However, in the current study it was used as a mediator to see its intervening effect on the relationship between instructional quality and effectiveness of Accounting education delivery.

Osman (2020) examined the indirect association between self-efficacy, styles of leadership, and academic employees' productivity in Malaysian higher education institutions that provide online distance learning. This research sampled 206 academic employees from online distance learning higher education institutions in Malaysia. A model was built, then tested and analysed using the Partial Least Squares (PLS) technique. For the analysis, Smart PLS 2.0 and SPSS 18.0 were used to test the hypothesis and evaluate the participants' profiles, accordingly.

According to the findings of Osman's (2020) study, self-efficacy exerts a positive and significant impact on the nexus between leadership styles and academic employee's outputs in Malaysian online distance learning higher education institutions. The results indicated that it is critical for online distance learning higher education institutions' leaders to adopt appropriate leadership styles and encourage self-efficacy in order to ensure their academic employees' performance are elevated to greater heights and their institutions' survival. Assessing the indirect relationship of self-efficacy, leadership styles and academic employees' performance using academic employees from online distance learning higher education institutions to the neglect of students cannot be referred to as an independent evaluation. Again, Osman (2020) employed only quantitative approach just like most of the studies reviewed.

In their brief report, Michaelides and Durkee (2021) present a preregistered replication study of their finding using secondary data obtained from a published article by Jung et al. (2017). Despite minor differences in the sample, the measures and the analysis approach, the replication supported the original claim that self-regulation was predictive of academic achievement for undergraduate students, while self-discipline was unrelated to the outcome. The positive association for the self-regulation variable with academic achievement was smaller, but in the same direction as in the original study. Findings from both studies support the assertion that only few studies have looked at academic self-discipline of students as a mediator to their instructional quality and effectiveness. The few studies that even considered academic self-discipline used quantitative approach, without looking at it from the qualitative perspective.

Lessons Learnt

From the study I have learnt that for a trainee-teacher or preservice Accounting teacher to teach effectively and efficiently, he or she must be exposed to quality instruction in the area of pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling; though, trainee-teachers' academic self-discipline can help enhance the influence these facets of instructional quality have on trainee-teachers' effectiveness and Accounting education delivery in general. Similarly, factors such as trainee-teachers' gender, their study institution, and mode of education delivery can foil or lift the predicting roles the various facets of instructional quality have on trainee-teachers' effective teaching. Therefore, there is the need to control for these variables in the model.

In addition, general deductions from the theories reviewed indicate that institutions who are able to design their preservice preparation programmes such that trainee-teachers are exposed to quality instruction are likely to produce teachers with demonstrated effectiveness in the teaching of Accounting. This situation becomes manifested significantly when the trainee-teachers possess behaviours that enable them to become persevering in all it takes to properly behave academically and professionally. This means, when institutions ensure quality instruction and also when trainee-teachers demonstrate meaningful level of academic self-discipline, they are likely to be effective which in the long run will lead to increase in Accounting education delivery as a whole. Also, there is a methodological argument that combining quantitative and qualitative approaches in a single study is appropriate because it makes the findings more acceptable to the consumer.

Generally, the empirical studies reviewed by the researcher reveal the following aspects:

- Instructional quality dimensions such as pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling are essential to teachers' effectiveness and Accounting education delivery in general.
- Accounting trainee-teachers generally perceived the instructional quality of their respective institutions in positive terms.
- Accounting trainee-teachers rate their teaching effectiveness high.
- There is more or less non-uniform response in favour of effective teaching and effective Accounting education delivery irrespective of the gender, study institution and modes of delivery.
- Trainee-teachers' academic self-discipline was considered as an intervener in predicting the influence of instructional quality on trainee-teachers' effectiveness and Accounting education delivery in general.
- The correlation between instructional quality and trainee-teachers' effectiveness was positive and moderate.
- Most studies indicate that Accounting trainee-teachers are homogeneous group.
- Accounting trainee-teachers who are exposed to quality instruction are able to demonstrate high level of effectiveness in the area of professional values, attitudes, knowledge, and practices.
- Most of the studies reviewed employed quantitative approach and looked at the issues from a single mode. Therefore, it is appropriate to assess the

issues comparatively using both conventional and non-conventional modes of education.

Research gaps identified from the empirical review were as follows:

- There is scarcity of literature existing on the predicting roles of instructional quality on trainee-teachers' effectiveness with regard to Accounting education delivery.
- Trainee-teachers' academic self-discipline can mediate the power of instructional quality on effective teaching.
- Gender and study institution are factors that can influence trainee-teachers' effectiveness and education delivery in general.
- Moreover, most of the studies (Browne et al., 2018; Chen et al., 2013; Engel, 2020; Foster, 2019; Srdar, 2017) in this field are mostly carried out in developed countries.
- Most of the researchers made use of mono-facet or bi-facet components to create latent or composite variables (Metcalf et al., 2019; Srdar, 2017). To that extent, the constructs used in these studies may be said to be skewed or invalid. Using multi-facets dimensions, as in the case of this study, help to measure composite variables from many angles in order to have a broader understanding of the issues.
- Most of the studies measured responses to the various close-ended items on dimensions of instructional quality and Accounting education delivery using five-point discrete scale measurement (Browne et al., 2018; Chen et al., 2013; Engel, 2020; Foster, 2019; Metcalfe et al., 2019; Srdar, 2017). In addition, most of the studies used inferential statistical tools such as Pearson product moment correlation, independent samples t-test, one-way

ANOVA, MANOVA, and multiple regression analysis to analyse the data. These statistical tools are used when the data are measured numerically using discrete scale data. Therefore, the current study expanded the scale to seven-point to ensure high level of reliability.

- There is a contradiction that whether gender, study institution, and mode of education delivery have effect on trainee-teachers' effective teaching and education delivery in general.
- In some of the studies (Ezenwafor & Akpobome, 2017; Mollel, 2015; Shobhana et al., 2014) the sample size was relatively small to come to any generalisation or conclusion. Also, examining the issue from a single standpoint did not bring the issue out clearly and convincing. Therefore, it is appropriate to examine the issues using large and representative sample size and also using both quantitative and qualitative approaches concurrently in a meaningful manner for better outcome.

Conceptual Framework

Based on the ideas that emerged from the review of related multiple theories and the empirical works, the researcher was able to conceptualise the argument of the study into a coherent model. In other words, the conceptual framework, as presented in Figure 1, took into consideration the possible factors from the literature and from observations to derive the dependent, independent, mediating and control variables.

The dependent variable was effectiveness of Accounting instructional delivery which is made up of five dimensions: professional values and attitudes, professional knowledge, professional practices in relation to

managing the learning environment, professional practices in relation to teaching and learning, and professional practices in relation to assessment.

In relation to the independent variables, five dimensions of instructional quality were considered. These dimensions were pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling. According to Mbwesa (2014), assessment of instruction cannot be done without consideration to quality standards and variables established to guide instruction in higher education. As a result, Mbwesa (2014) outlined 10 quality dimensions which influenced me in adapting her instructional quality dimensions for this study. Trainee-teachers' academic self-discipline was treated as mediating variable while gender, study institution, prior teaching experience and mode of education delivery were treated as controls.

The study assumed that undergraduate Accounting education programmes in Ghana consider the five dimensions of instructional quality depicted in the conceptual model as those that really defined both conventional and non-conventional learners' pedagogical content knowledge dimension. This dimension refers to learning activities and instructional methods that promote learner interactions in various forms of learning as well as delivery of suitable and quality content to learners. Faculty quality dimension deals with policies and procedures for engaging high calibre of course facilitators and support for their welfare.

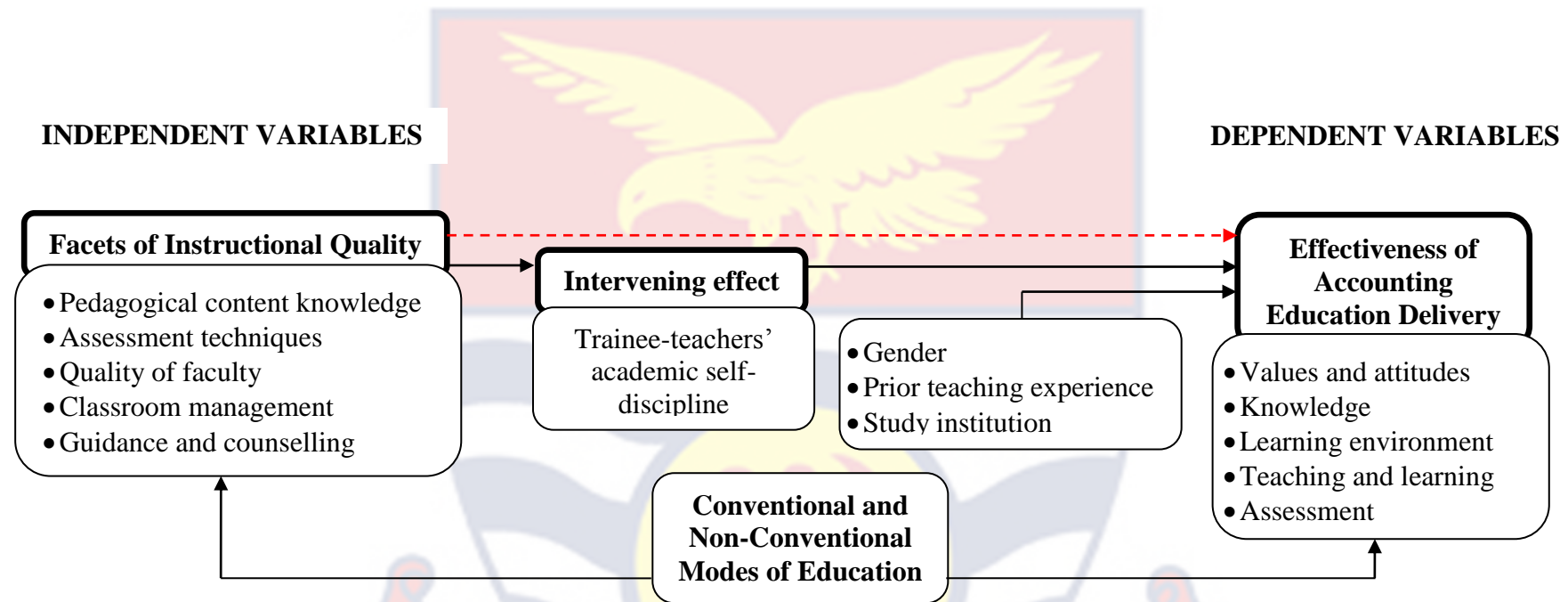


Figure 1: Model on the Mediating Role of Academic Self-Discipline in the Link between Instructional Quality and Accounting Education Delivery in Ghana.

Source: Author's construct (2021)

The guidance and counselling support dimension deals with policy and guidelines for technical, financial, psychological, social, and administrative support, flexible fee payment systems, timely provision of study materials that are individualised and tailored to suit current needs and trends. The assessment techniques dimension refers to activities and policies concerned with periodic students' learning assessment and feedback including trainee evaluation of their instructors (facilitators). Classroom management refers to the capacity of an instructor to keep order in the classroom, involve students in learning, and seek the participation of students in all classroom activities. It is the responsibility of the teacher to control students' behaviour in the classroom and coordinate their learning experiences for students to attain positive academic excellence.

Quality teaching or instruction does not exist independent of quality learning and application or transfer of learning to practical situations. To ensure high level of instructional quality on the part of trainee-teachers, there is the need to develop and implement a system for high-quality teaching that is predicated on curricula, assessment, and instruction as they facilitate all learners' attainment of deep understanding of the disciplines and concepts (Afalla & Fabelico, 2020; Amoono, 2019; Burgess, 2017; Fuudia, 2019; Michaelides & Durkee, 2021; Worley-Davis, 2016). When students explore concepts over time as opposed to facts in isolation, they develop deeper understanding and are able to transfer knowledge across disciplines and situations. These dynamics in the long run help enhance the effectiveness of education delivery of the country in general. In the

light of the foregoing, the study formulated questions to understand better the link that exist between the study variables, as shown in Figure 1.

As presented in Figure 1, the argument of the study is that trainee-teachers' instructional quality dimensions influence their effectiveness positively which in the long run help enhance the effectiveness of Accounting education delivery as a whole. This means that when trainee-teachers are able to use appropriate instructional methods that promote learner interactions during their teaching practices as well as deliver suitable and quality content to learners, they would be able to meet the expected unvaried teaching standards established by the universities. These include desired standard of teaching, adequate number and level of teaching per week. These dimensions to a large extent would enhance trainee-teachers' level of teaching that meets pre-specified standards and goals. It would also boost trainee-teachers' belief in their personal ability to execute the courses of action needed to positively affect student performance.

However, the trainee-teachers' effectiveness in teaching and the general improvement in Accounting education delivery becomes more potent when they develop high level of academic self-discipline. Therefore, if the trainee-teachers' instructional quality dimensions are viewed in positive terms or are in good shape, they would be in a better position to put in some level of effort in their teaching practice which will strengthen their teaching skills and in the long run enhance the effectiveness of Accounting education delivery as a whole. Trainee-teachers believing that they can perform well in the programme with some level of effort and being academically self-discipline with regard to their instructional practices

would significantly increase their efficiency in the teaching profession which in the long run would help enhance Accounting education delivery in general.

Nevertheless, as presented in Figure 1, control variables such as gender, study institution, prior teaching experience and mode of delivery employed by a university can foil or lift the trainee-teachers' views on instructional quality and education delivery high. These variables were treated as control because it was assumed that in Ghana, a patriarchal society, these variables may significantly influence the education of trainee-teachers since the society still hold on to strict social roles which normally go against some sections of the society, particularly, females and non-experienced teachers or workers. Therefore, it is appropriate to examine the impact of these variables on trainee-teachers effectiveness in the delivery of Accounting education.

Summary of Literature Review

This chapter provides the review of research pertaining to the main construct of this study. It presented the various concepts of the study, theoretical framework of the study and some selected empirical reviews. A special effort has been made to highlight the importance of these constructs as they relate to teachers' effectiveness with regard to Accounting education delivery. The theoretical framework of the study was made up of four related theories that were reviewed and analysed to form a theoretical structure that supported the argument of this study. It also provided the researcher with a general framework for data analysis. The theories reviewed were theory of autonomy and independent study, effective schools model, theory of constructivism, and self-determined theory.

The empirical review presented recently published empirical studies on the subject matter. The gaps in the empirical studies and challenges with the underlying theories paved way or provided fertile grounds for the development of a conceptual model based on the variables in the study's objectives. Also, the review looked at the nature of the link between the various dimensions of instructional quality of universities, both conventional and non-conventional modes of education, have with the trainee-teachers' effectiveness with regard to their professional values, attitudes, knowledge and practices.

In the review, trainee-teachers' effectiveness which was used as proxy to measure Accounting education delivery is the criterion variable in this study. It was conceptualised based on five components which relate to certain professional teaching behaviours which are observable, such as professional practices in the area of managing learning environment, teaching and learning and assessment, and the trainee-teachers' professional knowledge, values and attitudes. With respect to the examination of the gap in Accounting education, the study reported on gap in curriculum, gap in students' skills and teaching methods and gap in information technology alignment. The others include researchers' attempts at bridging the gap and trainee-teachers' academic self-discipline. In view of the above research gaps, the researcher taking up all the gaps identified into consideration has come up with specific research methods that have been clearly and step by step explained in Chapter Three of this research report.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter describes the procedures and methods that were used in conducting the study. That is, to comparatively examine conventional and non-conventional modes of instruction in Ghanaian public universities, and its influence on Accounting education delivery. The chapter looks at the philosophical orientation of the study, research design, study institutions, research approach, population, sample and sampling procedure, data collection instruments, validity and reliability of the instruments, and ethical issues considered in the study. In addition, the chapter covers the data collection procedures and data processing and analysis.

Philosophical Orientation of the Study

For well over a hundred years there has been a continuous debate as to whether the methodology of the natural sciences can appropriately be employed in the study of human behaviour. Clearly, this question depends partly on what view is taken of that methodology. Many arguments opposing the methodological unity of the natural and social sciences rest upon the view of the former which has been increasingly and successfully challenged in the last ten years or so (Creswell & Creswell, 2018).

The main feature of that challenging view is positivism. The argument between positivistic and naturalistic inquiry with regard to the way we think and investigate issues or problems in the society is often correlated to research

methodology. Basically, both deal with our philosophy with regard to the way we think about human phenomenon and research. According to Gravetter and Forzano (2018), they are the foundation on which we design research.

Philosophical paradigm may be seen as a system of ideas, set of assumptions or world view, used by a community of researchers to generate knowledge (Howitt & Cramer, 2020).

The philosophical argument of the naturalist is that man is rational and his or her subjective thinking and ways of seeing reality must be the focus of the researcher. The main aim of this paradigm is to understand meaning from the perspectives of the participants or individuals (Yin, 2018). Positivism on the other hand expressed a more general world view as a philosophy which lauded the achievements of science (Creswell & Creswell, 2018). For the positivist, it is the aim of science to provide us with predictive knowledge concerning societal problems. This shows that research philosophies differ on the goals of the research and the way to achieve these goals.

The ontological and epistemological orientations of the study with regard to the pursuit of the virtues of reality and truth were based largely on the ideas of both positivist and naturalist paradigms. That is, the current study saw reality as social constructions that form a complex interconnected whole. Thus, understanding of such social reality as instructional quality and effectiveness of Accounting education delivery requires an understanding of the context in which that reality is constructed and also from the general perspective from which the society agrees to such reality (Matias, 2021). This means, the study combined

both the positivist and naturalist paradigms to understand instructional quality and effectiveness of Accounting education delivery in Ghana in order to explore its implications for policy intervention.

The ontological position utilised for this study is based on both objectivism and subjectivism in a concurrent triangulation manner from the pragmatists' perspective. The researcher considers the concurrent view as the ontological point of view reasonable for this investigation on account that the research merges both the deductive and inductive methodologies to examine the issues concurrently. Ontology and epistemology are firmly connected. Along these lines, Cozby and Bates (2021) proposed that any position that is expected under the ontological underpinnings goes before and impact the decision of resulting epistemological and methodological presumptions. Hence, the next paragraph discusses the epistemological assumption which is chosen in light of the mixed ontological viewpoint of pragmatism.

The epistemological conviction for this study requires that the researcher communicates or combines with the object under study and also objectively interact with them on the issues using a structured validated instrument (Matias, 2021). The adoption of pragmatism, which makes use of both positivistic and naturalistic paradigms, created room for the researcher to use both deductive and inductive approaches concurrently because of the contextual nature of social phenomena and the multiple ways in which reality is constructed by the subjects. This shows that words and thought were used as tools and instruments for prediction, problem solving, and action. Also, the assumption of pragmatism

rejects the idea that the function of thought is to describe or mirror reality. Therefore, the position of the study on truth and reality influenced the adoption of the mixed methodology approach in understanding social phenomenon.

Research Design

Research design is a master plan, framework or a blue print of how a researcher intends to conduct a study (Cohen et al., 2018). The essence of research design is to guide the researcher on the type of data to collect, how to collect, process, and analyse them in order to answer the research questions or test the research hypotheses. The education fraternity is moving towards research based practices to improve educational standards. In line with the ontological and epistemological perspectives of the study, this study adopted a cross-sectional survey design with concurrent triangulation mixed methods approach in order to fuse both quantitative and qualitative stand points of exploring reality to examine the instructional quality and effectiveness of Accounting education delivery in Ghana.

The concurrent triangulation mixed methods approach is characterised by two or more methods used to confirm, cross-validate, or corroborate findings within a study (Creswell & Creswell, 2018). Quantitative and qualitative data were collected concurrently and compared with the aim of determining convergence and differences. According to Leavy (2017), this method is used to confirm, cross-validate or corroborate findings. It is often used to overcome a weakness in one method with the strengths of another. This design helped the researcher to blend two different approaches by allowing him to design research

questions within the context and parameters of the study (Cozby & Bates, 2021; Jain, 2019). Furthermore, adoption of this design aided the researcher to address broader questions providing a more expansive and creative approach to investigating instructional quality and effectiveness of Accounting education delivery.

Furthermore, the adopted design helped the researcher to triangulate the data such that the quantitative data provided general patterns and width while qualitative data reflected upon experience and depth of the study. In addition, this design created room for the findings from the qualitative data to help contextualise and enrich the quantitative findings, increase validity in the interpretation of the data, and generate new knowledge (Matias, 2021). Also, using this design helped the researcher to understand the issues in greater depth, increase confidence in the findings, and provide more evidence while offsetting possible shortcomings from using a single approach. Again, the design created room for the researcher to study phenomena in their natural settings in order to make sense of it with regard to the meanings people give to them.

However, a cross-sectional survey design with concurrent triangulation mixed methods approach is relatively laborious and time consuming (Gravetter & Forzano, 2018). It is sometimes regarded as focusing too much on the individual level, neglecting the network of relations and institutions of societies (Cozby & Bates, 2021; Patten & Newhart, 2018). These weaknesses of the design were acknowledged and tackled by being focused, logical and disciplined in the

process. Also, interviews were conducted to validate the quantitative data that were collected. Therefore, the design employed was considered to be appropriate.

Study Institutions

The study was carried out in UCC and UEW. The University of Cape Coast is located five kilometres west of Cape Coast, on a hill overlooking the Atlantic Ocean. The core mandate of the University was to train graduate teachers for second cycle and technical institutions although it has added to its functions the training of education planners, administrators, agriculturalists and healthcare professionals (UCC, 2020). Among the education programmes mounted within the university, Accounting education is one of them. The programme is one of the many programmes of Department of Business and Social Sciences Education (DoBSSE) of UCC. The final year students for B.Ed Accounting programme served as one of the units of analysis for this study.

The University is an equal opportunity university uniquely placed to provide quality education through the provision of comprehensive, liberal and professional programmes that challenge learners to be creative, innovative, and morally responsible citizens (UCC, 2019). Approximately 40 per cent of students are admitted into the College of Education Studies to pursue Bachelor of Education programmes, qualifying as professional teachers, and the rest into non-education programmes in other Colleges. Through non-conventional modes of learning, it also extends expertise and facilities to train professionals for the education enterprise and business by employing modern technologies.

According to the Ghana Tertiary Education Commission (GTEC, 2021), the enrolment figure for undergraduate students of UCC is 67,938 while that of postgraduates is 5,327. In terms of academic staff strength, the university can boast of 811 staff strength ranging from Professors to Assistant Lecturers (GTEC, 2021). The university is located at Cape Coast, which is the regional capital of the Central Region of Ghana. In relation to Accounting education programmes, DoBSSE, is currently responsible for designing the curriculum up to the doctoral level. The Bachelor of Education in Accounting programme is implemented conventionally by DoBSSE while Education Studies Programme Unit of College of Distance Education and Outreach Unit of Institute of Education implement the same programme non-conventionally. The department and the two units are currently producing professional Accounting teachers for the various second cycle institutions in the country and beyond.

University of Education, Winneba (UEW) is also a university located in the Central Region of Ghana. This university was established in September, 1992 by a government ordinance (PNDC Law 322) and has a special relationship with UCC. On 14th May, 2004 the University of Education Act, Act 672 was enacted to upgrade the status of the University College of Education of Winneba to the status of a full University. The University College of Education of Winneba brought together seven diploma awarding colleges located in different towns under one umbrella institution. These colleges were the Advanced Teacher Training College, the Specialist Training College and the National Academy of Music, all at Winneba; the School of Ghana Languages, Ajumako; the College of

Special Education, Akwapim-Mampong; the Advanced Technical Training College, Kumasi; and the St. Andrews Agricultural Training College, Mampong-Ashanti. The three sites in Winneba now referred to as the Winneba campus is the seat of the Vice-Chancellor with satellite campuses at Kumasi, Mampong and Ajumako.

The main aim of the UEW was to train professional educators to spearhead a new national vision of education aimed at redirecting Ghana's effort along the path of rapid economic and social development (UEW, 2019). As at the time of the study, the enrolment data shows that there were 25,024 students, of whom 45 per cent were females (GTEC, 2021). Specifically, 14,175 were full-time, 9,284 were distance learners while 1,565 were sandwich and part-time students. In relation to staff strength, there were 1,465 of them, where 23 per cent of them were females (GTEC, 2021). The Financial Accounting programme in UEW was also mounted by Department of Accounting Studies Education (DASE) located at the Kumasi campus. As part of the study, the researcher took data from all the final year Financial Accounting education students in this Department. Therefore, the unit of analysis of the study included final year Accounting or Financial Accounting education students of the two universities; that is, UCC and UEW.

Research Approach

The study adopted the mixed methods approach which makes use of both quantitative and qualitative approaches. The quantitative approach adopted was used to measure data numerically. This approach normally addresses the question "how many?" and/or "how often?" where the information can easily be processed

and converted into numbers. Also this approach is a process directed towards the expansion of theories which can be generalised across settings (Rosen, 2019).

In relation to qualitative approach, Blackwell (2020) posits that it is any kind of research that produces findings that are not arrived at by means of numerical statistical procedures or other means of quantification. It is multi-method in focus and involves interpretive or naturalistic approach to its subject matter. This approach created room for the researcher to examine the views of Head of Departments, Units and Senior High Schools (SHSs) on teacher instructional quality and effectiveness of Accounting education delivery in Ghana, focusing on trainee-teachers who are currently doing their off-campus or off-centre teaching practice.

Adopting the mixed method helped the researcher to integrate quantitative and qualitative approaches in a single study. This enabled the researcher not only to triangulate the data, but also to engage in multi-dimensional analysis of the phenomena that was investigated concurrently (Leavy, 2017; Rosen, 2019). Also, the adoption of mixed methods approach made it possible to obtain detailed and in-depth information in order to describe, interpret and make informed judgement concerning subjects' views on instructional quality and its influence on effectiveness of Accounting education delivery in Ghana comparatively with regard to conventional and non-conventional modes.

Population

According to Yates (2019), population is the entire aggregation of cases that meet a designated set of criteria. In other words, it is the target group about

which researchers are interested in gaining information and drawing conclusions. The target population was all undergraduate Accounting education students in the three (3) public universities in Ghana that run Bachelor of Education in Accounting or Financial Accounting. However, the accessible population was all Accounting or Financial Accounting education undergraduate students of UCC and UEW whose first teaching subject was Accounting or Financial Accounting. These two universities were more accessible and also were considered because, according to the GTEC (2021), they are responsible for 87.3 per cent of total enrolment in the last seven years with regard to the production of Accounting education teachers. The population distribution is shown in Table 1.

Table 1: Population Distribution of Undergraduate Accounting Education Students of UCC and UEW by Mode

Study Institution	Mode of Study				Total	
	Conventional No.	Conventional %	Non-Conventional No.	Non-Conventional %	No.	%
UCC	658	44.7	441	63.7	1,099	50.8
UEW	814	55.3	251	36.3	1,065	49.2
Total	1,472	100	692	100	2,164	100
% of mode	68.0%		32.0%		100%	

Source: Ghana Tertiary Education Commission (GTEC, 2021)

Furthermore, these universities are the only public universities in Ghana currently running Bachelor of Education in Accounting through conventional (regular) and non-conventional (distance) modes (GTEC, 2021). Therefore, it was appropriate to choose accounting trainee-teachers of UCC and UEW to better

understand their effectiveness and mediation role of their academic self-discipline on the relationship between the instructional quality they have received from the universities and their effectiveness in instructional delivery. The literature has indicated that these categories of respondents have not been assessed adequately regarding the study variables. Records show that there are 1,099 and 1,065 undergraduate students whose first teaching subject is Accounting or Financial Accounting, and they are being trained as Accounting teachers for second cycle schools at UCC and UEW respectively (GTEC, 2021). This shows that the accessible population of the study was 2,164.

Sample and Sampling Procedure

Generally, it is impractical to investigate all members of a target population, especially in cases where the target population is extremely large, hence, the need to draw a sample from the population of interest (Patten & Newhart, 2018). The results from the study can be used to make inferences about the entire population as long as it is truly representative of the population. A sample is a portion of the population of interest selected to partake in the study (Howitt & Cramer, 2020). That is, a sample is a sub-set of a population. The sample has properties which represent the whole.

The unit of analysis of the study was largely final year students of the two universities who have done their on-campus or on-centre teaching practice and are about to do or are doing their off-campus or off-centre teaching practice. Current records show that subjects that qualified for these criteria, that is, final year trainee-teachers, were 576 in number as presented in Table 2. As indicated in

Table 2, 379 conventional and 197 non-conventional final year trainee-teachers reading Accounting or Financial Accounting as their first teaching subject were selected purposively. Also, mentors assigned for off-campus or off-centre teaching practice for these final year trainee-teachers of the two universities were selected to assess the trainee-teachers' effectiveness of Accounting education delivery.

Table 2: Sample Distribution of Undergraduate Accounting Education Students of UCC and UEW by Gender and Mode

Study	Mode of Study					
	Conventional		Non-Conventional		Total	
	Male	Female	Male	Female	Male	Female
UCC	91	31	96	30	187	61
UEW	189	68	49	22	238	90
Total	280	99	145	52	425	151
% of mode	379 (65.8%)		197 (34.2%)		576 (100%)	

Source: Ghana Tertiary Education Commission (GTEC, 2021)

Records available to the researcher show that they were 42 in number. The Head of Departments, Units and SHSs were also considered in this study. The sample for the study was, therefore, 626. This comprised 576 final year trainee-teachers, 42 mentors and eight (8) duty bearers (participants). After selecting the respondents and participants purposively, the census method was used to capture all the final year undergraduate Accounting education students who met the inclusive criteria of the study as indicated earlier. The distribution of these categories of respondents and participants is presented in Table 3.

Table 3: Sample Distribution of Mentors and Duty Bearers by Gender

Category of Subjects	Gender of Subjects					
	Male		Female		Total	
	No.	%	No.	%	No.	%
Mentors	31	86.1	11	78.6	42	84.0
Duty Bearers (Interviewees)	5	13.9	3	21.4	8	16.0
Total	36	100	14	100	50	100

Source: Field Survey (2021)

As indicated earlier, mentors or in-house supervisors who were assigned to supervise the final year trainee-teachers were considered in this study spontaneously. Approximately, a mentor is expected to supervise and assess 10 – 20 trainee-teachers. Some of the mentors were supervising students from both conventional and non-conventional modes. According to Cozby and Bates (2021), sample size does not necessarily need to be large but how it truly represents most of the characteristics of the subjects in the population is what one must look at. Therefore, the subjects considered were deemed appropriate.

The participants considered have enough personal experience and better knowledge on the preservice preparation of Accounting teachers with regard to their instructional quality and effectiveness of Accounting education delivery in Ghana. This is so because they receive most complaint made by trainee-teachers during their off-campus or off-centre teaching practices, and also they have first-hand knowledge regarding educational delivery in the various SHSs. Also, their status as managers and leaders give them opportunity to know whatever is going on in their respective institutions with regard to instructional quality and

education delivery as a whole. Therefore, it was appropriate for the current study to use these participants. According to Rosen (2019), the number of participants used in a study, qualitatively, does not matter, but rather the emphasis should be on the personal experience of the participants and the information they possess.

In all, the study selected 576 final year trainee-teachers, 42 mentors and eight (8) participants, totalling 626 subjects. These subjects selected were able to provide data that enabled the researcher to answer the stated research questions appropriately. This is so because these subjects shared adequate attributes, skills and knowledge about the subject matter which helped in enriching the data collection.

Sources of Data and Data Collection Plan

The study was designed in such a way that it allowed for the use of multiple sources of data collection. Thus, multiple primary data (quantitative and qualitative) were used in the study. These data were collected through field survey and interviews using questionnaire and an interview guide. The secondary data were gathered through the review of official records of GTEC, UCC and UEW. Specifically, the secondary data were gathered largely to help in the designing of the population and sample distributions. Also, the secondary data were obtained through the enrolment records of the institution, mentors' teaching practice schedules, and monitoring and evaluation reports. According to Zikmund (2019), secondary data have been identified to be economical and having the potential to give high quality of information with the possibility of retesting. The process of data collection was planned concurrently as shown in Figure 2.

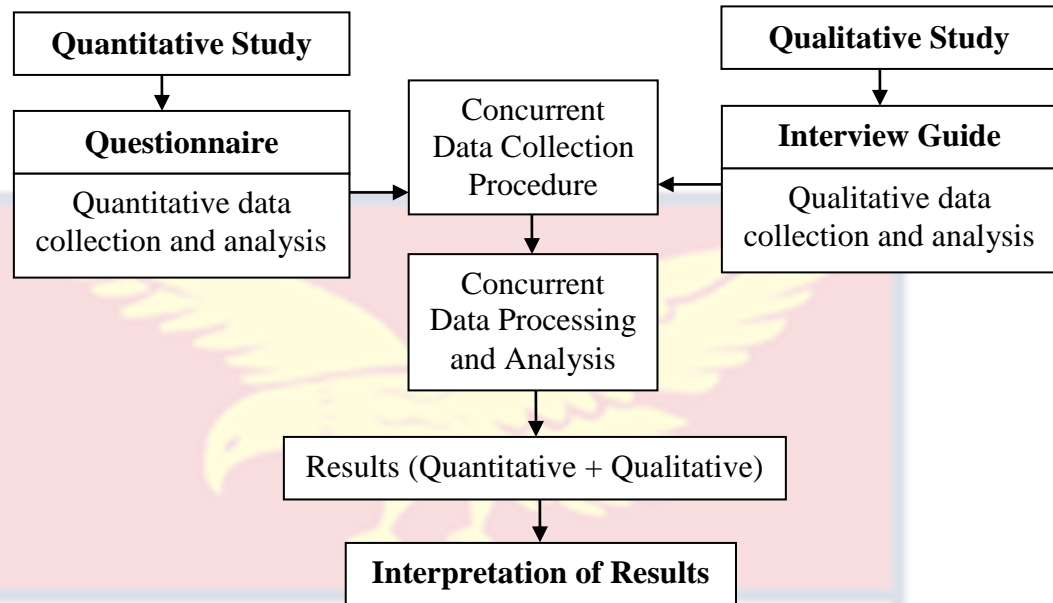


Figure 2: Data Collection Process

Source: Author's construct

As depicted in Figure 2, the data collection process was planned in such a way that the various stages were fed into one another and were allowed for simultaneous data collection procedure and analyses for purposes of data triangulation. The researcher started the data collection process by first using the questionnaire and the interview guide to collect quantitative and qualitative data simultaneously.

Data Collection Instruments

Two set of questionnaires and an interview guide were the instruments used to collect the data. A questionnaire is a formally organised set of written items presented in a uniform manner to a number of respondents or persons (Cohen et al., 2018). The questionnaires, as presented in appendices 'A' and 'B', were designed for the selected final year trainee-teachers and mentors respectively

while the interview guide, as presented in appendix C, was designed for the participants who were the Heads of Departments, Units, and SHSs.

The trainee-teachers' questionnaire (Appendix A) was in seven sections (Sections A – G). Section A was used to collect data on the background characteristics of the final year trainee-teachers. Items considered were respondent's mode of study, study institution, gender, and prior teaching experience. Sections B to F were used to collect data on the various facets of instructional quality of the programme while section G was used to collect data on trainee-teachers academic self-discipline. Trainee-teachers evaluation of instructional quality dimensions developed by Mbwesa (2014) were adapted and used to design the items in these sections of the trainee-teachers' questionnaire. Mbwesa developed the instructional quality measurement scale based on six quality dimensions created by Jung (2012) to assess Asian learners' perception of instructional quality in distance education. These six dimensions are as follows:

1. Pedagogical domain. This domain has also been used for defining quality in distance education in other studies (Jung, 2012; Mbwesa, 2014; Senyamator, 2018). It relates to pedagogical effectiveness in the learning and teaching process.
2. Learner support related to variables such as learner welfare, administrative support, technical, financial, psychological, social, and administrative support, and flexible payment among other services that support instruction given to student-teachers.

3. Infrastructure dimension is related to the use of physical and technological infrastructure such as availability of computer laboratories internet access, and library services among other facilities to enhance instruction.
4. Faculty dimension deals with support generally given to the teaching staff, their level of qualification and how they are related to instruction and student-teacher efficiency.
5. The evaluation and assessment dimension refer to activities and policies concerned with students' learning assessment and feedback.
6. Interactivity dimension which deals with how course facilitators initiate interaction among learners in the course of facilitation to ensure effective learning.

These six dimensions adapted by the researcher were modified to create five dimensions for this study. These dimensions are pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling. Specifically, 10 close-ended items were used to collect data on each of the five facets of instructional quality. (Appendix A). The last section of the trainee-teachers' questionnaire, which is section G, was used to collect data on trainee-teachers academic self-discipline. Similarly, 10 close-ended items were used to collect data on academic self-discipline of trainee-teachers. Responses to the items in sections B – G of the trainee-teachers' questionnaire were measured numerically using a seven-point discrete scale items such that the higher the number the more a respondent agrees to the statements and the lower the number the more he/she disagrees with the statements.

The questionnaire designed for the mentors (Appendix B) comprised two (2) sections. Section A was used to collect data on the background characteristics of the mentors. Items considered were gender, affiliated institution and years of teaching experience. The mentors' questionnaire was constructed based on the teaching practices assessment form of UCC and UEW. This constructed form was used to assess trainee-teachers' effectiveness with regard to Accounting education delivery. Section B of the mentors' questionnaire was used to collect data on effectiveness of Accounting education delivery. Five facets of effectiveness of Accounting education delivery were considered. These were professional values and attitudes, professional knowledge, professional practices regarding managing the learning environment, professional practices regarding teaching and learning, and professional practices regarding assessment.

Five (5) items each were used to collect data on each of the facets of effectiveness of Accounting education delivery, as presented in section B of the mentors' questionnaire. See appendix B for the details of the mentors' questionnaire. Seven-point discrete scale was used for the items regarding section B of the mentors' questionnaire. Responses to the items were measured numerically using discrete scale such that the higher the number, the more mentors agree with the statements and the lower the number, the more they disagree with the statements.

In relation to trainee-teachers and mentors' views on the study variables, questionnaires were used to collect the data. This is so because it is relatively less expensive to use questionnaire to collect data from a large sample than other

methods such as interview and observation (Cohen et al., 2018). In addition, it created room for the researcher to approach the respondents more easily. Also, using questionnaire to collect data from the trainee-teachers and mentors helped in providing a much quicker means of gathering data from such a fairly large literate population. According to Larini and Barthes (2018), questionnaire also allows for anonymity of respondents which normally makes it easier for respondents to volunteer information without fear of victimisation. However, questionnaire is limited to literate population and does not provide an opportunity to collect additional information. In the case of this study, the respondents are all literates and were in a position to understand the items in the questionnaire as expected.

Also, some respondents do not tell the truth about certain sensitive issues which often leads to the problem of the halo effect and low return rate (Zikmund, 2019). To eliminate or narrow these limitations, the questionnaires were developed in simple language to facilitate the understanding of respondents. The items on the questionnaires, both trainee-teachers and mentors' questionnaires, were constructed using close-ended items which allowed respondents to select from a number of options. Close-ended questionnaire items measure opinions, attitude or knowledge and it is easy to use, score and code for analysis using quantitative statistical tools. Closed-ended questionnaire has the tendency to enhance consistency of responses among respondents (Gravetter & Forzano, 2018). Despite the few limitations aforementioned, the questionnaires helped me

to get first-hand data from the trainee-teachers and mentors. This helped in enhancing the originality and authenticity of the study.

The interview guide (Appendix C) was designed for the participants. These were the head of departments, units and SHSs. It was used to collect qualitative data on the same issues that the questionnaires were used to address. The interview guide was made up of eight sections. Section A was used to collect data on background characteristics of the participants. These characteristics were institution, gender, and years of experience in current position. Sections B, C, D, E, and F of the interview guide were used to collect data on the five facets of instructional quality: pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling. Similarly, section G was used to collect qualitative data on trainee-teachers' academic self-discipline. The last section, which is section H, was used to collect data on effectiveness of Accounting education delivery. Five themes were formulated to guide the questioning processes during the interview session with regard to the effectiveness of Accounting education delivery. The emerging themes were based on the specific purposes of the study.

The duty bearers (participants) who were selected purposively were subjected to an interview on the issues raised concurrently to triangulate the two set of data, and to understand the issues from the naturalistic perspective. The interview guide allowed the researcher to probe further and to ensure open discussion to ascertain further and better information on instructional quality and

effectiveness of Accounting education delivery in Ghana, focusing on undergraduate Accounting programme of UCC and UEW.

Measurement of variables

The variables of the study were measured quantitatively using a seven-point discrete scale items. This means, responses to the items were measured numerically as indicated earlier. However, the study also presents the results qualitatively. This subsection focuses on describing the measurement of the variables quantitatively.

Independent variable

The independent variable of the study was the five facets of instructional quality. According to Bird (2017), instructional quality is manifested as a collective and inclusive way of using multiple teaching practices, which is adapted and used throughout this study. Within the context of this study, instructional quality refers to the degree to which an instruction is adequately delivered, meets trainee-teachers' learning needs, learning styles, interests, expectations, and is well aligned to standards. The measurement of instructional quality in this study focused on behaviours, materials, and characteristics of instructors or the instructional process which is assessed using trainee-teachers survey.

Emphasis was on instructional quality components such as pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling. These components were adapted from the work of Mbwesa (2014). In most cases, emphasis of instructional quality

in teacher preservice preparation programme is on the quality level of instruction with regard to pedagogical skills, teacher qualification, infrastructure, student-teacher interaction, evaluation, and support services (Jung, 2012; Mbwesa, 2014; Perez, 2013; Ogunleye, 2013).

Multiple close-ended items were used to collect data on the five facets of instructional quality used in this study (See Figure 2). Responses to the items were measured quantitatively using a seven-point discrete scale such that the higher the number, the more respondents agree with the statements and the lower the number, the more they disagree with the statements. For each of the dimensions of instructional quality, 10 close-ended items were formulated and used. The mean scores with regard to the responses of the various items under each of the facets were pooled together to form the coefficient of each of the dimension. These latent variables created were used as the independent variables of the study. These variables together represent instructional quality.

Dependent variable

The dependent variable for the study was effectiveness of Accounting education delivery. This variable was measured numerically using trainee-teachers' effectiveness scale. Countries around the world are seeking multiple measures of education delivery and teaching effectiveness for both accountability and school improvement purposes. This study constructed teacher quality measures and educational delivery facets from trainee-teachers' and mentors' survey responses. It refers to the extent to which trainee-teachers' level of teaching achieves or meets pre-specified standards and goals. That is, mentors'

belief in his or her students' personal ability to execute the courses of action needed to positively affect their work performance. Trainee-teachers' effectiveness was used as proxy to measure effectiveness of Accounting education delivery in Ghana.

The dependent variable was measured using five dimensions of effectiveness of Accounting education delivery. These dimensions were professional values and attitudes, professional knowledge, professional practices regarding managing the learning environment, professional practices regarding teaching and learning, and professional practices regarding assessment. Five items each were used to collect data on each of the facets of effectiveness of Accounting education delivery. The items were adapted from UCC and UEW trainee-teacher assessment forms for mentors. All the 25 items were pooled together to form the dependent variable. This was possible because the items used were measured numerically using discrete scale such that the higher the number, the greater the effectiveness of instruction that trainee-teachers demonstrate, and the lower the number, the more trainee-teachers demonstrate high level of ineffectiveness in teaching, which in the long run affect education delivery negatively.

Mediating variable

Trainee-teachers' academic self-discipline was the mediating variable of the study. The argument of the study is that this variable has the potency to link the independent and the dependent variables, and its existence explains the relationship between the two variables (Laryea, 2018; Senyamator, 2018). Academic self-discipline is a behaviour that a trainee-teacher possesses to enable

him or her become all what it takes to be an academic abiding student. The variable was measured using 10 close-ended items with responses that were measured numerically using a seven-point discrete scale. The items were adapted from the psychometric properties of Aragon et al.'s (2012) and Laryea's (2018) instruments. The eight close-ended items were pooled together using average responses to form a single coefficient using the mean response scores.

Control variables

A number of ascriptive factors can influence respondents' perception on instructional quality and effectiveness of education delivery; however, the current study was delimited to controls such as mode of study, study institution, prior teaching experience and gender of trainee-teachers. All the variables were measured numerically using categorical scale. The use of these measurement scales are in line with the works of Aragon et al. (2012), Mbaluka (2017), Laryea (2018) and Fuudia (2019). The evidence on the effect of these controlling variables on respondents' views on effectiveness of education delivery is mixed (Amoono, 2019; Antoniou, 2018; Bhat, 2020; Bird, 2017; Doğana & Yurtseven, 2018; Engel, 2017; Hannay & Newvine, 2016; Latha, 2015; Nigam & Arora, 2018; Preston, 2017; Srdar, 2017).

Latha (2015), and Nigam and Arora (2018) noted no difference in teacher effectiveness with regard to their prior teaching experience and gender. However, Srdar (2017) and Bhat (2020) found that teacher effectiveness scale of prospective female Accounting teachers is higher than that of male Accounting teachers, although both trainee-teachers are exposed to same instructional quality and

experience. Amoono (2019) also observed that more experienced trainee-teachers surpassed less experienced trainee-teachers academically with regard to their efficiency. Nevertheless, Bird (2017) and Antoniou (2018) found the opposite result. Given prior studies' mixed results, the potential effect of experience, mode of delivery and study institution on trainee-teachers' effectiveness of education delivery merits consideration in the current study. Brief presentation of the mixed results shows that it is appropriate for this study to control for these variables.

Reliability and validity of the instruments

In order to ensure the validity and reliability of the instruments, a pre-test was carried out. A sample of 77 trainee-teachers and five mentors were used for the pre-testing of the questionnaires using preservice Accounting teachers of UDS whose first teaching subject was Accounting or Financial Accounting. The instruments were administered during the preservice teachers' on-campus or on-centre teaching practice. These subjects were not considered in the main study. The respondents were selected because they share similar characteristics as those in the UCC and the UEW.

The two sets of questionnaires were personally delivered to the trainee-teachers and their assigned mentors with the help of the on-campus coordinator. All the copies of the questionnaires administered were retrieved as expected. The number of respondents used for the pre-testing was sufficient to include any major variations in the population as confirmed by Cohen et al. (2018) that for most cross-sectional survey study with concurrent triangulation mixed methods

approach, a range of five to ten per cent (5% - 10%), of the sample size, for pre-testing is sufficient and appropriate.

With the help of the Predictive Analytic Software (PASW) Version 21.0, the researcher used a Cronbach's Alpha reliability coefficient to measure the internal consistency of the questionnaires. Since the questionnaires were used to collect quantitative data, and also the responses to the items were measured numerically using a discrete scale, the study used a Cronbach's Alpha reliability coefficient to measure the reliability. According to Gravetter and Forzano (2018), the most appropriate measurement tool to use in finding out the reliability coefficient of an instrument which is designed to collect quantitative data, is the Cronbach's alpha reliability coefficient tool. Therefore, it was appropriate to use this statistical tool in measuring the consistency of the questionnaires.

This statistical tool varies from zero to one, and though alpha has several interpretations, the cut-off value is more useful in determining whether a scale is reliable. The closer the coefficient is to 1.0, the higher the reliability. The standard rule of thumb is that alpha must be or greater than approximately 0.70 to conclude that the scale is reliable. Indeed, Darren and Mallery (2014), suggest that a rule of thumb that applies to most situations is Excellent ($\alpha > 0.9$), Good ($\alpha > 0.8$), Acceptable ($\alpha > 0.7$), Questionable ($\alpha < 0.6$), Poor ($\alpha < 0.5$), and Unacceptable ($\alpha < 0.4$). As indicated in Table 4, averagely, the Cronbach's Alpha of the trainee-teachers and mentors questionnaires ranges from 0.714 to 0.884, implying acceptability.

Validity, on the other hand, is the extent to which an indicator accurately measures a concept it intends to measure (Yates, 2019). In other words, validity can be defined as the degree to which an instrument measures what it is supposed to measure. Internal validity was assessed to test the ability of the questionnaires to measure what it is projected to measure and it helped detect any errors that could obscure the meaning of the questionnaires and prevent it from eliciting specious responses. The researcher ensured content, face and construct validities of the instruments.

Table 4: Computed Reliability Co-efficients of the Variables (Scale)

Variables (Scales)	No. of Items	Cronbach's Alpha Coefficient
Pedagogical content knowledge	10	0.884
Assessment techniques	10	0.815
Quality of faculty	10	0.736
Classroom management	10	0.798
Guidance and counselling	10	0.798
Academic self-discipline	10	0.719
Professional values and attitudes	5	0.761
Professional knowledge	5	0.724
Professional practices: Managing the learning Environment	5	0.714
Professional practices: Teaching and learning	5	0.787
Professional practices: Assessment	5	0.845

Source: Field Survey (2021)

Content validity ensures that the items used in the instrument cover the important characteristics of the concept being measured. The researcher ensured that the items in the questionnaires cover the domain that they were purported to measure with regard to the purpose of the study. This was determined by the expert judgment of my two able supervisors and other professionals in the field of Accounting and teacher education in general. The instruments were made available to these academics and professionals who helped in shaping them with the view of establishing content validity. The experts assessed the quality of each item in the context of clarity, ambiguity and generality for the necessary corrections to be made. The researcher paraphrased, modified and deleted materials that the experts considered inaccurate or items that infringe on the confidentiality of the subjects. Furthermore, these academics and professionals helped scrutinise unclear, bias and deficient items, and evaluate whether items were members of the subsets they were assigned.

With regard to face validity, the researcher ensured that the questionnaires measure what they appear to measure. Face validity ensures that the items or scale used measure what it claims to measure. The face validity of the study was granted by my peers, colleague postgraduate students and educationalists. Construct validity, on the other hand, was ensured by making sure that the questionnaires relate to the various constructs that they were purported to measure. For example, does the questionnaire measure the construct of instructional quality, trainee-teachers' academic self-discipline, and effectiveness of Accounting education delivery the way the researcher conceptualised it.

According to Howitt and Cramer (2020), construct validity involves developing theoretical and conceptual understanding of the things being measured. That is, how well do we understand instructional quality, academic self-discipline and effectiveness of Accounting education delivery. In addition, factor analysis was performed to ensure construct validity of the questionnaire. This was done to find out the factors that measured the components of instructional quality, academic self-discipline, and effectiveness of Accounting education delivery.

Kaiser's criterion or the eigenvalue rule, which is considered to be one of the most commonly used techniques (Mukherjee et al., 2018), was used. Using this rule, only factors with an eigenvalue of 1.0 or more are retained. Kaiser's criterion has been criticised, however, as resulting in the retention of too many factors in some situations. Nevertheless, this criterion was used because the study used both quantitative and qualitative procedures to measure the variables. Therefore, there was no need for a more robust statistical analysis for construct validity.

The 85 items of the Positive and Negative Affect Scale (PANAS) were subjected to Principal Components Analysis (PCA) using PASW Version 21.0. Prior to performing the PCA the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of ± 0.3 and above. The Kaiser-Meyer-Oklin (KMO) values of the variables were more than 0.6, which is acceptable (Howitt & Cramer, 2020). Also, the Barlett's Test of Sphericity (BTS) values for all the variables reached

statistical significance (i.e. the Sig. values were less than 0.05), supporting the factorability of the correlation matrix. Principal components analysis of the individual variables revealed the presence of two to four components with eigenvalues exceeding 1.0 (Appendix D).

Also, an inspection of the screen plots of the individual variables, with regard to the set of items, revealed clear breaks. Due to the triangulation nature of the study, the researcher did not perform parallel analysis (Sarstedt & Mooi, 2019). In all, the 85 items were reduced to 35 items, which was subsequently used for the study. That is, the extracted items were pooled together to form each of the variables using average responses since the responses were measured using a discrete scale.

With respect to the interview guide, the researcher ensured that there was data trustworthiness. Data trustworthiness consists of the following components: credibility, transferability, dependability, and confirmability (Zikmund, 2019). In establishing the credibility of data, the researcher used triangulation of sources. This is the means of gathering data from different sources. Data were gathered from different participants at different points in time and in different settings. Thus, the researcher did not gather the data from the participants at just one sitting. Different participants were met at different times and at different places. This ensured that information given by the participants were the actual information they wanted to give and not influenced by the views of the other participants. This helped in establishing the *credibility* of the qualitative data that were collected using the interview guide.

Also, in addressing the extent of *transferability* of the data, the researcher's choice of purposive sampling was helpful. This is so because information from targeted group of people were emphasised in the purposive sampling, rather than the generalised and aggregated information, which was seen in the quantitative data. Furthermore, in establishing *dependability* of the qualitative data, the researcher conducted an inquiry audit on the study. An inquiry audit involves having another researcher other than the main researcher auditing the data collection procedure, data analysis and the results of the study (Gravetter & Forzano, 2018). In the current study, the assigned supervisors helped establish the dependability of the data collection and analysis procedures.

Lastly, in establishing *confirmability* in this study, the researcher used the audit trail approach. An audit trail is when a qualitative researcher details the process of data collection, data analysis, and interpretation of the data (Cassell et al., 2018). In this study, all the procedures that were involved in the study from the beginning to the interpretation of the results were shown in detail. Also, colleague researchers were asked to review the transcribed data, generated themes and conclusions that were made to determine if they are in line or there are contradictions. All the participants were given copies of the transcribed interview for them to confirm if they actually said the things transcribed.

Data Collection Procedures

The data collection process started on Monday, October 04, 2021 and ended on Friday, December 17, 2021. Prior to the administration of the instruments, informal familiarisation visits were made to the various SHSs and the

universities for the confirmation of the number of respondents and also to validate some of the secondary data used. After completion of a questionnaire by trainee-teacher, he or she was asked to hand it over to his or her assigned mentor for off-campus or off-centre teaching practice. The mentors' questionnaire has the Accounting education delivery items which they used to assess each of the trainee-teachers assigned to them during the off-campus or off-centre teaching practice. This process created room for most of the mentors to answer more than one mentor questionnaire since the mentors have been assigned more than one trainee-teacher from both conventional and non-conventional modes. Averagely, each mentor was assigned 13 students in total.

As indicated earlier, the instruments were administered personally with the support of known mentors, teaching practice coordinators and four field research assistants. In most of the cases, these people assisted in administering and collecting the questionnaires. They had adequate experience regarding data collection process; therefore, it was appropriate for me to use them as field assistants. During the data collection process, relevant data and information were gathered from the field. The field assistants were given brief training and orientation regarding the study, which made it easier for them to administer the questionnaires. The training programme included explaining the objectives of the study to the field assistants, how to identify the trainee-teachers and their respective assigned mentors, and how to manage the data.

The data collection procedures were carried out in four stages. The first stage was the collection of list of trainee-teachers, pursuing Accounting education

in both conventional (regular) and non-conventional (distance) modes, who were ready for off-campus or off-centre teaching practices. The second stage was the distribution of the questionnaires to trainee-teachers and mentors and the administering of the interview guide. The third stage focused on retrieving the questionnaires administered to the trainee-teachers and their assigned mentors. It also focused on coding the trainee-teachers' questionnaires that were retrieved and stapled with the respective mentors' questionnaires. This was done for each of the trainee-teacher questionnaire.

The administering of the questionnaires was done concurrently with the interview process. The interviews were conducted by the researcher personally, and recorded using an overt electronic device. Also, the fastened questionnaires (answered trainee-teacher questionnaire and unanswered mentor questionnaire) were given to the trainee-teachers' assigned assessors for off-campus and off-centre teaching practices. The fourth stage focused on retrieving the completed combined instruments from the selected and assigned mentors.

The researcher and the field assistants were given opportunity to be in the classrooms of the trainee-teachers who were doing their off-campus and off-centre teaching practices in the area of Accounting or Financial Accounting. The trainee-teacher questionnaire was given out to the selected trainee-teachers. The trainee-teachers' questionnaire was administered during break-time and after close of school. This was done in order not to disturb respondents teaching time. Trainee-teachers were asked to complete the questionnaire during their free time before handing it over to their assigned mentors. The mentors completed their part

during teaching-learning session. After assessing the trainee-teachers' effectiveness in the delivery of Accounting education, the mentors submitted the completed questionnaire to the researcher for onward sorting and processing.

In the case of some of the mentors, the combined questionnaires were given to them individually outside the classrooms. The mentors answered their questionnaire during the off-campus and off-centre teaching practice, since they needed to see the trainee-teachers teaching in order to evaluate their effectiveness which was used as proxy to measure the effectiveness of Accounting education delivery. The data collection process was done from one school to another. At the end of data collection, the research was able to collect 512 combined, completed and accurate questionnaires, representing 88.9 per cent response rate, which is above the acceptable threshold. According to Cohen et al. (2018), a response rate of 75.0 per cent and above for quantitative data in a mixed methods study is appropriate. In the case of the interview, the researcher was able to interview all the eight participants selected for the study, representing 100 per cent participation rate.

Data Processing and Analysis

The quantitative data were sorted and coded based on the procedures within the variable view of the statistical analysis software tool known as PASW Version 21.0 software. The Test Analysis for Surveys (TAFS) tools in the two software were used to analyse the quantitative data. They are some of the most sophisticated statistical software packages popular with social scientists and other professionals when analysing quantitative data (Mukherjee et al., 2018; Muthén &

Muthén, 2017). Before the coding process, the researcher skimmed and scanned through the answered questionnaires to ensure that they were devoid of any irrelevant responses before keying into the computer.

After the coding, the quantitative data were inputted into the data view of the software to complete the keying-in process. Items that were stated negatively were coded inversely to ensure that the coding system is consistent. The data were then analysed and transformed into tables and extracted for presentation and discussion. Specifically, the quantitative data were analysed using descriptive and inferential statistical tools. With the exception of data on the background characteristics of respondents, responses to all the close-ended items were measured numerically using seven-point discrete scale.

In analysing data regarding the formulated research questions, the researcher first performed a normality test on the distribution using descriptive statistics in order to find out whether the distribution was normal or not. According to Cohen et al. (2018), in analysing quantitative data, mean and standard deviations are used when the distribution is normal while median and skewness are used when the distribution is skewed. Cohen et al. added that in a normal distribution the mean and the median are approximately the same. The skewness values of the data must also be within a threshold of -0.5 to 0.5. Also, the results of Kolmogorov-Smirnov statistics for the various scales/ variables were non-significant result (Sig value of more than .05), suggesting non-violation of the assumption of normality.

Also, the descriptive statistics show that the skewness and kurtosis values were within the normality thresholds. That is, skewness values ranged between -.338 to 1.202 while the kurtosis values ranged between -.087 to .791. Most researchers are of the view that for normality testing, skewness values should be within the range of -2 to 2 while that of kurtosis should range between -3 to 3 (Heck & Thomas, 2020; Mukherjee et al., 2018; Sarstedt & Mooi, 2019). The normality test performed showed that the distribution was normal and the respondents were homogeneous. The close-ended questionnaire items were analysed, taking cognisance of the fact that they were the basis for which conclusions and recommendations would be drawn.

Results and discussion of the data were presented based on the research questions of the study. Data on the background characteristics of the respondents and participants were first analysed using cross tabulation that makes use of frequency counts and percentage distributions. These were used to analyse mode of study, gender, study institution, and prior teaching experience.

Quantitative data on the first and second research questions of the study were analysed using one-way multivariate analysis of variance (MANOVA) where descriptive statistics such as mean and standard deviation were used. These statistical tools were used to measure the extent of the effectiveness with regard to instructional quality and Accounting education delivery of UCC and UEW. This statistical tool was used because it created room for the researcher to calculate the margin of the differences, if any, between conventional and non-conventional modes of education with regard to their instructional quality. Furthermore, these

statistical tools were used because earlier research works on related issues and concepts (Amoono, 2019; Antoniou, 2018; Bhat, 2020; Bird, 2017; Doğana & Yurtseven, 2018; Engel, 2020; Hannay & Newvine, 2016; Latha, 2015; Nigam & Arora, 2018; Preston, 2017; Srdar, 2017) show that this group of people are homogeneous. Also, the preliminary analysis shows that the distribution was normal with homogeneous respondents. Therefore, the perceptions of the respondents can be assessed descriptively using means and standard deviations (Jain, 2019).

In relation to the third research question, the two-way MANOVA was used to analyse the quantitative data. Two-way MANOVA was used to analyse the quantitative data in order to examine the ways in which study institution and gender of trainee-teachers affect their views regarding the five facets of Accounting education delivery in Ghana. This statistical tool was used because the independent variables were two while the dependent variables were multiple. This statistical tool allowed the researcher to look at the individual and interceptual effects of the independent variables on the dependent variables.

In finding out differences between independent groups with two independent variables where the distribution is normal with numerically constructed dependent variables such as respondents' views on the five facets of Accounting education delivery, it was appropriate to use the two-way MANOVA (Mukherjee et al., 2018). Again, this statistical tool was used because it created room for the researcher to calculate the margin of the differences, if any, between the groups (Lind et al., 2019).

With the help of PASW Version 21.0 software, the quantitative data regarding the fourth research question were analysed using Pearson product moment correlation. Using the same software, the researcher was able to perform a Hayes (2018) mediation analysis after using hierarchical multiple regression analysis to examine the incremental influence of instructional quality on the effectiveness of Accounting education delivery of undergraduate Accounting education programmes of UCC and UEW. Hayes (2018) mediation analysis helped me to examine the direct, indirect and total effects of the variables considered. With this statistical tool, the researcher was able to analyse the indirect effect in order to examine the mediating role of trainee-teachers' academic self-discipline on the link between the five facets of instructional quality and effectiveness of Accounting education delivery in Ghana. This tool involves the entry of predictor variables into the analysis in steps. The order of variable entry into the analysis was based on theory. Instead of letting a computer software algorithm "choose" the order in which to enter the variables, these order determinations were made by the researcher based on theory and past research works.

The rationale for using this statistical tool is that the variables were measured numerically using close-ended items with responses that were measured discretely using seven-point scale items. Researchers (Kelly, 2016; Mukherjee et al., 2018) are of the view that mediation or moderation analysis is better analysed using Hayes processing software, particularly when the variables are measured numerically using discrete scale. According to Mukherjee et al., hierarchical

multiple regression analysis is useful for evaluating the contribution of predictors, as a means of statistical control, and for examining incremental validity.

The usage of these statistical tools is in line with the works of Bird (2017), Antoniou (2018), Doğana and Yurtseven (2018), and Bhat (2020) who used the same statistical tools in finding out the relationships between their independent and dependent variables. Also, they all used multiple regression analysis to examine the influence of explanatory variables on dependent variable that was measured numerically using discrete scale. This statistical tool allows the researcher to find out the percentage contribution of each of the independent variables on the dependent variable and also to generalise the results. It was appropriate to use this statistical tool since the distribution was estimated to be normal with homogeneous subjects.

The qualitative data were analysed thematically using open, axial and selective coding systems. This created room for me to identify and develop concepts in terms of their properties, make connections between the variables and select the central phenomenon around which all the other variables were integrated. Also, this was done manually based on the stated research questions of the study. After transcribing the data, the researcher sifted and sorted the data based on the key issues and themes that were derived. This helped in creating familiarity with the data in the mind of the researcher to facilitate the process of analysis. Furthermore, responses were reported verbatim to explain general issues as they emerged in order to validate, compliment, and better the results that were

obtained from the quantitative data. The qualitative data were analysed concurrently with that of the quantitative data.

Ethical Issues Considered in the Study

The issue of ethics is an important consideration in research that involves human subjects. It refers to appropriate behaviour of a researcher relative to the norms of society (Cohen et al., 2018). The researcher, research subjects, and clients of the research were protected from any adverse consequences of the study by following laid down rules and procedures of ethics in research. The study considered ethical factors in a number of ways. Ethical issues that were catered for in this study included right to privacy, voluntary participation, no harm to subjects, anonymity, confidentiality, deception and scientific misconduct.

To gather data from the sampled individuals, the researcher first submitted a copy of the proposal for this study and the adapted instruments to the Institutional Review Board (IRB) of UCC for review and ethical clearance. Also, the final draft of the instruments was submitted to the Heads of the used Departments and Units for permission. This was done to confirm and ensure that the research subjects, institutions, and the country at large are protected. Based on the guidelines of ethical protocol of UCC, I ensured that all ethical requirements such as academic honesty, plagiarism, acknowledgement of copyrighted materials used, and institutional ethical clearance were addressed. Furthermore, permissions were sought from the Heads of the Departments, SHSs and Units used after request for support letter, giving an introductory letter, and ethical clearance by DoBSSE and IRB of UCC respectively (Appendix E).

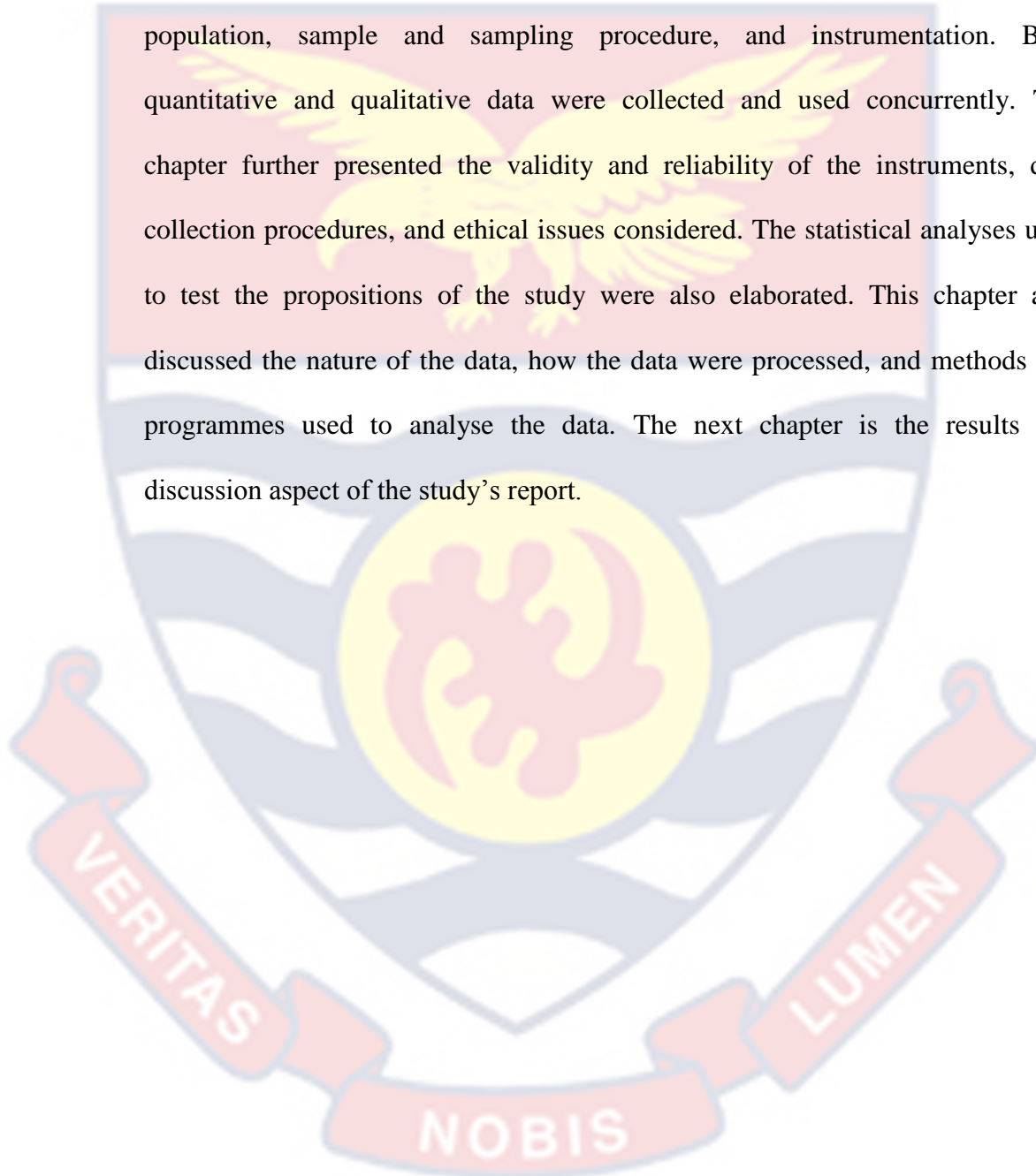
Approval was sought from the Heads through an introductory letter. The consents of the respondents (trainee-teachers and mentors) were also sought individually using the questionnaires (Appendices A and B). Both respondents and participants were informed about the purpose of the research and what objective it sought to achieve. Also, clarifications were made where needed. The privacy and consent of respondents were also negotiated and respected in the study. All these were done to secure the consent of the respondents.

After ensuring that the respondents understood the content very well, the questionnaires were administered. The respondents were thoroughly informed before commencing the research, and they were properly treated throughout the research. Respondents were encouraged to feel free and air their views as objectively as possible and that they had the liberty to choose whether to participate or not. They also had the option to withdraw their consent at any time and without any form of adverse consequence. They were assured that the data they provided would be used solely for research purpose and nothing else.

The interviews were also conducted with the approval of the participants. The data that were obtained from the participants were made available to them for verification after transcribing them, before they were analysed and final conclusions drawn from them. Also, arrangements were made to securely store the data that were collected for seven years after the research, and to destroy it thereafter. In addition, the researcher maintained professionalism, presented the true research findings, used the research results for academic purposes only as outlined in the research protocol of UCC.

Chapter Summary

This chapter presented the research methods used in conducting the study. It examined the research design, study institutions, philosophical orientation, population, sample and sampling procedure, and instrumentation. Both quantitative and qualitative data were collected and used concurrently. The chapter further presented the validity and reliability of the instruments, data collection procedures, and ethical issues considered. The statistical analyses used to test the propositions of the study were also elaborated. This chapter also discussed the nature of the data, how the data were processed, and methods and programmes used to analyse the data. The next chapter is the results and discussion aspect of the study's report.



CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the analyses of the data collected. The discussion includes the interpretation of the data with reference to previous findings, theory and specific responses given by the respondents in accordance with the research questions. The general purpose of the study was to analyse comparatively conventional and non-conventional modes of instruction and Accounting education delivery in Ghana, taking into consideration the mediating role of trainee-teachers' academic self-discipline. The first part of the chapter deals with the background characteristics of the subjects while the second part is devoted to the research questions. Both descriptive and inferential statistics were employed in the data analysis of the quantitative data. At the end of data collection, the investigator retrieved 512 completed and combined questionnaires from the respondents, representing 88.9 per cent. In the case of the interview, all the participants participated in the study, representing 100 per cent participation rate.

Analyses of Respondents' Background Characteristics

This part of the chapter deals with the analyses regarding the background characteristics of the respondents which are based on their study institution, gender, and prior teaching experience. The results are presented in Table 5. Preliminary analysis of the data collected show that 60.4 per cent of the respondents' study institution was UEW while 39.6 per cent of the respondents were from the UCC. In relation to mode of study delivery, majority (68.0%) of

the respondents were from conventional (regular) mode while 32.0 per cent were from non-conventional (distance) mode. Majority (69.0%) of the Accounting education trainee-teachers studying through the conventional mode were from the UEW while majority (57.9%) of those studying through the non-conventional mode were from the UCC.

Table 5: Distribution of Respondents' Background Characteristics

Variables	Sub-scale	Mode of Study				Total	
		Conventional No.	Conventional %	Non-Conventional No.	Non-Conventional %	No.	%
Study institution	UCC	108	31.0	95	57.9	203	39.6
	UEW	240	69.0	69	42.1	309	60.4
Gender	Male	271	77.9	118	72.0	389	76.0
	Female	77	22.1	46	28.0	123	24.0
Prior experience	No	33	9.5	8	4.9	41	8.0
	Yes	315	90.5	156	95.1	471	92.0
Total		348	100	164	100	512	100
% of participants		68.0%		32.0%		100%	

Source: Field Survey (2021)

The results in Table 5 show that the UCC has more preservice Accounting teachers under training in its non-conventional mode as compared to the conventional mode while UEW is training more Accounting teachers through the conventional mode as compared to non-conventional mode. This means, the universities are able to train more Accounting teachers through non-conventional mode of education delivery such as distance and sandwich programmes as

compare to conventional mode such as regular face-to-face mode of delivery. The training of more Accounting teachers through non-conventional mode of education delivery is more severe in the UCC as compare to the UEW.

The results that emerged from Table 5 are in line with the submission of Mutaka (2018) who indicates that the UEW's Accounting education programme is training more Accounting teachers through the conventional mode as compared to the non-conventional mode. Also, in the case of the UCC, the finding is consistent with the assertions of Denkyi (2013), Laryea (2018) and Fuudia (2019) who all aver that through distance education, the UCC is able to train more professional teachers than the conventional mode of face-to-face mode of delivery.

Furthermore, results in Table 5 show that majority of the trainee-teachers that participated in the study, both conventional (77.9%) and non-conventional (72.0%), were males. Only 24.0 per cent of the respondents were females. Based on this finding, one may argue that in terms of percentage, the total number of male trainee-teachers in the study institutions, with regard to both conventional and non-conventional modes of education delivery outnumbered their female counterparts. This gives a cursory indication that the Accounting teacher education programmes of the study institutions are more attracted by males as compared to females. This means, the institutions attract more males for the SHSs than female trainee-teachers.

The findings are in line with the report of GTEC (2021) which indicates that the number of male students enrolled on to the various education programmes

in public universities in Ghana is more than that of the females. Furthermore, the finding is in line with the perceived social expectation in traditional Ghanaian society which is largely patriarchal in nature where males are more prone to work in the formal sector than females who are more in the informal sector of the Ghanaian economy. That is, in such societies, males are known to participate more in education than their female counterparts. However, in relation to trainee-teachers in Accounting education, the percentage difference is relatively large and one may, therefore, argue that the finding is not good indicator in our modern society since both men and women have equal chance of being admitted into the programmes and also into the teaching profession, either private or public.

The next background characteristic of respondents considered was trainee-teachers prior teaching experience. As indicated in Table 5, respondents were to indicate 'yes' or 'no' whether they have had any prior teaching experience. Improving the quality of Accounting education worldwide for students suggests that Accounting teachers must be trained with the required skill sets, knowledge, and experiences needed for the times. Most researchers (Adeyemi & Adu, 2012; Amabile et al., 2019; Corbin, 2017; Darling-Hammond, 2014) in teacher education are of the view that the longer a trainee-teacher establishes relation with an institution, the teaching work or profession, all other things being equal, the better he or she expresses his or her view on the institution's activities and services with regard to instructional quality, and their effectiveness in the teaching of their respective subjects. As a result, the investigator collected data on the trainee-teachers' prior teaching experience.

As indicated in Table 5, most of the trainee-teachers from both conventional (90.5%) and non-conventional (95.1%) modes of education delivery indicated that they had some level of prior teaching experience. The findings show that both conventional and non-conventional education students reading Accounting education had some level of prior teaching experience to provide relevant information for the study with regard to their assessment of the institution's instructional quality and their academic self-discipline.

Similarly, the mentors who assessed the trainee-teachers' effectiveness in the teaching of Accounting or Financial Accounting indicated that they had adequate experience in the work they do. Specifically, 4.8 per cent, 40.5 per cent and 54.7 per cent of the mentors indicated that they have had less than 6 years, 6 – 10 years, and above 10 years teaching and supervision experience respectively in their respective institutions with regard to on-campus/on-centre and off-campus/off-centre teaching experiences. This shows that both trainee-teachers and mentors had relatively meaningful level of experience to answer the questionnaires.

Analyses of Research Questions

This section presents the results pertaining to the specific research questions of the study. The quantitative data were analysed using both descriptive and inferential statistical tools while the qualitative data were analysed manually using open, axial and selective coding systems. These analytical tools were used because the responses to the items with regard to the variables were measured using discrete scale and also the preliminary analysis at the pre-test stage shows

that the distribution was normal. The preliminary analyses show that the standard deviations were moderate and closer to one another, indicating the non-dispersion in a widely-spread distribution. The moderateness of the standard deviations of the distribution shows that the views of the respondents were coming from a moderate homogeneous group that is, a group with similar characteristics or similar understanding with regard to the issues under consideration.

Responses to the closed-ended items used in collecting the data on the issues regarding the concepts were measured on a seven-point discrete scale ranging from one to seven where the higher the number, the more agreement to the statements and the lower the number, the more the disagreement to the statements. Based on the scale used, the approximation approach recommended by Sarstedt and Mooi (2019) when dealing with discrete or unilinear scale items was used to categorise the response scores. Specifically, the study adopted the recommended mathematical approximation technique to interpret the mean scores. Thus Totally Agree (6.5 - 7.0), Strongly Agree (5.5 - 6.4), Agree (4.5 - 5.4), Undecided (3.5 - 4.4), Disagree (2.5 - 3.4), Strongly Disagree (1.5 - 2.4), and Totally Disagree (1.0 - 1.4). The results showing the views of the respondents regarding the study variables are presented as follows:

Levels of Instructional Quality in the Training of Accounting Teachers Using Conventional and Non-Conventional Modes with regard to the Five Facets of Instructional Quality

The rationale of the first research question of the study was to finding out, comparatively, the levels of instructional quality in the training of Accounting

teachers using conventional and non-conventional models with regard to pedagogical content knowledge, assessment techniques, quality level of faculty, classroom management, and guidance and counselling. The five dimensions of instructional quality were treated as dependent variables while the study institutions and mode of education delivery were treated as independent variables. As indicated in Chapter Three of this report, 10 close-ended items were used to collect data on each of the dimensions of instructional quality. These items were transformed by pooling them together to form the two variables using average response scores of the seven-point discrete scale used.

Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violations noted. The two c-way MANOVA was, therefore, used to analyse the data in order to compare the instructional quality of the UCC and the UEW for both conventional and non-conventional modes of education delivery. The results with regard to descriptive statistics, multivariate tests and tests of between-subjects effects are presented in Tables 6, 7 and 8 respectively.

As shown in Table 6, respondents rated the pedagogical content knowledge for both conventional (Mean = 5.393, SD = .251) and non-conventional (Mean = 5.385, SD = .271) modes of education delivery as high. This shows that Accounting education trainee-teachers studying at the UCC and the UEW, either conventional or non-conventional mode, are comfortable with the pedagogical content knowledge of the instructional quality dimension of the

institutions. This may mean that the trainee-teachers' preservice preparation programme provides them with a good foundation in teaching Accounting at the pre-tertiary level.

Table 6: Descriptive Statistics on the Levels of Instructional Quality in the Training of Accounting Teachers Using Conventional and Non-Conventional Models

Variables	Mode	Mean	SD	N
Pedagogical content knowledge (PCK)	Conventional	5.393	.251	348
	Non-Conventional	5.385	.271	164
	Total	5.390	.257	512
Assessment techniques (AT)	Conventional	5.269	.466	348
	Non-Conventional	5.219	.469	164
	Total	5.253	.467	512
Quality of faculty (QF)	Conventional	5.207	.316	348
	Non-Conventional	5.192	.309	164
	Total	5.205	.314	512
Classroom management (CM)	Conventional	5.722	.276	348
	Non-Conventional	5.651	.289	164
	Total	5.699	.282	512
Guidance and counselling (GC)	Conventional	4.869	.324	348
	Non-Conventional	4.885	.315	164
	Total	4.874	.321	512

Source: Field Survey (2021) Where SD = Standard deviation (N = 512)

This is so because the lecturers/tutors use good teaching learning materials in instruction which enhance their understanding, and also their teacher education

programme equips them with varieties of Accounting teaching methods and familiarises them with the SHS curriculum. Furthermore, the result regarding pedagogical content knowledge of the institutions may mean that at the UCC and UEW, trainee-teachers reading Accounting education in both conventional and non-conventional modes are prepared adequately in order for them to present Accounting lessons in a logical manner, use teaching and learning materials (TLMs) to enhance students' understanding of lessons, and improvise TLMs where necessary or needed.

The findings on pedagogical content knowledge support the assertion that teachers should have content knowledge that is deeper than that of a “mere subject matter major,” including specific sections of content area courses for teacher candidates that will promote deeper understandings of content than general subject matter courses (Ahinful et al., 2019). Engel (2017) indicates that subject matter expertise may be a necessary, but not sufficient, condition for teacher effectiveness; pedagogy coursework must supplement subject matter coursework. It is important for institutions to ensure that their preservice teacher preparation programmes are structured or designed to increase pre-service teachers' pedagogical knowledge and pedagogical content knowledge. Coursework in Accounting methods for pre-service teachers has been linked to increased Accounting knowledge for teaching, a subject specific area of pedagogical content knowledge, and to student understanding and achievement in Accounting (Ezenwafor & Akpobome, 2017; Fortin et al., 2019).

In relation to assessment techniques of instructional quality, the respondents agreed that in both conventional (Mean = 5.269, SD = .466) and non-conventional (Mean = 5.219, SD = .469) modes of education delivery the assessment techniques students are exposed to are appropriate and relevant to their preservice preparation. Relatively, respondents learning through the conventional mode of education view the assessment techniques of their institution higher as compared to those learning through non-conventional mode.

This means, irrespective of one's mode of study, the assessment techniques used by the institutions are appropriate in their training. That is, the Accounting teacher education programme of the universities has made trainee-teachers familiar with a variety of assessment techniques. This finding corroborates with the submission by Fortin et al. (2019) who examined Accounting students' choice of blended learning format and its impact on performance and satisfaction. Fortin et al. posit that, irrespective of the mode of education, institutions must ensure that activities and policies concerned with periodic students' learning assessment and feedback including trainee evaluation of their instructors (facilitators) must be effective to ensure quality in students' assessment.

Also, the results on assessment techniques as presented in Table 6 shows that trainee-teachers have been able to develop critical thinking skills and motivation for learning as a result of the assessment techniques used by the institutions. Their respective universities are able to train them to use evaluation remarks to enhance students' learning and diagnose students' academic problems.

Similarly, the results may mean that the various Accounting teacher education programmes of the universities are able to equip preservice teachers with the requisite knowledge, skills and competencies for crafting test items and marking schemes.

Furthermore, as indicated in Table 6, respondents agreed that their respective universities had quality faculty. This shows that the teaching staff of the two universities, either conventional or non-conventional modes, are well trained and highly qualified. They are very professional in their work, are able to show enough skills and competencies when teaching, are knowledgeable about how and when to help students overcome their learning difficulties, and they periodically engage students in practical aspects of the courses they teach.

Also, the results on quality of faculty may mean that lecturers/tutors interactions with students during lectures were effective and the students had created the medium by the universities for them to interact with the teaching staff, both offline and online. Again, the results on the quality of faculty may mean that the teaching staff of the universities created platforms for group work and discussions for students to construct knowledge and they always came together to share ideas on how to assist students grow their practical skills of teaching and practice for mastery.

Similarly, the respondents indicated that the faculty members of both universities were able to demonstrate high level of classroom management skills and strategies (Mean = 5.699, SD = .282). This shows that the two universities were able to give trainee-teachers enough tuition on classroom management skills

and strategies, how to use instructional techniques to manage disruptive students' behaviour, and they were prepared on how to manage over enrolled class and enhance students' engagement. Similarly, the results may mean that trainee-teachers of the two universities were trained in how to use a variety of teaching strategies to manage classroom learning and interaction, handle students with problematic behaviours, determine class rules, and manage and administer classroom discipline.

In relation to guidance and counselling, as one of the dimensions of instructional quality, the results in Table 6 show that trainee-teachers in both universities were of the view that their respective universities were able to demonstrate high level of instructional quality in the area of guidance and counselling in both conventional and non-conventional modes of education delivery (Mean = 4.874, SD = .321). This means the two universities had well-established guidance and counselling units for students counselling and also they had professional guidance and counselling staff who were not lecturers/tutors.

Also, the results, regarding guidance and counselling dimension of instructional quality, mean that both universities were able to train Accounting teachers on how to offer guidance and counselling services to students to enhance their development, particularly to academically weaker students. Through the instructional quality provided by the two universities in the preparation of Accounting teachers, the trainee-teachers were able to deal with students with emotional problems and also were able to help learners to manage time judiciously.

Overall, the views of the respondents show that they perceived the instructional quality of their respective universities as moderately effective. Instructional quality has become an increasing phenomenon in the educational landscape such that no education policy or programme can do away with. The findings support the assertion that most universities are now measuring their instructional quality by focusing on the positive influence it has on student learning outcomes (Rahman et al., 2019). In most cases, emphasis is on the quality level of instruction with regard to pedagogical skills, teacher qualification, infrastructure, student-teacher interaction, evaluation, student support services, and teachers' support services (Perez, 2013; Ogunleye, 2013). Instructional quality is critical in achieving the ultimate aim of improved student outcomes. It requires the use of a variety of teaching and learning strategies, methods, and/or practices that potentially enhance student achievement (Harris & Sass, 2017; Ishola et al., 2020).

After examining the views of the respondents descriptively, the study further performed multivariate tests to see if there was statistically significant difference in the views of the respondents with regard to the dimensions of instructional quality. The results show that the test of equality of covariance matrices as tested by Box M was not violated ($F(15, 434727) = 1.349, p = .163$). Therefore, Wilks' Lambda was used to check for any significant differences in the main effects as recommended by Sarstedt and Mooi (2019). According to Sarstedt and Mooi, Wilks' Lambda values are used when the test of equality of covariance matrices as tested by Box M is not violated. However, in cases where the test is

violated; Pillai's Trace value is used. Multivariate tests and test of between-subjects effects are presented in Tables 7 and 8.

Table 7: Multivariate Tests on the Levels of Instructional Quality in the Training of Accounting Teachers

Effect		Value	F	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.999	70627.353 ^b	.000	.999
	Wilks' Lambda	.001	70627.353 ^b	.000	.999
	Hotelling's Trace	697.899	70627.353 ^b	.000	.999
	Roy's Largest Root	697.899	70627.353 ^b	.000	.999
Mode	Pillai's Trace	.024	2.491 ^b	.030	.024
	Wilks' Lambda	.976	2.491 ^b	.030	.024
	Hotelling's Trace	.025	2.491 ^b	.030	.024
	Roy's Largest Root	.025	2.491 ^b	.030	.024

Source: Field Survey (2021)

(N = 512)

As indicated in Table 7, there was a statistically significant difference between conventional and non-conventional modes of education delivery in the linear combination of dependent variables (pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling): $F(5, 506) = 2.491, p = .030$; Wilks' Lambda = .976; partial eta squared=.024. This shows that the margin of the difference between the groups with regard to the modes of education was 2.4 per cent in favour of conventional.

Furthermore, the dependent variables were considered separately using a Bonferroni adjusted alpha level of .01 in order to examine the tests of between-subjects effects. The results are presented in Table 8.

Table 8: Tests of Between-Subjects Effects on the Levels of Instructional Quality in the Training of Accounting Teachers

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	PCK	.007 ^a	1	.007	.109	.741	.000
	AT	.283 ^b	1	.283	1.296	.256	.003
	QF	.026 ^c	1	.026	.268	.605	.001
	CM	.561 ^d	1	.561	7.121	.008	.014
	GC	.027 ^e	1	.027	.260	.611	.001
Intercept	PCK	12947.771	1	12947.77	194881.9	.000	.997
	AT	12261.719	1	12261.72	56219.9	.000	.991
	QF	12055.404	1	12055.40	122425.8	.000	.996
	CM	14415.814	1	14415.81	182985.9	.000	.997
	GC	10605.214	1	10605.21	102722.9	.000	.995
Mode	PCK	.007	1	.007	.109	.741	.000
	AT	3.110	1	3.110	18.599	.000	.035
	QF	.026	1	.026	.268	.605	.001
	CM	1.092	1	1.092	14.403	.000	.028
	GC	.027	1	.027	.260	.611	.001
Error	PCK	33.884	510	.066			
	AT	111.232	510	.218			
	QF	50.220	510	.098			
	CM	40.178	510	.079			
	GC	52.653	510	.103			
Total	PCK	14909.860	512				
	AT	14240.320	512				
	QF	13908.250	512				
	CM	16668.780	512				
	GC	12216.780	512				
Corrected Total	PCK	33.891	511				
	AT	111.515	511				
	QF	50.247	511				
	CM	40.739	511				
	GC	52.680	511				

a. R Squared = .000 (Adjusted R Squared = -.002)

b. R Squared = .003 (Adjusted R Squared = .001)

c. R Squared = .001 (Adjusted R Squared = -.001)

d. R Squared = .014 (Adjusted R Squared = .012)

e. R Squared = .001 (Adjusted R Squared = -.001)

Source: Field Survey (2021)

(N = 512)

Where PCK = pedagogical content knowledge, AT = assessment techniques, QF = quality of faculty, CM = classroom management, and GC = guidance and counselling

As indicated in Table 8, when the results for the dependent variables were considered separately, the dimensions of instructional quality that indicates statistical significance difference between conventional and non-conventional modes, using a Bonferroni adjusted alpha level of .01, were assessment techniques [$F(1, 510) = 18.599, p = .000, \text{partial } \eta^2 = .035$] and classroom management [$F(1, 510) = 14.403, p = .000, \text{partial } \eta^2 = .028$].

An inspection of the mean scores for assessment techniques indicated that trainee-teachers from the conventional mode (Mean = 5.269, SD = .466) reported slightly higher levels of agreement that the activities and policies concerned with periodic students' learning assessment and feedback including trainee evaluation of their instructors is effective than trainee-teachers from the non-conventional (Mean = 5.219, SD = .469) mode of education delivery. For both assessment techniques and classroom management dimensions of instructional quality, trainee-teachers from conventional mode demonstrated high level of agreement that their instructional quality is effective as compared to trainee-teachers from non-conventional mode. This may mean that conventional accounting education trainee-teachers view the effectiveness of their institutions' instructional quality higher than non-conventional Accounting education trainee-teachers.

In order to understand the issues better, I collected qualitative data from participants regarding the levels of instructional quality in the training of Accounting teachers at the UCC and the UEW with regard to pedagogical content knowledge, assessment techniques, quality level of faculty, classroom management, and guidance and counselling. Most of the participants indicated

that there is no much difference between conventional and non-conventional modes of education delivery. However, in relation to content knowledge and appearance, trainee-teachers being trained through conventional mode seem to be relatively higher as compared to those trained through non-conventional mode.

Specifically, HMM1 said: *for about four years now, I have observed that preservice Accounting teachers who are being prepared through conventional mode of education are able to demonstrate high level of content knowledge in the teaching of the subject, particularly those from UCC. Also, their dress code, in my view is professional and representative enough. Same can be said about those from UEW. However, in some cases, I think the content knowledge base of preservice teachers trained through non-conventional mode such as distance education is not that strong, particularly, regarding the principles of Financial Accounting and Cost Accounting. Their ability to demonstrate high level of classroom assessment techniques, management and interaction is worse.*

Also, HMF2 said: *In my school, most of the trainee-teachers who do their off-campus or off-centre teaching practices are regular and punctual, particularly when they are informed that their supervisors or assessors will be coming. I think trainee-teachers from the conventional mode are able to demonstrate strong pedagogical knowledge in the teaching of either Cost Accounting or Financial Accounting as compared to those from non-conventional modes such as distance and sandwich. Irrespective of the institution, whether the UCC or the UEW, the trainee-teachers from non-conventional mode have weak content knowledge and*

classroom management skills. However, in relation to their assessment techniques and professional values, I think they are better.

Another participant, HODM2 said: *To tell you the truth, it is almost every student's desire and to the greater extent every lecturer's desire to have students learn through the conventional mode. As an academic I can attest to the fact that the kind of time, attention and materials we give to the conventional (regular) students may not be the same as the non-conventional (distance) mode. For instance with the non-conventional mode, it is not the same lecturer who goes round to teach the students in the various centres, often times the lecturer (chief examiner) is made to be a team leader and teaches at a particular centre, whatever is going on in the other centres is handled by other tutors. These chief examiners may be generous by sharing their lecture notes to other lecturers. However, you and I know that the way and manner the tutors may teach by virtue of the experience they have had with regard to their pedagogical and classroom management strategies may not be the same as the chief examiner. I think these differences can cause some level of heterogeneity among the students with regard to their understanding of concepts and performance.*

Furthermore, HODM2 said: *But for regular students the lecturer is the only one teaching all the students who are in one class. He is the one who sets examination questions for them. However, in the case of distance education students, the tutor handles only one class or two classes at a centre and the rest of the centres are taught by other tutors. This scenario differs from the conventional mode where the chief examiner is the one that teaches all classes and also set the*

questions. This arrangement is the same for students at sandwich mode of the Institute of Education. However, for regular sandwich students, it is the same teacher but the problem with the sandwich is that time is an issue and the kinds of students who are admitted for the sandwich programme are the working class. It so happens that most of them had already lost touch with classroom activities. So when they come it appears like they are just coming to start the whole thing all over and that is what creates a lot of problems with their engagement. When you compare conventional and non-conventional students, I can say that about 95 per cent of the regular students are on campus and they are ready to learn and in most cases are not disturbed by work and family pressures. However, in the case of distance education students, I think most of them are facing problems in their academic life largely as a result of work and family pressures.

Comparing students on teaching practice for conventional and non-conventional modes, HODM3 said: *Interestingly you see students who are on conventional mode appear to be having the better part of attention when it comes to studies, so I always favour the conventional mode of learning because, the regular students are made to go for teaching practice for a whole semester at level 400. For regular students, the whole First Semester of their final year is devoted to teaching practice. It so happened that most of them do not do it in the comfort of their home, they go to stay closer to the schools they choose for the practice.*

In addition, HODM3 said: *I think this system creates room for the trainee-teachers to be fully integrated in the school system but not only the teaching*

activities. Ideally, they are supposed to be well immersed in whatever goes on in the school and get to know the various dynamics that are there as they adapt to the actual work environment, because of this, they tend to be well immersed in what is going on in the various schools of practice. However, for distance students, most of them are already teachers or workers, so if they have to go for teaching practice, they rather go back to work and they see themselves as workers so even if they are doing the teaching practice it is more or less stealing some time off their work schedule; it only when they get a hint of supervisors coming, that is when they go to their chosen schools of practice. At times they have to arrange a class and do not go strictly by the time table they are supposed to apply. Those of them who are teachers at the basic school (primary) level and are reading a degree programme which requires them to practice at secondary schools or JHS may have to vacate post for the practice, so they go in for the teaching practice as and when they hear of the supervisors coming.

HOUM1 also said: when it comes to trainee-teachers trained for basic schools, I think distance learners are better than the regular students who have no experience in the teaching profession. My experience have taught me to understand that most trainee-teachers reading B.Ed (Basic Education) through non-conventional mode are usually professional teachers with Diploma in Basic Education as their highest academic qualification. If these trainee-teachers from non-conventional mode of education are using their own class for their teaching practice, that is where you actually get the best feel of how they are doing well in terms of teaching. I think they have comparative advantage over regular students

who have never taught before when it comes to pedagogy, classroom management, guidance and counselling, and assessment techniques usage. This is so because they are already diploma teachers and doing top up for degree. This means, they have done the teaching practice before, and they have been teaching over and over again, so they may reduce the entire exercise to an accumulation of marks, instead of just picking virtues skills and some knowledge from the exercise that they are undertaking.

With regard to teaching practice achieving its aim of training teachers, HODM1 said: *well to some extent, and with regards to mentors, there is one striking problem when it comes to mentorship, the assignment of supervisors is a problem, so to say that with regard to supervision, of teaching practice the vision of teaching practice has achieved its aim, I really wonder because, supervisors are expected to spend some time with the students, even before the students enter the class (pre teaching engagement) before the real teaching engagement then when they enter the class, the supervisor then followed to observe what they were doing then after the class you also engage them. So, therefore, there are three stages in the supervision: pre-teaching engagement, the supervision itself, and post teaching engagement. But often supervisors in their bid to cover whatever work that is assigned to them may skip especially the pre-teaching; they do not do it. The only question they often ask is what class do you have? Where are you going? Ok go I will follow soon that is all they tell them, instead of listening to the concerns of the students and how to help them address them.*

Furthermore, HODM1 said: *Probably the students may be talking about the use of particular equipment but that equipment is not available. In such situation, the supervisor could come in and help them with how to improvise. These are not discussed so the whole work has been reduced to the supervision itself and afterwards the discussion of how the students fared and how they can improve upon is actually even not emphasised because often time the supervisors are rushing to go and see other students, and the exercise is much more on how to maximise the time and not how they can actually improve students' teaching. However, that is by no means to try criminalising or criticising the supervisors.*

In relation to the assessment techniques quality of the trainee-teachers, HODM2 said: *As for quality of assessment let me just say that on one part the text items are of the same level of difficulty, they do not change, just that when it comes to grading that we find instances where lecturers are trying to favour non-conventional students on the grounds that they learn under some constrains. They are so limited by time and for that matter they could not spend much time in school so they could not have interacted more, and for that matter they may appease them by lowering the standard or adding some marks across board for them, which is often unfair to the regular students. Most lecturers think that they have given the regular students all they need to fare well.*

Furthermore, HODM2 said: *There is significant level of difference in the assessment of conventional and non-conventional students. In the case of regular students, the one who teaches them does the assessment. However, in the case of distance students, the one who crafts the questions is different, the one who*

administers the questions is different, the one who marks it is different and the one who looks at the overall scores to input them into the system is also different. In fact, the point is that the chief examiner or the lecturers themselves do not even have access to the continuous assessment, so is like things are done in such a way that there is no way one individual can have a comprehensive idea about how the students are performing.

HODM2 further said: that is how come the distance students fail in their numbers, because if it should happen to the regular students chances are that the one teaching after the first quiz will know that they may have to change the strategies they are using in teaching as part of the formative evaluation devices, they can employ these and they will get to know whether or not what their teaching is having the desired impact or not. However, this is the case where the teacher, the examiner, the marker and inputter are different so these do not inure to the advantage or benefit of distance students; unlike the regular students where the one doing all these activities is the same person. I think this situation creates room for the assessment techniques of the university to favour regular students as compared to distance education students.

In relation to the promptness of assessment result, HOUM1 said: For regular students, usually I do not see any delay. However, in the case of distance education students, assessment results take some time because of the large numbers of students that they have to deal with. Also, there are so many students and hands involved, so even administration of exams takes a very long time and when they are done they will also have to take their time in collecting the result.

HODM1 also said *that assessment of distance education students in this university is a whole big business on its own, it is analogous to whatever the university is doing at the conventional mode. It has over 37,000 students so imagine dealing with all these students at a time and they cannot release the results one by one. Whatever is done at the CoDE is centralised so the same person or the unit in charge of exams, will invite markers, camp them in hotels for a week or two to mark and to check the marked scripts. Unlike the conventional mode where a particular lecturer who teaches a number of students will mark the scripts, collate the result, administer everything and key in the results, but for that of distance education students, the work is highly centralised on few people and because of that it takes a longer time to release results in the non-conventional mode unlike the conventional mode.*

In relation to pedagogical quality, HODM2 said: *Well strictly speaking, I can only share my experience with you as a supervisor. I have not supervised any distance students yet for this semester, but I have supervised the regular and sandwich students. What I can say is that mostly the distance education students are teachers and for that matter they know whatever they are teaching, they are ok with the pedagogical strategies that they use. However, when it comes to the content of what they teach, it seems the regular students have strong content knowledge as compared to the distance students. Therefore, I think the major problem facing distance students reading B.Ed. (Accounting) is with the content and not with the pedagogy. In the case of regular students, they know the content*

of Cost and/or Financial Accounting as expected; however, their problem is how to use the pedagogical skills to make it simpler for the student to understand.

With classroom management quality, four of the participants (HODM1, HODM2, HODM3 and HOUM1) indicated that those who are already teachers do not have any problem employing the classroom management skills and strategies, so the strength of the regular students lies in content knowledge whereas that of the distance students who are teachers do not have any problem with the classroom management because they are constantly doing it on the job. So relatively they are masters of such activities.

Again, with regard to quality of faculty, these four participants asserted that for conventional education or regular students, it is the same lecturers who are teaching, but for the distance, lecturers are recruited from other places even though interviews are conducted. They further indicated that they do not apply the same rigour used to select lecturers for conventional mode and for that matter by extension, the quality of lecturers for conventional mode may not be the same as those on non-conventional mode. Often you may have tutors who do not measure up to the quality of lecturers engaged in the regular stream. So here we may have an issue, for instance, we can engage somebody with master's degree to teach a distance class, but probably a master's degree may not be research based, but in the regular stream, if you do not have a research-based master's degree you may not be engaged.

In relation to guidance and counselling, HODM3 said: *In this university, there is Guidance and Counselling Centre for all students and also Guidance and*

Counselling Unit created specifically for distance education students. The Unit is even looking at adopting e-counselling (electronic counselling) where students on distance can engage with a counsellor on campus so that whatever concerns the students have may be addressed and also we have students support services unit where students who have problems can actually reach out to such office and obtain whatever answers they need for their questions. Regular students also have access to the Centre on campus.

The findings that emerged from both the quantitative and qualitative results show that in relation to instructional quality, there is some level of differences between conventional and non-conventional students, particularly regarding assessment techniques and classroom management. Regular students are more exposed to effective level of assessment techniques and classroom management. Also, students in the conventional mode of education seem to be exposed to higher level of pedagogical content knowledge and quality of faculty as compared to those in the non-conventional mode such as distance learners. However, the trainee-teachers viewed the instructional quality of the university as moderate.

These findings are consistent with that of Chen et al. (2013) who found that students attending the Accounting courses prefer the conventional mode as opposed to non-conventional mode such as distance learning and interactive television use. Specifically, Chen et al. conducted a survey involving two groups of Accounting students attending a class delivered by the same tutor using a different method each time; in fact, the only difference was the means of teaching

the students. The latter felt that the online teaching did not promote teacher-student interaction as good as conventional teaching did; yet, no significant difference between the two groups of students was found. That is, one group taught with the traditional method and the other group with the use of online for distance learning in terms of their performance in the exams.

The finding that the various facets of teacher preservice preparation programmes, that is, B.Ed. in Accounting, is good, is not in line with the comments of Kwarteng (2018) who indicated that with respect to quality of curriculum, most teachers implemented the Accounting curriculum sustainably. However, other teachers' use of the curriculum is mediocre. However, in the case of guidance and counselling there is no meaningful difference between students from conventional and non-conventional modes of education.

Also, the findings indicate that students in the conventional mode of education are able to demonstrate high level of content knowledge but weak pedagogical skills and strategies. In the case of students from the non-conventional mode, they were able to demonstrate high level of pedagogical knowledge as compared to content knowledge. This may mean that there is inconsistency in the findings which support the current trends where most institutions have started to replace or blend their conventional mode of teaching with notes, slides and books with tools drawn from VLE. This environment is used as the only tool in distance teaching or as supplementary means to the conventional mode of education (Mutaka, 2018). Therefore, using a blended mode that is skewed towards conventional mode will help students to acquire the

requisite knowledge, skills and competencies that would enable them demonstrate high level of pedagogical content knowledge and strategies.

Level of Effectiveness of Accounting Education Delivery Using Conventional and Non-Conventional Models in Relation to Professional Values and Attitudes, Professional Knowledge, and Professional Practices

The second research question focused on finding out the level of effectiveness of Accounting education delivery using conventional and non-conventional modes of education in relation to professional values and attitudes, professional knowledge, professional practices (managing the learning environment), professional practices (teaching and learning), and professional practices (assessment). Again, multiple items were used to collect data on these issues which were later pooled together using average response score as composite. The results are presented in Table 9.

As indicated in the table, trainee-teachers from both conventional (Mean = 5.404, SD = .419) and non-conventional (Mean = 5.321, SD = .428) modes of education, with regard to the two universities, were able to demonstrate effective level of professional values and attitudes. This means, the trainee-teachers were regular in school during their teaching practices and also they valued engaging other teachers to plan and share knowledge for the success of their students. The results also mean that trainee-teachers value attendance at school meetings and workshops, they show professional commitment by showing positive attitude towards teaching, and they join colleague staff to undertake activities that bring about changes in the school. The results showed that conventional trainee-

teachers were able to exhibit high level of effectiveness regarding their professional values and attitudes during their teaching practice as compared to others.

The finding that Accounting trainee-teachers are effective with regard to their professional values and attitudes, particularly regular students is congruent with the submission of HMF1 who said: *In my school, most of the trainee-teachers who do their off-campus teaching practice are able to demonstrate high level of professional values and attitudes, particularly, those from UCC, who in most cases are relatively young. In my school, we put much emphasis on professionalism and as a result all staff are to hold the values of the profession high and must demonstrate positive and acceptable attitudes toward all.*

The views of HMM2 concur with that of HMF1. HMM2 said: *I think the trainee-teachers who do their off-campus in my school are always seen to be respectful and also professional in nature with regard to their values, attitudes, and behaviour. I am not surprised to always see these trainee-teachers demonstrate high level of professional values, attitudes and behaviour. This is so because they are under supervision and they are teaching in order for them to be supervised, assessed and graded. Therefore, they will do everything possible to please the assessors and supervisors.*

Similarly, in relation to professional values and attitudes, HODM1 also said: *Oh that is an issue, we are human and I know many of the students are reducing the whole exercise to accumulation of marks, once they obtain the required number of supervisions or they know that they have done with teaching*

for supervision. They do not attend classes any more. At times you go round and some school heads and mentors complain that students on teaching practice are no more coming to school. This means, they were able to exhibit high level of professional values and attitudes to get good grade; but could not do same for 'free'; meaning they have acquired the needed skills and competencies to be professional but want to be motivated before they demonstrate what they have.

Results from Table 9 further show that both conventional (Mean = 4.739, SD = .728) and non-conventional (Mean = 4.738, SD = .713) trainee-teachers from the UCC and the UEW demonstration of knowledge in their teaching was rated as effective by the supervisors. This means, the trainee-teachers were able to use variety of teaching methods to meet different learning needs of their students; they were able to consider individual students' learning needs in their lesson plan, and also they were able to demonstrate the competencies in putting students in appropriate learning groups in their respective classrooms.

In addition, the results from Table 9 mean that the trainee-teachers were able to relate their lessons to students' real experience and also were able to demonstrate deep understanding of topics they teach. Again, the specific results show that trainee-teachers from the conventional mode of education were able to demonstrate high level of professional knowledge in the area of Accounting than their counterparts in the non-conventional mode.

The views of the respondents are in line with that of HOUM1 who said: *Some trainee-teachers do exhibit lack of content knowledge during their teaching practice and are not able to prepare good lesson plans. However, other trainee-*

teachers do very well in all these areas of competencies. With regard to professional knowledge, I will say performance cut across both modes, conventional and non-conventional: you may get from each of these modes of delivery students doing very well and others performing poorly.

Table 9: Respondents' Views on Level of Effectiveness of Accounting Education Delivery of B.Ed in Accounting Programme

Variables	Mode	Mean	SD	N
Professional values and attitudes	Conventional	5.404	.419	348
	Non-Conventional	5.321	.428	164
	Total	5.377	.423	512
Professional knowledge	Conventional	4.739	.728	348
	Non-Conventional	4.738	.713	164
	Total	4.739	.723	512
Professional practices (managing the learning environment)	Conventional	5.158	.546	348
	Non-Conventional	5.123	.557	164
	Total	5.147	.549	512
Professional practices (teaching and learning)	Conventional	5.707	.401	348
	Non-Conventional	5.688	.400	164
	Total	5.701	.401	512
Professional practices (assessment)	Conventional	5.465	.429	348
	Non-Conventional	5.402	.442	164
	Total	5.445	.434	512

Source: Field Survey (2021)

(N = 512)

Furthermore, as indicated in Table 9, the trainee-teachers were able to show meaningful level of effectiveness with regard to their professional practices in managing their respective learning environments (Mean = 5.147, SD = .549), particularly conventional or regular mode trainee-teachers. The results show that Accounting trainee-teachers of UCC and UEW were able to establish purposeful learning environment that helped them to monitor students' learning activities. Also, the trainee-teachers were able to establish clear parameters to control and regulate the conduct and behaviour of their students and class. Similarly, the results mean that the trainee-teachers were able to effectively mix both girls and boys for class assignment, administer motivation and reward packages effectively, and were able to find out the concerns of students who misbehave in their respective classes.

Again, results from Table 9 show that both conventional (Mean = 5.707, SD = .401) and non-conventional (Mean = 5.688, SD = .400) Accounting education trainee-teachers of the universities were able to demonstrate high level of effectiveness with regard to their professional practices regarding teaching and learning. This shows that the trainee-teachers were able to organise teaching and learning activities sequentially, use appropriate pace for the entire lesson in order for all students to hear them clearly, distribute questions fairly to stimulate critical thinking in their respective students. Also, the finding suggests that the trainee-teachers were able to manage classroom board effectively (ie. writing of date, subject, topic, core points, and cleaning of board at the end of lesson) and they were able to exhibit command of subject matter.

Similarly, as indicated in Table 9, the supervisors indicated that the trainee-teachers were able to demonstrate some level of effectiveness in their professional practices regarding assessment (Mean = 5.445, SD = .434). This means, the trainee-teachers were able to use varieties of assessment techniques to ensure students' participation, state specific relevant measurable objectives which were linked to classroom activities, and develop different assessment techniques to promote students' learning in their classes. Also, the trainee-teachers were able to set assessment questions to cover the three domains of learning and give prompt feedback to their students on their assignments (e.g. homework, class test and projects).

The findings that emerged from the quantitative data are consistent with the views of the participants. Both HODM1 and HOUM1 said that *their Accounting trainee-teachers, in most cases, are able to demonstrate meaningful level of professionalism in their teaching practices with regard to their teaching, learning and assessment*. HODM2 said: *Yes our students from various modes of delivery have been doing very well with regards to professional practices in terms of classroom management, assessment, and others. They are able to demonstrate high level of professional values and attitudes. However, I will want to stress once again that the distance students who are already teachers on the field do very well when it comes to these professional values, skills and attitudes compared to the regular students who are doing these probably for the first time.*

On whether the students use appropriate assessment techniques or method during teaching practice, all the eight participants indicated that the trainee-

teachers are able to do extremely well in that regard whereas others appeared to be fumbling here and there. However, HODM2 said: *Among conventional (regular) and non-conventional (distance) modes, regular students apart from their mastering of content knowledge, appear to be found wanting when it comes to professional practices.*

After examining the views of the respondents descriptively, the study further performed multivariate tests to see if there is statistically significant difference in the views of the respondents with regard to the dimensions of Accounting education delivery. The results show that the test of equality of covariance matrices as tested by Box's M was not violated ($F(15, 39639) = .615, p = .866$). Therefore, Wilks' Lambda was used to check for any significant differences in the main effects and interaction effects. Multivariate tests and test of between-subjects effects are presented in Tables 10 and 11 respectively.

As indicated in Table 10, the results show that there was no statistically significant difference between conventional and non-conventional modes of education delivery in the linear combination of dependent variables (professional values and attitudes, professional knowledge, professional practices: managing the learning environment, professional practices: teaching and learning, and professional practices: assessment); $F(7, 504) = 1.242, p = .288$; Wilks' Lambda = .988; partial eta squared=.012. This shows that in relation to trainee-teachers effectiveness with regard to their accounting education instructional delivery, there is no difference between products of conventional and non-conventional modes of accounting education.

Table 10: Multivariate Tests on Accounting Education Instructional Delivery

Effect		Value	F	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.997	3.470 ^a	.000	.997
	Wilks' Lambda	.003	3.470 ^a	.000	.997
	Hotelling's Trace	342.840	3.470 ^a	.000	.997
	Roy's Largest Root	342.840	3.470 ^a	.000	.997
Mode	Pillai's Trace	.012	1.242 ^a	.288	.012
	Wilks' Lambda	.988	1.242 ^a	.288	.012
	Hotelling's Trace	.012	1.242 ^a	.288	.012
	Roy's Largest Root	.012	1.242 ^a	.288	.012

Source: Field Survey (2021)

(N = 512)

Furthermore, the dependent variables were considered separately using a Bonferroni adjusted alpha level of .01 in order to examine the tests of between-subjects effects. This created room for me to know exactly where there will be some mild differences with regard to the independent variables (mode of study) when the facets of Accounting education delivery were considered. The results are presented in Table 11.

As indicated in Table 11, in relation to mode of education delivery, when the results for the dependent variables were considered separately, the only dimension of Accounting education instructional delivery that indicate statistical significance difference between conventional and non-conventional modes, using a Bonferroni adjusted alpha level of .01, was professional values and attitudes [$F(7, 504) = 4.343, p = .038, \text{partial eta squared} = .008$].

Table 11: Tests of Between-Subjects Effects on Instructional Delivery

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	PVA	.773 ^a	1	.773	4.343	.038	.008
	PKn	.000 ^b	1	.000	.001	.978	.000
	PPM	.140 ^c	1	.140	.464	.496	.001
	PPT	.043 ^d	1	.043	.268	.605	.001
	PPA	.435 ^e	1	.435	2.315	.129	.005
Intercept	PVA	12821.176	1	12821.176	7.201	.000	.993
	PKn	10012.374	1	10012.374	1.913	.000	.974
	PPM	11783.945	1	11783.945	3.903	.000	.987
	PPT	14474.476	1	14474.476	9.007	.000	.994
	PPA	13164.457	1	13164.457	6.999	.000	.993
Mode	PVA	.773	1	.773	4.343	.038	.008
	PKn	.000	1	.000	.001	.978	.000
	PPM	.140	1	.140	.464	.496	.001
	PPT	.043	1	.043	.268	.605	.001
	PPA	.435	1	.435	2.315	.129	.005
Error	PVA	90.804	510	.178			
	PKn	266.978	510	.523			
	PPM	153.996	510	.302			
	PPT	81.956	510	.161			
	PPA	95.931	510	.188			
Total	PVA	14896.480	512				
	PKn	11765.840	512				
	PPM	13719.240	512				
	PPT	16723.720	512				
	PPA	15275.720	512				
Corrected Total	PVA	91.577	511				
	PKn	266.979	511				
	PPM	154.136	511				
	PPT	81.999	511				
	PPA	96.367	511				

a. R Squared = .008 (Adjusted R Squared = .007); b. R Squared = .000 (Adjusted R Squared = -.002); c. R Squared = .001 (Adjusted R Squared = -.001); d. R Squared = .001 (Adjusted R Squared = -.001); and e. R Squared = .005 (Adjusted R Squared = .003)

Source: Field Survey (2021)

(N = 512)

Where *PVA* = professional values and attitudes, *PKn* = professional knowledge, *PPM* = professional practices - managing the learning environment, *PPT* = professional practices - teaching and learning, and *PPA* = professional practices – assessment

The margin of the differences between the modes was 0.8 and can be describe as very small. An inspection of the mean scores for these statistical significant facets of Accounting education delivery indicated that trainee-teachers from the conventional mode were able to demonstrate higher levels of effectiveness with regard to their professional values and attitudes as compared to those from the non-conventional mode. This means, regular Accounting education trainee-teachers were able to demonstrate high level of effectiveness in Accounting education delivery as compared to trainee-teachers who opted for the distance mode of education regarding their professional values and attitudes.

The results that mode of education delivery has no statistically significant effect on Accounting education trainee-teachers' professional knowledge and practices are inconsistent with the submissions of many researchers (Abeysekera, 2019; Adey et al., 2012; Mah'd & Mardini, 2020; Williams et al., 2019). These researchers have made assertions to suggest that although non-conventional mode of education such as distance learning has gained some popularity in recent times, conventional mode of education is able to produce more competent and effective teachers as compare to non-conventional mode of education. Furthermore, the findings on modes of education are inconsistent with that of Faidley (2018) which show that effectiveness of Accounting education delivery in a conventional face-to-face mode of education are higher than those of non-conventional modes.

The findings that emerged from the quantitative and qualitative data with regard to the second research question show that the Accounting trainee-teachers of both universities were able to demonstrate effective levels of professional values, attitudes, knowledge and practices. This means, they are able to design and understand the need of the students for quality instruction. By designing and implementing the teaching and learning process properly the result will reach a real effective stage where the teacher will be able to demonstrate meaningful level of professional knowledge, values, attitudes and practices. These findings have significant positive implications on Accounting education delivery in Ghana.

This is so because research has shown that the teacher is the most important school-related variable in student achievement (Wenglinsky, 2014; Wilson & Floden, 2019). Therefore, ensuring that there is high level of instructional quality among trainee-teachers is a key pillar in ensuring that there is high level of effectiveness with regard to education delivery (Ishola et al., 2020). The instructional quality of a teacher largely influences his/her efficiency positively which in the long run helps boost the effectiveness of education delivery as a whole. Quality of Accounting education delivery in a country is as good as the teachers delivering it. According to researchers such as Engel (2020) and Mah'd and Mardini (2020), quality of Accounting education depends largely on the availability of qualified Accounting teachers to teach. One of the critical issues about the availability of these teachers is the management of staffing of schools with these teachers and their preservice preparation.

According to Helms-Lorenz et al. (2017), effectiveness of Accounting education delivery is not marked by a set of criteria or teaching standards, but measured or judged according to achievement levels over a number of years, focusing on professional values, attitudes, knowledge, and practices. Helms-Lorenz et al. found that beginning teachers are able to demonstrate high level of self-efficacy and professionalism after the implementation of effective induction arrangements. In most cases, emphasis is on the quality level of instruction with regard to pedagogical skills, teacher qualification, infrastructure, student-teacher interaction, evaluation, student support services, and teachers' support services (Perez, 2013; Ogunleye, 2013). Value added studies, measuring student achievement levels that are matched with individual teachers over a number of years, have suggested that there are significant differences in teacher effectiveness for improving student learning with regard to teachers trained through non-conventional modes and those trained through conventional mode (Bird, 2017).

The findings are consistent with that of Fortin et al. (2019) and Helms-Lorenz et al. (2017). Fortin et al. indicated that most universities were now using online platforms to deliver educational content in a blended mode that combine the advantages of online instruction with traditional face-to-face teaching. Fortin et al. compared Accounting student performance and satisfaction in two blended formats with similar content and design, that is, face-to-face versus online plus courses. Results from Fortin et al.'s study show that students in advanced Accounting courses with equivalent content and design perform similarly, and

had the same level of course satisfaction across course delivery formats, as hypothesised under equivalency theory.

Furthermore, the findings that preservice Accounting teachers of UCC and UEW are able to demonstrate meaningful level of effectiveness regarding their professional values, attitudes, knowledge and practices support the assertions of Mangalamma and Vardhini (2017). The teacher is most essential in the education field and he/she is the most important pillar in the development of schooling. Therefore, issues relating to his/her instructional quality are of concern to researchers and policy makers. In line with this need and interest, Mangalamma and Vardhini posited that instructional quality of teacher is a significant issue in teaching and learning progress. The findings that emerged from Mangalamma and Vardhini's study show that there is a statistically significant relationship between teacher effectiveness and teaching ability of secondary school teachers.

Again, the findings support the assumptions of constructivism theory. With high level of instructional quality exposure, trainee-teachers should be able to demonstrate high levels of professional values and attitudes, professional knowledge, and professional practices in the area of managing the learning environment, teaching and learning, and assessment. When developing an Accounting education programme for both conventional and non-conventional modes students, according to constructivism theory, designers must create stimulating environments that capture learners and enable them to formulate knowledge and derive meaning and experience for themselves (Funa & Talaue, 2021; Kunter et al., 2017; Tsiane & Motebang, 2022a). These environments allow

for collaboration between learners and the facilitator, and encourage meaningful dialogues so that understanding can be individually constructed.

Similarly, the findings are congruent with that of Bhat (2020) who investigated the effect of preservice teacher education on teaching effectiveness of prospective teachers. The results show that the impact of pre-service teacher education training on teaching effectiveness of the pupil-teachers was found to be significant at 0.01 level of confidence. The findings from Senyametor et al. (2020) study also showed that the dimensions of instructional quality that most accurately predicted trainee-teacher effectiveness were pedagogical quality and quality evaluation. Also, as trainee-teachers show a high degree of competence in subject expertise, lesson presentation skills, class management and control, and preparing lesson note, they enhance their magnitude by which their level of instruction meets the college's pre-specified goals and expectations.

However, the findings are not in line with the submission of Okoiye et al. (2016). In Ghanaian tertiary institutions there is the need for Accounting education teachers to make use of appropriate methods and strategies that are challenging to the Accounting education students in order to achieve the desired goal of Accounting education. Okoiye et al. (2016) reported that teachers use inconsistent teaching methods and strategies that always fail to take into consideration differences in ability and capability of students. This ultimately defeats the aim of teaching Accounting education courses in Ghanaian institutions. According to Okoye and Umezulike (2018), suitable methods and strategies are required and recommended for teaching and learning because, they

go a long way to stimulate students for proper learning to take place and equip students with marketable skills for the world of work and not passing examination. Therefore, the various teacher preservice preparation institutions in Ghana should review and improve their programmes to make the Accounting teacher more effective.

Ways through Which Background Characteristics Affect the Five Facets of Accounting Education Delivery in Ghana

The rationale for the third research question of the study was to find out the ways in which study institution, gender and prior teaching experience of trainee-teachers affect their Accounting education delivery in Ghana. Five facets of Accounting education delivery in Ghana were considered. These facets were professional values and attitudes, professional knowledge, professional practices (managing the learning environment), professional practices (teaching and learning), and professional practices (assessment). In the analysis, study institution and gender of trainee-teachers were treated as independent variables while the five facets of Accounting education delivery were treated as dependent variables.

As indicated earlier, multiple close-ended items were used to collect data on each of the facets. Again, these items were transformed by pooling them together using average response scores of the seven-point discrete scale used. The two-way MANOVA was used to analyse the data. The descriptive statistics were first presented to explain the views of respondents, as shown in Table 12.

Table 12: Descriptive Statistics on Trainee-Teachers Views Regarding the Five Facets of Accounting Education Delivery in Ghana by Study Institution and Gender

Variables	Gender	Institution	Mean	SD	N
Professional values and attitudes (PVA)	Male	UCC	5.496	.468	158
		UEW	5.276	.366	231
		Total	5.366	.424	389
	Female	UCC	5.453	.521	45
		UEW	5.392	.351	78
		Total	5.415	.420	123
	Total	UCC	5.487	.479	203
		UEW	5.305	.365	309
		Total	5.377	.423	512
Professional knowledge (PKn)	Male	UCC	5.137	.907	158
		UEW	4.516	.445	231
		Total	4.768	.737	389
	Female	UCC	4.991	.863	45
		UEW	4.449	.419	78
		Total	4.647	.669	123
	Total	UCC	5.104	.898	203
		UEW	4.499	.438	309
		Total	4.739	.723	512
Professional practices: Managing the learning environment (PPM)	Male	UCC	5.437	.635	158
		UEW	4.941	.385	231
		Total	5.142	.557	389
	Female	UCC	5.391	.656	45
		UEW	5.031	.376	78
		Total	5.163	.524	123
	Total	UCC	5.426	.639	203
		UEW	4.964	.384	309
		Total	5.147	.549	512
Professional practices: Teaching and learning (PPT)	Male	UCC	5.786	.395	158
		UEW	5.635	.396	231
		Total	5.696	.402	389
	Female	UCC	5.693	.438	45
		UEW	5.731	.374	78
		Total	5.717	.397	123
	Total	UCC	5.765	.406	203
		UEW	5.659	.392	309
		Total	5.701	.401	512

Continuation of Table 12

Variables	Gender	Institution	Mean	SD	N
Professional practices: Assessment (PPA)	Male	UCC	5.630	.511	158
		UEW	5.328	.358	231
		Total	5.451	.451	389
	Female	UCC	5.484	.454	45
		UEW	5.392	.319	78
		Total	5.426	.375	123
Total	UCC	5.598	.502	203	
	UEW	5.344	.349	309	
	Total	5.445	.434	512	

Source: Field Survey (2021)

(N = 512)

As indicated in Table 12, females (Mean = 5.415, SD = .420) were able to demonstrate high level of effectiveness regarding professional values and attitudes as compared to males (Mean = 5.366, SD = .424). In relation to study institution, respondents from UCC (Mean = 5.487, SD = .479) recorded high level of effectiveness than those from UEW (Mean = 5.305, SD = .365) with regard to their ability to demonstrate high level of professional values and attitudes.

This may mean that female trainee-teachers reading Accounting education are able to demonstrate high level of regularity and punctuality to school, peer engagement and knowledge sharing for students' success, and professional commitment than their male counterparts, particularly those from the UCC. Furthermore, female trainee-teachers were able to demonstrate high level of

professional practices than their male counterparts with regard to their ability to manage the learning environment, and teaching and learning.

In relation to professional practices in the area of assessment, the results from Table 12 show that both female (Mean = 5.426, SD = .375) and male (Mean = 5.451, SD = .451) trainee-teachers were able to demonstrate high level of assessment techniques and procedures professionally. This may mean that trainee-teachers, irrespective of gender and study institution, are able to use variety of assessment techniques to ensure students participation, state specific relevant measurable objectives which are linked to classroom activities, develop different assessment techniques to promote students' learning in their class, set assessment questions to cover the three domains of learning and give prompt feedback to their students on their assignments (e.g. homework, class test and projects).

Also, the results from Table 12 show that male trainee-teachers (Mean = 3.945, SD = 1.131) were able to demonstrate high level of professional knowledge as compared to female trainee-teachers (Mean = 3.723, SD = 1.025) of the two universities. This means, male trainee-teachers are able to use variety of teaching methods to meet different learning needs of their students, consider individual students' learning needs in their lesson plan, ensure group studies, relate lessons to students' real experience and demonstrate deep understanding of topics they teach more than their female counterparts. Overall, the results show that Accounting education trainee-teachers from the universities were able to demonstrate significant levels of effectiveness regarding their professional values, attitudes, knowledge and practices.

After examining the views of the respondents descriptively, the study further performed multivariate tests to see if there is statistically significant difference in the views of the respondents with regard to the dimensions of Accounting education delivery. The results show that the test of equality of covariance matrices as tested by Box's M was violated ($F(45, 102598) = 9.075, p = .000$). Therefore, Pillai's Trace was used to check for any significant differences in the main effects and interaction effects. Multivariate tests and test of between-subjects effects are presented in Tables 13 and 14.

Table 13: Multivariate Tests on Accounting Education Delivery

Effect		Value	F	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.997	30205.656 ^b	.000	.997
	Wilks' Lambda	.003	30205.656 ^b	.000	.997
	Hotelling's Trace	299.659	30205.656 ^b	.000	.997
	Roy's Largest Root	299.659	30205.656 ^b	.000	.997
Gender	Pillai's Trace	.013	1.336 ^b	.248	.013
	Wilks' Lambda	.987	1.336 ^b	.248	.013
	Hotelling's Trace	.013	1.336 ^b	.248	.013
	Roy's Largest Root	.013	1.336 ^b	.248	.013
Study institution	Pillai's Trace	.159	19.072 ^b	.000	.159
	Wilks' Lambda	.841	19.072 ^b	.000	.159
	Hotelling's Trace	.189	19.072 ^b	.000	.159
	Roy's Largest Root	.189	19.072 ^b	.000	.159
Gender * Study institution	Pillai's Trace	.022	2.310 ^b	.043	.022
	Wilks' Lambda	.978	2.310 ^b	.043	.022
	Hotelling's Trace	.023	2.310 ^b	.043	.022
	Roy's Largest Root	.023	2.310 ^b	.043	.022

a. Design: Intercept + Gender + Study institution + Gender * Study institution

b. Exact statistic

Source: Field Survey (2021)

(N = 512)

As presented in Table 13, there was no statistically significant difference between male and female trainee-teachers in the linear combination of dependent variables (professional values and attitudes, professional knowledge, professional practices: managing the learning environment, professional practices: teaching and learning, and professional practices: assessment); $F(5, 504) = 1.336$, $p = .248$; Pillai's Trace = .013; partial eta squared=.013. However, in relation to respondents study institution, there was a statistically significant difference between trainee-teachers from the UCC and the UEW in the linear combination of dependent variables (professional values and attitudes, professional knowledge, professional practices: managing the learning environment, professional practices: teaching and learning, and professional practices: assessment); $F(5, 504) = 19.072$, $p = .000$; Pillai's Trace = .159; partial eta squared=.159. The margin of the difference between trainee-teachers from UCC and UEW was 15.9 per cent in favour of the UCC trainee-teachers.

Also, as indicated in Table 13, there was a statistically significant difference in the dependent variables based on the two levels interaction (gender * study institution): $F(5, 504) = 2.310$, $p = .043$; Pillai's Trace = .022; partial eta squared=.022. The margin of the two level interaction differences was 2.2 per cent. As indicated in Table 11, the results may mean that gender and study institution of the trainee-teachers play significant roles in determining their effectiveness regarding professional values, attitude, knowledge and practices.

Furthermore, the dependent variables were considered separately using a Bonferroni adjusted alpha level of .01 in order to examine the tests of between-

subjects effects. This created room for me to know exactly where the differences are coming from with regard to the independent variables (gender and study institution) that were statistically significant when the facets of Accounting education delivery were considered. The results are presented in Table 14.

As indicated in Table 14, in relation to study institution, when the results for the dependent variables were considered separately, the dimensions of Accounting education delivery that indicate statistical significance difference between trainee-teachers from the UCC and the UEW, using a Bonferroni adjusted alpha level of .01, were professional knowledge [$F(3, 508) = 68.020, p = .000, \text{partial eta squared} = .118$], professional practices in the area of managing the learning environment [$F(3, 508) = 63.946, p = .000, \text{partial eta squared} = .112$], professional practices in the area of assessment [$F(3, 508) = 19.760, p = .000, \text{partial eta squared} = .037$], and professional values and attitudes [$F(3, 508) = 10.126, p = .002, \text{partial eta squared} = .020$].

An inspection of the mean scores for these statistical significant facets of Accounting education delivery in Table 14 indicated that trainee-teachers from UCC were able to demonstrate higher levels of effectiveness in the delivery of education as compared to those from the UEW. The margin of the differences that exist between trainee-teachers from the UCC and the UEW with regard to the trainee-teachers' effectiveness in the delivery of Accounting education were 11.8 per cent, 11.2 per cent, 3.7 per cent, and 2.0 per cent respectively.

Table 14: Tests of Between-Subjects Effects on Accounting Education Instructional Delivery

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	PVA	4.873 ^a	3	1.624	9.517	.000	.053
	PKn	45.910 ^b	3	15.303	35.166	.000	.172
	PPM	26.787 ^c	3	8.929	35.618	.000	.174
	PPT	2.233 ^d	3	.744	4.740	.003	.027
	PPA	8.871 ^e	3	2.957	17.168	.000	.092
Intercept	PVA	10226.054	1	10226.054	59914.493	.000	.992
	PKn	7976.343	1	7976.343	18329.026	.000	.973
	PPM	9466.522	1	9466.522	37762.318	.000	.987
	PPT	11419.598	1	11419.598	72726.750	.000	.993
	PPA	10432.607	1	10432.607	60571.661	.000	.992
Gender	PVA	.117	1	.117	.688	.407	.001
	PKn	.992	1	.992	2.279	.132	.004
	PPM	.042	1	.042	.169	.681	.000
	PPT	.000	1	.000	.002	.968	.000
	PPA	.146	1	.146	.849	.357	.002
Study institution	PVA	1.728	1	1.728	10.126	.002	.020
	PKn	29.600	1	29.600	68.020	.000	.118
	PPM	16.031	1	16.031	63.946	.000	.112
	PPT	.284	1	.284	1.811	.179	.004
	PPA	3.403	1	3.403	19.760	.000	.037
Gender * Study institution	PVA	.553	1	.553	3.241	.072	.006
	PKn	.134	1	.134	.308	.579	.001
	PPM	.400	1	.400	1.596	.207	.003
	PPT	.781	1	.781	4.972	.026	.010
	PPA	.966	1	.966	5.608	.018	.011
Error	PVA	86.704	508	.171			
	PKn	221.069	508	.435			
	PPM	127.349	508	.251			
	PPT	79.766	508	.157			
	PPA	87.496	508	.172			
Total	PVA	14896.480	512				
	PKn	11765.840	512				
	PPM	13719.240	512				
	PPT	16723.720	512				
	PPA	15275.720	512				

a. R Squared = .053 (Adjusted R Squared = .048); b. R Squared = .172 (Adjusted R Squared = .167); c. R Squared = .174 (Adjusted R Squared = .169); d. R Squared = .027 (Adjusted R Squared = .021); e. R Squared = .092 (Adjusted R Squared = .087)

Source: Field Survey (2021)

(N = 512)

However, as shown in Table 14, when the interactions of gender and study institution were considered only professional practices in the area of teaching and learning [$F(3, 508) = 4.972, p = .026, \text{partial eta squared} = .010$] and assessment [$F(3, 508) = 5.608, p = .018, \text{partial eta squared} = .011$] were statistically significant. The margins of the differences regarding the two-level interaction (gender and study institution) were relatively small. The results seem to suggest that Accounting education trainee-teachers from UCC were able to demonstrate higher levels of effectiveness in the delivery of Accounting education as compared to those from the UEW.

The findings that gender of Accounting education trainee-teachers has no effects on their professional values, attitudes, knowledge and practices mean that the gender of a trainee-teacher can affect his/her ability and in the long run his/her effectiveness in teaching. This finding is consistent with that of Ezenwafor and Akpobome (2017) who also found that gender has no significantly influence on teachers ratings on the effectiveness of questioning strategies but did on the effectiveness of group discussion strategies for teaching Accounting courses. Ezenwafor and Akpobome concluded that the two strategies are effective irrespective of the influence of gender. Ezenwafor and Akpobome's findings and that of the current study are inconsistent with that of Biswas (2017) and Mangalamma and Vardhini (2017). Biswas indicated that gender is a factor that has effect on teachers' effectiveness with regards to secondary school teachers. Mangalamma and Vardhini's study also revealed that gender has significant influence on teachers' effectiveness in teaching.

Furthermore, the findings on gender corroborate with that of Heck (2017) who found that gender of students was seen as variable without any impact on teachers' quality and effectiveness. The findings that emerged from Khan's (2017) study also revealed that gender has no statistically significant effect on students view on their teachers' quality with regard to educational and professional qualifications. Walters' (2019) study also revealed that trainees' gender has no significant effect on their effectiveness and their perceptions toward the institutions' infrastructure and learner support services qualities. Bhat's (2020) study also revealed that there was no significant effect of gender on teaching effectiveness of the pupil-teachers.

However, the findings that gender has no statistically significant effect on Accounting education trainee-teachers' effectiveness in the delivery of Financial or Cost Accounting at the various SHSs, are incongruent with the findings that emerged from Nigam and Arora's (2018) study. Nigam and Arora tried to explore the teaching effectiveness of secondary school teachers on the basis of their gender and work experience. The study revealed that there was a significant difference between teaching effectiveness of secondary school male and female teachers. The results that emerged from Faidley's (2018) study indicated that students performed significantly better in the face-to-face classes than the online sections.

Also, female students scored significantly higher than male students in both methods of instruction. Accounting composite score, Accounting math score, Grade Point Average (GPA), gender, and method of instruction all were

significantly related to final course grade. The results that emerged from Stejskalová et al. (2019) study also show that men accept the new way of teaching better than women and they are able to demonstrate high levels of effectiveness in the teaching of Accounting as compared to their female counterparts. Clotfelter et al.'s (2019) study also revealed that gender has significant effect on instructional quality dimensions. The study revealed that the female students, compared with the male students, perceived all quality domains and dimensions as being more important in evaluating distance learning quality.

Also, the findings that the two-way interaction, with regard to mode of education delivery and study institution, have statistically significant effect on Accounting education trainee-teachers' professional values, attitudes, knowledge and practices are consistent with the submissions of many researchers (Abeysekera, 2019; Adey et al., 2012; Williams et al., 2019). These researchers have made assertions to suggest that although non-conventional mode of education such as distance learning has gained some popularity in recent times, it is essential to know that classroom learning remains predominant, even in advanced countries like UK, China, the US, and others.

In addition, Adey et al. (2012), Abeysekera (2019) and Williams et al. (2019) indicated that conventional mode of education was able to produce more competent and effective teachers as compared to non-conventional mode of education. Furthermore, the findings on modes of education are consistent with that of Faidley (2018) which show that instructional quality and effectiveness of

Accounting education delivery in a conventional face-to-face mode of education are higher than those of non-conventional modes such as distance education.

According to Garrison (2019), the conventional mode of education setting is more intimidating and exerts pressure on students; hence they may not participate appropriately in a lesson. Thus, students who find it challenging to participate in learning activities may feel isolated, affecting their performance. In light of this, Malan (2020) found that the more the interaction in an online learning platform among fully online accounting degree students, the higher their performance. The concerns over the years have been whether the pathways to Accounting teacher education do matter and that whether their experiences of teaching differ with different institutions and modes. Supporting this assertion is Mutaka (2018) who stated that the selectivity of the institution a teacher attended and the mode of education (regular or distance) have significant effects on the output as it may partially be a reflection of the cognitive and pedagogical abilities of the Accounting teacher.

Lastly, with regard to the third research question, the investigator examined the effect of prior teaching experience of trainee-teachers on the five facets of education delivery. The descriptive statistics are presented in Table 15. As indicated in the table, respondents who indicated that they have some prior teaching experience were able to demonstrate higher an effective accounting education delivery as compare to those with no prior teaching experience in all the facets of the study variable. In order to finding out whether the differences in the respondents' effectiveness of accounting education delivery by their prior

teaching experience is statistically significant, the investigator performed multivariate tests and tests of between subjects.

Table 15: Descriptive Statistics on Trainee-Teachers Views Regarding the Five Facets of Accounting Education Delivery by Experience

Variables	Experience	Mean	SD	N
Professional values and attitudes (PVA)	No	5.219	.374	41
	Yes	5.391	.425	471
	Total	5.377	.423	512
Professional knowledge (PKn)	No	4.590	.463	41
	Yes	4.752	.740	471
	Total	4.739	.723	512
Professional practices – Managing the learning environment (PPM)	No	5.009	.479	41
	Yes	5.159	.554	471
	Total	5.147	.549	512
Professional practices – Teaching and learning (PPT)	No	5.658	.445	41
	Yes	5.705	.397	471
	Total	5.701	.401	512
Professional practices – Assessment (PPA)	No	5.239	.287	41
	Yes	5.463	.441	471
	Total	5.445	.434	512

Source: Field Survey (2021)

(N = 512)

To start with, the results show that the test of equality of covariance matrices as tested by Box M was violated ($F(66, 1.551) = 3.742, p = .000$).

Therefore, Pillai-Trace was used to check for any significant differences in the main effects and interaction effects. Multivariate tests and test of between-subjects effects are presented in Tables 16 and 17.

Table 16: Multivariate Tests on Accounting Education Delivery

Effect		Value	F	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.997	1.497E4 ^a	.000	.997
	Wilks' Lambda	.003	1.497E4 ^a	.000	.997
	Hotelling's Trace	329.440	1.497E4 ^a	.000	.997
	Roy's Largest Root	329.440	1.497E4 ^a	.000	.997
Prior teaching experience	Pillai's Trace	.036	1.683 ^a	.074	.036
	Wilks' Lambda	.964	1.683 ^a	.074	.036
	Hotelling's Trace	.037	1.683 ^a	.074	.036
	Roy's Largest Root	.037	1.683 ^a	.074	.036

Source: Field Survey (2021)

(N = 512)

The results from Table 16 show that there is no statistically significant difference in the linear combination of dependent variables (professional values and attitudes, professional knowledge, professional practices - managing the learning environment (ppm), professional practices - teaching and learning, and professional practices – assessment) based on the single level interaction (prior teaching experience): (F (66, 1.551) = 1.683, p = .074, p = .074; Pillai's Trace = .036; partial eta squared=.036. The results may mean that prior teaching experience of trainee-teachers play no statistically significant role in determining

their effectiveness regarding professional values, attitude, knowledge and practices.

Furthermore, the dependent variables were considered separately using a Bonferroni adjusted alpha level of .01 in order to examine the tests of between-subjects effects. This created room for me to know exactly where the differences are likely to come from, if any, with regard to prior teaching experience of trainee-teachers. The results are presented in Table 17.

As indicated in Table 17, when the results for the dependent variables were considered separately, the dimensions of accounting education delivery that indicate statistical significance difference between trainee-teachers that have prior teaching experience and those that do not have prior teaching experience, using a Bonferroni adjusted alpha level of .01, were professional values and attitudes [$F(1, 510) = 6.259, p = .013, \text{partial eta squared} = .012$] and professional practices in the area of assessment [$F(1, 510) = 10.199, p = .001, \text{partial eta squared} = .020$].

An inspection of the mean scores for these statistical significant facets of accounting education delivery, as shown in Table 17, indicated that trainee-teachers with prior teaching experience were able to demonstrate higher levels of effectiveness in the delivery of education as compared to those with no prior teaching experience. The margin of the differences that exist between trainee-teachers with prior teaching experience and those without prior teaching experience with regard to the trainee-teachers' effectiveness in the delivery of Accounting education were 1.2 per cent and 2.0 per cent respectively.

Table 17: Tests of Between-Subjects Effects on Instructional Delivery

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	PVA	1.110 ^g	1	1.110	6.259	.013	.012
	PKn	.987 ^h	1	.987	1.893	.170	.004
	PPM	.843 ⁱ	1	.843	2.804	.095	.005
	PPT	.081 ^j	1	.081	.504	.478	.001
	PPA	1.889 ^k	1	1.889	10.199	.001	.020
Intercept	PVA	4246.335	1	4246.335	2.394	.000	.979
	PKn	3291.841	1	3291.841	6.312	.000	.925
	PPM	3900.233	1	3900.233	1.298	.000	.962
	PPT	4870.269	1	4870.269	3.032	.000	.983
	PPA	4319.705	1	4319.705	2.332	.000	.979
Prior teaching experience	PVA	1.110	1	1.110	6.259	.013	.012
	PKn	.987	1	.987	1.893	.170	.004
	PPM	.843	1	.843	2.804	.095	.005
	PPT	.081	1	.081	.504	.478	.001
	PPA	1.889	1	1.889	10.199	.001	.020
Error	PVA	90.467	510	.177			
	PKn	265.992	510	.522			
	PPM	153.293	510	.301			
	PPT	81.918	510	.161			
	PPA	94.477	510	.185			
Corrected Total	PVA	91.577	511				
	PKn	266.979	511				
	PPM	154.136	511				
	PPT	81.999	511				
	PPA	96.367	511				

a. R Squared = .012 (Adjusted R Squared = .010); b. R Squared = .004 (Adjusted R Squared = .002); c. R Squared = .005 (Adjusted R Squared = .004); d. R Squared = .001 (Adjusted R Squared = -.001); e. R Squared = .020 (Adjusted R Squared = .018)

Source: Field Survey (2021)

(N = 512)

Where PVA = professional values and attitudes, PKn = professional knowledge, PPM = professional practices - managing the learning environment, PPT = professional practices - teaching and learning, and PPA = professional practices - assessment

The findings that emerged from Tables 15, 16 and 17 may mean that prior teaching experience have no effect on trainee-teachers accounting education delivery in Ghana. The findings are incongruent with that of Latha (2015) and Srdar (2017) who both found that teaching experience has significant effect on teachers' ability to demonstrate high level of effectiveness in teaching. In assessing teacher effectiveness of secondary school teachers in relation to their teaching aptitude, Mangalamma and Vardhini (2017) also found that teachers with high level of teaching experience are able to demonstrate high level of effectiveness in the teaching of their related subjects as compare to their counterparts with less or no teaching experience. However, in relation to professional values and attitudes and professional practices in the area of assessment, trainee-teachers with prior teaching experience were able to demonstrate meaningful levels of effectiveness as compare to those with no prior teaching experience.

Also, the findings that trainee-teachers with prior teaching experience are able to demonstrate high level of effectiveness with regard to their professional values and attitudes and professional practices in the area of assessment as compare to those with no prior teaching experience corroborate with that of Nigam and Arora (2018) and Amoono (2019). In examining teacher effectiveness of secondary school teachers in relation to their gender and teaching experience, Nigam and Arora results show that prior teaching experience has significant effect on the effectiveness or teaching quality of entrant teachers.

Nigam and Arora (2018) added that teachers are able to demonstrate effective teaching, particularly those with prior teaching experience. They added that experience and effective teaching is positively related. This means, the higher one's prior teaching experience, the higher his/her effectiveness in teaching. Also, the findings are compatible with that of Amoono (2019) who indicated that trainee-teachers with high level of experience are able to demonstrate meaningful level of competencies as compare to those with no or less experience.

Relationship between Instructional Quality and Trainee-Teachers' Effectiveness in the Delivery of Accounting Education Instruction in Ghana

The rationale for the fourth research question was to examine the ways in which instructional quality received by accounting education trainee-teachers relates to their effectiveness with regard to accounting education instructional delivery. Dealing with this rationale helps in understanding the possible collinearity challenges that the variables may have when performing the regression analysis. The results will show whether the two variables are related strongly or not. It will also help in validating the non-violation of multicollinearity conditions, and to provide further and better particulars regarding the relationship between the various facets of the variables. The results are presented in Table 18.

As contained in Table 18, all the facets of instructional quality; pedagogical content knowledge ($r = .333, p < .01$), assessment techniques ($r = .816, p < .01$), quality of faculty ($r = .196, p < .01$), classroom management ($r = .473, p < .01$), and guidance and counselling ($r = .657, p < .01$), have positive and

statistically significant relationship with the effectiveness of accounting education trainee-teachers instructional delivery.

Table 18: Relationship between Instructional Quality and Trainee-Teachers' Effectiveness in the Delivery of Accounting Education Instruction

Variables	<i>PVA</i>	<i>PKn</i>	<i>PPM</i>	<i>PPT</i>	<i>PPA</i>	<i>EID</i>
<i>Pedagogical content knowledge</i>	-.138**	.073	.497**	.559**	.213**	.333**
<i>Assessment techniques</i>	.611**	.832**	.494**	.080	.619**	.816**
<i>Quality of faculty</i>	-.159**	.104*	.306**	.565**	-.135**	.196**
<i>Classroom management</i>	.451**	.143**	.291**	.289**	.602**	.473**
<i>Guidance and counselling</i>	.229**	.668**	.542**	.432**	.237**	.657**
Instructional Quality	.385**	.668**	.683**	.556**	.526**	.838**

Source: Field Survey (2021) *p<0.05; **p<0.01 (N = 512)
 Where *PVA* = professional values and attitudes, *PKn* = professional knowledge, *PPM* = professional practices - managing the learning environment, *PPT* = professional practices - teaching and learning, *PPA* = professional practices – assessment, and *EID* = Effectiveness of Trainee-Teachers Instructional Delivery

In all, the results show that instructional quality received by accounting education trainee-teachers has statistically significant strong and positive relationship with the effectiveness of instructional delivery of the trainees ($r = .838, p < .01$). This shows that when the various institutionally approved quality guidelines, policies and measures that ensure sound instruction in the various universities are exposed to trainee-teachers appropriately, the higher they are able to design and understand the needs of their students for quality instruction. Thus, they are able to demonstrate meaningful level of professional knowledge, values, attitudes and practices.

Furthermore, the findings mean when teachers are prepared to be able to demonstrate the requisite needed knowledge, skills and competencies to organise classrooms and manage behaviours of their students in order to produce positive educational outcomes, the higher the competence level of teachers with regard to their instructional delivery. This shows that a lack of preparation for developing the skills to manage a classroom can set the stage for increased levels of acting out behaviour.

The findings that emerged from Table 18 are consistent with previous ones which suggest that subject matter, knowledge and understanding of school subjects, assessment techniques, as well as the content of classroom instruction is associated with effective teaching (Asonitou, 2021; Deci, 2019; Mah'd & Mardini, 2020; Senyamator et al., 2020; Tsiane & Motebang, 2022a). As exemplified by Tsiane and Motebang, a teacher cannot be teaching 'accounting' when he or she does not understand the basic concepts and pedagogy of accounting. To help student teachers develop an understanding and know-how of teaching, equally demands a sound understanding of the subject matter being taught (Tsiane & Motebang, 2022a).

Societies require all students to be taught by teachers with professional qualifications who are able to demonstrate subject-matter competence for the courses they teach. In order to produce such teachers, there is the need to ensure that there are appropriate preservice preparation interventions in the various training institutions that produce professional teachers (Tsiane & Motebang, 2022b). Research has shown that the teacher is the most important school-related

variable in student achievement (Wilson & Floden, 2019; Wenglinsky, 2017). Therefore, ensuring that there is high level of quality in the preservice preparation of teachers is a key pillar in producing efficient teachers capable of delivering effective instruction to their students.

Ways through which Trainee-Teachers' Academic Self-Discipline Mediate the Link between the Five Facets of Instructional Quality and Effectiveness of Accounting Education Delivery in Ghana

The rationale for the last research question of the study was to examine the ways through which trainee-teachers' academic self-discipline mediates the link between the five facets of instructional quality and effectiveness of Accounting education delivery in Ghana. The independent variables were the five dimensions of instructional quality while the dependent variable was trainee-teachers' effectiveness in the delivery of Accounting education. As indicated earlier, multiple items were used to collect data on the independent, mediating and dependent variables. The facets or dimensions of the independent variables have also been explained earlier.

The dependent variable, which was trainee-teachers' effectiveness in the delivery of Accounting education, was made up of five dimensions. The dimensions were professional values and attitudes, professional knowledge, professional practices in the area of managing the learning environment, professional practices in the area of teaching and learning, and professional practices in the area of assessment. These dimensions were pooled together to form the dependent variable. To be able to achieve the objective relating to this,

the study adopted the hierarchical multiple regression cum Hayes (2018) mediation analysis procedure.

Using multiple regression analysis to analyse the data, a diagnostic test was first conducted to check for multicollinearity among the independent and mediating variables. This was used to examine the possible undesirable situation where the correlations among the variables are strong. The PASW Version 21.0 was used to assess the Variance Inflation Factor (VIF) that measures multicollinearity in the regression model since multicollinearity misleadingly inflates the standard errors thereby making some variables statistically insignificant while they should be otherwise significant.

The VIF was used to measure how much the variance of the estimated coefficients increase over the case of no correlation among the independent variables. All the VIF values for the independent variables were within the acceptable threshold. This shows that none of the values was greater than five (5), which means there was no collinearity associated with the variables. The VIF values were also inversely related to the Tolerance values ($VIF = 1/Tolerance$). According to Sarstedt and Mooi (2019), large VIF values (threshold is 10.0, which corresponds to a tolerance of 0.10) indicate a high degree of collinearity or multicollinearity among the independent variables.

In addition, under the collinearity diagnostics table, condition index values for all the variables were less than 15 indicating that there was no problem. A condition index value greater than 15 indicates a possible problem while an index greater than 30 suggests a serious problem with collinearity (Sarstedt & Mooi,

2019). In all, it is clear that the contribution of the independent variables on the dependent variable was largely not as a result of the strong association among the variables. The results of the hierarchical multiple regression cum Hayes (2018) mediation analyses procedure are presented in Tables 19, 20 and 21.

In the first model, as presented in Table 19, the mediating variable, trainee-teachers' academic self-discipline, was not considered. The direct influence of the independent variables on the dependent variable was the focus, as depicted in Table 19. As depicted in the table, the instructional quality dimensions that predicted trainee-teachers' effectiveness in the delivery of Accounting education significantly, in order of importance, were pedagogical content knowledge [$\beta = .131 (.023)$, $p < .01$], assessment techniques [$\beta = .425 (.012)$, $p < .01$], and quality of faculty [$\beta = .541 (.023)$, $p < .01$]. Classroom management and guidance and counselling were not able to influence trainee-teachers' effectiveness with regard to Accounting education delivery.

The findings from Table 19 are consistent with the comments of Wang and Walberg (2018) who posited that trainees with high level of instructional quality are able to demonstrate high level of effectiveness with regard to objectives and core points in lesson plan, teaching methodology and delivery, and classroom organisation and management. Teachers with high level of instructional quality are known for always coming to class (and leave) on time, with well-prepared lesson plan, instructional materials, engaged time on task, and everything is organised regardless of output or result produced in the teaching-learning process (Wanjala & Wanjala, 2017).

Table 19: Regression Model on the Direct Influence of Instructional Quality on Trainee-Teachers' Effectiveness in the Delivery of Accounting Education (Model I)

Variables	Unstandardized		Standardized			Collinearity Statistics		Condition Index
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF	
Pedagogical content knowledge	.137	.023	.131**	5.917	.000	.371	2.694	2.058
Assessment techniques	.304	.012	.425**	25.502	.000	.654	1.528	2.944
Quality of faculty	.589	.023	.541**	25.129	.000	.391	2.556	4.311
Classroom management	.034	.025	.028	1.354	.176	.435	2.297	4.676
Guidance and counselling	.040	.023	.038	1.727	.085	.378	2.649	6.021
Constant		.038						
R		.453						
R Square		.408						
Adjusted R Square		.407						

Source: Field Survey (2021)

*p < .05, **p < .01

(N = 512)

Dependent Variable: Trainee-teachers' Effectiveness in the Delivery of Accounting Education

The results from Table 19 may mean that trainee-teachers who exhibit high level of instructional quality in their lesson note preparation, pedagogical skills, quality interaction, discipline, and so on are able to enhance their competence level which in the long run help boost their students' academic performance. Furthermore, the findings support the assumptions of autonomy and independent study and self-determined theories. Both theories suggest that for all the modes of our educational system to be successful they must be analysed synchronically. That is, the more the learning experiences of distant learners are to those in the traditional or conventional system, the more parallel will be the quality of products as compared to their conventional counterparts. Therefore, education at a distance away from the traditional or convention systems of higher education should be built on the concept of parallel of learning experiences. This approach to non-conventional mode of education thus advocates designing a collection of parallel learning experiences for conventional and non-conventional learners, even though they are in different worlds and contexts. Therefore, same learning experiences should be exposed to trainee-teachers of both those in the non-conventional mode and those in the conventional mode.

It is, however, significant to observe that the total contribution of the independent variables to the variance in the dependent variable, as indicated in Table 19, is .408 with an adjusted R^2 of .407. This shows that an effective teacher must be an expert in the subject he/she is teaching as well as have content-based pedagogical knowledge, have mastery in the language of instruction, create productive and joyful learning environment, arouse interests among the students

in their studies, generating compliant classroom environment for students' needs, bearing strong ethical minds, dedicated in the profession and have intensive care for students (Ertmer, 2015; Harris & Sass, 2017).

The total results mean that the five components of instructional quality considered were able to explain 40.8 per cent of the variance in trainee-teachers' effectiveness in the delivery of Accounting education. This means, quite apart from the entered dimensions of instructional quality, other components or variables that are not yet considered in the model have a chance of contributing 59.2 per cent to trainee-teacher' effectiveness in the delivery of Accounting education. The study therefore, assumed that trainee-teachers' academic self-discipline can help enhance the power of the independent variables on the dependent variable. The results are presented in Table 20.

As indicated in Table 20, when trainee-teachers' academic self-discipline was added into the first model to generate the second model, the beta coefficient for pedagogical content knowledge [$\beta = .035 (.012)$, $p < .01$] reduced but was still statistically significant. That of assessment techniques [$\beta = .011 (.010)$, $p > .05$] lost its significance, however, quality of faculty [$\beta = .353 (.013)$, $p < .01$] was still significant with an increased beta coefficient. Classroom management [$\beta = .013 (.013)$, $p > .05$] was still not statistically significant. Guidance and counselling [$\beta = .046 (.012)$, $p < .01$] which was not statistically significant in the first model became significant in the second model when trainee-teachers academic self-discipline was added into the model.

Table 20: Regression Model on the Indirect Influence of Instructional Quality on Trainee-Teachers' Effectiveness in the Delivery of Accounting Education (Model II)

Variables	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		Condition Index	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF	
Pedagogical content knowledge	.037	.012	.035**	3.095	.002	.365	2.741	2.098
Assessment techniques	.008	.010	.011	.769	.443	.518	1.929	3.092
Quality of faculty	.385	.013	.353**	30.134	.000	.380	2.631	4.729
Classroom management	.016	.013	.013	1.217	.224	.424	2.357	5.156
Guidance and counselling	.049	.012	.046**	4.221	.000	.375	2.667	6.540
Academic self-discipline	.536	.014	.644**	37.688	.000	.363	2.758	8.885
Constant		.072						
R		.889						
R Square		.878						
Adjusted R Square		.877						

Source: Field Survey (2021)

*p < .05, **p < .01

(N = 512)

Dependent Variable: Trainee-teachers' Effectiveness in the Delivery of Accounting Education

Also, results from Table 20 show that trainee-teachers' academic self-discipline [$\beta = .644 (.014)$, $p < .01$] contributed significantly in positive terms to trainee-teachers effectiveness with regard to their delivery of Accounting education. As indicated in Table 20, trainee-teachers' academic self-discipline alone contributed 64.4 per cent to Accounting education delivery when it was added to the various facets of instructional quality of the universities. It is, however, significant to observe that the total contribution of the five facets of instructional quality increased from .408 to .878, more than double, when trainee-teachers' academic self-discipline was added into the model.

The rate of change was 115 per cent. This means that the components of instructional quality and trainee-teachers' academic self-discipline are able to explain 87.8 per cent of the variance in trainee-teachers' effectiveness in the delivery of Accounting education. This means, quite apart from the entered dimensions of instructional quality and trainee-teachers' academic self-discipline, other variables that are not yet considered in the model have a chance of contributing 12.2 per cent to trainee-teacher' effectiveness in the delivery of Accounting education.

The findings from Tables 19 and 20 are in line with the views of the participants. All the participants were of the view that trainee-teachers who possess qualities that enable them to become persevering in all it takes to properly behave academically and professionally, they are likely to be highly effective in their delivery of Accounting education. Specifically, HODM1 said: *Irrespective of the mode or a university one attends, the preservice preparation programmes*

of the universities are expected to be of quality. Therefore, trainee-teachers are expected to be exposed to high level of instructional quality, however, some of the trainees will still not do well which I think can be due to individual difference.

Nevertheless, I think trainee-teachers who are academically self-disciplined and academically self-confident, are likely to be effective in their delivery of education.

In addition, HOUM1 also said: For a trainee-teacher to be able to deliver as expected, he/she must be serious in his/her academic work by being disciplined. Teaching requires some meaningful level of self-control and seriousness, therefore, I think trainee-teachers who are not academically disciplined cannot deliver education effectively. For example, last year we had a student who was academically good. His least grade for the three years was B; however, regarding his teaching practice he was graded with C because his appearance and seriousness in lesson pre-preparation was poor. Also, he was not punctual and regular to school during his off-campus teaching practice. Therefore, I think if he was academically self-disciplined, he would have performed better. Those students who do not want to become teachers in future as a result end up not being serious in the practical courses.

The findings are in line with the submission of Mbwesa (2014) who reported that the assessment of instruction in distance education cannot be done without giving credence to quality standards and variables established to guide instruction in higher education. As a result, she outlined ten instructional quality dimensions, namely faculty support, student support, interactive tasks,

pedagogical, evaluation and assessment, infrastructure, institutional quality assurance mechanism, institutional credibility and accreditation, course development, and information and publicity dimension. Mbwesa found that instructional quality has significant influence on students' effectiveness.

With respect to certain barriers that affect the overall quality of distance learning, Markova et al. (2017) reported on some quality dimensions such as interaction and collaboration, instructional design and delivery, student evaluation, and learner support services. Markova et al.'s (2017) study discovered that, while degree students generally view their distance learning experiences strongly, they encounter some learning challenges, especially in terms of productive teaching practices and patterns of communication. The study failed to address instructional quality dimensions such as interaction and collaboration, instructional design and delivery, student evaluation, and learner support services on distance education delivery.

Fong-Yee and Normore (2017) also indicated that instructional quality has significant influence on student achievement and education delivery as a whole. Their work shows that quality teachers; that is, teachers with high level of educational and professional qualifications, have more positive impact on students' academic achievement than low-qualified ones. Similarly, Khan (2017) also examined the professional development of teachers, focusing on the field-based teacher development programmes in Chitral, Pakistan. One of Khan's objectives examined student support systems in distance learning, which revealed that when students were asked to name the factors that played an important role in

aiding their learning and success, they cited the highly qualified facilitator. When students were asked to name the significant barriers to their learning experience, they named the poor or incompetent facilitator.

Furthermore, the findings are in line with that of Senyamator et al. (2020) who investigated the predictive ability of instructional quality on trainee-teacher efficacy in distance education delivery in Ghana, with a focus on CoDE, UCC. The findings from Senyamator et al. (2020) study showed that the dimensions of instructional quality that most accurately predicted trainee-teacher effectiveness were pedagogical quality and quality evaluation. Also, as trainee-teachers show a high degree of competence in subject expertise, lesson presentation skills, class management and control, and preparing lesson note, they enhance the magnitude by which their level of instruction meets the college's pre-specified goals and expectations.

The results show that trainee-teachers' academic self-discipline is a potential factor that can mediate the relationship between instructional quality of the universities and Accounting education delivery. A Serial-Multiple Mediation Model 6 was conducted to find out how the effect of the predictors on the criterion is explained through causal effect of one mediator to the other. Statistical significance of the tested model in the current research was studied through the software developed by Hayes (2018), the approach based on ordinary least-squares regression, and the bootstrap method. The analysis used 10,000 bootstrap samples using 95 per cent confidence level. The summary of the mediation analysis can be found in Table 21.

Table 21: Matrix: Total, Direct and Indirect Effects of Instructional Quality of Universities on Accounting Education Delivery through Trainee-Teachers' Academic Self-Discipline

Total effect of X on Y							
Effect	se	t	p	LLCI	ULCI	c_ps	c_cs
.9478	.0429	22.0930	.0000	.8635	1.0321	.7051	.6993
Direct effect of X on Y							
Effect	se	t	p	LLCI	ULCI	c'_ps	c'_cs
.1925	.0247	7.7911	.0000	.1440	.2410	.1432	.1420
Indirect effect(s) of X on Y:							
	Effect	BootSE	BootLLCI	BootULCI			
TOTAL	.7553	.0474	.6598	.8435			
ASD	.6195	.0442	.5314	.7024			
Partially standardized indirect effect(s) of X on Y:							
	Effect	BootSE	BootLLCI	BootULCI			
TOTAL	.5619	.0321	.4967	.6235			
ASD	.4609	.0297	.4030	.5182			
Completely standardized indirect effect(s) of X on Y:							
	Effect	BootSE	BootLLCI	BootULCI			
TOTAL	.5573	.0295	.4957	.6117			
ASD	.4571	.0266	.4021	.5068			

Source: Field Survey (2021) *p < .05, **p < .01 (N = 512)

Dependent Variable: Trainee-teachers' Effectiveness in the Delivery of Accounting Education

The results, as shown in Table 21, have revealed that the effect of instructional quality of the universities on Accounting education delivery is explained by trainee-teachers' academic self-discipline. For instructional quality of the universities with regard to pedagogical content knowledge, assessment techniques, quality of faculty, classroom management, and guidance and counselling to influence the effectiveness of trainee-teachers Accounting education delivery strongly, the relationship needs to be serially mediated by the trainee-teachers' academic self-discipline, $b = .7553$, *BootCI* [.6598 - .8435]. As indicated in the table, the total contribution of the independent variables on the dependent variable increased from 19.25 per cent to 75.53 per cent in the mediation analysis. Based on the results, a final model was designed which reflects the trend of results as already underscored. The model was found to be fit based on the assertion of Hayes (2018) that the Mean Square Error (MSE) of the model should be closer to zero. In the case of this model, MSE obtained was .6214 which shows that the model is fit.

The findings mean that the various dimensions of instructional quality of the universities have significant influential value on Accounting education delivery. However, this influence can be described as being not strong since the interventions of trainee-teachers' academic self-discipline will be required to strengthen it to enhance the effectiveness of the trainee-teachers Accounting education delivery significantly. That is, when Accounting education trainee-teachers become persevering in all it takes to properly behave academically and professionally, the instructional quality of their respective universities stand to strongly influence their effectiveness in the delivery of Accounting education significantly. The findings suggest that instructional quality of the

universities alone may not lead to significant increase in the effectiveness of trainee-teachers Accounting education delivery. For this to happen, the trainee-teachers must be counselled, oriented, and motivated to become persevering in all it takes to properly behave academically and professionally.

The findings on the mediation analysis are in line with that of Celik (2015) whose regression based mediation analysis indicated that the effect of student academic support on personal growth initiative was mediated by academic self-efficacy. However, the effect of student academic support on personal growth initiative was not moderated by academic self-efficacy. These findings suggested that the student academic support was both direct and indirect effects on personal growth initiative. Similarly, the findings on mediation analysis are consistent with the results that emerged from Simba et al. (2016) study which indicated that 46 (5.6%), 214 (26.2%), 413(50.6%) and 144 (17.6%) of the pupils had low, moderate, high, and very high academic self-discipline respectively. Also, academic self-discipline related positively with, and accounted for 23% of variance in the pupils' academic performance ($R = .480$, $\beta = .480$, $R^2 = .230$, $p < .05$). The study recommended enhancement of academic self-discipline among the pupils for improvement of their academic performance.

Furthermore, the findings are congruent with the assertion that non-conventional mode of education such as e-learning environment makes learning process more efficient and attractive. However, the possibility of learning anytime and anywhere in e-learning environment requires additional attention to motivate students to acquire knowledge and prevent drop-outs (Gorbunovsa et al., 2016). Gorbunovsa et al.'s study aimed at proving that

academic self-discipline in daily routine knowledge acquisition process could be considered as a key parameter to improve learning outcomes. They proved this statement by data analysis of learner activity levels within collaborative e-learning environment and achieved appropriate competence levels.

Gorbunovsa et al. (2016) found that academic self-discipline has positive impact on learning outcomes. Achievements at the end of the learning course do not depend on student initial competence levels. Contrariwise, academic self-discipline is the key factor which influences learners and allows them achieving main goals. Accordingly, academic self-discipline in daily school routine knowledge acquisition process is the key indicator to improve learning outcomes. On the one hand, teaching staff ought to care about student motivation and make steps to strengthen this spirit during whole educational process. Jung et al. (2017) also found academic self-discipline mediated the relationship between academic self-efficacy and academic performance, after controlling for conscientiousness and performance scores. The importance of academic self-discipline in academic performance was addressed.

Mbaluka (2017) also investigated the impact of students' self-discipline and parental involvement on academic performance. Results from Mbaluka's study indicated that students' self-discipline and parental involvement are significantly correlated with student's ITBS scores and GPA. Yet, some variables showed stronger correlation with the dependent variables than others. Student self-discipline had a higher correlation with GPA than ITBS scores. On the other hand, parental involvement showed a higher correlation with ITBS than GPA. Of all the scales of self-discipline, students' diligence presented the highest correlation with ITBS scores while parenting

had the strongest correlation with ITBS scores among all the parental involvement scales. Student's diligence, parenting and volunteering have a significant positive correlation with ITBS at $p < .001$ each. Mbaluka (2017) concluded that student self-discipline and parental involvement are crucial factors in academic performance. Combined, student self-discipline and parental involvement revealed significant impact on academic performance.

Summary of Chapter Four

The chapter presented results and discussion regarding a comparative study of conventional and non-conventional modes of instruction and Accounting education delivery in Ghana, focusing on the undergraduate accounting education programmes of UCC and the UEW. The study also looked at the mediating role of trainee-teachers' academic self-discipline on the relationship between the instructional quality of the universities and Accounting education delivery of the trainee-teachers. The results have been presented with associated explanations. With the help of tables, the study analysed and presented the data using both descriptive and inferential statistical tools.

The results showed that instructional quality in the training of Accounting teachers at the UCC and the UEW with regard to pedagogical content knowledge, assessment techniques, quality level of faculty, classroom management, and guidance and counselling is moderately high. However, the UCC and conventional trainee-teachers are able to view these dimensions higher than the UEW and non-conventional trainee-teachers respectively. Similarly, the results show that the UCC and conventional trainee-teachers are able to demonstrate high level of effectiveness in the delivery of

undergraduate Accounting education programmes in the areas of professional values and attitudes, professional knowledge, professional practices (managing the learning environment), professional practices (teaching and learning), and professional practices (assessment) as compared to the UEW and non-conventional trainee-teachers respectively. However, gender was found not to have any significant impact on trainee-teachers' views on instructional quality and their effectiveness in the delivery of Accounting education in Ghana.

Furthermore, the results show that the five dimensions of instructional quality of the universities are able to predict 40.8 per cent of the effectiveness of Accounting education delivery of trainee-teachers. However, power of instructional quality becomes higher when academic self-discipline of the trainee-teachers was considered. When trainee-teachers' academic self-discipline was considered, the total contribution was more than doubled; it increased from 40.8 per cent to 87.8 per cent. This means that power of instructional quality on trainee-teachers' effectiveness in the delivery of Accounting education is shared strongly with the academic self-discipline of the trainee-teachers. The next chapter is the final chapter of the study which deals with the summary, conclusions and recommendations sections of the study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

In this chapter, a summary of the study, the conclusions drawn as well as recommendations made are presented. The chapter further presents suggestions for further research. The first part of the study summary focused on the purpose, research questions and research methods, while the second part focused on the key findings.

Summary of the Study

The purpose of the study was to investigate conventional and non-conventional modes of Accounting education delivery in Ghana comparatively, focusing on UCC and UEW undergraduate programmes. The study also considered the mediating role of trainee-teachers' academic self-discipline on the relationship between instructional quality and trainee-teachers' effectiveness. Four research questions were formulated based on the stated specific objectives of the study to guide the study.

The ontological and epistemological orientations of the study with regard to the pursuit of the virtues of reality and truth were based on the ideas of both positivist and naturalist paradigms. The study adopted a cross-sectional survey design with concurrent triangulation mixed methods approach in order to fuse both quantitative and qualitative stand points of exploring reality to examine the instructional quality and effectiveness of Accounting education delivery in Ghana. The study population was all Accounting or Financial Accounting education undergraduate students of UCC and UEW whose first teaching subject was Accounting or Financial Accounting. The

sample was 626, made up of 576 final year trainee-teachers, 42 mentors and eight (8) participants.

Two set of questionnaires and an interview guide were the instruments used to collect the data. The Cronbach's Alpha of the trainee-teachers and mentors' questionnaires ranges from 0.714 to 0.884, implying acceptability. The quantitative data were analysed using both descriptive and inferential statistical tools. Quantitative data on the first and second research questions of the study were analysed using descriptive statistics such as mean and standard deviation. In relation to the third research question, the two-way MANOVA was used to analyse the quantitative data. Data on the fourth research question were analysed using hierarchical regression cum mediation analyses. The qualitative data were analysed manually using open, axial and selective coding systems. The key findings that emerged from the study were as follows:

Key Findings of the Study

The first research question comparatively assessed the levels of instructional quality in the training of Accounting teachers using conventional and non-conventional modes with regard to pedagogical content knowledge, assessment techniques, quality level of faculty, classroom management, and guidance and counselling. The main findings that emerged were:

- Respondents rated the pedagogical content knowledge for both conventional (Mean = 5.393, SD = .251) and non-conventional (Mean = 5.385, SD = .271) modes of education delivery as high.
- Also, in both conventional (Mean = 5.269, SD = .466) and non-conventional (Mean = 5.219, SD = .469) modes of education delivery, the

assessment techniques students are exposed to are appropriate and relevant to their preservice preparation.

- Furthermore, respondents agreed that their respective universities had quality faculty and the faculty members of both universities were able to demonstrate high level of classroom management skills and strategies (Mean = 5.699, SD = .282). This result is consistent with the views of the participants.
- There was a statistically significant difference between conventional and non-conventional modes of education delivery in the area of assessment techniques [$F(3, 508) = 18.599, p = .000, \text{partial } \eta^2 = .035$] and classroom management [$F(3, 508) = 14.403, p = .000, \text{partial } \eta^2 = .028$], in favour of those in conventional mode.

The second research question also looked at the level of effectiveness of Accounting education delivery using conventional and non-conventional modes in relation to professional values and attitudes, professional knowledge, and professional practices in the area of managing the learning environment, teaching and learning, and assessment. The key findings that emerged were that:

- Trainee-teachers from both conventional (Mean = 5.404, SD = .419) and non-conventional (Mean = 5.321, SD = .428) modes of education, with regard to the two universities, were able to demonstrate effective level of professional values and attitudes. The participants also indicated that most of the trainee-teachers who do their off-campus teaching practice are able to demonstrate high level of professional values and attitudes, particularly, those from conventional mode of education, who in most cases are

relatively young. In my school, we put much emphasis on professionalism and as a result all staff are to hold the values of the profession high and must demonstrate positive and acceptable attitudes toward all.

- Also, both conventional (Mean = 4.739, SD = .728) and non-conventional (Mean = 4.738, SD = .713) trainee-teachers from UCC and UEW demonstration of knowledge in their teaching was rated as effective by the supervisors.
- Furthermore, the trainee-teachers were able to show meaningful level of effectiveness with regard to their professional practices in managing their respective learning environments (Mean = 5.147, SD = .549), particularly conventional mode trainee-teachers (Mean = 5.548, SD = .649).
- Also, both conventional (Mean = 5.707, SD = .401) and non-conventional (Mean = 5.688, SD = .400) Accounting education trainee-teachers were able to demonstrate high level of effectiveness with regard to their professional practices regarding assessment practices, and teaching and learning activities.

Finding out the ways through which study institution, gender and prior teaching experience of trainee-teachers can affect their Accounting education delivery in Ghana was the focused of the third research question. The key findings that emerged regarding this question were:

- There was a statistically significant difference between trainee-teachers from UCC and UEW with regard to their Accounting education delivery. The difference was in favour of trainee-teachers from UCC. The differences between UCC and UEW with regard to trainee-teachers Accounting education delivery were noticed in the areas of professional

values and attitudes [$F(7, 504) = 9.013, p = .003$, partial eta squared = .018], professional knowledge [$F(7, 504) = 55.930, p = .000$, partial eta squared = .100], professional practices in the area of managing the learning environment [$F(7, 504) = 64.924, p = .000$, partial eta squared = .114], and professional practices in the area of assessment [$F(7, 504) = 21.004, p = .000$, partial eta squared = .040]. Also, there was a statistically significant difference in trainee-teachers Accounting education delivery based on the two levels interaction (mode of study and study institution).

- However, in relation to the gender and prior teaching experience of Accounting education trainee-teachers, there were no statistically significant differences in their Accounting education delivery. Similarly, there were no statistically significant differences in the dependent variables based on the two levels interactions; mode of study and gender, and study institution and gender.
- Furthermore, there was a statistically significant difference in the Accounting education delivery of trainee-teachers based on the two levels interaction: study institution and gender.

Lastly, the study examined the relationship between the study variables and also ways through which trainee-teachers' academic self-discipline could mediate the link between the facets of instructional quality and effectiveness of Accounting education delivery. The key findings that emerged were:

- There is a statistically significant positive and strong relationship between instructional quality received by accounting education trainee-teachers and the effectiveness of their instructional delivery ($r = .838, p < .01$).

- The instructional quality dimensions that predicted trainee-teachers' effectiveness in the delivery of Accounting education significantly, in order of importance, were pedagogical content knowledge (13.1%), assessment techniques (42.5%), and quality of faculty (54.1%). Classroom management and guidance and counselling were not able to influence trainee-teachers' effectiveness with regard to Accounting education delivery.
- The total contribution of instructional quality dimensions to the variance in trainee-teachers' Accounting education delivery was 40.8 per cent.
- When trainee-teachers' academic self-discipline was combined with instructional quality of the universities, the total contribution increased from .408 to .878.
- Trainee-teachers' academic self-discipline alone contributed 64.4 per cent to Accounting education delivery when it was added to the various facets of instructional quality of the universities.
- The various dimensions of instructional quality of the universities had significant influential value on Accounting education delivery. However, this influence can be described as being not strong since the interventions of trainee-teachers' academic self-discipline will be required to strengthen it to enhance the effectiveness of the trainee-teachers Accounting education delivery significantly.

Conclusions

From the findings of the study, the following conclusions were drawn. The first research question analysed comparatively the levels of instructional quality in the training of Accounting teachers using conventional and non-

conventional modes with regard to pedagogical content knowledge, assessment techniques, quality level of faculty, classroom management, and guidance and counselling. On the basis of the quantitative and qualitative results and the assumptions of theory of autonomy and independent study and effective schools model, the study can conclude that both UCC and UEW were able to expose Accounting education trainee-teachers to good instructional qualities, particularly regarding pedagogical content knowledge quality, quality assessment techniques and classroom management. Trainee-teachers trained through conventional mode are able to view the instructional quality they are exposed to higher than those trained through non-conventional mode.

The second research question looked at the level of effectiveness of Accounting education delivery using conventional and non-conventional models in relation to professional knowledge, values, attitudes and practices in the area of managing the learning environment, teaching and learning, and assessment. Again, from the findings and literature, the researcher concludes that trainee-teachers were able to develop and demonstrate high level of professional values, attitudes, knowledge and practices that promote learner interactions in various forms as well as delivery of suitable and quality content to learners during their off-campus and off-centre teaching practices. However, trainee-teachers in the conventional mode were able to imbibe more of the various instructional qualities and strategies of their respective universities than those in the non-conventional mode. As a result, the trainee-teachers in the conventional mode were able to demonstrate high level of

effectiveness in the delivery of Accounting education as compared to those in the non-conventional mode.

The third research question focused on the effect of study institution, gender and prior teaching experience of trainee-teachers on the five facets of Accounting education delivery. The study's findings and literature imply that gender of the trainee-teachers play no significant role in determining their effectiveness regarding professional values, attitude, knowledge and practices. However, study institution plays statistically significant roles in influencing Accounting education trainee-teachers' professional values, attitudes, knowledge and practices. Also, trainee-teachers from UCC, both conventional and non-conventional, were able to imbibe meaningful levels of instructional qualities of their university and also are able to demonstrate high level of effectiveness in the delivery of Accounting education than those from UEW.

The fourth and fifth research questions assessed the relationship between the study variables and also the mediating role of trainee-teachers' academic self-discipline on the link between the five facets of instructional quality and effectiveness of Accounting education delivery respectively. From the findings of this study and the assumptions of constructivism and self-determined theories, the study can conclude that the higher the instructional quality imbibed by a trainee-teacher, the higher he/she is able to demonstrate high level of effectiveness in the delivery of Accounting education, a phenomenon which will make him/her become a competent teacher in the profession. However, this influence becomes more potent and double when the trainee-teachers are able to possess characteristics that will make them become persevering in all it takes for them to properly behave academically and

professionally in school. This shows that whenever trainee-teachers are able to show high level of academic self-discipline coupled with the various instructional qualities they are being exposed to in the universities, they are likely to demonstrate high level of effectiveness in the delivery of Accounting education in the long run, all other things being equal.

Recommendations

Based on the key findings and conclusions of the study, a number of practical recommendations for enhancing Accounting teacher education at both UCC and UEW are made:

1. The findings that emerged from the first research question indicated that trainee-teachers ranked the pedagogical content knowledge, quality of faculty, and classroom management moderately high. However, those of assessment techniques, and guidance and counselling were ranked less. This meant that trainee-teachers were satisfied with the contents of courses being taught, tutors usage of appropriate teaching learning materials, and their demonstrated professionalism, and competency. However, they were not satisfied with the periodic assessment of courses and guidance and counselling interventions given to them. The study, therefore, recommend to management of the two universities through the Heads of Departments and Units in charge of providing accounting education to ensure and encourage the course tutors and lecturers to keep the good work that they are doing with regard to quality assessment and provision of quality pedagogical skills to trainees. Also, the Heads of Departments and Units should also ensure that the lecturers and tutors provide or give timely feedback on exams scores or grade to the students or trainees.

2. Also, management of the universities, through the Heads of Departments and Units, need to create special orientation programme for all fresh students on how to access guidance and counselling services of the institutions. Similarly, the Heads of Departments and Units, and directors of the various Counselling Centres/Units should ensure that their guidance curriculum and responsive services are structured to address human relationships, career development, life skills, social values, self-development, and learning skills. Also, they should ensure that providing support services to learners and tutors should be an integral part of the Departments'/Units' education process and that more time and status are allocated for that.
3. Also, the Directors of the various Counselling Centres/Units of the universities should introduce the use of self-reporting instruments to trainee-teachers and encourage them to use as and when they deem it fit. This will enable the Centres/Units to be aware of counselling needs of trainee-teachers. This recommendation will be successful in its implementation if pre-counselling service is effectively delivered during orientation of the freshmen in order to understand fresh students and to help boost their academic self-discipline needs as early as possible.
4. The finding that the various dimensions of instructional quality of the universities were able to influence positively trainee-teachers effectiveness in the delivery of Accounting education, and the influence becomes more than double when academic self-discipline of the trainee-teachers are considered, the study recommends to management of the universities, through the Heads of Departments/Units, to put measures in place to boost

the academic and professional perseverance of trainees through effective mentoring and counselling interventions.

5. Furthermore, management of the universities, through the Directors of the various Counselling Service Units/Centres should put in place a biannually self-motivation counselling programme that will regularly orient trainee-teachers to possess characteristics that will enable them become persevering in all it takes to properly behave academically and professionally on campus and beyond. This will help them to better demonstrate meaningful level of professional knowledge, values, attitudes and practices; and also design and effectively understand the need of their students for quality instruction. By designing and implementing the process properly the result will reach a real effective stage where the teacher will be able to demonstrate meaningful level of professional knowledge, values, attitudes and practices.
6. Also, Heads of Departments/Units, through management of the universities, should collaborate with Ghana Education Service (GES) and the Ministry of Education (MoE) to review upward the durations for induction programmes organised by GES for beginning teachers to help enhance their professional values, attitudes, knowledge and practices. This is so because most of the participants indicated that the durations for teaching practice programmes is relatively short. It is further recommended to the Heads of Departments/Units to periodically organise a training workshop for final year trainee-teachers on what is expected of them in the profession to help boost their professional values, attitudes,

knowledge and practices. This intervention can also help enhance the trainee-teachers 21st century skills acquisition.

Contribution to Knowledge, Practices, Policy and Theory

Ordinarily, within the context of doctoral research, a unique contribution to knowledge is a very shaded term since it does not mean an enormous breakthrough, but rather to demonstrate that one has a good grasp of how research is normally conducted in a proposed area of study being specialised in. According to Creswell and Creswell (2018), the ability of any research to contribute to knowledge could be displayed in four key areas. These are developing a concept, thinking through the methodology, building on an existing study and being able to change directions. In this regard, this study can be seen as generally, building on existing studies to add to knowledge in the field of accounting teacher education, teacher effectiveness and accounting education delivery in general.

To start with, few studies in Ghana comparatively examined conventional and non-conventional modes of accounting instructional delivery in Ghana. Most of the studies that attempted to investigate this phenomenon focused more on single mode and influence of instructional quality on teachers' effectiveness. The current study examined the issues from the perspective of trainee-teachers with regard to their instructional quality and effectiveness of accounting education delivery, taking into consideration the mediating role of trainee-teachers' academic self-discipline. Also, gender, study institution, and prior teaching experience were considered as controls.

There are limited studies in Ghana on the issue highlighted. The current study to a large extent has been able to provide information on these

issues by employing both quantitative and qualitative methods that is deductively and inductively informed by theory of autonomy and independent study, effective schools model, theory of constructivism and self-determined theory. These theories assisted the researcher in explaining the modelling of instructional quality and its influence on effectiveness of accounting education delivery.

Again, the findings suggest that when teacher-trainees are exposed to appropriate instructional quality, they would be able to demonstrate effectiveness in their accounting education delivery. However, the influence of the various facets of instructional quality have on education delivery becomes more potent when the trainee-teachers become academically self-discipline. In the light of the results of this study, one may say that they constitute a fundamental aspect of accounting teacher education that requires practical development.

Furthermore, the research described in this thesis has reviewed and analysed a complex model on facets of instructional quality and effectiveness of accounting education delivery from a pragmatic perspective. The rationale for the study was ultimately to contribute to the understanding of teachers' instructional quality and their effectiveness with regard to accounting education delivery. This would inform policy makers regarding issues relating to teacher education practice and policy. The findings have a significant contribution to knowledge in the area of teacher preservice preparation intervention and delivery of effective accounting education. The findings presented here suggest that these interventions are likely to succeed in reducing preservice Accounting teachers' ineffectiveness.

Additionally, the findings also make a significant contribution to knowledge in the area of intervention and facilitation of courses in class. The findings presented in the study, suggest that interventions in the form of practical study skills courses are unlikely to succeed due to the difficulties in teachers' instructional quality and demonstration of effectiveness in accounting education delivery. Arguably, it may be more useful to encourage teacher training institutions to develop trainees conceptual training skills, academic self-discipline and broaden their 'abstract orientation' as a means of encouraging them to adopt deep preservice preparation interventions that help boost the trainees' education delivery and effectiveness. This study may serve as a blue print which will provide empirical literature for future studies.

Furthermore, the study highlighted the role mode of education delivery and study institution affect trainee-teachers Accounting education delivery. This presupposes that policy makers and implementers must ensure that there is some meaningful level of parity in instructional quality of teacher training institutions, irrespective of the mode of delivery used. It behoves implementers of teacher education curriculum and regulators such as Ghana Tertiary Education Commission (GTEC) to focus on building an effective system with standardised instructional quality and education delivery, irrespective of the mode of education used or the study institution. This intervention will eventually lead to high level of effectiveness with regard to quality accounting instructional delivery.

From an organisational perspective, teacher education policy makers and implementers would be advised to appraise the instructional quality and effectiveness of accounting education delivery of preservice teachers. Clearly,

effective instructional quality interventions in the area of pedagogical content knowledge, assessment techniques, quality of faculty, classroom management and guidance and counselling are critical aspects to consider when preparing professional teachers for the teaching profession. In addition, school administrators can also increase the effectiveness of accounting instructional delivery and presence of teaching and learning resources in senior high schools by creating a climate that welcomes collaboration, information sharing, and recognition among the teaching staff of the school, including those doing off-campus teaching practice.

With regard to the theoretical contribution, the investigator posits that trainee-teachers learn through the construction of one logical structure after another in a systematic and consistent manner. Thus, accounting instructional delivery and general education as a whole are grounded in real experience. This means, professional teachers construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences. Therefore, the level of exposure given to trainee-teachers with regard to accounting instructional quality during their training helps in shaping their effectiveness in the delivery of accounting instruction. This makes trainee-teachers active participants in their learning and professional journey.

Theoretically, the study expands the argument of the theories modelled. The various facets of instructional quality that are exposed to trainee-teachers are able to help produce teachers who are able to demonstrate meaningful level of accounting instruction. However, this dynamic becomes more significant and potent when the trainee-teachers are able to demonstrate high level of discipline academically. Thus, if preservice accounting teachers

are exposed to high instructional; quality and they are able to possess behaviours that enable them become persevering in all it takes to properly behave academically and professionally, they are able to demonstrate high level of effectiveness in the delivery of accounting instruction or education, all other factors being constant.

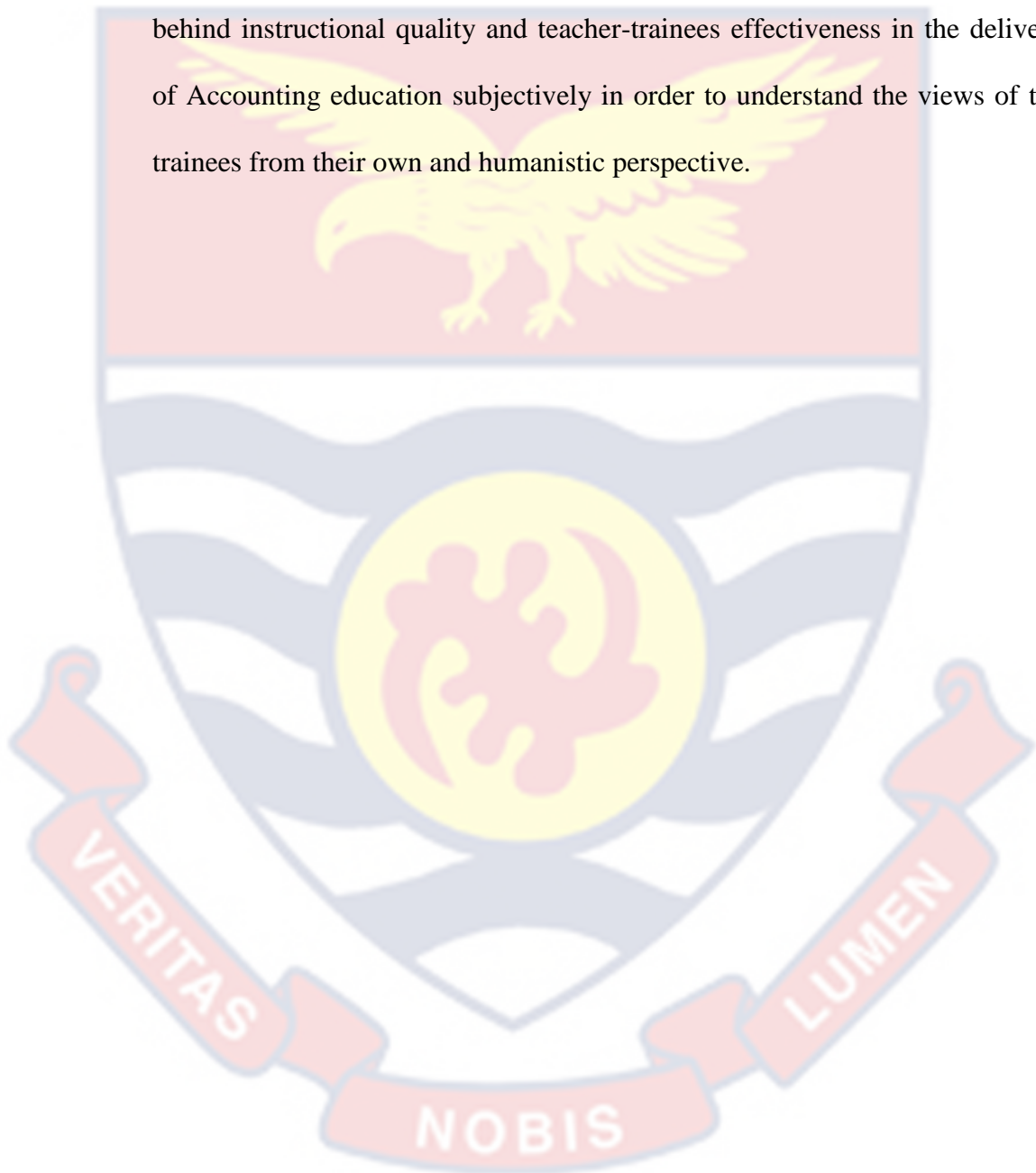
Additionally, it is evident that the more trainee-teachers are engaged in the preservice teaching process, including on-campus and off-campus teaching practices, the more they gain prior teaching experience. This phenomenon makes them become academically self-discipline which in the long run helps enhance their effectiveness in the delivery of accounting education in general.

Suggestions for Further Research

Firstly, the instruments used in this study may be used in the study of other institutions in order to test their reliability and validity in other contexts, and to broaden the understanding of instructional quality and effectiveness of Accounting education delivery in Ghana. It is, therefore, suggested that this study should be replicated in the various Colleges of Education in Ghana, both public and private. Also, further studies should be performed with the same research design and instrumentation as the current study using both regular, sandwich and distance students, focusing on master's students in education. This would greatly increase generalisability to other institutions and populations. Again, it would be prudent to compare regular, sandwich and distance learning environments in terms of the study variables; and also graduate and post-graduate students.

It is further suggested that future research could advance the comprehension of the complex nature of instructional quality and trainee-

teachers effectiveness in the delivery of Accounting education by exploring other facets of individual differences such as academic self-confidence, perceived feasibility and desirability. Furthermore, research may be conducted using the phenomenological approach in order to determine possible reasons behind instructional quality and teacher-trainees effectiveness in the delivery of Accounting education subjectively in order to understand the views of the trainees from their own and humanistic perspective.



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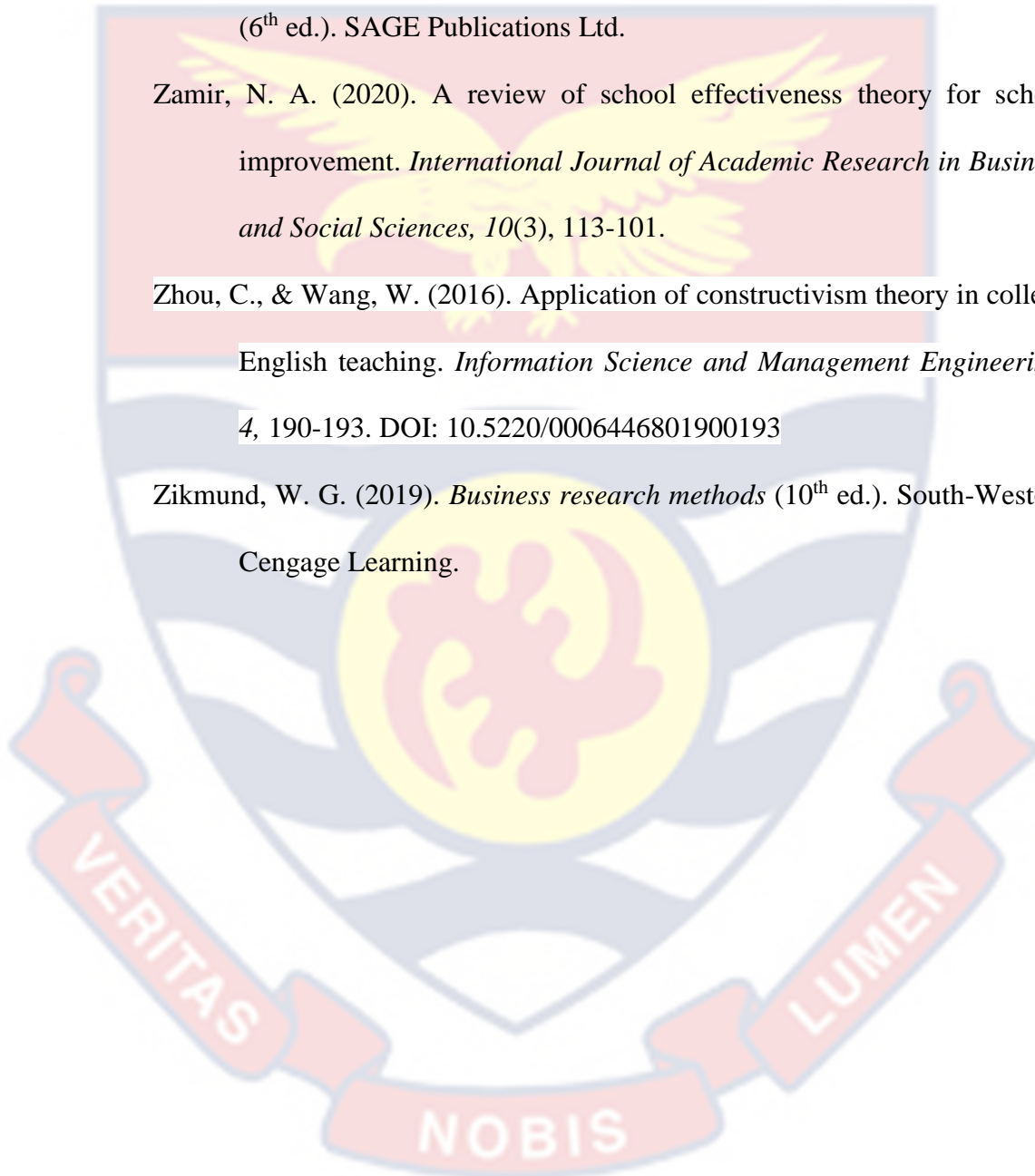
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APPENDICES

APPENDIX A

Questionnaire for Trainee-Teachers



**UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES**

**FACULTY OF HUMANITIES AND SOCIAL SCIENCES EDUCATION
DEPARTMENT OF BUSINESS AND SOCIAL SCIENCES EDUCATION**

**TOPIC: A Comparative Study of Conventional and Non-Conventional
Modes of Education and Accounting Education Delivery in
Ghana**

Dear Respondent,

This questionnaire has been designed to solicit data for a research work being undertaken on the above topic. The various undergraduate final year students (Level 400) reading Accounting education in the University of Cape Coast and University of Education, Winneba have been selected as units of analysis. The survey is completely voluntary. Your opinions are important to the success of the study, and will be kept confidential. Please kindly respond to the questionnaire by filing in as appropriate. Should you have any questions concerning this survey, please feel free to contact the researcher with this phone number: 0556591076. I look forward to your participation.

Consent to Participate in Research:

I understand that any information I share will remain confidential and that when the results of the research are published or discussed in conferences, no information will be included that would reveal my identity. I am 18 years of age or older. By agreeing to continue with the survey and submit a response to the researcher in question, I am giving consent to participate in this study.

I consent to participate in this survey: Yes No

SECTION A: Background Characteristics of Respondents

Please tick (√) or provide responses to the questions which follow:

1. Please indicate your study institution.
 - a. University of Cape Coast (UCC) []
 - b. University of Education, Winneba (UEW) []

2. Please indicate your mode of study in the institution.
 - a. Conventional (Regular mode) []
 - b. Non-conventional (Distance mode) []

3. Please indicate your gender.

- a. Male []
b. Female []

4. Do you have any prior teaching experience? Yes [] No []

For sections B, C, D, E, F and G, please respond to each of the statements by ticking (✓) the scale corresponding to the option that is most appropriate. Note that responses to the items are measured numerically using discrete scale ranging from one (1) to seven (7), where as a response get closer to one (1) the respondent is disagreeing more to the items and also as a response get closer to seven (7) the respondent is agreeing more to the items.

SECTION B: Pedagogical Content Knowledge

Items/Statements	1	2	3	4	5	6	7
5. My preservice preparation programme provided me with a good foundation in teaching accounting at the pre-tertiary level.	1	2	3	4	5	6	7
6. There is a disconnection between the content I learnt during my pre-service preparation and what I am teaching in the classroom.	1	2	3	4	5	6	7
7. Lecturers/tutors use good teaching learning materials in instruction which enhance my understanding.	1	2	3	4	5	6	7
8. My teacher education programme equipped me with varieties of accounting teaching methods.	1	2	3	4	5	6	7
9. Lecturers/tutors do <u>not</u> cater for individual differences in their instructional processes.	1	2	3	4	5	6	7
10. My college prepared me in such a way that I can teach more than one subject on the school time table.	1	2	3	4	5	6	7
11. My university familiarised me with the senior high school curriculum.	1	2	3	4	5	6	7
12. My university preparation helped me to present accounting lessons in a logical manner.	1	2	3	4	5	6	7
13. My university prepared me in how to use teaching and learning materials (TLMs) to enhance students' understanding of lessons.	1	2	3	4	5	6	7
14. My university trained me on how to improvise teaching and learning materials (TLMs).	1	2	3	4	5	6	7

SECTION C: Assessment Techniques

Items/Statements	1	2	3	4	5	6	7
15. My university has mounted at least a semester course in assessment/measurement and evaluation in all its teacher preservice preparation programmes.	1	2	3	4	5	6	7
16. My teacher education programme made me familiar with a variety of assessment techniques.	1	2	3	4	5	6	7
17. Test items were such that they helped me to apply what we learnt in class to real life situation.	1	2	3	4	5	6	7
18. Test items (quiz/exams) helped me to develop critical thinking skills.	1	2	3	4	5	6	7
19. Quick release of assessment results by my lecturers							

motivated me to be serious with studies.	1	2	3	4	5	6	7
20. The test items (quiz/exam) use by lecturers in university cover the three domains of learning.	1	2	3	4	5	6	7
21. My university prepares me on how to use evaluation remarks to enhance students' learning.	1	2	3	4	5	6	7
22. My university prepares me on how to use assessment to diagnose students' academic problems.	1	2	3	4	5	6	7
23. My teacher education programme equips me with the requisite knowledge for crafting test items.	1	2	3	4	5	6	7
24. My university gives me enough tuition on how to prepare marking schemes.	1	2	3	4	5	6	7

SECTION D: Quality of Faculty

Items/Statements	1	2	3	4	5	6	7
25. Teaching staff of my university are well trained and highly qualified.	1	2	3	4	5	6	7
26. Teaching staff of my university are very professional in their work.	1	2	3	4	5	6	7
27. Teaching staff of my university are <u>not</u> able to show enough skills and competencies when teaching.	1	2	3	4	5	6	7
28. The teaching staff of my university are knowledgeable about how and when to help students overcome their learning difficulties.	1	2	3	4	5	6	7
29. Teaching staff of my university periodically engage students in practical aspects of courses they teach.	1	2	3	4	5	6	7
30. My interaction with the teaching staff of the university during lectures is effective.	1	2	3	4	5	6	7
31. Teaching staff of the university always promote effective ways for students to interact with the content to be learned.	1	2	3	4	5	6	7
32. Students do <u>not</u> have any medium created by the university to interact with teaching staff, both offline and online.	1	2	3	4	5	6	7
33. Teaching staff of the university create a platform for group work and discussions for students to construct knowledge.	1	2	3	4	5	6	7
34. Teaching staff of the university always come together to share ideas on how to assist us grow our practical skills of teaching and practice for mastery.	1	2	3	4	5	6	7

SECTION E: Classroom Management

Items/Statements	1	2	3	4	5	6	7
35. My university has mounted a semester course in classroom management in all its teacher education programmes.	1	2	3	4	5	6	7
36. In my training as an accounting teacher, I am given enough tuition on classroom management skills.	1	2	3	4	5	6	7
37. My university prepares me in how to manage over enrolled class.	1	2	3	4	5	6	7

38. My training as an accounting teacher equips me with the relevant knowledge for enhancing students' engagement.	1	2	3	4	5	6	7
39. My university trains me in how to use instructional techniques to manage disruptive student's behaviour.	1	2	3	4	5	6	7
40. I am knowledgeable about effective classroom management strategies.	1	2	3	4	5	6	7
41. My university trains me in how to use a variety of teaching strategies to manage classroom learning and interaction.	1	2	3	4	5	6	7
42. My university prepares trainee-teachers on how to handle students with problematic behaviours.	1	2	3	4	5	6	7
43. My university prepares me on how to determine class rules.	1	2	3	4	5	6	7
44. My university adequately prepares me in the area of classroom discipline.	1	2	3	4	5	6	7

SECTION F: Guidance and Counselling

Items/Statements	1	2	3	4	5	6	7
45. My university has a well-established guidance and counselling unit/office for students counselling.	1	2	3	4	5	6	7
46. My university has professional guidance and counselling staff who are not lecturers/tutors.	1	2	3	4	5	6	7
47. My university offers at least a semester course in guidance and counselling for trainee-teachers.	1	2	3	4	5	6	7
48. My university trains me on how to offer guidance and counselling services to students to enhance their development.	1	2	3	4	5	6	7
49. The only time I officially experienced guidance and counselling services as a trainee-teacher was during fresher's orientation.	1	2	3	4	5	6	7
50. I would have frequently sought academic guidance and counselling at the university, but the services are not effective/available.	1	2	3	4	5	6	7
51. Many students in my university do not go for counselling because of lack of counselee-counsellor confidentiality.	1	2	3	4	5	6	7
52. My university trains students in how to effect counselling services to academically weaker students.	1	2	3	4	5	6	7
53. My preservice training prepares me in dealing with students with emotional problems.	1	2	3	4	5	6	7
54. Through my training in guidance and counselling at the university, I am able to help my learners to manage time judiciously.	1	2	3	4	5	6	7

SECTION G: Trainee-Teachers' Academic Self-Discipline

Items/Statements	1	2	3	4	5	6	7
55. I always make sure to complete my class assignments on schedule.	1	2	3	4	5	6	7
56. I often set-goals and strive to achieve them in my studies.	1	2	3	4	5	6	7
57. I make sure to be present in class before a lesson begins.	1	2	3	4	5	6	7
58. I do not allow friends to disrupt my attention in class.	1	2	3	4	5	6	7
59. I always make sure to participate in class activities.	1	2	3	4	5	6	7
60. I always abide by rules and regulations in class to enhance my studies.	1	2	3	4	5	6	7
61. I avoid making/receiving calls when learning.	1	2	3	4	5	6	7
62. I set high academic standards at the beginning of every semester for myself and strive to achieve them.	1	2	3	4	5	6	7
63. I do not move out of class even when a teacher is being boring to my liking.	1	2	3	4	5	6	7
64. I prepare a personal timetable at the beginning of every semester to guide me in my studies.	1	2	3	4	5	6	7

THANK YOU



SECTION B: Effectiveness of Accounting Education Delivery

Please assess the trainee-teacher in question by indicate the level of his/her effectiveness to the following statements that focus on accounting education delivery. The responses to the statements are measured numerically using a seven-point discrete scale such that the higher the number the higher the level of effectiveness and the lower the number the higher the level of ineffectiveness to the indicated items/statements.

Professional Values and Attitudes	1	2	3	4	5	6	7
4. The trainee-teacher is regular in school.	1	2	3	4	5	6	7
5. The trainee-teacher values engaging other teachers to plan and share knowledge for the success of students.	1	2	3	4	5	6	7
6. The trainee-teacher values attendance at school meetings and workshops.	1	2	3	4	5	6	7
7. The trainee-teacher shows professional commitment by showing positive attitude towards teaching.	1	2	3	4	5	6	7
8. The trainee-teacher joins colleague staff to undertake activities that bring about changes in the school.	1	2	3	4	5	6	7
Professional Knowledge	1	2	3	4	5	6	7
9. The trainee-teacher uses variety of teaching methods to meet different learning needs of his/her students.	1	2	3	4	5	6	7
10. The trainee-teacher considers individual students' learning needs in his/her lesson plan.	1	2	3	4	5	6	7
11. The trainee-teacher is able to demonstrate the competencies in putting students in appropriate learning groups in his/her class.	1	2	3	4	5	6	7
12. The trainee-teacher is able to relate his/her lessons to students' real experience.	1	2	3	4	5	6	7
13. The trainee-teacher is able to demonstrate deep understanding of topics he/she teaches.	1	2	3	4	5	6	7
Professional Practices: Managing the Learning Environment	1	2	3	4	5	6	7
14. The trainee-teacher is able to establish purposeful learning environment that help him/her to monitor students learning activities.	1	2	3	4	5	6	7
15. The trainee-teacher establishes clear parameters in his/her class for student conduct in order to control the class.	1	2	3	4	5	6	7
16. The trainee-teacher is able to mix both girls and boys for class assignment.	1	2	3	4	5	6	7
17. The trainee-teacher acknowledges students' good behaviour in class by rewarding them accordingly.	1	2	3	4	5	6	7
18. The trainee-teacher is able to find out the concerns of students who misbehave in his/her class.	1	2	3	4	5	6	7
Professional Practices: Teaching and Learning	1	2	3	4	5	6	7
19. The trainee-teacher organises teaching and learning activities sequentially	1	2	3	4	5	6	7
20. The trainee-teacher uses appropriate pace for the entire lesson in order for all students to hear him/her clearly.	1	2	3	4	5	6	7
21. The trainee-teacher distributes questions fairly to stimulate critical thinking in students.	1	2	3	4	5	6	7

22. The trainee-teacher manages board effectively (ie. writing of date, subject, topic, core points, and cleaning of board at the end of lesson).	1	2	3	4	5	6	7
23. The trainee-teacher exhibits command of subject matter.							
Professional Practices: Assessment	1	2	3	4	5	6	7
24. The trainee-teacher uses a variety of assessment techniques to ensure students participation.	1	2	3	4	5	6	7
25. The trainee-teacher is able to state specific relevant measurable objectives which are linked to classroom activities.	1	2	3	4	5	6	7
26. The trainee-teacher is able to develop different assessment techniques to promote students' learning in his/her class.	1	2	3	4	5	6	7
27. The trainee-teacher is able to set assessment questions to cover the three domains of learning.	1	2	3	4	5	6	7
28. The trainee-teacher gives prompt feedback to his/her students on their assignments (e.g. homework, class test and projects).	1	2	3	4	5	6	7

THANK YOU



APPENDIX C
Interview Guide for Participants



UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF HUMANITIES AND SOCIAL SCIENCES EDUCATION
DEPARTMENT OF BUSINESS AND SOCIAL SCIENCES EDUCATION

TOPIC: A Comparative Study of Conventional and Non-Conventional Modes of Education and Accounting Education Delivery in Ghana

SECTION A: Background Characteristics of Respondents

1. Please indicate the institution of the interviewee
 - g. University of Cape Coast (UCC) []
 - h. University of Education, Winneba (UEW) []
2. Please indicate the gender of the interviewee.
 - a. Male []
 - b. Female []
3. Years of experience in your current position.....

SECTION B: Pedagogical Content Knowledge

- Relevance of content
- Tutors' use of TLMs
- Catering for individual differences

SECTION C: Assessment Techniques

- Construction of test items
- Promptness of releasing assessment results
- Assessing all the three domains of learning

SECTION D: Quality of Faculty

- Qualification of course tutors
- Professionalism of course tutors

SECTION E: Classroom Management

- Tuition on classroom management skills and strategies
- Classroom management
- Students' engagement

SECTION F: Guidance and Counselling

- Well-established guidance and counselling unit/office
- Availability of professional guidance and counselling staff
- Knowledge on guidance and counselling services

SECTION G: Trainee-Teachers' Academic Self-Discipline

- Proactiveness and achieving set goals
- Do trainee-teachers complete classroom task on schedule? If no why?
- How would you rate/describe trainee-teachers' regularity and punctuality to class?
- What can you say about "trainee-teachers setting high academic standards for themselves at the beginning of every semester and striving to achieve them"?
- How would you describe the extent to which rules and regulations are abided by trainee-teachers in class?

SECTION H: Effectiveness of Accounting Education Delivery***Professional values and attitudes***

- Punctuality and regularity to school and meetings
- Working with others
- Commitment to the profession

Professional knowledge

- Usage of various teaching methods
- Preparing a lesson plan that meet the needs of all
- Relevance of lesson to students' real experience
- Understanding of content

Professional practices: Managing the learning environment

- Establishing purposeful learning environment
- Establishing clear parameters to control class
- Gender balance in teaching and learning activities
- Administering of rewards/motivation

Professional practices: Teaching and learning

- Sequential organisation of teaching and learning activities
- Using appropriate pace for lesson delivery
- Fair distribution of questions
- Effective board management

Professional practices: Assessment

- Developing and using variety of assessment techniques
- Stating specific relevant measurable objectives
- Setting assessment questions to cover the three domains of learning
- Promptness of feedback

THANK YOU

NOBIS

APPENDIX D
Factor Analysis

Pedagogical Content Knowledge

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.646
Bartlett's Test of Sphericity	Approx. Chi-Square	224.569
	Df	45
	Sig.	.000

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.634	16.337	16.337	1.634	16.337	16.337
2	1.295	12.951	29.287	1.295	12.951	29.287
3	1.244	12.439	41.726	1.244	12.439	41.726
4	1.127	11.266	52.993	1.127	11.266	52.993
5	.994	9.939	62.931			
6	.864	8.640	71.572			
7	.797	7.972	79.544			
8	.718	7.176	86.720			
9	.675	6.749	93.468			
10	.653	6.532	100.000			

Extraction Method: Principal Component Analysis.

Assessment Techniques

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.614
Bartlett's Test of Sphericity	Approx. Chi-Square	612.903
	Df	45
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.170	21.700	21.700	2.170	21.700	21.700
2	1.328	13.281	34.981	1.328	13.281	34.981
3	1.155	11.549	46.530	1.155	11.549	46.530
4	1.097	10.971	57.501	1.097	10.971	57.501

5	.944	9.444	66.944		
6	.857	8.567	75.511		
7	.803	8.033	83.544		
8	.714	7.143	90.687		
9	.668	6.676	97.363		
10	.264	2.637	100.000		

Extraction Method: Principal Component Analysis.

Quality of Faculty

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.634
Bartlett's Test of Sphericity	Approx. Chi-Square	3028.250
	Df	45
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.576	35.758	35.758	3.576	35.758	35.758
2	1.693	16.929	52.688	1.693	16.929	52.688
3	1.331	13.309	65.997	1.331	13.309	65.997
4	.971	9.707	75.704			
5	.844	8.442	84.146			
6	.763	7.631	91.776			
7	.500	5.003	96.779			
8	.164	1.644	98.423			
9	.088	.878	99.301			
10	.070	.699	100.000			

Extraction Method: Principal Component Analysis.

Classroom Management

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.613
Bartlett's Test of Sphericity	Approx. Chi-Square	229.561
	Df	45
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.637	16.374	16.374	1.637	16.374	16.374
2	1.273	12.731	29.105	1.273	12.731	29.105
3	1.177	11.767	40.873	1.177	11.767	40.873
4	1.107	11.071	51.943	1.107	11.071	51.943
5	.965	9.649	61.592			
6	.902	9.024	70.616			
7	.833	8.330	78.945			
8	.812	8.123	87.068			
9	.790	7.904	94.972			
10	.503	5.028	100.000			

Extraction Method: Principal Component Analysis.

Guidance and Counselling**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.831
Bartlett's Test of Sphericity	Approx. Chi-Square	1466.785
	Df	45
	Sig.	.000

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.498	34.985	34.985	3.498	34.985	34.985
2	1.185	11.851	46.836	1.185	11.851	46.836
3	1.048	10.484	57.320	1.048	10.484	57.320
4	1.010	10.104	67.423	1.010	10.104	67.423
5	.830	8.304	75.727			
6	.742	7.418	83.145			
7	.640	6.396	89.541			
8	.568	5.680	95.222			
9	.267	2.665	97.887			
10	.211	2.113	100.000			

Extraction Method: Principal Component Analysis.

Trainee-Teachers' Academic Self-Discipline**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.685
Bartlett's Test of Sphericity	Approx. Chi-Square	232.995
	Df	45
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.530	15.301	15.301	1.530	15.301	15.301
2	1.333	13.329	28.630	1.333	13.329	28.630
3	1.202	12.018	40.648	1.202	12.018	40.648
4	1.143	11.425	52.074	1.143	11.425	52.074
5	1.045	10.447	62.521	1.045	10.447	62.521
6	.969	9.691	72.211			
7	.807	8.072	80.283			
8	.764	7.642	87.925			
9	.662	6.624	94.549			
10	.545	5.451	100.000			

Extraction Method: Principal Component Analysis.

Professional Values and Attitudes**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.615
Bartlett's Test of Sphericity	Approx. Chi-Square	47.212
	Df	10
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %

1	1.284	25.683	25.683	1.284	25.683	25.683
2	1.155	23.110	48.792	1.155	23.110	48.792
3	.956	19.128	67.920			
4	.834	16.672	84.592			
5	.770	15.408	100.000			

Extraction Method: Principal Component Analysis.

Professional Knowledge

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.607
Bartlett's Test of Sphericity	Approx. Chi-Square	251.266
	Df	10
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.828	36.567	36.567	1.828	36.567	36.567
2	1.033	20.650	57.217	1.033	20.650	57.217
3	.870	17.397	74.614			
4	.811	16.228	90.842			
5	.458	9.158	100.000			

Extraction Method: Principal Component Analysis.

Professional Practices: Managing the Learning Environment

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.619
Bartlett's Test of Sphericity	Approx. Chi-Square	83.781
	Df	10
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.369	27.374	27.374	1.369	27.374	27.374
2	1.223	24.465	51.839	1.223	24.465	51.839
3	.927	18.549	70.388			
4	.784	15.671	86.059			
5	.697	13.941	100.000			

Extraction Method: Principal Component Analysis.

**Professional Practices: Teaching and Learning
KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.628
Bartlett's Test of Sphericity	Approx. Chi-Square	35.324
	Df	10
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.273	25.468	25.468	1.273	25.468	25.468
2	1.089	21.788	47.257	1.089	21.788	47.257
3	.979	19.583	66.840			
4	.851	17.015	83.855			
5	.807	16.145	100.000			

Extraction Method: Principal Component Analysis.

**Professional Practices: Assessment
KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.682
Bartlett's Test of Sphericity	Approx. Chi-Square	46.027
	Df	10
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.255	25.090	25.090	1.255	25.090	25.090
2	1.123	22.470	47.560	1.123	22.470	47.560
3	1.032	20.635	68.195	1.032	20.635	68.195
4	.859	17.177	85.372			
5	.731	14.628	100.000			

Extraction Method: Principal Component Analysis.

APPENDIX E

Sample Letters for Ethical Clearance

Department of Business and Social Sciences Education
Faculty of Humanities and Social Sciences Education
College of Education Studies
University of Cape Coast
Cape Coast
20th November, 2021

The Chairman
Institutional Review Board
University of Cape Coast
Cape Coast

Dear Sir,

APPLICATION FOR ETHICAL CLEARANCE

I am Tahir Ahmed Andzie a PhD in Accounting Education student of the Department of Business and Social Sciences Education, University of Cape Coast with student number EII/ACE/18/0004.

I wish to apply for ethical clearance from your highly esteem Institution to enable me collect data for my study on the topic: Instructional Quality and effectiveness of Accounting Education Delivery of University of Cape Coast Undergraduate Programme.

I would be grateful if my application would be considered. Thanks for your usual co-operation.

Yours Faithfully



Tahir Ahmed Andzie

Department of Accounting
School of Business
College of Humanities and legal Studies
University of Cape Coast
Cape Coast

22nd November, 2021.

The Chairman
Institutional Review Board
University of Cape Coast
Cape Coast

Dear Sir,

ACCEPTANCE OF PROPOSAL

I write to confirm that Tahir Ahmed Andzie has submitted and defended his proposal on the topic: Instructional Quality and effectiveness of Accounting Education Delivery of University of Cape Coast Undergraduate Programme in Ghana.

I therefore have given him the permission to apply for an ethical clearance from IRB to enable collect data for the continuation of his work.

Counting on your usual co-operation. Thank you.

Your Faithfully



Rev. George Nii- Tachie PhD

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES

FACULTY OF HUMANITIES & SOCIAL SCIENCES EDUCATION

DEPARTMENT OF BUSINESS & SOCIAL SCIENCES EDUCATION

Telephone: 0209408788

EXT. (268), Direct: 35411.

Telegrams & Cables: University, Cape Coast.

Email: dbse@ucc.edu.gh

UNIVERSITY POST OFFICE
CAPE COAST, GHANA



Our Ref: DoBSSE/37/V.2/

Your Ref:

DATE: 23rd November, 2021

The Chairperson
Institutional Review Board
University of Cape Coast
Cape Coast

Dear Sir,

ACCEPTANCE OF PROPOSAL

We formally bring to your notice that the Department is satisfied with the research proposal of Mr. Tahiru Ahmed Andzie, and has accordingly given the said candidate the permission to apply for ethical clearance from IRB in order to enable him undertake data collection.

He is working on Research Topic: **"Instructional Quality and Effectiveness of Accounting Education Delivery of University of Cape Coast Undergraduate Programme in Ghana."**

We count on your usual cooperation.

Thank you.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Bernard Y.S. Acquah'.

Dr. Bernard Y.S. Acquah
Head

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309
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 OMB NO: 0990-0279
 IORG #: IORG0009096

26TH JANUARY, 2022

Mr. Tahir Ahmed Andzie
 Department of Business and Social Sciences Education
 University of Cape Coast

Dear Mr. Andzie,

ETHICAL CLEARANCE – ID (UCCIRB/CES/2021/164)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research titled **Instructional quality and Effectiveness of Accounting Education Delivery of University of Cape Coast Undergraduate Programme**. This approval is valid from 26th January, 2022 to 25th January, 2023. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD
UCCIRB Administrator

ADMINISTRATOR
 INSTITUTIONAL REVIEW BOARD
 UNIVERSITY OF CAPE COAST