

UNIVERSITY OF CAPE COAST



PERCEIVED EFFECTIVENESS OF THE TRAINING OF BASIC  
SCHOOLTEACHERS THROUGH THE SANDWICH MODE TO  
TEACH ACCOUNTING

ALBERT KOFI THOMPSON

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TEACH ACCOUNTING

BY

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College of Education Studies, University of Cape Coast, in partial fulfilment  
of the requirements for the award of Master of Philosophy degree in  
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## 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: Albert Kofi Thompson

### Supervisor's Declaration

I 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.

Supervisor's signature ..... Date .....

Name: Professor Joseph Tufuor Kwarteng

## ABSTRACT

The purpose of the study is to explore the perception of in-service basic schoolteachers switching to become accounting teachers, about the quality of accounting teacher education they have received through the sandwich mode and its influence on their ability to teach accounting effectively. The study sought information on the teacher trainees' perception of their pre-service preparation with regard to five dimensions of the training programme namely pedagogical quality, classroom management, assessment techniques, face-to-face interaction and quality of faculty. Also the study focused on how these five dimensions contributed to their effective teaching of accounting to enhance quality teacher education as a whole.

The study was made up of 194 respondents who were the final year student selected through census. The study was conducted through the use of descriptive cross sectional survey. It adopted quantitative approach through the use of questionnaire adapted. The quantitative data were analysed with statistics such as Friedman Test, Kruskal Wallis and Partial Least Squares, Structural Equation Modelling. The study found out that there was significance difference in the level of quality dimensions in the accounting education programme. Also the various dimensions of quality accounting education significantly influenced the teacher trainees' effective teaching of accounting. It was recommended that the quality dimensions of accounting education that are lower should be attended to by the management of the programme. Finally premium should not be place on any of the dimensions at the expense of others.

## KEYWORDS

Accounting Education,

Teacher trainees,

Assessment Techniques,

Quality of Faculty,

Face-to-Face Interaction,

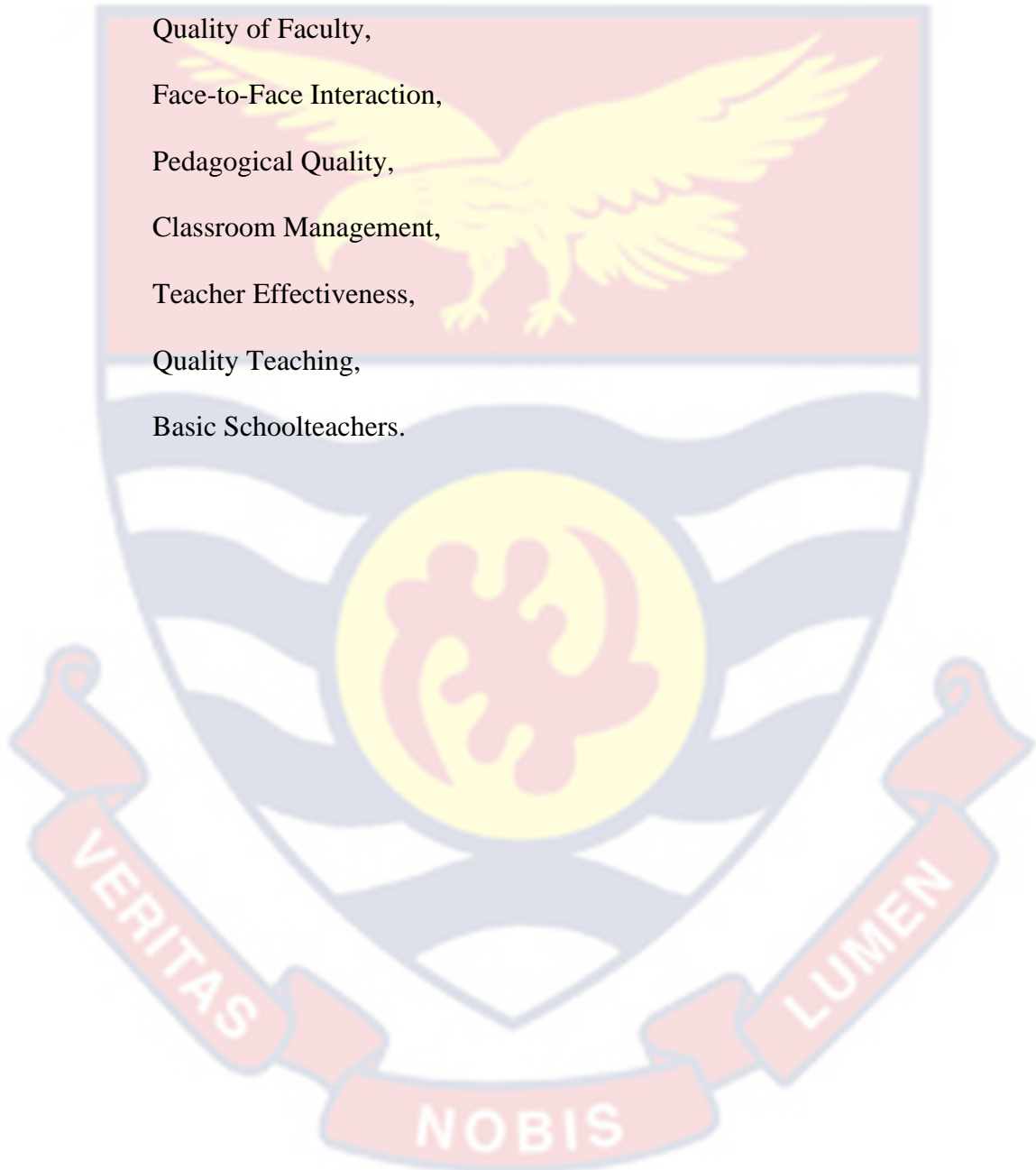
Pedagogical Quality,

Classroom Management,

Teacher Effectiveness,

Quality Teaching,

Basic Schoolteachers.

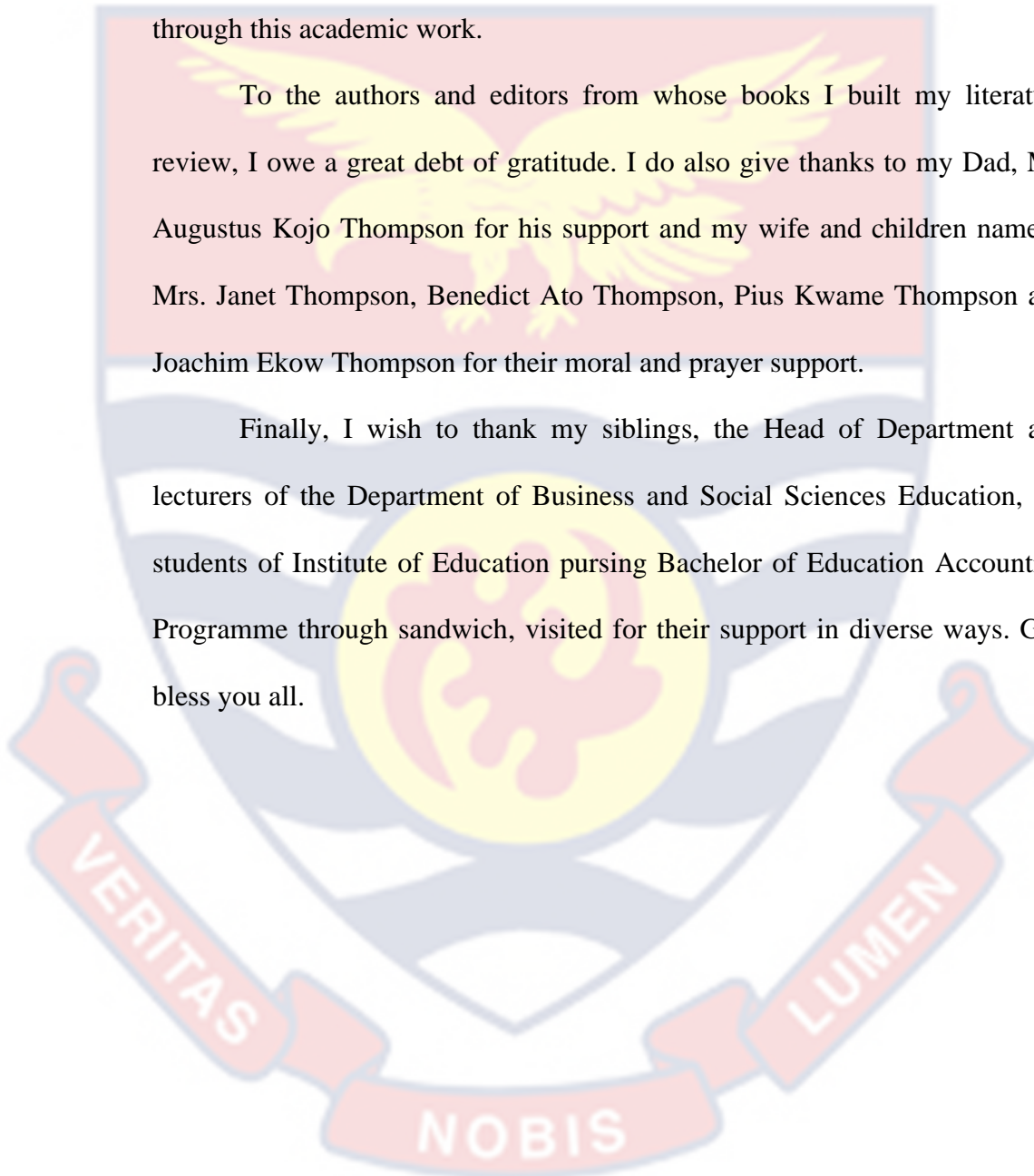


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Finally, I wish to thank my siblings, the Head of Department and lecturers of the Department of Business and Social Sciences Education, the students of Institute of Education pursuing Bachelor of Education Accounting Programme through sandwich, visited for their support in diverse ways. God bless you all.





## DEDICATION

To my beloved and caring wife, Mrs Janet Thompson and my children, namely, Benedict Ato Thompson, Pius Kwame Thompson and Joachim Ekow Thompson. They have really been a source of great inspiration.



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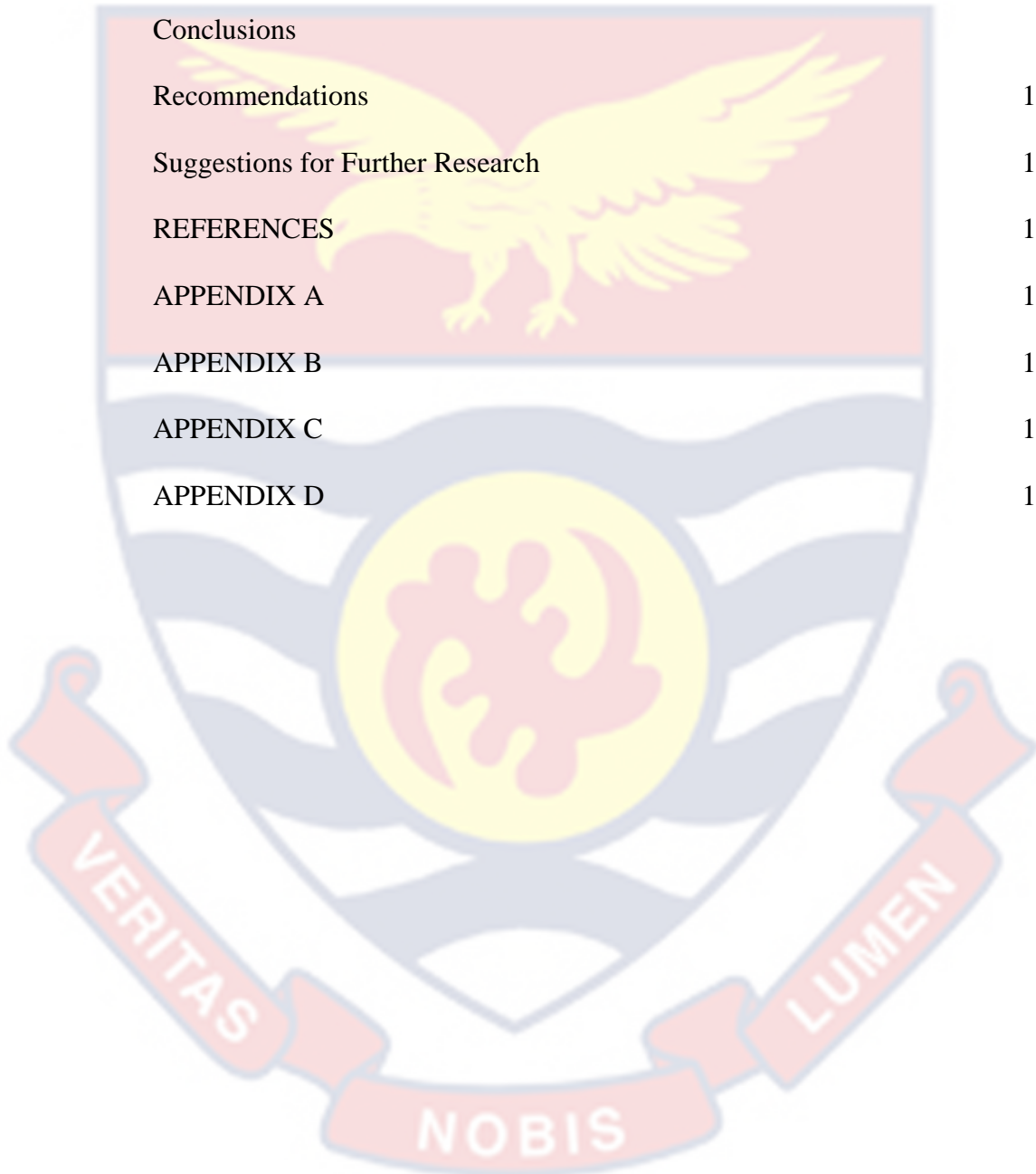
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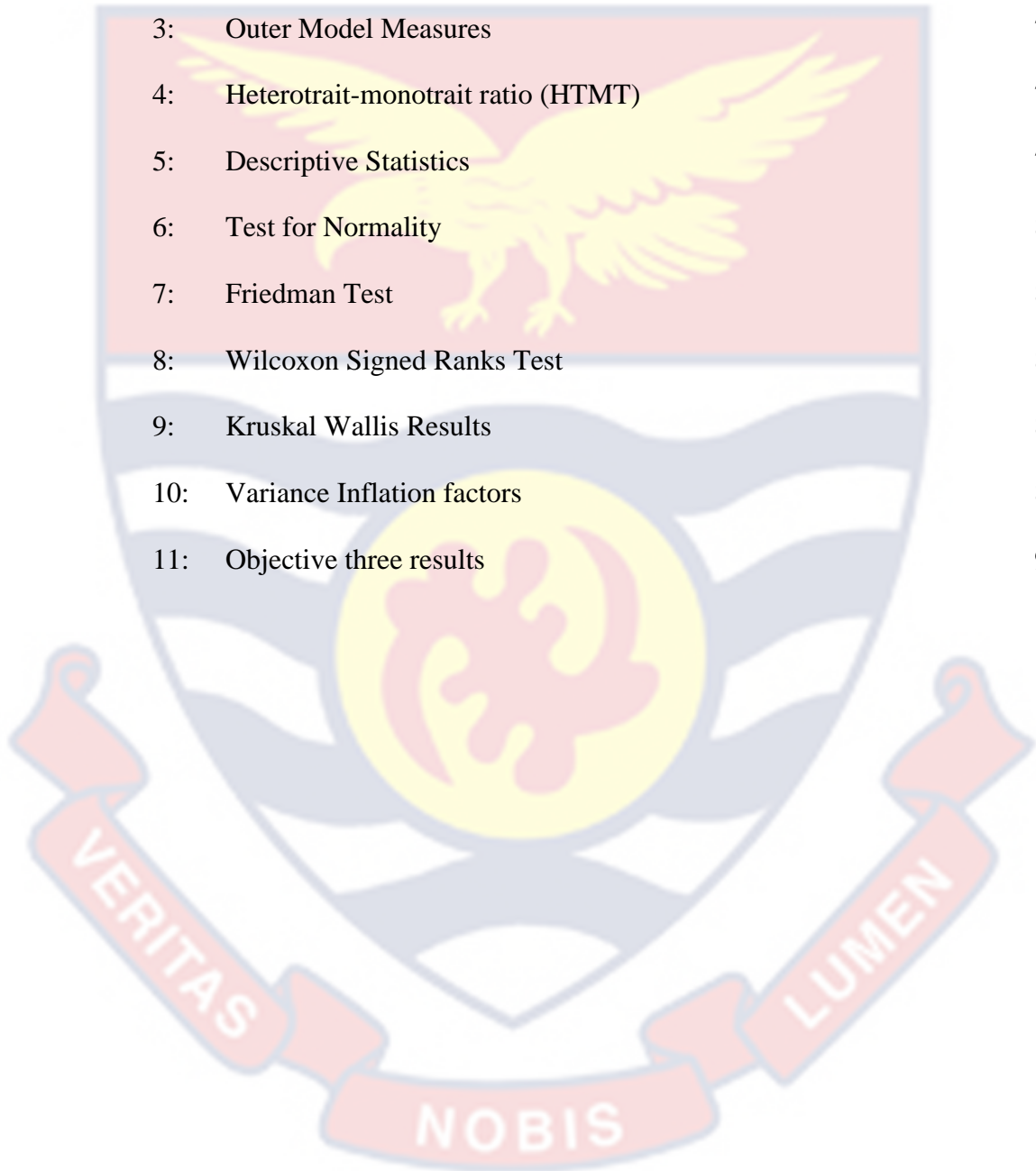
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## CHAPTER ONE

### INTRODUCTION

One of the parameters to judge the effectiveness of any accounting education system is the quality of its teachers because they are the engine of growth of the system (Preston, 2017). Therefore, it is appropriate for universities to prepare accounting trainee-teachers adequately to meet the needs and demand of stakeholders. However, scholars have argued about the gap in accounting teacher education with regard to instructional quality and practice (Aaronson, Lisa & William, 2017; Corbin, 2017). This gap may be the reason for the perception that accounting teachers particularly those trained through the non-conventional modes such as sandwich in Ghana are not effective (Amoono, 2019; Clark, 2020; Cleveland, 2018; Kwarteng, 2018; Thompson, 2015; Wright, 2017). This call for an empirical investigation into the issues of pre-service accounting teacher preparation through non-conventional mode such as sandwich in order to better understand and address the issues, if any.

#### **Background to the Study**

Globally, quality education is cherished by all nations because its citizens' education has been their concern. With decades of effort, many nations have put in measures to ensure that all children of school going age enter basic school with most of them proceeding to higher levels of education (United Nations Educational, Scientific and Cultural Organisation (UNESCO), 2019). The percentage of senior high school leavers entering universities is very high in most developed countries relative to those of developing countries (UNESCO, 2020).

This may be as a result of less effective education and schooling system in developing countries, which is largely blamed on poor provision of resources, teacher preparation, and political interference (Clark, 2020). Of the three antecedents of ineffective education identified by Clark, teacher preparation is considered as crucial because teachers translate educational philosophy and objectives into knowledge and skills and transfer them to learners in the classroom so that the learners will acquire the requisite knowledge, skills and competencies needed (Akeke, Aluko & Iwuru, 2020).

In accounting education, the accounting teacher is regarded as a central element. Accounting knowledge and education are the basis for most things that can be accomplished in the accounting profession and life (Ali, 2019). According to Ali, accounting teachers are those that provide the power of accounting education to today's youth, thereby giving them the possibility for a better future. Accounting teachers simplify the complex, and make abstract accounting concepts readily understandable to students. As a result, many countries including Ghana have put in place many interventions to help prepare more effective accounting teachers so that they can become more professional, responsible and competent. It has been well established that teachers are very essential to students' academic performance (Magudu, 2014; Cleveland, 2018). Therefore, much effort must be committed to improve accounting education by improving the accounting teacher-education. This helps to produce competent accounting teachers.



In Ghana, the desire to become an accounting teacher has continued to exist. This is evident in the fact that individuals who have already qualified as basic schoolteachers do not consider it too late to even switch from the prior area of specialisation to retrain to become accounting teachers for the senior high school level. In order to retrain these basic schoolteachers to become effective and qualified accounting teachers, institutions have put in many interventions to expand and to produce more qualified accounting teachers by employing non-conventional modes such as distance and sandwich in addition to with the conventional mode (regular and residential). One of such institutions running regular, sandwich and distance mode of accounting teacher education programme simultaneously is University of Cape Coast (UCC).

The regular mode of the accounting teacher education is where the trainee teachers would have to be in school for two semesters per an academic year as they are resident in the school. The distance mode also describes the engagement of students during the weekends in satellite campuses of the main university. Finally, the sandwich mode is characterised by the students (i.e., basic schoolteachers) coming to school during vacation to be trained as accounting teachers. In the University of Cape Coast the sandwich mode is operated by the Outreach Unit of Institute of Education (IoE) in collaboration with Ghana Education Service (GES) and the Ministry of Education (MoE).

Irrespective of the mode of engaging students, the quality of education provided is one which is uncompromisable, if effective accounting teachers would have to be produced to teach accounting. According to Frederiksen (2017),

quality accounting teacher education programme should be able to develop the teachers' content knowledge, classroom management skills, pedagogical knowledge, assessment techniques, improvisational skills, and extracurricular activities with the view of developing him/her holistically as a professional and effective teacher. This calls for an enhanced teaching and learning environment in the sandwich mode in order to prepare more capable professional accounting teaching force with the needed skills. The argument has been that the kind of experiences the learner may have culminates into what will become of them (Clark, 2020; Cleveland, 2018; Fuudia, 2019; Metcalfe, Burgess & Proud, 2019). The consequential imperative, therefore, is ensuring that quality variables of the accounting education provided to the basic school teachers who want to switch to teach accounting (as expounded earlier on) is maintained.

### **Statement of the Problem**

Generally, stakeholders in education have constantly critiqued the quality of accounting teacher education programme offered through non-conventional mode such as sandwich and distance with regard to content knowledge, classroom management skills, pedagogical knowledge, assessment techniques, improvisational skills, and extracurricular activities (Saani, 2016). Also, GES and MoE is finding it difficult to accept the graduates of accounting teacher education offered through sandwich, a situation which is enhancing the negative perception stakeholders have towards non-conventional teacher education programmes such as sandwich.

In addition, the introduction of social intervention policies in the various SHSs in Ghana has made teaching in the secondary level much more difficult for teachers to handle. This has to do with difficulties in managing over enrolled classes, poor classroom management skills, assessment techniques and poor pedagogical knowledge on the part of teachers (Abeysekera, 2019; Akeke et al., 2020; Fuudia, 2019; Williams, Horner & Allen, 2019). This situation makes it imperative for universities to ensure that their accounting teacher education programme offered through conventional and non-conventional modes prepare teachers adequately for them to be able to acquire the necessary knowledge, skills and competencies needed to handle the situation appropriately.

Even though, many interventions have been put in place by government and other institutions to help enhance accounting teachers' effectiveness (Amoono, 2019; Saani, 2016), questions regarding pre-service accounting teachers' preparation in the area of content knowledge, assessment techniques, classroom management skills, and methods of teaching have been raised by educators, policy makers, and researchers (Fuudia, 2019; Ishola, Alao & Ukpong, 2020). Stakeholders in the secondary level of education are yearning for competent and effective teaching force. This can be realised through appropriate and effective pre-service teacher preparation system.

Previous research has addressed several aspects of teachers' pre-service preparation such as field experiences, usage of accounting curriculum, and dispositions (Abernathy, Beck & Taylor, 2014; Frederiksen, 2017; Kwarteng, 2018), classroom management (Klopfer, 2014), technology competency (Goedde,

2016), teacher preparedness and efficacy (Clark, 2020; Cleveland, 2019; Hudson, 2019) instructional quality (Senyamator, 2018), and effectiveness of teaching practices (Amoono, 2019; Fuudia, 2019). The researcher identified an apparent knowledge gap in the prior research concerning the effectiveness of accounting teacher education programme offered through sandwich mode. Particularly the perception of basic school teachers who are already qualified teachers on the quality of accounting education through the sandwich mode provides a richer basis of determining the quality, given their experience, and how it contributes to their effective teaching of accounting.

Furthermore, it appears there are few rigorous research works in the prior literature regarding teacher-trainees' assessment of their perception of their programmes of study in Ghana, not to mention accounting teachers (Reynolds, 2016; Senyamator, 2018). Many of the prior studies in this area focus on the theoretical courses in accounting teacher education without focusing on the teaching practice itself. Basically, the assertions so far set a valuable foundation for the development of this study.

### **Purpose of the Study**

The purpose of the study is to explore the perception of in-service basic schoolteachers switching to become accounting teachers, about the quality of accounting teacher education they have received through the sandwich mode and its influence on their ability to teach accounting effectively. The specific objectives are to:



1. compare the quality dimensions of the sandwich mode of accounting education as perceived by the basic schoolteachers.
2. examine the differences in the perceived quality dimensions of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers.
3. analyse the influence of the quality dimensions of accounting teacher education through the sandwich mode on perceived effective teaching of accounting.

### Hypotheses

The following hypotheses were tested to achieve the objectives of the study;

**H<sub>1</sub>:** There is no statistically significant difference in the quality dimensions of sandwich mode of accounting education as perceived by the basic schoolteachers.

**H<sub>2a</sub>:** There is no statistically significant difference in the perceived pedagogical quality of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers.

**H<sub>2b</sub>:** There is no statistically significant difference in quality of classroom management of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers.

**H<sub>2c</sub>:** There is no statistically significant difference in quality of faculty of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers.

**H2d:** There is no statistically significant difference in quality of assessment techniques of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers.

**H2e:** There is no statistically significant difference in quality of face-to-face interaction of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers.

**H3a:** Assessment technique in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting.

**H3b:** Classroom Management in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting.

**H3c:** Face-to-Face Interaction in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting.

**H3d:** Pedagogical Quality in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting.

**H3e:** Quality of Faculty in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting.



### **Significance of the Study**

The result of this study provides ready empirical evidence on the perception held on the quality of accounting education provided through the sandwich mode. The information on the quality provides basis to place judgement on the value given to teacher education provided through the sandwich mode. It will help put the perception held by stakeholders in perspectives as it can be substantiated from a much reliable empirical basis.

In terms of policy, sandwich education providers would be able to rely on the information provided through the findings of the study to improve the quality of accounting teacher education. The very variables that would be identified as most relevant to teaching accounting would also be brought to bear to enable how the programmes structure to be designed to give premium to the important variables. Also, the findings will assist instructional designers, trainers, educators, and developers of teacher education programmes in increasing the effectiveness of the curriculum by considering some of the dimensions of teacher pre-service preparation.

### **Delimitation**

There are many stakeholders who are involved in the implementation of sandwich programme. However, the study was delimited to the views of final year teacher-trainees who are sandwich students who are basic schoolteachers reading accounting in UCC. Also, the study was delimited to five (5) quality dimensions of the programme. These dimensions were pedagogical quality, classroom management, quality of faculty, assessment techniques, and face-to-face

interaction. The study also considered the years of teaching experience of the pre-service accounting teachers enrolled on the programme.

### **Limitations**

In conducting this study, the focus was on only IoE, UCC sandwich students who are basic schoolteachers reading BEd (Accounting) programme. It would have been more interesting to consider distance and regular BEd (Accounting) students in the university. Therefore, the generalisation of the findings to other groupings with similar characteristics must be done with caution. Also, with this limitation in mind, explanations regarding the significance of the study should be handled cautiously.

Also, the collection of the data was through the questionnaire. As a result, the responses that were obtained might not be the true reflection of the reality because as descriptive cross sectional survey it may have delved into private and emotional issues of the respondents. Again, the findings and conclusions of the study may not be projected for the future since issues related to teachers' pre-service preparation keep changing with time and place. These limitations notwithstanding, resultant findings of the study would constitute a strong basis for generalisation.

### **Operational Definition of Terms**

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

**Assessment dimension** refers to activities and policies concerned with periodic students' learning assessment and feedback including teacher-trainees evaluation of their instructors (tutors).

**Pedagogical content knowledge 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.

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

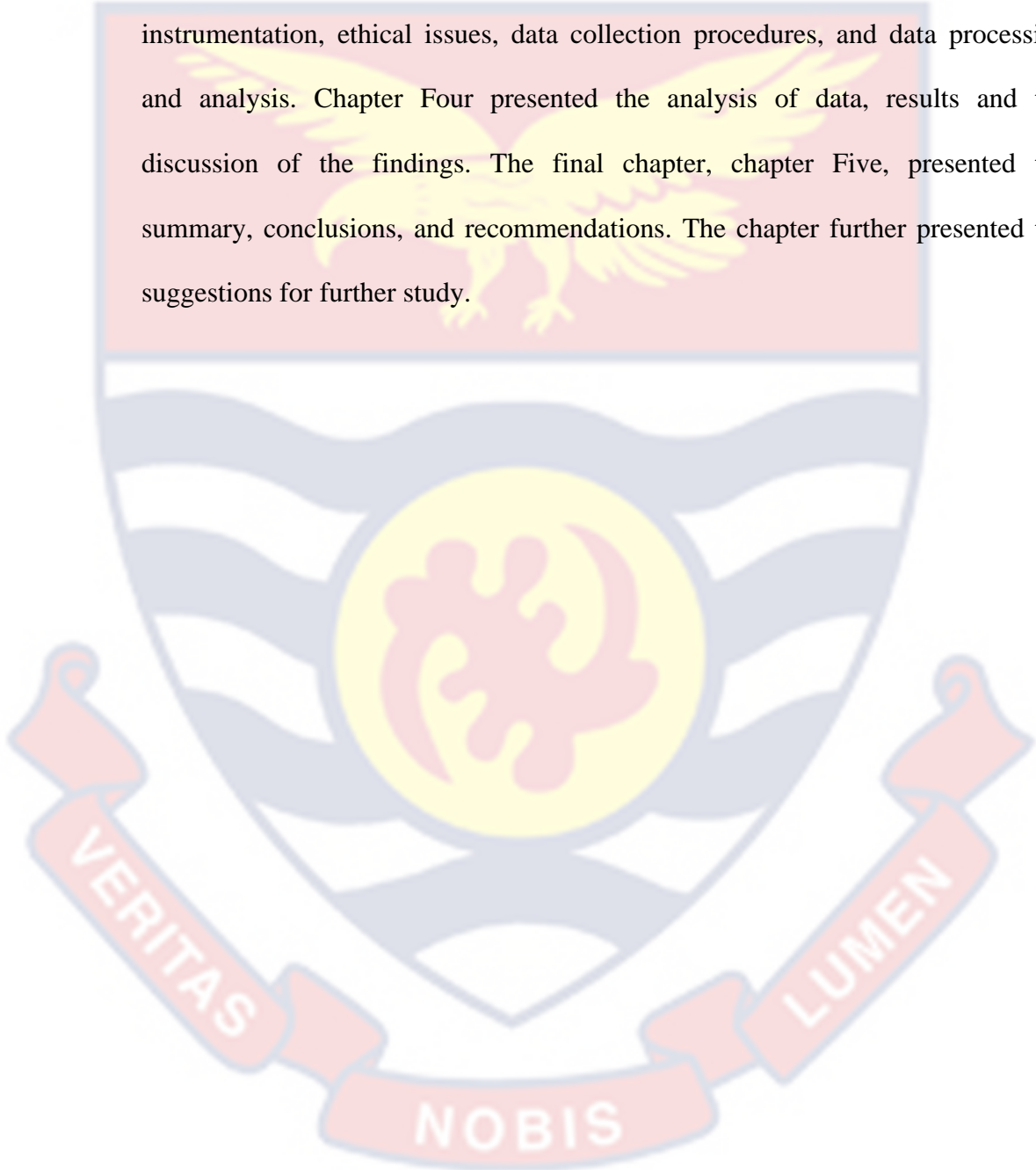
**Teacher effectiveness** is the process of designing and understanding the need of the students for quality instruction. By designing and implementing the process properly the result will reach a real effective stage. It is the characteristics of a teacher to be a real instrument for the process.

**Basic Schoolteacher** refers to a certified teacher undergoing retraining to be full-fledged teacher in a particular subject area (accounting).

### **Organisation of the Study**

The study is organised into five chapters. Chapter One covered the introduction which concentrated on the background to the study, a statement of the problem, purpose of the study as well as research objectives and hypotheses. It also presented the significance of the study, delimitation and limitations of the study. Chapter Two focused on the review of existing relevant and related literature on the study. The review was organised under three major areas, namely the theoretical, conceptual and empirical reviews of both predictor and

criterion/outcome variables. Chapter Three described the research methods used in the study. This included the epistemological orientation of the study, approach to the study, research design, population, respondents and participants, instrumentation, ethical issues, data collection procedures, and data processing and analysis. Chapter Four presented the analysis of data, results and the discussion of the findings. The final chapter, chapter Five, presented the summary, conclusions, and recommendations. The chapter further presented the suggestions for further study.



## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

This chapter deals with the review of literature that relates to the current study. The review makes it possible to compare the concerns and findings of the current study and that of related studies in order to provide sound basis for either confirming or refuting earlier findings and conclusions. This chapter also enhanced the researcher's ability to gain much insight into the problem, identified gaps existing in the current literature for pre-service accounting teachers and most importantly suggested relevant and reliable research methods. The chapter focuses on the interaction of the concept and themes as they relate to the theoretical and conceptual framework of the study. The theoretical reviews were presented first, followed by the conceptual review. Also, some related empirical studies were also reviewed in order to gain knowledge by means of direct and indirect observation of previous researchers.

#### Theoretical Review

The theoretical review of the study was enrooted on constructivism. This theoretical argument and philosophy was reviewed and analysed to form a theoretical structure that supported the argument of the study. The review forms a collection of interrelated ideas based on constructivism assumptions used to explain the implementation of teacher education programmes and its influence on teacher-trainees' effectiveness.



## Theory of constructivism

The related theory considered was constructivism. According to Adey, Fairbrother and Jones (2017), Jean Piaget and John Dewey concept of progressive education is what led to the evolution of constructivism. Piaget believed 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 education. Dewey called for education to be grounded in real experience. According to Dewey (as cited in Adey et al., 2017), 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). 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.

Constructivism transforms the student from a passive recipient of information to an active participant in the learning process. Always guided by the



teacher, students 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 students 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, 2017). In the constructivist classroom ideally the learners become "expert learners." This gives them ever-broadening tools to keep learning. Classroom applications of constructivism support the philosophy of learning which build the students' and the teachers' understanding.

Constructivism has been criticised on various grounds. Some of the charges that critics level against it is that it is elitist. 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 dominate the group's conclusions, and dissenting students are forced to conform to the emerging consensus (Ellis & Hunt, 2015; Miller, 2017).

The assertions so far shows that in order to enhance the quality of teacher trainees and the ability of these teachers to teach and guide students to acquire the needed skills in accounting, facilitators in the various universities should practicalised instruction, guide the learners to go through the professional processes of teaching. The professional process include; statement of behavioural objectives, relevant previous knowledge, introduction, development of teacher-learner activity, questioning skills, lesson closure and evaluation (Kunter, Baumert & Koller, 2017). With high level of instructional quality exposure, the students should be able to demonstrate high levels of these skills. When developing a teacher education programme, according to constructivism theory, designers must create stimulating environments that capture learners and enable them to formulate knowledge and derive meaning for themselves (Corbin, 2017; Kunter et al., 2017). These environments allow for collaboration between learners and the facilitator, and encourage dialogues so that understanding can be individually constructed.

### **Conceptual Review**

This section discusses the concepts relevant to the study. It begins with how teachers are prepared for the profession in Ghana. It also reviews the structural features of teacher education programme available to train the teacher trainees. Finally it presents an exposition on the concept of effective teaching.

### **Teacher Education and Preparation in Ghana**

Teacher education originated in France in 1685, led by St. John Baptist de la Salle, and was accepted throughout Europe through the efforts of August

Hermann Francke and Johann Pestalozzi (Manzar-Abbas & Lu, 2013). Germany established the first curriculum for teacher training in the 18<sup>th</sup> century. By 1810, teacher training reached the United States (Oyalle, 2019). In 1839, Horace Mann and Henry Barnard opened the first common school in Lexington, Massachusetts. Mann was the founder of teacher training schools. He was an early activist of recruiting and educating women as teachers. He knew one way to improve the quality of schools was to better educate prospective teachers. According to Oyalle, he gave speeches, held public gatherings at teacher education institutes, and raised public consciousness about the significance of education. Supporters of the free school movement liked his efforts to raise teachers' salaries, improve school infrastructure, and elongated the school year (Oyalle, 2019).

The beginning of the 1900 was a time during which small aspects of pedagogical education increased in undergraduate and graduate programmes (Perez, 2013). Specialists and professionals desired to establish an education profession, which had its specific preparation programmes and its own identifiable professional language (Ravitch as cited in Preston, 2017). Institutions of higher education established a variety of specialisations such as curriculum, school educational psychology, administration, and educational sociology. Angus (as cited in Peterson, 2018) noted that the establishment of graduate schools of education gave rise to a separation among the leadership in the profession. The separation included classroom instructors, professors of pedagogy, liberal arts faculty, and college presidents who had played a leading role in education reform throughout the 1800.

Several explanations of the concept of teacher education exist. Some researchers see teacher education as teacher development (Abernathy et al., 2014; Rahman, Jumani, Akhter, Chisthi & Ajmal, 2019; Zein, 2015). Rahman et al. (2019) identify three types of teacher preparation to consist of pre-service, induction and in-service training. They also identify general education, mastery of specific subject knowledge and methods of teaching the specific subject as the components of teacher education. Ansu (as cited in Preston, 2017) outlines two main aspects of teacher preparation: academic and professional preparations. According to Preston, to qualify as a professional teacher from any teacher preservice institution in Ghana, the student-teacher must be well educated in what he/she is going to teach; and must have undergone a professional preparation or training that will earn him/her special skills and competencies in the art of teaching.

Teacher education institutions are those educational institutions that are put there by the society to prepare and train teachers professionally. The programmes of these institutions are given appropriate acknowledgement by state agencies that certify teachers. Holden (as cited in Alharbi, 2017) criticised the form of teacher education to the effect that much of it, often, is passive. According to Alharbi, emphasis of these institutions is on pouring theory into unresponsive ears and the lesson does not get to the mind. Application of knowledge by the teacher becomes a problem. Azkiyah (2017) observed that teacher educators are the last to follow their advice and the activity they advocate



in their trainees' classes is often absent from their own, implying that the trainers appear to give what they do not have.

Mangalamma and Vardhini (2017) emphasise that what is taught and particularly how it is taught at the teacher pre-service institution greatly affects future career of teacher training college products. Mangalamma and Vardhini believe that the manner of teaching at the training college affects students' professional competence as they teach at the basic school level. To them, if teachers work in an institution as a team, and are committed, hardworking, resourceful and imaginative, they can cause their clients to be positively influenced. They noted further that the way and manner facilitators go about their work and the degree of their commitment to duty in the colleges go a long way to determine their students' capabilities to assume full classroom responsibilities. According to Bhat (2020), the success or failure of the curriculum depends on the teacher. This means, the teacher is the most significant person in the curriculum implementation process. The teacher is the king-pin of the educational situation; he makes or breaks educational programmes. This makes it vital to give the right kind of education to teacher trainees during their preparation in order to function efficiently after school.

Education is a condition for development and the teacher is the ultimate decider of its reality. The quality of teacher education is critical if education is to boost development. Teacher preparation, mentoring and motivation are critical factors in enhancing quality education which is capable of enhancing meaningful development. It is not, therefore, surprising that teacher preparation is on the

priority list of national educational programmes of most countries including Ghana (Mutaka, 2018). According to Mutaka, the vision of teacher education in Ghana is to lay the foundation for quality teaching and learning outcomes through competency-based preparation of teachers. The mission is to provide a comprehensive teacher education programme through pre-service and in-service training that would produce competent, committed and dedicated teachers to improve the quality of teaching and learning in Ghanaian schools.

Some of the training institutions that have been given the mandate to train and prepare teachers professionally focused purely on methods of teaching and assessment practices that are not tailored to the needs of the children with disabilities in inclusive schools (Amoono, 2019). Amoono added that methods of teaching at the pre-service teacher preparation programmes continue to be directed towards practices of regular schools. Consequently, teachers do not teach towards differential and multicultural learning outcomes since approaches adopted by many teachers in Ghana tend to be exam-driven.

The success of the curriculum largely depends on the skills and attitudes of the products of the curriculum, which are the classroom teachers. However, teachers may prefer to work with a traditional curriculum for a number of reasons. In the first place they may have little preparation or have been prepared in the “frontal method” where they simply stand at the front of the class and deliver information (Srdar, 2017). Secondly, they may have enough subject knowledge and feel more comfortable with a traditional curriculum which relies on the knowledge they have acquired through their pre-service preparation or which is



documented in their text books. Thirdly, they may feel more confident with a traditional curriculum which requires the teacher to make fewer decisions about how to address issues of student diversity (Senyamator, 2018). Also, they may gain real sense of professional satisfaction that their students are learning something concrete.

Enrolment into initial teacher training colleges in Ghana was undertaken by the Teacher Education Division of the Ghana Education Service (GES). The pre-service teacher preparation used to take three years leading to the certificate 'A' three-year post-secondary (Nkrumah, 2012). Now, the initial teacher preparation takes the four years but leading to the award of degree in education. In the course of the training, student-teachers are given adequate preparation in the subject areas to be taught after completion of training. According to Nkrumah, teacher trainees normally receive intensive intellectual training in the disciplines of leverage over and above what the students/pupils already have so that they would be able to provide the necessary guidance expected of them. In addition to their general and elective courses, teachers in training colleges are exposed to other subjects to give them broad background knowledge, which goes a long way to enhance their success in the profession (Mutaka, 2018).

In Ghana, as part of the teacher preparation process, trainee teachers are subjected to all kinds of assessment, that is, formative and summative assessments. The formative assessment consists of quizzes, mid-term examinations, assignments, tests, group projects, term papers, and end-of-term examinations, which aim at providing remediation to shortcomings in students

learning and improving the instructional process generally (Salmaan, 2020). Salmaan added that the summative assessment of the trainee teacher takes the form of end of year external examinations in the training colleges and end of semester examinations in the case of the universities. The summative assessment processes are used for administrative purposes in the promotion of trainee teachers across the grade-levels, placement of teachers and certification of teachers (Salmaan, 2020). The teacher preparation process demands in-depth knowledge in the methodologies of the courses taught in order to equip the trainees with the skills needed in the teaching/learning enterprise.

Kyriacou (as cited in Abdus-Salam, 2015) commenting on the importance of teaching skills says, the essence of being an effective teacher lies in knowing what to do to foster pupils' learning and being able to do it. Effective teaching is primarily concerned with setting up a learning activity for each pupil which will bring about the type of learning the teacher intends. Senyamator (2018) is of the view that the teaching skill of the teacher is acquired during the teaching practice, and when the student-teacher assumes the full responsibility as a qualified teacher. Sometime ago, with the introduction of the new policy in teacher training colleges, otherwise known as the In-In-Out programme, the third year of the teacher training was spent outside the college for professional practice training.

Several scholars in education have expressed their views and observations about the teaching practices of teacher trainees. Basically, teaching practices aim at giving professional preparation to teacher trainees and to prepare them adequately to absorb some of the "reality shocks" they will face as first-time

teachers (Antoniou, 2018). Antoniou further posits that it also intends to equip them with special competencies in the art of teaching. He lists some of the shocks that confront teacher trainees on practice as poor chalkboard writing, the docility of children in class, having to employ appropriate questioning techniques, copious assignments to mark and controlling unruly class behaviour of children. Teaching practice is one of the important programmes in the training of teachers. It is during the teaching practice period that the student-teacher assumes the role of an actual classroom teacher to work with children. It enables the teacher trainee to put into practice the techniques learnt during methodology classes (Amoono, 2019). The teaching practice helps the student-teacher to form a sound philosophy of education. He also has a chance to put together his skills and ideas into a whole to enable him/her to be a successful teacher. It also helps the student-teacher to gain insights into the actual problems of classroom teaching.

According to Abderahman (2018), for school authorities, practice teaching affords them the opportunity to assess how effective their instructional efforts have been in terms of equipping their students to take up the duties and responsibilities of teaching. Practice teaching also provides school authorities the chance to provide remediation for observable shortcomings of student teachers before they assume full responsibility for their classes after they have been certified as fully qualified teachers. This means, practice teaching is a vital aspect of teacher education which demands full co-operation of the college/university authorities, tutors, student-teachers and co-operating schools to achieve its purposes. However, there are some problems with the organisation of teaching

practice. Key among them are lack of co-operation among stakeholders, lack of pre-observation and post-observation conferences by tutors and the monopoly of Colleges of Education acting as if they alone hold the key or the professional training of the student-teachers. Mutaka (2018) challenges the assumption that anybody teaching in the teacher training institution is competent enough to supervise teaching practice.

Most researchers have argued that teaching practice observation programme should incorporate pre- and post-observation techniques (Abderahman, 2018; Amoono, 2019; Azkiyah, 2017; Mutaka, 2018; Senyamator, 2018). Mutaka, considers it necessary that the training of teachers should be a joint or co-operative venture between the teacher training institutions and the schools which will eventually use their teachers. It is necessary for GES to release its supervisors to help with the supervision of teaching practice. Amoono contends that adequate preparation should be given to all tutors in teacher training institutions, particularly new and inexperienced ones. Amoono observed that student teachers are not usually exposed to the wide spectrum of administrative work and co-curricular activities that they will be required to perform when they pass out as qualified teachers. As a result, their levels of professional competencies are usually limited to only what they learn during teaching practice. This means, we should not expect the personal and professional competencies acquired in a pre-service programme to be adequate for a life time teaching. The teacher still needs to upgrade his/her knowledge when he/she begins to teach. They must seek to add knowledge when they teach. Well-prepared teachers are



those who know the limits of their initial training and can develop themselves to meet emerging challenges in the classroom (Srdar, 2017).

### **Structural Features of 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 achievement gains (Albemarle, 2015). Further, utilising these programme requirements to estimate the relationship of structural features to student achievement gains provides better information for colleges and universities 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). 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 (Senyamentor, 2018). 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, 2018; Amabile & DeJong, 2016; 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 will promote deeper understandings of content than general subject matter courses (Allen, 2015). 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 this 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 necessity, 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 methods for pre-service teachers has been linked to increased subject knowledge for teaching, a subject specific area of pedagogical content knowledge, and to student understanding and achievement (Ezenwafor & Akpobome, 2017). 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 instruction and there is some evidence for a negative relationship between pedagogy coursework and teacher effectiveness (Gunarathne, Senaratne & Senanayake, 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, Ozogul and Bichelmeyer (2017), foundations coursework should be the hallmark of an accounting teacher education 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 accounting teacher education 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, 2017). Research suggests if instruction on using educational technology is to impact practice, it should be integrated throughout an accounting teacher education programme, rather than in a discrete class, including integration into early field experiences and student teaching (Purdy, 2017). These interventions will help the teacher-trainee acquire the requisite knowledge, skills and competencies to teach effectively.

#### **Teacher-Trainees’ Effectiveness**

All students, no matter the location, economic situation, or life outside of school, deserve an adequate education to prepare them with the skills needed to be successful in the future (Grasha & Yangarber-Hicks, 2013). For this to happen, the teacher must be trained to be effective and be able to demonstrate the requisite competencies needed to teach effectively. These skills are a range of

competencies, taught across all levels of education, that give students the skills they need to navigate an ever-shifting teaching workforce (Conderman, 2015). Within the context of this study, teacher effectiveness is conceptualised as teacher-trainees ability to demonstrate requisite skills required to succeed in this world as professional accounting teachers. The skills considered are ICT literacy, critical thinking, multicultural, collaboration, and creativity. For students to be equipped with these skills in order to be successful in the future, teachers must be trained to be effective in teaching students to help them demonstrate the needed skills and competencies require in this modern world (Friend, 2017).

This call for the need for teachers to take advantage of the opportunity to engage students by creating lessons that enhance problem-solving, integrate technology, and inspire critical thinking. Content knowledge is necessary but not nearly enough for success in acquiring the needed skills. Students must have skills that enable them to apply their knowledge and continue learning. According to Vockley (as cited in Fullan & Stiegelbauer, 2017), students learn more when their work is connected to their interests, to problems they may face in the real world, and to work and college. While the mastery of fundamental content knowledge is vital, students must understand how to apply the knowledge they are learning.

Rote learning must become a thing of the past, and a new method of teaching and assessment must be implemented to continue developing students to contribute their quota to modern society. Students must be able to encounter and solve real-world problems while taking knowledge from the situation and applying it to others (Frodi, Bridges & Grolnick, 2016; Lee, 2015). For decades,



students have thought of core content classes to be irrelevant in the real-world because they have not been asked to apply these concepts in real-world situations and critical skills have not been intertwined (Leman, Bremner, Parke & Gauvain, 2017). As a result, students leave the knowledge learned in the classroom and rarely connect it to their personal lives. Education as a whole must prepare for a growing global economy, and to do so, the needed skills and competencies must be incorporated into the classroom so teachers can continue to prepare students to be successful after basic school graduation (Garrison, 2017; Weeks, 2019).

With effective teacher pre-service intervention, professionally trained teachers can use different strategies to be effective in the classroom. Some of these strategies include making curriculum relevant, teaching through the disciplines, developing thinking skills, encouraging the transfer of learning, teaching students how to learn, addressing misunderstanding directly, treating teamwork like an outcome, exploiting technology to support learning, and fostering creativity (Chen, 2018; Hatchlaf, 2018; Klopfer, 2014). According to Hatchlaf (2018) when these strategies are used, educators prepare students to solve the economic, civic, and global challenges that the world faces today.

### **Conceptual Framework**

Based on the ideas that emerged from the review of constructivism theory and concepts, 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



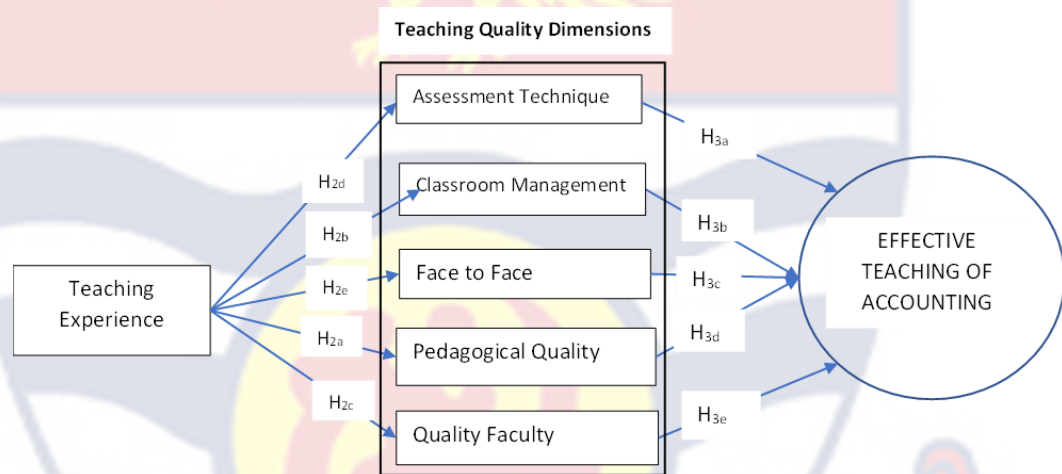
observations to derive the dependent, independent, and control variables. Teaching experience of the teacher-trainees was treated as controls.

The study assumed that undergraduate accounting education programme of UCC considers the five dimensions of pre-service preparation depicted in the conceptual model as those that really defined learners' pedagogical quality. 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. Quality of faculty dimension deals with policies and procedures for engaging high calibre of course facilitators and support for their welfare. The assessment techniques dimension refers to activities and policies concerned with periodic students' learning assessment and feedback including teacher-trainees evaluation of their instructors.

Classroom management dimension 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.

Face-to-face interaction dimension, on the other hand, does not exist independent of quality learning and application or transfer of learning to practical situations. To ensure high level of class interaction on the part of teacher-trainees, 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

(Amoono, 2019; Burgess, 2017; Fuudia, 2019; Michaelides & Durkee, 2021). 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 their effectiveness in teaching. In the light of the foregoing, the study formulated hypotheses to understand better the link that exist between the study variables, as shown in Figure 1.



**Figure 1:** Model on the Influence of Pre-service Preparation on Teachers' Effectiveness in Teaching

Source: Authors' Construct (2021)

As presented in Figure 1, the argument of the study is that pre-service preparation of teacher-trainees in accounting through sandwich mode influence their effectiveness positively which in the long run help enhance their effectiveness in the teaching of accounting. This means that when teacher-trainees are exposed to appropriate instructional methods that promote learner interactions during their study, they would be able to meet the expected unvaried teaching standards established by the universities. These dimensions to a large extent

would boost their personal ability to execute the courses of action needed to positively affect their effectiveness in accounting instruction.

Nevertheless, as presented in Figure 1, control variable such as prior teaching experience of the trainees can foil or lift the teacher-trainees views on pre-service preparation and their effectiveness in teaching. This variable was treated as control because there is a saying that “experience is the best teacher”, a saying which suggest that all things being equal, teachers who have taught for more years may teach effectively. Therefore since this study concerns in-service basic school teachers training to become accounting teachers, it is appropriate to examine the influence of this variable on teacher-trainees effectiveness in the teaching of accounting.

### **Empirical Review**

To understand the current concepts and issues under study much better, the study reviewed empirically 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 record of other researchers’ observation or experience were critiqued and analysed to gain more information about the concept under study. The review of empirical studies concentrated on the quality of teacher education and how it contributes to trainee teacher’s effectiveness.

### **Quality of teacher education programmes**

Farajollhi, Zare, Hormozi, Sarmadi and Zarifsanaee (2017) surveyed the views of 15 experts on the interactivity in distance education. The study revealed that communication of the learner and teacher should be done frequently with

language suitable and easy to understand and respond to by the learner. This was argued to be done because it is relevant to distance education and points out the learner centric in learning. Besides, the learners' interaction is necessary for making deep learning and construction of knowledge. This finding suggested that a poor application of the teacher-student interaction existed in the provision of distance education to the student teachers.

Similarly, Dilshad (2010) evaluated teacher education quality in Pakistan. Three hundred and fifty (350) students enrolled in B.Ed. and M.Ed. programmes, were polled about their thoughts using questionnaire that asked about five different aspects of quality. Both descriptive and inferential statistics were used in the data analysis. Results indicated that while learners were generally of good quality, the learning environment, processes, and results were of poor quality. The students' top concerns included ill-equipped classrooms, extensive course materials, a lack of highly qualified instructors, and the usage of English as a language of instruction. The study made recommendations for enhancing the quality of teacher education, including upgrading academic resources, using a student-centred approach, and placing a focus on faculty development.

Kildan et al. (2013) did a study to evaluate the teacher trainees' perspectives on the teacher training process in Turkey. Being qualitative in nature, the current research was a descriptive study. The study included 58 newly-appointed teacher trainees from various fields who began their teaching careers in 2010 in Kastamonu. An interview guide was utilized to collect data. The participants-collected data were analyzed using the Nvivo 9 software programme.



The results indicated that teacher candidates felt inadequate, particularly in terms of curriculum and topic understanding, and that teaching practice and school experience courses did not contribute effectively to their profession.

Omane-Agyekum (2016) conducted a study to determine how students at the University of Cape Coast perceive the Bachelor of Education (Accounting) curriculum. The research employed a descriptive survey design, with data collected within the scope of the Context Input Process Product evaluation model. The sample size for the study was 350 participants. The sample for the study was selected using a multi-stage selection technique that incorporated the stratified sampling technique, the proportionate random sampling technique, and the basic random technique. All of the research data were analysed using descriptive statistics (mean and standard deviation). According to the study, the Bachelor of Education (Accounting) programme meets the context criteria of the CIPP model. Nonetheless, it was determined that the programme does not meet the input criteria of the CIPP model. Students' satisfaction with the implementation of the B.Ed. (Accounting) programme was also disclosed.

Lingam (2017) conducted a study to determine how a group of 33 beginning teachers perceived the training programme they completed at the Vanuatu institute of teacher education to prepare them for the work expected of them in Vanuatu primary schools. All the graduates of the programme in the study sample were in their first year of teaching and their opinions were surveyed by means of a self-administered questionnaire. Analysis of the data showed that the beginning teachers were generally positive about their training programme though



some did express concerns about some important areas of it that they considered need improvement. Lingam realised that the education provided was lacking in physical facilities and quality of educational resources together with an out-dated curriculum, contributed to this situation. This affirms the imbalance in the various dimensions of quality of educational training offered them.

Alvarez's (2017) research also presented a pattern among elementary and middle school teachers in Virginia. She found that 64.5% of her sample reported insufficient training in classroom management. Wragg (2017) also noted limited classroom management within teacher preparation programmes in Australia, Germany and the Netherlands. However, Amoono (2019) posits that throughout Ghana most teacher training institutions had meaningful required classroom management practices.

According to Emmer and Stough (2015), students facing high levels of behaviour problems may also undermine a teacher's confidence in their ability to manage the classroom environment. Specifically, researchers have found that teachers with higher levels of concern about student misbehaviour report lower levels of confidence in their ability to manage behaviour (Ertmer, 2019; Kleinert, Silva, Coddington, Feinberg & James, 2017; Makarova & Herzog, 2018). On a positive note, professional development opportunities have been used to improve management practices, leading to greater self-confidence.

According to Wragg (2018), classroom management is among the most important skills pre-service teachers learn, yet they may receive inadequate preparation to effectively manage student behaviour. Hediye (2015) discovered

that pre-service teachers identified learning classroom management strategies as equally important in their preparation as experience in the classroom, observation of effective teachers, and content pedagogy. In a study of five undergraduate students enrolled in the last year of an elementary science education programme, Hediye found that in terms of learning classroom management skills, students studying to become teachers could benefit from a combination of real-world school field experiences and college coursework during their undergraduate studies.

The findings that emerged from Hediye's (2015) study is consistent with the findings of Ergul, Baydik and Demir (2017) that showed both pre-service and in-service teachers perceived themselves as ineffective classroom managers. In a study surveying 107 special education teachers and 160 seniors in an undergraduate special education programme spanning four different colleges, Ergul et al. discovered that even though special education teachers felt that they were more prepared for classroom management than their subject-matter teaching counterparts, they still felt as though more in-service classroom experiences throughout their undergraduate experiences were needed.

Ayebo and Assuah (2017) also conducted a mixed method study in the United States to explore classroom management knowledge of 72 pre-service teachers and how the knowledge was gained. The study employed the convenience sampling technique to sample the participants involved. Ayebo and Assuah cited among other things, in-service training, teaching colleagues, retired teachers, teaching experience and teacher education programmes as sources of

teachers' knowledge in classroom management. The results further revealed that learning to manage one's classroom is a developmental work in process, influenced by forces that are both personal and contextual in nature. The finding is congruent with the comments of Koula and Koula (2017) and Matsaggouras (2019) who posit that classroom management is contextual and must be done on contingency basis. However, trainee teachers must be educated to acquire the needed basic knowledge, skills and competencies in managing students' classroom behaviours.

Beaudoin, Mihić and Lončarić (2018) undertook a study aimed at examining teachers' perceptions regarding their competence for managing the challenging behaviour of young children and to identify the factors that affect these beliefs. A total of 204 preschool teachers working in Kindergarten, Rijeka in Croatia participated. Teachers completed an exploratory survey of self-perceptions of competence in managing the challenging behaviours encountered in their classrooms. The study revealed that preschool teachers' assessment of their own competence in managing challenging behaviour was explained by the level of support they received from other professionals when faced with children's challenging behaviour and prior coursework in classroom management. Participants with higher levels of professional support and more coursework in classroom management estimated themselves to be more competent in managing challenging behaviour. Beaudoin et al. suggest that Croatian preschool teachers need training in classroom management and greater access to professional support, personnel when working with students with challenging behaviours.

According to Jones and Jones (2018), most pre-service accounting teachers needed professional development in the area of classroom management in order to handle and manage student misbehaviour. In a study of 869 teachers of primary education, Obwoya (2019) found that teachers were not offered classroom management training to address the misconducts or the opportunity to establish a rapport with the students, which might help them better address student behaviour. Ideal professional development should include proactive classroom management strategies (Wong & Wong, 2020). Wong and Wong posit that teachers could increase classroom engagement and decrease behaviour problems through the use of a teachers' professional development programme. They noted that during professional development, not only do teachers learn effective strategies, but also they get the opportunity to collaborate. Professional development opportunities increased teacher skills that ultimately translated into increased student engagement and improved academic success. Professional development for teachers in classroom management requires more proactive training regarding when to apply mediations and when to apply appropriate routines (Uriegas & Mundy, 2020).

Classroom management training, like any other professional development, should be on-going, required, and implemented in a way that encourages buy-in from all school staff (Konti, 2017; May, 2019). The assertions so far may mean that there is the need for public school teachers to receive classroom management training throughout their careers, and especially those teachers who work with students in the lower grades who are just learning how to meet the behaviour



demands of being in school. Williams, Sullivan and Kohn (2020) posit that universities and school districts should place a greater emphasis on classroom management training to demonstrate its importance to teaching strategies. In a study of 223 middle and high school students, Williams et al. found that these students wanted teachers who could relate to them, enjoyed teaching, and were proficient in the area of classroom management.

Classroom management is often at the top of the list of factors that contribute to student attainment (Kayikci, 2020). Classroom management skills consist of a teacher's ability to create an atmosphere where they can teach and students can learn. Teachers use procedures to manage their classrooms so that instruction and learning occur. The ability to manage a classroom involves several skills that every teacher must possess. Effective teachers must have a classroom management plan that contains strategies and routines that are designed to help create and maintain a classroom environment that facilitates learning. Most of the studies reviewed under classroom management focused largely on the views of teachers. However, both teachers and students are expected to follow classroom rules, as classroom rules contribute to the smooth function of the school class, to the maintenance of positive climate and to the elimination of unwanted behaviour.

According to Vermula (2019), quality evaluation must follow six broad parameters. These parameters are curriculum design, content and organisation; teaching, learning and assessment; student progression and achievement; and student support and guidance. Vermula found that enhancing these parameters positively help in boosting teachers' efficiency.



Pedagogical content knowledge is the knowledge of teaching, the knowledge of classroom management and organisation, how students learn, and what sorts of activities encourage learning, and also the knowledge of assessing learning (Khan, 2017). Pedagogical knowledge is generic in the sense that it cuts across content areas to include knowledge of learning theories and how they apply to the classroom. According to Khan, subject matter and school experience foundations of education (teaching practice) are some of the major components of teacher education evident in various models and structures.

As exemplified by Rivkin, Hanushek and Kain (2015), a teacher cannot be teaching 'chemistry' when he or she does not understand the basic concepts of the subject. As cited at the conceptual review segment of this chapter, pedagogical quality includes teaching methods and ways of assessing learning. To help student teachers develop an understanding and know-how of teaching, equally demands a sound understanding of the subject matter being taught (Abid, Hussain, Ch, Saeed & Shoaib, 2017; McNeill & Knight, 2017; Smith, 2016). Teaching practice involves working under supervision, initial periods of classroom observation, practice micro teaching with peers, and follow up discussions of school experience. Research findings seem to suggest that effective supervision of pre-service and in-service teachers who were teaching science disciplines like chemistry requires a deep understanding of the subject content. For example, McNeill and Knight (2017) placed more value on the development of teachers' pedagogical content knowledge. Therefore, creating room for trainee teachers to

be prepared well during their pre-service preparation with regard to pedagogical content knowledge is not contested.

Abid et al. (2017) conducted a study aimed at examining the subject matter knowledge competence of elementary school teachers working in public sector elementary schools of Lahore district in Pakistan. Survey method was used through observational checklist to conduct the study. The population of the study consisted of all the elementary school teachers of public sector elementary schools of Lahore district. The observed findings showed that the majority of elementary school teachers had moderate competence level in subject matter knowledge. Based on the findings, Abid et al. concluded that age and gender of elementary school teachers have no statistically significant effect on their competence level regarding subject matter knowledge. Abid et al. suggested that the concerned educational authorities in Pakistan should step forward to enhance competence level of elementary school teachers by indulging them in different training.

In as much as the findings and recommendations of this study are not in doubt, it is equally true that an element of specificity was lost upon the reporting of average competence in subject matter knowledge by gender and age (Abid et al., 2017). The reporting of the hypotheses could have presented a less vague picture. Abid et al. should have compared the competences of males and females and old and young in specific subject matter areas because there is an existing literature to support the fact that there are statistically significant differences in the achievement test of given subject areas by gender and age.

Assessment is defined as the use of instruments (e.g., a test or homework assignment) and processes (e.g., asking questions and classroom conversations) for gathering evidence about student learning (Eret, 2013; Harlen & James, 2017).

Assessment is important for improving the quality of education and learning. If assessment has a formative purpose, it is used to support student learning. According to Harlen and James, formative assessment has the potential to enhance student achievement. Formative assessment can be seen as a concept that covers various approaches for using assessment to support student learning (Harlen & James, 2017; Moss, 2016; Reynolds, Livingston, Willson & Willson, 2019). Many studies have emphasised the importance of two approaches: assessment for learning and data based decision making (Clotfelter, Helen & Jacob, 2019; Loupas, Baltouna, Christodoulou & Vlochaki, 2017; Salmaan, 2020).

Assessment for learning has been defined as part of everyday practice by students, teachers and peers that seeks, reflects upon and responds to information from dialogue, demonstration and observation in ways that enhance on-going learning (Harlen & James, 2017). Data based decision making on the other hand refers to the process of systematically analysing data sources within the school, applying outcomes of analyses to innovate teaching, curricula, and school performance, and, implementing and evaluating these innovations (Salmaan, 2020).

Summative assessment is a form of appraisal that occurs at the end of an instructional unit or at a specific point in time, such as the end of the school year.

It evaluates mastery of learning and offers information on what students know and do not know. Frequently, summative assessment consists of evaluation tools designed to measure student performance against predetermined criteria based on specific learning standards. Examples of commonly employed tools include advanced placement exams, national assessment of education progress, end-of-lesson tests, midterm exams, final project, and term papers (Salmaan, 2020). These assessments are routinely used for making high-stakes decisions; for this purpose, often student knowledge or skill acquisition is compared with standards or benchmarks.

Despite the important role of summative assessment in education, research finds little evidence to support it as a critical factor in improved student achievement (Moss, 2016; Reynolds et al., 2019). Because summative assessment happens after instruction is over, it has little value as a diagnostic tool to guide teachers in making timely adjustments to instruction aimed at catching students who are falling behind. It does not provide teachers with vital information to use in crafting remedial instruction. Formative assessment is a much more effective instrument for adjusting instruction to assist students' master material (Harlen & James, 2017). Despite these shortcomings, summative assessment plays a pivotal role in education by troubleshooting weaknesses in the system. It provides educators with valuable information to determine the effectiveness of instruction for a particular unit of study, to make high-stakes decisions, and to evaluate the effectiveness of school wide interventions (Salmaan, 2020).



Shin, Wilkins and Ainsworth (2017) conducted a related study at Botswana in Southern Africa to survey teachers' thoughts about classroom assessment and identify classroom assessment practices, teachers perceive to be skilled and those that they used most. They further examined the differences between teachers' perceived skill and use of classroom assessment practices. Botswana teachers held positive beliefs about both mastery and performance orientations to student assessment according to the study. The study revealed that teachers were unsure about the adequacy of their assessment training, but indicated that they needed further training in assessment. The results also showed that primary teachers, particularly those with only a certificate needed more skill training in assessment applications, statistical applications, and criterion referenced testing.

Shin et al. (2017) further asserted that the more experienced teachers were, the more they agreed with mastery and performance orientations, and the more they had perceived skill and use of desirable classroom assessment practices. Factors were related to teacher characteristics of educational level, subject taught, teaching level, years of teaching experience and assessment training. The results showed that including more courses in assessment during teacher training and sending teachers for in-service or workshops in assessment helped to improve their perceived beliefs, skills, and use of desirable classroom assessment practices. Understanding the beliefs teachers hold, particularly about students' performance, can be used as a framework for identifying educational resources meant to help both schools and students to perform. If policy makers are aware of



teachers' beliefs regarding mastery, they can help teachers to formulate assessment practices that promote critical thinking skills and mastery.

A mentoring programme to match new and experienced teachers to share reciprocal knowledge and skills on classroom assessment practices can be developed in schools. Teacher educators may consider overhauling their programmes to have courses that are more focused on assessment, or increase the number of assessment courses for pre-service teachers. Teachers should be sent for in-service training in assessment on a regular basis to ensure that they maintain current classroom assessment skills (Shin et al., 2017). Again, just like the other previous works reviewed, Shin et al. delimited the dimensions of pre-service preparation to only three variables, which calls for the need to expand it in order to accommodate other dimensions.

The main argument that Shin et al. (2017) made was that when there is a discrepancy between teachers' comments and grades that students receive, students are left frustrated as this robs them of the potential to improve in their learning. For this reason, it is essential that teachers should be given sufficient assessment training that would enhance their grading practices and equip them with skills of giving effective, efficient, and useful feedback to students.

Reinke, Herman and Newcomer (2017) investigated teachers' assessment practices across teaching levels and content areas, as well as teachers' self-perceived assessment skills as a function of teaching experience and measurement training. Data from 297 teachers on the assessment practices inventory were analysed in a multiple analysis of variance design. They found that as grade level

increases, teachers rely more on objective tests in classroom assessment and showed an increased concern for assessment quality. The study further revealed that across content areas, teachers' involvement in assessment activities reflects the nature and importance of the subjects they teach. Regardless of teaching experience, teachers with measurement training reported a higher level of self-perceived assessment skills in using performance measures; in standardised testing, test revision, and instructional improvement; as well as in communicating assessment results than those without measurement training. Reinke et al. study further show that gender and age of teachers has no significant effects on their assessment practices and skills with regard to content area.

Ghavifekr, Kunjappan and Ramasamy (2017) researched into the analysis of Melaka (Malaysia) teachers' perceptions of the challenges faced in using ICT tools in classrooms. The study was a quantitative study involving hundred participants. The key issues and challenges revealed by the study in using ICT tools by teachers include: limited accessibility and network connection, limited technical support, lack of effective training, limited time and lack of teachers' competency. Moreover, the results from independent t-test indicated that use of ICT tools by male and young teachers in the classroom were higher compared to female and old teachers respectively. Ghavifekr et al. focused on only ICT literacy. This gives an indication that the perception of quality can be influenced by the demographical characteristics of the teacher trainees.

Again, Omane-Agyekum (2020) conducted a study to determine how well students and alumni of the Bachelor of Education (Accounting) programme at the

University of Cape Coast are prepared by the programme. The study utilized a sequential mixed-methods explanatory design to collect data within the context of the CIPP evaluation model. 350 students, 250 graduates, and 250 employers comprised the study's sample size. The students for the study were selected using a multistage sample method that used the stratified, proportional, and simple random sampling procedures. Using snowball sampling procedures, both graduates and their employers were sampled. As data collection instruments, a questionnaire, semi-structured interview guide, evaluation scale, and observation guide were utilized. All study topics were analysed using descriptive statistics (means and standard deviation), inferential statistics (t-test and ANOVA on independent samples), and thematic analysis.

The study determined that the programme fits the needs of the students. However, it was determined that the programme's human and material resources did not satisfy the needs of its clients and the programme as a whole. It was also observed that the programme had a good effect on the graduates' work performance. More so, across the various levels of the student, they had different perceptions of the quality of education that was provided to them. The study therefore revealed that the measure of quality was not the same based on the background characteristics of the students.

Finally, Andoh, Appiah and Agyei (2020) examined the insights of postgraduate distance education students at the University of Cape Coast (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. The 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. These three areas that inspired students were considered to be predictors of their satisfaction. This again proved that some dimensions of quality teacher education are better met by the training institutions at the expense of other dimensions.

#### **Pre-service preparation of teachers and teacher-trainees effectiveness**

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 State were polled in this study to evaluate student learning performance involving a mixed instruction educational environment. 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 suggest that age, prior experience with distance learning opportunities, delivery



format choice, 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.

In another study by Beutel, Afshari and Salleh (2019), they investigated into the impact of intercultural experiences on pre-service teachers' preparedness to teach a multicultural class in Queensland, Australia. The study selected 40 pre-service teachers as its sample size. Findings indicated that prior quality engagement with diversity over time enhances pre-service teachers' intercultural competence. Also, Beutel et al. found that teachers with the requisite knowledge, skills and competencies regarding multicultural and collaboration skills are able to produce students with the necessary competencies to adapt to the current demands. This proved that being able to produce competent students requires competent teachers with the right quality.

Fong-Yee and Normore (2017) performed a systematic review study that sought the impact of quality teachers' practices on student achievement. The data was sourced from policy briefs, executive summaries, on-line press releases, professional and academic journals, as well as pertinent web sites. The study revealed five different qualities and practices employed by teachers that leads to the increased students' achievement. The work of Fong-Yee and Normore 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.

In order to mitigate the impact of the coronavirus pandemic (COVID-19) on primary schools, Pozo-Rico, Gilar-Corbi, Izquierdo and Castejon (2020) presented an empirical learning package to assist teachers in coping with stress, preventing burnout, enhancing their information and communications technology (ICT) competency, and introducing the principles of emotional intelligence (EI) in the classroom. There were 141 primary school teachers among the participants ( $M = 38.4$  years,  $SD = 6.84$ ; 54.6% women). They were randomized at random to either the experimental or control group. The experimental group participated in the 14-week teacher training programme, while the control group received no training during the intervention. To identify the impacts of the teacher training programme, repeated-measures analysis of variance (time x group) was conducted. Teachers who participated in the training programme gave it a positive evaluation and demonstrated substantial differences compared to the control group in their ability to deal with stress and avoid burnout, their ICT proficiency, and their implementation of EI in the classroom. This proved that the quality of training teachers undergo highly determines how effectively they are able to teach.

Similarly, Khan (2017) also examined the professional development of teachers, focusing on the field-based teacher development programmes in Chitral, Pakistan. Khan's specific 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. 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).

Again a study by Charles and Senter (2018) suggest effective pre-service and professional development opportunities contain certain components and they maintain a particular look or appearance. The empirical outcome of their study proved that these characteristics help teachers develop the ability to organise classrooms and manage behaviours of their students in order to produce positive educational outcomes.

Annan (2020) equally conducted a study that aimed to determine the current state of teacher education and training in Ghana, as well as the associated challenges and opportunities, and to investigate other viable options for improving teacher education for the delivery of high-quality education in Ghanaian primary schools. Regarding the usefulness of archival resources, the study on teacher training in Ghana relied mostly on observation and secondary sources of data with content analysis. This study revealed several factors that contribute to the quality of teachers, hence enhancing the quality of education. These included the quality assurance of teacher education, initial teacher training, deployment processes, professional development, compensation, and regulatory agencies that ensure compliance with standards. The study then

recommended that teachers be trained exclusively by educational institutions, that curricula be reformed to address teachers' critical thinking skills, and that teachers receive regular professional development training.

### **Lessons Learnt**

From the review, it has been learnt that for a teacher-trainee or pre-service 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, teacher-trainees' academic self-discipline can help enhance the influence these dimensions of instructional quality have on teacher-trainees' effectiveness and accounting education delivery in general.

In addition, general deductions from the theory reviewed indicate that institutions which are able to design their pre-service preparation programmes such that teacher-trainees 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 teacher-trainees 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.

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

- i. Pre-service preparation dimensions such as pedagogical quality, face-to-face interaction, assessment techniques, quality of faculty, and classroom management are essential to teacher-trainees' effectiveness in general.
- ii. Accounting teacher-trainees rate their teaching effectiveness high.
- iii. There is more or less non-uniform response in favour of effective teaching irrespective of the prior teaching experience.
- iv. The correlation between pre-service preparation and teacher-trainees' effectiveness was positive and moderate.
- v. Most studies indicate that teacher-trainees are homogeneous group.
- vi. Teacher-trainees who are exposed to quality instruction are able to demonstrate high level of effectiveness in their teaching.

Research gaps identified from the empirical review were as follows:

- i. There is scarcity of literature existing on the predicting roles of the various dimensions of pre-service preparation on teacher-trainees' effectiveness in teaching.
- ii. Prior teaching experience is a factor that can influence teacher-trainees' expected development from the teacher training.
- iii. Moreover, most of the studies in this field are mostly carried out in developed countries with fewer in the Ghanaian context that pays attention to the uniqueness of pre-service accounting teachers who wish to move from various disciplines to the accounting discipline.



- iv. Most of the studies used inferential statistical tools such as Pearson product moment correlation, independent samples t-test, one-way Analysis of variance (ANOVA) 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 made use of these statistical tools for better reliability and viability of results.
- v. In some of the studies the sample size was very small to come to any generalisation or conclusion. Therefore, it is appropriate to examine the issues using large and representative sample size in a meaningful manner for better outcome.

### **Chapter Summary**

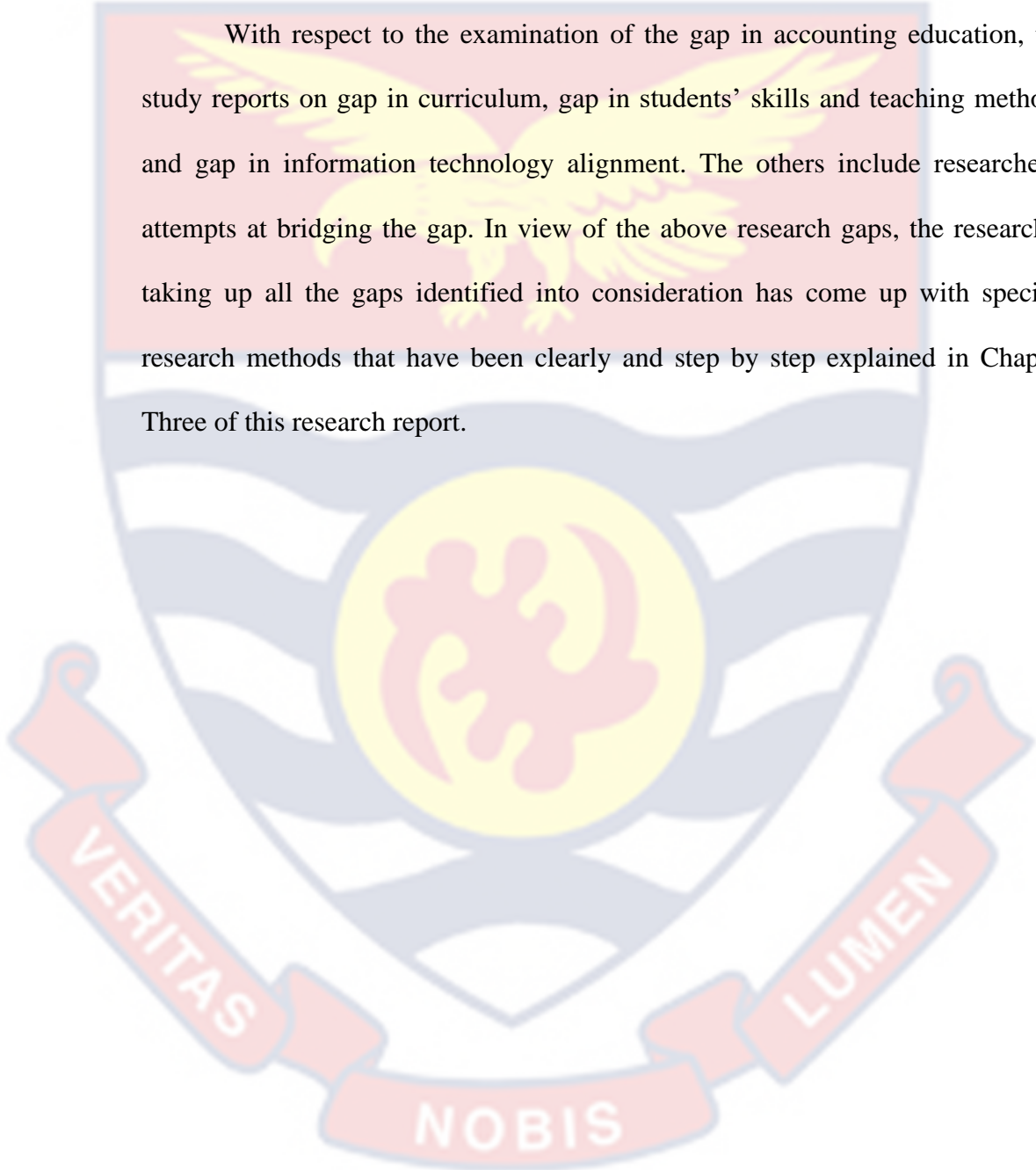
This chapter provides the review of research pertaining to the main construct of this study. It presented the theoretical review, various concepts of the study, conceptual framework of the study, and some selected empirical reviews. A special effort has been made to highlight the importance of these constructs as they relate to teachers' effectiveness with regard to accounting instruction. The theoretical framework of the study was based on constructivism. It also provided the researcher with a general framework for data analysis.

The empirical review presented both earlier and recently published empirical studies on the subject matter. The gaps in the empirical studies and challenges with the underlying assumption of constructivism provided a fertile ground 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 the various quality preparation have with the pre-service accounting teachers' effectiveness in the teaching of accounting.

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. 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 assess teacher– trainees perception of their pre-service accounting teacher education programme through the sandwich mode, focusing on five quality dimensions of the programme. The chapter looked at the research philosophy, research approach, research design, population, respondent and participants, instrumentation, and ethical issues considered in the study. In addition, the chapter covered the data collection procedures and data processing and analysis.

#### Philosophical Orientation of the Study

The study's epistemological and ontological orientations in relation to search of virtues of reality and truth were based on the idea of positivism. That is, the study saw reality as socio-psychological constructions that form a complex interconnected whole. Thus, understanding of such social reality required an understanding of the general perspective from which the society agree to such reality. This means, the study employed the argument of positivism to understand teacher-trainees' assessment of their perception of pre-service teacher education programme through the sandwich mode. The adoption of this paradigm created room for the me to use deductive approach because of the multiple ways in which reality was constructed by BEd (Accounting) sandwich students of IoE, UCC. This means, the study argument was underpinned by general perspective or

theory, and later zero down to the conceptual argument of the study. Therefore, the position of the study on truth and reality as explained through engagement with the literature influenced the adoption of the quantitative approach for this study. The next sub-section explains briefly the approach adopted.

### **Research Approach**

This study used the quantitative approach. This approach differs from the qualitative approach with respect to its theory of knowledge and theory of being. This approach was used in order to measure the data that were collected from the field using inferential statistics. According to Sarstedt and Mooi (2019), quantitative approach normally addresses the question “how many?” and/or “how often?” where the information can easily be processed and converted into numbers. A quantitative approach is a process directed towards the development of testable assumptions which can be generalised across settings (Creswell & Creswell, 2018; Jain, 2019).

In some cases, this approach tends to be inflexible, artificial and ineffective in gauging the significance that people attach to actions, and is not helpful in generating theories (Zikmund, 2019). The main reason that influenced the adoption of the quantitative approach was the use of questionnaire, which allowed the measure of variables numerically. Also, it created room for the researcher to collect large amount of data from a sizeable population, and the ease of adopting quantitative statistical tools to analyse the data quantitatively.

## Research Design

The study employed descriptive cross sectional survey since it entailed a survey of pre-service accounting teachers' perception of the quality dimensions of the sandwich accounting education programme. This design involves systematic gathering of data about individuals and groups in order to test hypotheses relating to the current status of the subject of the study at one time (Jain, 2019; Yin, 2018). It determines and reports the way things are. In the views of Creswell and Creswell (2018), this type of design is appropriate because it allows the researcher to collect data to assess current practices for improvement. Creswell and Creswell further point out that the design gives a more accurate and meaningful picture of events and seek to explain people's perception and behaviour on the basis of data gathered at one particular time. This design created room to study the phenomena in its natural settings in order to make sense of it with regard to the objective meanings sandwich students of IoE, UCC give to them.

This design is relatively laborious and time consuming method. According to Gravetter and Forzano (2018), this type of design is susceptible or easily influenced to distortions through the introduction of biases in the measuring of instruments. In collecting data from the respondents, the researcher can influence the responses through the designing of the questionnaire which is usually used in such study (Creswell & Creswell, 2018). That is, it sometimes concentrates more on the researcher than the respondents. Also, it sometimes regarded as focusing too much on the individual level, neglecting the network of relations and institutions of societies (Patten & Newhart, 2018).



In minimising the possible challenges, the researcher adhered to the ethical guidelines set by the Institutional Review Board (IRB) of UCC. Also, the researcher was objective and independent as possible, and the data that were collected were organised and presented systematically in order to arrive at valid and accurate conclusions. With regard to the population characteristics and data analysis procedures, meaningful and representative sample was used. Also, the variables and procedures used were described accurately as possible to make things easier for other researchers who may want to replicate this study.

### **Population**

Population refers to entire aggregation of cases that meet a designated set of criteria (Zikmund, 2019). In other words, it is the target group about which researchers are interested in gaining information and drawing conclusions. The target population of the study was made up of all the pre-service teacher trainees' reading Bachelor of Education (Accounting) programme as at 2020/2021 academic year through the sandwich mode. However, the accessible population was all final year (level 400) students of UCC reading Bachelor of Education (Accounting) programme as at 2020/2021 academic year through the sandwich mode organised by IoE, UCC. Data show that there were 426 sandwich students of IoE, UCC reading Bachelor of Education (Accounting) programme as at 2020/2021 academic year (IoE, 2021). However, the accessible population was the final year students who were 219.



Table 1 shows the distribution of the target population by gender.

**Table 1: Distribution of Target Population by Gender**

Levels	Male		Female		Total	
	No.	%	No.	%	No.	%
Level 300	61	19.8	18	15.1	79	18.6
Level 350	84	27.4	44	37.0	128	30.0
Level 400	162	52.8	57	47.9	219	51.4
Total	307	100	119	100	426	100
% by gender		72.1%		27.9%		100%

Source: IoE, UCC (2021).

### Sampling Procedure

Generally, researchers usually sample from an accessible population and hope to generalise to a target population. However, due to the relatively small number of students in the accessible population, the census method was used for the study. That is, the number of final year students of UCC reading Bachelor of Education (Accounting) programme as at 2020/2021 academic year through the sandwich mode organised by IoE, UCC was 219, as indicated in Table 1.

The census method used was deemed appropriate and feasible since the number of final students of UCC reading BEd (Accounting) programme as at 2020/2021 academic year through the sandwich mode was relatively small. The census again was necessary since these students are quite different from each other regarding their gender and years of teaching experience. According to Kelly (2016), it is always appropriate to use the census method in such studies since the population is small and variable, any sample the study drawn would not be representative of the population from which it is drawn. Furthermore, the resulting values the study would calculate from the sample would also be

incorrect as estimates of the population values. These students were able to provide data that helped in dealing with the stated specific objectives of the study. These students share adequate attributes, skills and knowledge about the Bachelor of Education (Accounting) programme organised through the sandwich mode to enrich data collection.

### **Data Collection Instrument**

The instrument that was used to collect the data for the study was structured questionnaire, as presented in Appendix B. This instrument was used because of its effectiveness in securing factual information about practices and existing conditions, and for enquiring into the opinions and attitudes of subjects (Cohen, Manion & Morrison, 2018). A questionnaire is a formally organised set of written items presented in a uniform manner to a number of respondents. It consists of questions or statements related to the objectives of the study. According to Cohen et al., questionnaire is inexpensive to administer, it can provide information about the respondents' internal meanings and ways of thinking, it is quick to administer and turnaround and it can be administered to groups. Furthermore, a well-constructed questionnaire is generally considered to provide high measurement of validity and reliability (Yin, 2018). Also, questionnaire that makes use of close-ended items can be easily analysed quantitatively and are generally regarded as useful for exploration purposes as well as confirmatory purposes (Zikmund, 2019).

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, it 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 are in a better position to understand the items in the questionnaire as expected. The content of the questionnaire was developed along the line of the specific objectives. The questionnaire was divided into three (3) sections. Section 'A' of the questionnaire contained two items. These items were used to collect data on respondents' gender and years of teaching experience.

Section 'B' of the questionnaire was used to collect data on the five (5) dimensions of teacher-trainees' pre-service preparation regarding the BEd (Accounting) programme of the university through the sandwich mode. These dimensions are face-to-face interaction, pedagogical quality, classroom management, assessment techniques, and quality of faculty. Thirty-six close-ended items were used to collect data on these dimensions. Section 'C' was also used to collect data on teacher-trainees' effectiveness with regard to their teaching using 12 close-ended items. In all, 50 close-ended items were used in these sections. Responses to the items in sections B and C were measured numerically using a four-point discrete scale such that the higher the number the more respondents agree and the lower the number the more they disagree with the items.

### **Validity and reliability of the instrument**

In order to ensure the validity and reliability of the research instrument, a pilot testing was carried out. Validity is the extent to which an indicator

accurately measures a concept it intends to measure (Gravetter & Forzano, 2018). In other words, validity can be defined as the degree to which an instrument measures what it is purport to measure. Internal validity was assessed to test the ability of the instrument to measure what it was projected to measure and to help detect any errors that could obscure the meaning of the instrument, and prevent it from eliciting specious responses. According to Zikmund (2019), the experience of pilot respondents is used to improve and amend the questionnaire before sending it out to the main research population. Validity, in the context of this study refers to how accurately the questionnaire was able to collect the responses from the respondents as intended by the researcher to tackle the purpose.

In relation to content validity, the researcher ensured that the items in the questionnaire covered the domain that it purported to measure. This was determined by the expert's judgment of the supervisor and other professionals in the field of accounting teacher education and curriculum studies. The questionnaire was made available to these academics and professionals who helped in shaping it with the view of establishing content validity. The researcher paraphrased, modified and deleted materials that were considered inaccurate, or items that infringed or violated on the confidentiality of the respondents.

With regard to face validity, the researcher ensured that the questionnaire measured what they appeared to measure. The face validity of the study was granted by the researcher's peers, colleague students and teachers. Construct validity, on the other hand, was ensured by making sure that the instrument related to the theoretical constructs that it purported to measure. Example, does



the questionnaire measure the constructs of pedagogical quality, classroom management and assessment techniques the way the study designed it?

Factor analysis was performed to ensure construct validity of the questionnaire. This analysis was conducted using the results of the draft questionnaire which was administered to 65 final year teacher-trainees pursuing BEd (Accounting) education through the regular mode. This was done to find out the factors that measured the various dimensions of pre-service preparation programme of the university with regard to BEd (Accounting) programme. Items with eigen values greater than one were extracted. Also, items with correlation coefficient below  $\pm 0.3$  were also erased on the grounds that they were thought to have low commitment to the elements extricated (Larini & Barthes, 2018; Sarstedt & Mooi, 2019). The extracted items were pooled together to form each of the variables using average responses since the responses were measured using discrete scale. Initially, 80 close-ended items were formulated to collect data on dimensions of pre-service preparation. However, after the factor analysis, it was reduced to 50, which was later used for the study.

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) who posit that for most survey studies using questionnaires, a range of five to ten percent (5% - 10%), of the sample size, for pilot testing is sufficient. As indicated earlier, during the pre-testing of the instrument, the questionnaire was administered to a total of 65 respondents. The questionnaire was personally delivered to the respondents by the researcher. In some cases, a day interval was

allowed for the respondents to complete the questionnaire. All the 65 copies of the questionnaire administered were retrieved as expected.

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 questionnaire. Since the questionnaire was used to collect quantitative data, and also the responses to the items were measured using a discrete scale, the study used a Cronbach's alpha reliability coefficient to measure the reliability of the variables. According to Mukherjee, Sinha & Chattopadhyay (2018), the most appropriate measurement tool to use in finding out the reliability coefficient of an instrument which is designed to elicit 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 questionnaire. The results are shown in Table 2.

**Table 2: Computed Reliability Co-efficient of the Variables**

Variables	Number of Items	Cronbach's Alpha
Pedagogical quality	8	.808
Classroom management	8	.809
Quality of faculty	4	.807
Assessment techniques	8	.807
Face-to-face interaction	8	.811
Teachers' effectiveness	12	.810

Source: Field survey (2022)

The Cronbach's alpha reliability co-efficient generated indicated that the various scales were reliable per the suggestion of Zikmund (2019), implying acceptability of the scales. As indicated in Table 2, the Cronbach alpha reliability coefficient obtained from the questionnaire ranged from .807 to .811. Research has shown that scales with Cronbach's alpha co-efficient of .70 or more are

considered reliable (Cohen et al., 2018; Mukherjee et al., 2018). Based on the recommendations made during the validation process, few modifications were made in the questionnaire in terms of the items even though most of the items scored the required Cronbach's alpha co-efficient.

### **Measurement of Variables**

The variables of the study were measured quantitatively using discrete scale. This means, responses to the items focusing on the five (5) dimensions of teacher-trainees' pre-service preparation programme; that is, BEd (Accounting) programme, were measured numerically using the positivists' philosophy. According to Mutaka (2018), pre-service preparation is manifested as a collective and inclusive way of using multiple teaching strategies and practices to educate trainee-teachers. Within the context of this study, pre-service preparation refers to the degree to which teacher education is adequately delivered, meets trainee-teachers learning needs, learning styles, interests, expectations, and is well aligned to standards. The measurement of pre-service preparation programme of the university in this study focused on components such as pedagogical quality, face-to-face interaction, classroom management, assessment techniques, and quality of faculty.

Teacher-trainees' effectiveness, was also measured numerically using their off-campus and on-campus practicums. Multiple close-ended items were used to collect data on the five (5) dimensions of the pre-service preparation programme of the university and the teacher-trainees' effectiveness. These items were adapted from the works of Abernathy et al. (2014), Cleveland (2018), Mutaka (2018),

Amoono (2019), Fuudia (2019) and Clark (2020). Responses to the items were measured quantitatively at the interval or ratio level using a 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. The mean scores with regard to the responses of the various items under each of the five (5) dimensions of the programme were pooled together to form the coefficient of each of the dimension.

A number of demographic variables can influence teacher-trainees' views regarding their preparation programme. The study focused on years of teaching experience and gender. The evidence on the effect of respondents' gender and years of teaching experience have on their views regarding pre-service preparation programme is mixed as a result requires further analysis to understand their effects better. Latha (2015), and Nigam and Arora (2018) noted no difference in teachers' acquisition of modern skills with regard to their gender and age. However, Srdar (2017) and Bhat (2020) found that teaching effectiveness scale of prospective female teachers is higher than that of male teachers, although both trainee-teachers are exposed to same pre-service preparation quality.

#### **Data Collection Procedure**

Prior to the administration of the questionnaire, an informal familiarisation visits were made to Ola and Fosu Colleges of Education study centres, all in the Central Region of Ghana. This was done in order to confirm the number of final year teacher-trainees pursuing BEd (Accounting) programme through the sandwich mode and to gather additional information regarding the issues raised.



The questionnaires were administered by the researcher personally to the 219 respondents with the support of four field assistants, two for each study centre. These field assistants were course tutors on the programme and also doctoral students of UCC, as a result had adequate experience regarding data collection process. Therefore, it was appropriate to use them as field assistants. Nevertheless, the field assistants were given training and orientation, which made it easier for them to administer the questionnaires. The training programme included explaining the objectives of the study, how to identify and approach respondents and data management and ethical issues.

The data collection procedures were carried out in two stages. The first stage was the administering of the questionnaire while the second stage focused on retrieving the questionnaire administered. The researcher and the field assistants were able to distribute the questionnaire to the respondents. Due to the outbreak of coronavirus disease (Covid-19) in Ghana as at the time of the study, some of the selected respondents were contacted individually at their various houses. Most of the questionnaire administered was done in the various lecture rooms. In order not to disturb the respondents teaching-learning or instructional hours, they were asked to complete the questionnaire during their free time or immediately after close of lecturers. Those who were not able to answer the questionnaire on the same day were asked to submit their answered questionnaire on some other day and their contacts (phone numbers) were obtained in order to reach them later.

The second stage focused on retrieving the questionnaire administered. At the end of data collection, the researcher was able to collect completed and accurate data from 194 teacher-trainees. This resulted in 88.6 percent response rate, which was deemed appropriate. According to Mukherjee et al. (2018), a response rate of 75 percent or higher in a survey study is appropriate to be used for the analysis.

### **Data Processing and Analysis**

The questionnaire retrieved from the field were first sorted and coded based on the procedures within the variable view of the statistical analysis software tool known as the PASW Version 21.0. The Test Analysis for Surveys (TAFS) was used for analysing the data. It is one of the most sophisticated statistical software packages popular with educationalists and other professionals when analysing quantitative data (Mukherjee et al., 2018). Before the coding process, the researcher skimmed and scanned through the answered questionnaire to ensure that they were devoid of any irrelevant responses before feeding the computer with the data.

After the coding, the 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 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 discrete scale.

In analysing data regarding the formulated hypotheses, the study first of all performed a normality test on the distribution 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. (2018) added that in a normal distribution the mean and the median are approximately the same.

Results and discussion of the data were presented based on the research objectives. Data on the background characteristics of the respondents were analysed using frequency counts and percentage distributions. This was used to analyse gender and years of teaching experience of the respondents. These statistical tools were used because earlier related research works on the topic (Bhat, 2020; Amoono, 2019; Eret, 2013; Frederiksen, 2017; Fuudia, 2019) show that teacher-trainees are homogeneous.

Inferential statistical tool such as the Friedman test, kruskal wallis and partial least squared structural equation modelling (PLS-SEM) were used to analyse data regarding the research objectives. PLS-SEM has a variety of advantages, including the ability to conduct path modeling with a small sample size. PLS-SEM can obtain great statistical power with a small sample size compared to other statistical tools (Hair, Risher, Sarstedt, & Ringle, 2019).

## PLS-SEM

To perform Partial Least Squared-Structural Equation Modelling (PLS-SEM), there are some set of criteria that has to be met. Common method bias was statistically required (Siemsen, Roth, & Oliveira, 2010). Also, the instruments used had to pass the validity and reliability test. The outcome of these tests are presented subsequently.

### Common Method Bias

Harman's one-factor test for common method bias was used to determine whether the study was free of CMB in order to counteract the potential of common method bias leading to erroneous results. The results (see appendix A) demonstrated that the total variance retrieved by one factor was 24.34% less than the maximum threshold of 50%. This indicates that the responses were free of common method bias and any effect it may have had on the study's conclusions.

### Indicator reliability

The outer loadings were used to check for indicator reliability. This explained the extent to which the latent variables are able to explain the variation, in their respective indicators (Hair et al., 2019). The outer loadings ought to meet the minimum threshold of 0.7 however, outer loadings of 0.4 can be maintained as long as it does not compromise the other outer model specifications (Hair et al., 2019; Hulland, 1999). From Table 3 it is identified that almost all the outer loading met the 0.7 threshold with only five indicators under assessment technique and pedagogical quality falling below 0.7 but above 0.5. They were



maintained because their presence did not compromise the subsequent specification while they added to the content validity of the instrument.

**Table 3: Outer Model Measures**

Latent Construct	Indicators	Outer Loadings	CA	Rho_A	Rho_C	AVE
Assessment Technique (AT)	AT1	0.592	0.893	0.916	0.915	0.580
	AT2	0.867				
	AT3	0.855				
	AT4	0.910				
	AT5	0.814				
	AT6	0.679				
	AT7	0.595				
	AT8	0.706				
Classroom Management (CM)	CM3	0.776	0.779	0.792	0.857	0.601
	CM4	0.786				
	CM5	0.823				
	CM8	0.712				
Effective Teaching of Accounting (ETA)	ETS1	0.770	0.799	0.817	0.870	0.630
	ETS10	0.720				
	ETS13	0.954				
	ETS5	0.707				
Face to Face Interaction	I3	0.741	0.783	0.791	0.875	0.702
	I8	0.799				
	I9	0.959				
Pedagogical Quality (PQ)	PQ1	0.568	0.841	0.851	0.880	0.515
	PQ3	0.709				
	PQ4	0.697				
	PQ5	0.750				
	PQ6	0.801				
	PQ7	0.747				
	PQ8	0.727				
	Quality of Faculty (QF)	QF1				
QF2		0.924				
QF3		0.774				
QF4		0.795				

CA= Cronbach's alpha; AVE= Average Variance extracted  
Source: Field survey (2022)

### **Internal Consistency Reliability Specification**

In order to ensure internal consistency reliability in the measure of the latent variables of the study, three set of statistical estimates (Cronbach alpha and Rho\_A and Rho\_C) were used for assessment. The use of all three help complement each other. As Cronbach alpha provide lower estimates (representing the lower bound), rho\_C provides higher estimates (representing the upper bound) while rho\_A provides estimates that falls between the other two (Hair et al., 2019). From Table 3 it is observed that all the estimates were above 0.7 generally ranging from 0.779 to 0.916. This, therefore, suggested that the measures employed in the study had internal consistency reliability.

### **Convergent Validity Specification**

The study therefore assessed the convergent validity in the measurement of the latent variables. This explains the extent to which the indicator items come together to adequately measure the latent variable. (Hair et al., 2019). To evaluate the convergent validity, the average variance extracted (AVE) was used. To compute AVE, each outer loading of the indicators for the various variables were first squared. Then the average of the squared values were then computed with respect to each variable. Estimates that were below 0.5 indicated there was insufficient communality (Siemsen et al., 2010). The variable estimates equal to and above 0.5 indicted the presence of convergent validity. From Table 3, the AVEs for all the variable were above 0.5 as they ranged from 0.515 to 0.702. This confirms the presence of convergent validity in the measures of the study.

### Discriminant Validity Specification

The proof that the indicators measuring a particular latent variable are truly distinct from other indicators, shows there is discriminant validity (Hair et al., 2019). To establish discriminant validity, the cross-loadings, Fornell-Larcker criterion, and Heterotrait-Monotrait ratio (HTMT) can all be used. However, the use of the HTMT ratios has been prominent among all of them (Henseler, Ringle, & Sarstedt, 2015), hence, it was applied in this study to assess discriminant validity. HTMT values above 0.90 suggest that the measures lack discriminant validity while the values below 0.9 affirm the presence of discriminant validity. As reported in Table 4, the values were below 0.9 as they range from 0.058 to 0.861. This means that the measures of the variables possess discriminant validity.

**Table 4: Heterotrait-monotrait ratio (HTMT)**

	HTMT ratio
CM -> AT	0.663
ETA -> AT	0.772
ETA -> CM	0.597
Experience -> AT	0.130
Experience -> CM	0.058
Experience -> ETA	0.061
F2FI -> AT	0.649
F2FI -> CM	0.518
F2FI -> ETA	0.530
F2FI -> Experience	0.121
PQ -> AT	0.644
PQ -> CM	0.742
PQ -> ETA	0.534
PQ -> Experience	0.126
PQ -> F2FI	0.367
QF -> AT	0.780
QF -> CM	0.861
QF -> ETA	0.534
QF -> Experience	0.032
QF -> F2FI	0.611
QF -> PQ	0.804

Source: Field survey (2022)

### **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 instrument to the Institutional Review Board (IRB) of University of Cape Coast (UCC) for review and ethical clearance. Also, the final draft of the questionnaire was added to the letter submitted to the office of the Registrar, IoE, UCC 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, the researcher 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 various study centre coordinators, and ethical clearance by the Department and IRB of UCC respectively (Appendix D).

The consents of the respondents were sought individually using the questionnaire (Appendix B). Respondents 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 negotiated and respected in the study. All these were done to ensure and secure the consent of the respondents. After ensuring that the respondents understood the content very well, the questionnaires were administered with some assistance from the field assistants. 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 have 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 information they provided were going to be used solely for research purpose and nothing else. 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 objectivity, presented the true research findings, and use 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 philosophical orientation of the study, research approach, research design, population, respondents and participants, sources of data and data collection plan, and instrumentation. It was established that the study adopted a descriptive cross sectional survey design where only quantitative data were

collected and used. The chapter further presented the validity and reliability of the instrument, data collection procedures, and ethical issues considered in the study.

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 analysed the data.



## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### Introduction

This chapter presents the results and the discussions of the study after the data gathered was used to test the hypotheses that guided the study. The result and discussions of the descriptive characteristics of the respondents were first presented and the results to address the objectives were subsequently presented in line with the objectives of the study.

#### Demographic Characteristics of the Respondents

This section presents the results that relate to the demographic characteristics of the respondents. The results are therefore presented in Table 5.

**Table 5: Descriptive Statistics**

Scale	Subscale	Frequency	Percent
Gender	Male	142	73.2
	Female	52	26.8
Teaching Experience	Less than 6 years	61	31.4
	6 - 10 years	102	52.6
	Above 10 years	31	16.0

Source: Field survey (2022)

The study gathered data from 219 respondent out which 194 was retrieved. The distribution was made up of 142 males that accounted for the majority as they represent 73% of the total respondents. Female respondents constituted only 26.8%. The respondent in terms of teaching experience was dominate of teachers who had taught for about six to ten years as they were made up of 52.6% of the

entire respondents. This was followed by those who had taught for less than 6 years. They also constituted 31.4% of the distribution with a frequency of 61. Teachers with more than 10 years of experience were the least to have participated in the study. They represent only 16% of the entire respondents engaged in the study.

### **Quality of accounting education provided to equip the trainee teachers**

The first objective of the study is to determine whether there were differences in the level of various quality dimensions of accounting education provided to the pre-service accounting teachers. In order to apply the suitable statistics to test for the differences, there was a need to ascertain the normality of the data distribution relative to those variables. As such the Kolmogorov-Smirnov and Shapiro-Wilk tests were employed. The results of which have been presented in Table 6.

**Table 6: Test for Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Stat	Df	Sig.	Stat	Df	Sig.
Effective Teaching Skills	.285	194	.000	.775	194	.000
Pedagogical Quality	.112	194	.000	.948	194	.000
Classroom Management	.192	194	.000	.912	194	.000
Quality of Faculty	.248	194	.000	.820	194	.000
Assessment Technique	.178	194	.000	.870	194	.000
Face to Face Interaction	.149	194	.000	.966	194	.000

Source: Field survey (2022)

The results as presented in Table 6 shows that each of the variables was not normally distributed. Both Kolmogorov-Smirnov and Shapiro-Wilk results indicated a statistically significant ( $p < 0.001$ ) difference between the data and a



normally distributed data. This suggested that the data were asymmetric hence warrant the use of non-parametric statistics. Consequently, the study adopted the Friedman test, the non-parametric equivalent of repeated measures ANOVA to test to see if there are statistically significant differences in the various quality dimensions of accounting education provided for the pre-service accounting trainee teachers.

**Table 7: Friedman Test**

Quality dimensions of teacher education	Mean Rank	Percentiles		
		25 <sup>th</sup>	50 <sup>th</sup> (Median)	75 <sup>th</sup>
Quality of Faculty	4.13	3.0000	3.2500	3.7500
Assessment Technique	3.96	3.0000	3.2500	3.6250
Pedagogical Quality	3.29	2.8750	3.2500	3.5000
Classroom Management	2.47	2.8438	3.0000	3.2500
Face to Face Interaction	1.15	2.2500	2.5000	2.7500
N		194		
Chi-Square ( $\chi^2$ )		495.249		
Df		4		
Asymp. Sig.		.000		

Source: Field survey (2022)

Results from the Friedman test as presented in Table 7 showed that there are statistically significant differences in the level of quality across the various dimensions of quality accounting education ( $\chi^2 (4) = 495.249, p < .01$ ). The null hypothesis (H<sub>0</sub>: *There is no statistically significant difference in the quality dimensions of sandwich mode of accounting education as perceived by the basic schoolteachers*) was therefore rejected. This means that the quality across the various dimensions of quality accounting education provided for the pre-service accounting trainee teachers are not the same throughout. Beyond this finding, the study went further to conduct a post hoc analysis to identify the specific differences that existed among the dimensions of quality accounting education.

This was done using the Wilcoxon signed ranks test with Bonferroni correction for multiple test adjusted significance. The results are subsequently presented in Table 8

**Table 8: Wilcoxon Signed Ranks Test**

	Z	Sig.
Classroom Management - Pedagogical Quality	-7.105	0.000
Quality of Faculty - Pedagogical Quality	-6.156	0.000
Assessment Technique - Pedagogical Quality	-5.246	0.000
Face to Face Interaction - Pedagogical Quality	-11.740	0.000
Quality of Faculty - Classroom Management	-10.658	0.000
Assessment Technique - Classroom Management	-9.435	0.000
Face to Face Interaction - Classroom Management	-11.501	0.000
Assessment Technique - Quality of Faculty	-1.165	0.244
Face to Face Interaction - Quality of Faculty	-11.936	0.000
Face to Face Interaction - Assessment Technique	-12.019	0.000

Source: Field survey (2022)

First of all, the mean ranks gave indication that the quality of faculty (4.13) was higher than all the other indicators. This was followed by the quality of assessment techniques (3.96). Subsequent to assessment technique was the pedagogical quality (3.29) displayed when engaging the trainee teachers. Classroom management (2.47) was identified as higher than the quality of face to face interaction (1.15) which seem to have the least quality among them all. These observations were further subjected to rigorous pairwise test. It was identified that the order in which the dimensions of quality accounting education has been presented was valid with almost all the comparisons being statistically significant at more than 99% confidence level. The comparison between Assessment

Technique and Quality of Faculty suggests there was no statistically significant difference in the level of their quality ( $Z = -1.165$ ,  $p = 0.244$ ). This means that quality of the faculty is at the same level as the quality of assessment technique employed when engaging the teacher trainees.

Generally, the study revealed that the sandwich mode of education had sufficient quality as the least median value for the various quality dimensions measured 2.5. This means that the sandwich mode of education provided to the pre-service accounting teachers does not compromise quality but ensures that it meets the expectations of the accounting education programme. The identification of general quality in teacher education corroborated the revelations of other similar studies which were conducted in other modes of programme delivery (regular) (Shin et al., 2017; Omane-Adjekum, 2020). Unlike it was found in this study, Dilshad (2010) identified that the quality of education provided for teacher trainees in the Pakistan context has a poor environment. The study of Amoono (2019) who realised sufficient classroom management skills in Ghanaian context of teacher training institutions was also consistent with the findings of the current study.

A detailed analysis also brought to bear the nuances that goes beyond the wholesome judgment of the quality to compare the various dimensions of quality accounting teacher education provided through the sandwich mode. Identifying significant differences across the various dimensions of quality education proved that the quality dimensions of education provided were better met in some institutions than others. This is realistic given that institutions usually would have

their competitive advantage in terms of their strengths as well as their weakness in the delivery of their duties. The study's finding of some qualities being higher than the others corroborates the study of Omane-Adjekum (2020; 2016) and Lingam, (2017) as they explored similar phenomenon in the regular mode context. This further gives an indication that the education provided through sandwich mode is not necessarily inferior as it is perceived. This was, however, in contrast with the study of Kildan et al. (2013) as they found that the education provided to the teachers during their training was inadequate. Definitely a lot would have changed over the period.

The study of Lingam (2017) showed that the trainee teachers who were involved in the study gave remarks that some aspect of the education was not as functional as other dimensions. In this study, it was identified that the quality of faculty is the highest dimension among all the quality dimensions explored. This may suggest that the education providers have put in place measures to select most qualified personnel through a rigorous approach. In sharp contrast to the foregoing assertion, is the finding of Khan (2017) who rather realised that the education providers have poor competencies.

#### **Differences in quality dimensions of accounting education based on teaching experience of pre-service accounting teachers**

The second objective of the study sought to identify whether or not there are differences in how pre-service accounting teachers perceive the quality of accounting education provided to them through the sandwich mode. This was done by testing the differences in the five dimensions of quality accounting



education based on teaching experience of pre-service accounting teachers. Since the distribution was asymmetrical, the Kruskal Wallis (non-parametric equivalent of one way ANOVA) was used to test for the difference. The results for the five hypotheses (H2a, H2b; H2c; H2d and H2e) were presented subsequently in Table 9.

***H2a: There is no statistically significant difference in the perceived pedagogical quality of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers***

This hypothesis tested whether there are differences in pedagogical quality from the perspectives of the pre-service accounting teachers. The result from Table 9 showed that there was statistically significant difference in the pedagogical quality of the accounting education provided to pre-service accounting teachers ( $H(2a)=6.739$ ;  $p=0.034$ ) based on their level of teaching experience. The null hypothesis was therefore rejected.

***H2b: There is no statistically significant difference in quality of classroom management of sandwich of mode accounting education based on the teaching experiences of the basic schoolteachers***

The second hypothesis for the second objective of the study focused on differences in quality of classroom management across teaching experience. From Table 9, it is observed that there is statistically significant difference in how pre-service accounting teachers perceived the quality of classroom management in the accounting education provided to them ( $H(2b) = 8.888$ ;  $p=0.012$ ) based on their level of teaching experience. The null hypothesis was therefore rejected.

**Table 9: Kruskal Wallis Results**

Variable	Sub-Scale	Mean Rank	H	Sig
Pedagogical Quality	Less than 6 years	86.70	6.739	0.034
	6 - 10 years	107.37		
	Above 10 years	86.27		
Classroom Management	Less than 6 years	84.65	8.888	0.012
	6 - 10 years	108.75		
	Above 10 years	85.77		
Quality of Faculty	Less than 6 years	91.54	4.563	0.102
	6 - 10 years	104.98		
	Above 10 years	84.61		
Assessment Technique	Less than 6 years	82.93	10.212	0.006
	6 - 10 years	109.48		
	Above 10 years	86.77		
Face to Face Interaction	Less than 6 years	99.23	2.794	0.247
	6 - 10 years	92.34		
	Above 10 years	111.08		

Source: Field survey (2022)

***H2c: There is no statistically significant difference in quality of faculty of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers***

The third hypothesis for the second objective of the study was focused on testing the differences in quality of faculty across teaching experience. From Table 9, it is observed that there was no statistically significant difference in how pre-service accounting teachers perceived the quality of faculty in the accounting education provided to them (H (2c) =4.563; p=0.102;) based on their level of teaching experience. This means that regardless of their teaching experience, they

held the same perception in terms of qualification of the faculty teaching them. As such the study failed to reject the null hypothesis.

***H2d: There is no statistically significant difference in quality of assessment techniques of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers***

The study further tested for the difference in how the pre-service accounting teacher trainees had perceived the quality of assessment technique. The result from Table 9 suggested that there was statistically significant difference in how pre-service accounting teachers perceived the quality of assessment technique in the accounting education provided ( $H(2d) = 10.212$ ;  $p = 0.006$ ) based on their level of teaching experience. Consequently, the null hypothesis was rejected.

***H2e: There is no statistically significant difference in quality of face-to-face interaction of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers***

Finally, the difference in the quality of face-to-face interaction as experienced by the pre-service accounting teachers based on their level of teaching experience was tested. The results from Table 9 showed that there was no statistically significant difference in the perception of face-to-face interaction quality received through the accounting education based on the teaching experience of the pre-service accounting teachers ( $H(2e) = 2.794$ ;  $p = 0.247$ ) based on their level of teaching experience. The study therefore, failed to reject the null hypothesis.

The study found that teaching experience of the pre-service accounting teachers influenced their perceptions of pedagogical quality, classroom management and assessment techniques of the pre-service accounting teachers.

This means that how high or low the pre-service teachers perceived the qualities of these dimensions are contingent on the teaching experience. However, in terms of face-to-face interactions and quality of faculty there was no such influence of their teaching experience. This means that they held a unanimous view on the level of quality in terms of those two.

The finding of this study of difference in pre-service accounting teachers' perception of pedagogical quality based on their teaching experience corroborates with the study of Omane-Adjekum (2020) as the study identified the significant difference in the context, input and process dimensions of quality of accounting based on the demographic background of the accounting teacher trainees. The significant difference identified based on teaching experience of the respondents in the pedagogical quality, classroom management and assessment technique may come as a result of the fact that their differences in level of experience would cause them to have different expectations hence different perception.

Again, the unanimous perception held on quality of assessment technique and face-to-face interaction, regardless of the teaching experiences of the pre-service teachers show that the quality in these dimensions is undisputed. The study of Omane-adjekum (2016) again, is consistent with this finding as the study found unanimous position held by the accounting trainees on the quality of the



accounting education they have been given through the regular mode of programme delivery.

### **Influence of quality dimensions of accounting education on pre-service accounting teachers effective teaching of accounting**

Consequential to meeting the outer model specifications, the inner model specifications were discussed. Table 10 presents the results on multicollinearity among the latent variables of the study while the results presented in Table 11 and Figure 2 highlighted the finding from the partial least squared structural equation modelling regression. The influence of all the dimensions of quality education as employed in the study is captured together with the control variable (experience). The model control for experience, however, it was not included in the subsequent discussions of the study because it had insignificant direct influence. However, its presence cannot be underestimated given its contribution to the entire model.

**Table 10: Variance Inflation factors**

	VIF
Assessment Techniques	2.113
Classroom Management	2.124
Experience	1.045
Face to Face Interaction	1.505
Pedagogical Quality	2.089
Quality of Faculty	2.930

Source: Field survey (2022)

### **Multicollinearity Specification**

To ensure that the independent variables employed in the model are significantly different from the dependent variable, there was a need to check for multicollinearity. This was checked by assessing the variance inflation factors

(VIFs). VIFs above 5 suggests a high probability of multicollinearity hence, VIFs below 5 is preferred (Becker, Ringle, Sarstedt, & Völckner, 2015). From the Table 10, it is seen that all the VIF values were below 5 ranging from 1.045 to 2.930. This proved that the model was free from multicollinearity making the results obtained reliable enough.

**Table 11: Objective three results**

Exo. Construct	Beta ( $\beta$ )	SD	t-stat	P-value	$R^2$	$f^2$	$Q^2$
AT -> ETA	0.611	0.075	8.109	0.000	0.501	0.355	0.452
CM -> ETA	0.169	0.071	2.371	0.018		0.027	
F2FI -> ETA	0.120	0.058	2.046	0.041		0.019	
PQ -> ETA	0.106	0.075	1.420	0.156		0.011	
QF -> ETA	0.215	0.104	2.070	0.038		0.032	
Exp -> ETA	-0.040	0.055	0.731	0.465		0.003	

Source: Field survey (2022)

### Hypotheses Testing

Five hypotheses (H3a, H3b, H3c, H3d, and H3e) were tested in the model and the outcome are subsequently reported and discussed.

***H3a: Assessment technique in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting***

The results in Table 11 and Figure 2 show there was a statistically significant positive influence of the assessment techniques on the pre-service teachers' effectiveness in teaching accounting ( $\beta = .611$ ;  $t = 8.109$ ;  $p < .001$ ). This means that the use of higher quality assessment techniques when training pre-

service teachers to become accounting teachers improve their capability of teaching accounting effectively. The null hypothesis was therefore rejected.

***H3b: Classroom Management in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting***

The second hypothesis tested under the third objective also, in line with the first hypothesis identified a statistically significant positive influence of classroom management activities on the effective teaching of accounting among the pre-service accounting teachers ( $\beta = .169$ ;  $t = 2.371$ ;  $p = .018$ ; Table 11, Figure 2). The more accounting education provides quality classroom management to the pre-service accounting teachers, the more they are able to effectively teach accounting. Consequently, the null hypothesis was rejected.

***H3c: Face-to-Face Interaction in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting***

Subsequently, as presented in Table 11 and Figure 2, the study identified a positive and statistically significant influence of the face-to-face interaction on the effective teaching of accounting ( $\beta = .120$ ;  $t = 2.046$ ;  $p = .041$ ; Table 11, Figure 2). This means that the quality of face-to-face interaction with the teacher trainees during their accounting education programme contributes to how well they are able to teach accounting effectively. Therefore, the better the face-to-face interaction, the more effectively pre-service teachers are able to teach accounting. Hence, the null hypothesis was rejected.

*H3d: Pedagogical Quality in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting*

Even though the result suggested that pedagogical quality had a positive influence on pre-service teachers' effective teaching of accounting, the influence was not statistically significant ( $\beta = .106$ ;  $t = 1.420$ ;  $p = .156$ ; Table 11, Figure 2). The results therefore means that quality of pedagogical knowledge received during the accounting education did not contribute enough to the how effective the pre-service teachers taught accounting. The study therefore failed to reject the null hypothesis.

*H3e: Quality of Faculty in the sandwich mode of accounting education has no statistically significant influence on the basic schoolteachers' perceived effective teaching of accounting*

From Table 11 and figure 2, the last hypothesis tested under the third objective of the study proved that quality of faculty has statistically significant positive influence on pre-service teacher trainees' effective teaching of accounting ( $\beta = .215$ ;  $t = 2.070$ ;  $p = .038$ ). This means that, as the quality of faculty employed in the accounting education programme increase, the more pre-service teacher trainees are able to teach accounting effectively. The null hypothesis was therefore rejected.

#### **Coefficient of Determination**

The predictive power of the model was determined using the coefficient of determination ( $R^2$ ). This helped to determine the extent to which the exogenous



variables (quality dimensions of accounting education) was able to explain the variances in the pre-service teachers' effective teaching of accounting. From Table 11 and Figure 2, the independent variables explained about 50% variations in the effective teaching of accounting ( $R^2 = 0.501$ ). This means that about 50% variations are also explained by other variables which are beyond the scope of this study.

### **Effect sizes**

Subsequent to identifying the predictive power of the model, the study had to determine the effect size of each independent variable in the model. This was done by applying Cohen (1988)  $f^2$  criteria. The results in Table 11 showed that assessment technique (0.355) had a large effect size while classroom management (0.027) face-to-face interaction (0.019), Pedagogical quality (0.011) and quality of faculty (0.032) all had small effect sizes. This confirms the need for all these qualities to be concurrently available to help improve the effective teaching of accounting among pre-service teacher trainees.

### **Predictive Relevance**

Stone-Geisser's  $Q^2$  criterion was used to determine whether the model has predictive relevance. From Table 11 it was determined that the model had predictive relevance as the Stone-Geisser's  $Q^2$  value (0.4520) is greater than zero. This means that the results are relevant to the real world situation and will be reliable enough to make realistic generalisations and deductions for practical purposes beyond statistics.

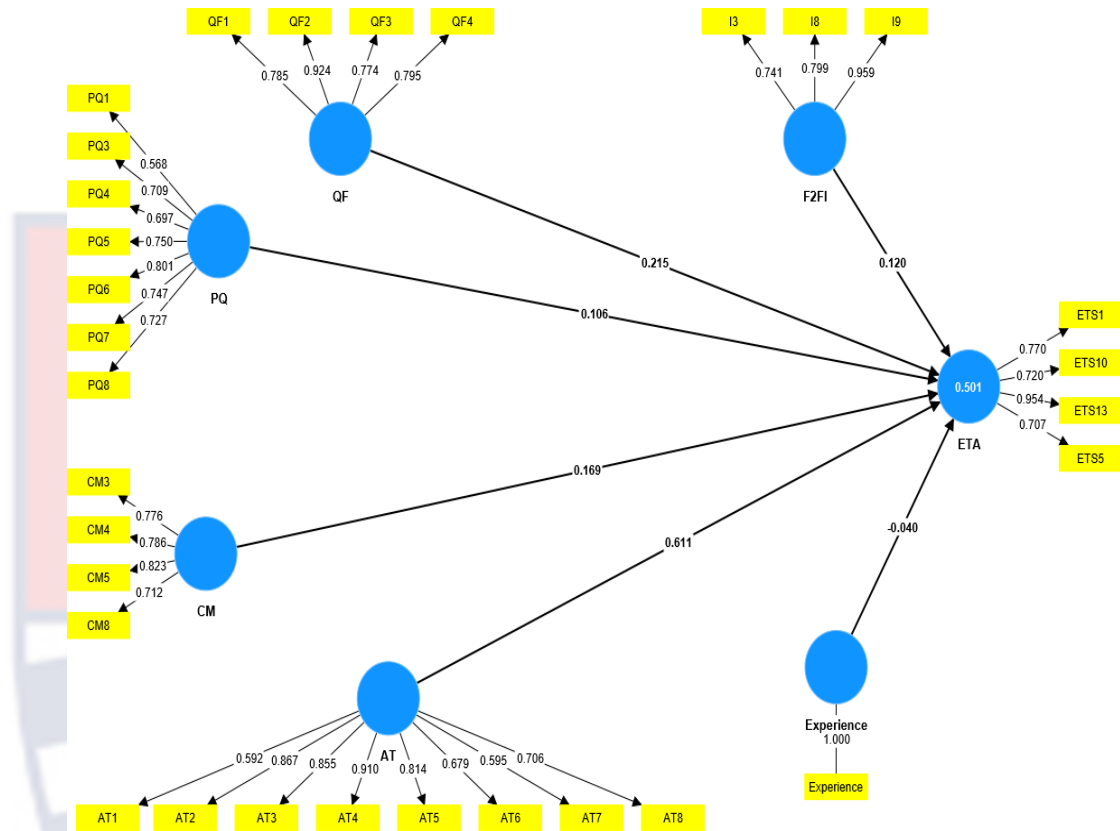


Figure 2: Partial Least Squared-Structural Equation Modelling (PLS-SEM) Showing results of Objective three

The various quality dimensions of teacher education delivered through the sandwich mode having significant influence on the pre-service teachers' effective teaching of accounting confirms the assumption held by the theory of constructivism and the general position of the empirical literature. The theory argued that experience of an individual reshapes their practices. Also, several studies have established a positive relation between the quality of education and the effectiveness of teaching (Beautel et al., 2019; Charles and Senter 2018; Fong-Yee & Normore 2017; Lim & Morris 2009). This study however gave a deeper insight by presenting the individual relationships between each quality dimension

of teacher education and how it contributes to the effective teaching of accounting by the pre-service teacher trainee.

The significant influence of assessment technique, classroom management, face-to-face interaction, pedagogical quality and quality of faculty confirms the study of Charles and Senter (2018). They discovered that the quality of education, teacher trainees experience gravely impacts on how well they are able to teach and manage their classroom environment. The high effect size of assessment technique explains the fact that quality assessment technique lead the pre-service teachers to master the content of their programme so well. A quality assessment technique may require students to engage in deeper learning strategies which will help build the required competencies for job performance (Tufuor & Servoh, 2022). As argued by Tamakloe, Amedahe and Atta (2005) effective teaching is a function of a confident teacher and that confidence is also a function of adequate content knowledge.

The insignificant influence of pedagogical quality on the pre-service teachers' effective teaching of accounting, however give an indication of a positive relationship between the two variables. The insignificant effect rather disconfirmed the study of Fong-Yee & Normore (2017). Nonetheless, it is imperative to put this finding into perspective. The use of diverse pedagogical approach in teaching the various courses in accounting education provided to the students may have a mixed impact on the pre-service teachers' effective teaching of accounting which is rather masculine and straightforward (Kamayanti, Triuwono, Irianto & Mulawarmam, 2011). More so, the small effect sizes of the

various dimensions of quality education explains why Tamakloe et al., (2005) advocates for their concurrent presence in order to adequately train students to be effective teachers.

### Chapter Summary

The chapter presented results obtained from the study. It was revealed that there was adequacy in the quality dimensions of accounting teacher education with significant differences among them. Also, the level of some quality dimensions, to the pre-service accounting teachers, considered some of the qualities varied based on their teaching experience. Other quality dimensions were unanimously agreed to be on either very high level or moderate level. Finally there were some established relationships between the quality dimensions of accounting education and the pre-service accounting teachers' effectiveness of teaching accounting. These revelations set the tone to draw some logical conclusions that would arrive at realistic recommendations in the subsequent chapter.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

This chapter provides a summary of the study and conclusions based on the research findings to make specific recommendations to improve practice and inform policy. The study concluded with suggestions for further research based on its constraints and limitations.

#### Summary of the Study

This section is divided into two. The first part summarises the research process, whereas the second section summarises the key findings of the study.

#### Summary of the research process

The purpose of the study was to explore the quality of sandwich mode of accounting teacher education and its effect on in-service basic school teachers' competence in teaching accounting. The purpose was pursued through the following research objectives:

1. compare the quality dimensions of the sandwich mode of accounting education as perceived by the basic schoolteachers.
2. examine the differences in the perceived quality dimensions of sandwich mode of accounting education based on the teaching experiences of the basic schoolteachers.
3. analyse the influence of the quality dimensions of accounting teacher education through the sandwich mode on perceived effective teaching of accounting

The study adopted cross-sectional survey to gather data through questionnaires from 194 pre-service accounting teachers. The quantitative data were analysed with inferential statistics including Friedman Test, Kruskal Wallis and Partial Least Squares, Structural Equation Modelling.

### **Summary of Key Findings**

The following key findings were derived from the study;

1. First, the sandwich accounting education programme had quality with regards to the level of the various quality dimensions. However, there was significant difference in the levels of quality dimensions of the accounting education programme rolled out through the sandwich mode. The quality of faculty was regarded as the highest dimension while face-to face interaction had the least quality among all of them.
2. There was no significant difference in how the pre-service teacher trainees perceived the quality of faculty and face-to-face interaction based on their teaching experiences. On the other hand there was significant difference in how teacher trainees perceived pedagogical quality, class management and assessment technique.
3. The various quality dimensions of accounting education significantly influenced the teacher trainees' effective teaching of accounting. The quality of accounting education explained about fifty percent variations in the effective teaching of accounting. Among the quality dimensions, assessment techniques had the highest influence while

pedagogical quality had no significant influence even though there was an indication of a positive relationship.

### Conclusions

The realisation of differences in the level of the various quality dimensions of education provided to the pre-service accounting teachers would have some implications on their effective teaching of accounting. In line with the constructivist theory, these differences may determine how well the accounting teachers would conceptualise and develop their competence of teaching accounting. For instance teacher trainee experience of high quality assessment technique in their education may influence them to place premium on high assessment standards. Similarly, the relatively low quality in face-to-face interaction may have an attendant effect on the teacher trainees' ability to interact well with their students during lesson delivery. If the accounting teacher does not experience the skills of handling face-to-face interaction with accounting students, it may have detrimental outcome on how effectively he or she can teach. This is, accounting as a subject by its nature require a lot of demonstrations which is a function of interaction.

The unanimous measure of face-to-face interaction and quality of faculty across teaching experience of pre-service accounting teachers suggest that these qualities as they exist may have the same effect on teachers' quality regardless of their background (Teaching experience). This probably implies that the qualities of those two dimensions (face-to-face interaction and quality of faculty) of quality accounting education have similar appeal to peculiar and diverse needs of the

teacher trainees. Also, the differences observed in how teacher trainees perceived the quality of assessment technique, classroom management and pedagogical quality gives an indication that, the use of a straight-jacket approach in training accounting teachers would not yield the utmost result of adequately training all the teacher trainees enrolled on the programme.

The identified influence of the quality dimensions on the pre-service accounting teachers' effective teaching of accounting proves that the quality dimensions of accounting education provided through the sandwich mode are equally relevant to the development of an effective accounting teacher. Hence if these qualities are taken for granted, there is the likelihood that the accounting teacher who would be produced through the sandwich mode may not be competent enough in teaching accounting. However, improving upon these qualities would produce effective accounting teachers even if trained through the sandwich mode. Finally, the need to concurrently uphold all the various quality dimensions of accounting education is therefore imperative to developing an effective accounting teacher.

### **Recommendations**

With reference to the findings that have been identified from the study, the following recommendations are made:

1. Premium should be placed on all the various quality dimensions of accounting education provided through sandwich mode. This would mean that teacher trainees would holistically develop their ability to teach accounting effectively when they find themselves in the position to do so.

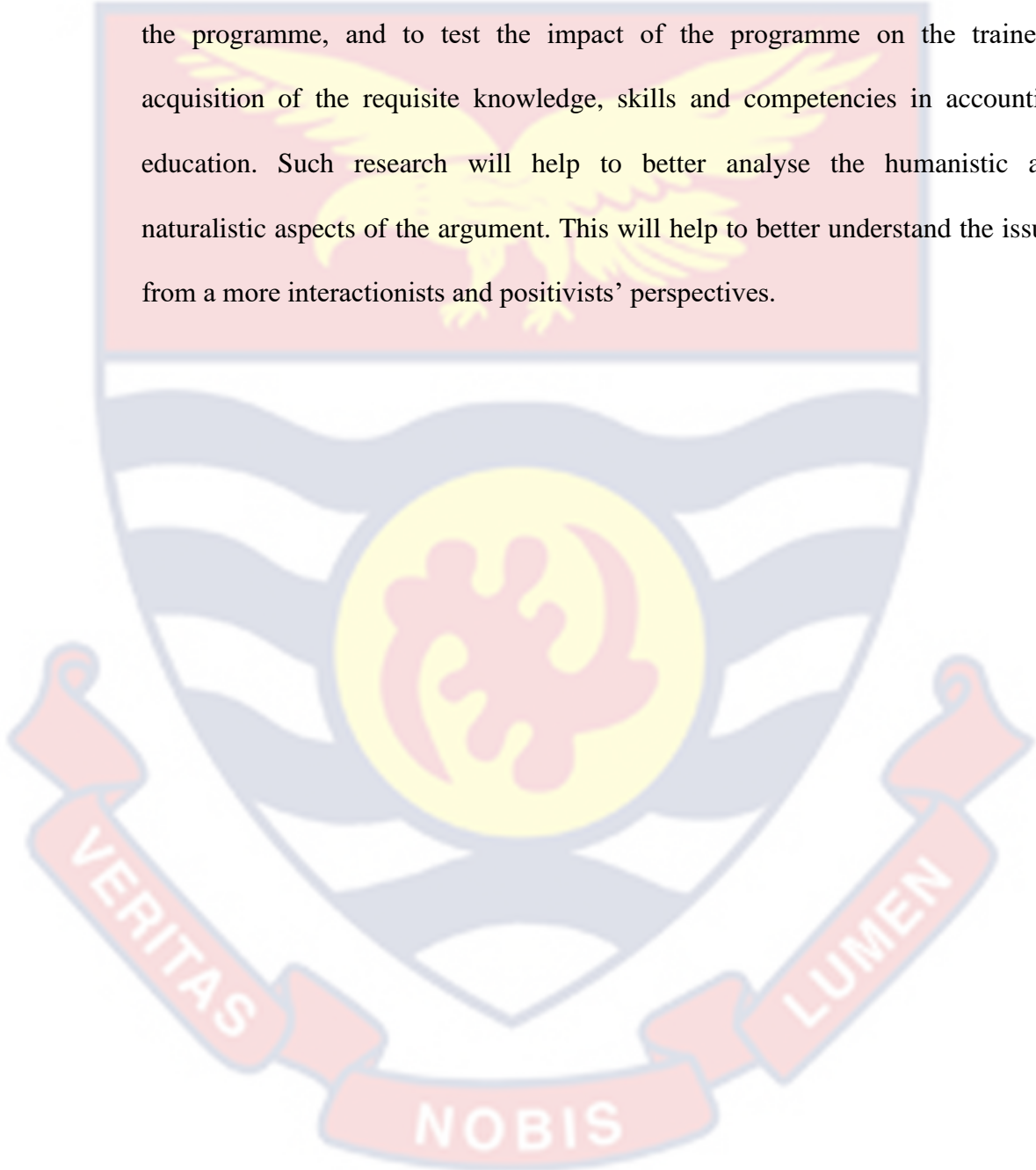


Again pre-service accounting teachers are encouraged to draw attention of management of the accounting education programme, whenever they identify the fall in any of the quality dimensions as their ability to teach accounting effectively is tied to these dimensions.

2. The faculty and management of accounting education programme through the sandwich mode should not overlook the relevance of the background characteristics (teaching experience) of the pre-service accounting teachers. Attention needs to be given to the experienced level of the pre-service accounting teachers in order to make the sandwich programme beneficial to all of them. Specifically, data on their teaching experience should be made available to the course tutors/lecturers in order to apply teaching techniques that would meet the background needs of the teacher trainees.
3. The quality dimensions of accounting education through the sandwich mode with lower qualities should be reviewed by the relevant authorities since they all contribute to the kind of products that would be produced by the accounting education programme. The pedagogical quality should be evaluated in the context of teaching accounting to elicit its expected influence on the effective teaching of accounting. Finally premium should not be placed on any of the dimensions at the expense of others.

### Suggestions for Further Research

It is suggested that future research could employ multiple instruments such as questionnaire, observation and interview guides to explore other dimensions of the programme, and to test the impact of the programme on the trainees' acquisition of the requisite knowledge, skills and competencies in accounting education. Such research will help to better analyse the humanistic and naturalistic aspects of the argument. This will help to better understand the issues from a more interactionists and positivists' perspectives.



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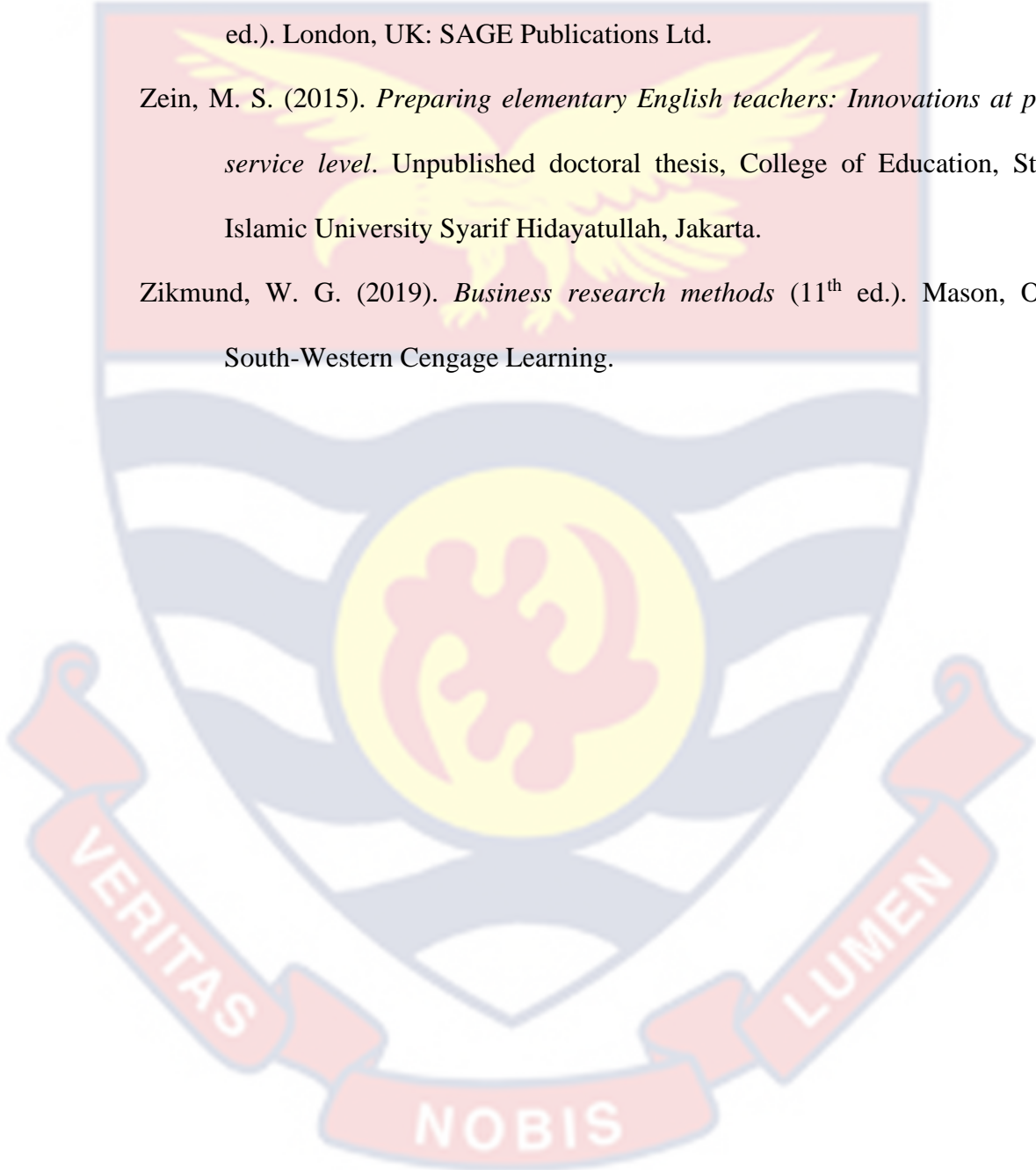
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## APPENDIX A

## Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.312	25.651	25.651	11.682	24.337	24.337
2	3.173	6.611	32.262			
3	2.687	5.598	37.860			
4	2.163	4.506	42.366			
5	1.959	4.082	46.449			
6	1.905	3.969	50.417			
7	1.806	3.762	54.179			
8	1.686	3.513	57.692			
9	1.549	3.228	60.920			
10	1.481	3.085	64.005			
11	1.379	2.873	66.878			
12	1.163	2.423	69.301			
13	1.073	2.236	71.537			
14	1.036	2.157	73.694			
15	.959	1.998	75.692			
16	.886	1.846	77.538			
17	.860	1.792	79.330			
18	.845	1.759	81.089			
19	.743	1.548	82.637			
20	.687	1.430	84.067			
21	.678	1.413	85.480			
22	.633	1.319	86.799			
23	.565	1.177	87.976			
24	.530	1.103	89.080			
25	.517	1.077	90.157			
26	.480	.999	91.156			
27	.429	.894	92.050			
28	.408	.849	92.899			
29	.356	.741	93.640			
30	.337	.702	94.342			
31	.291	.606	94.947			
32	.280	.583	95.531			
33	.264	.550	96.080			



34	.249	.519	96.600		
35	.205	.426	97.026		
36	.202	.421	97.447		
37	.187	.389	97.837		
38	.169	.352	98.189		
39	.154	.322	98.511		
40	.138	.287	98.798		
41	.118	.246	99.044		
42	.101	.210	99.254		
43	.093	.194	99.448		
44	.072	.149	99.598		
45	.058	.121	99.719		
46	.049	.101	99.820		
47	.046	.096	99.916		
48	.040	.084	100.000		

Extraction Method: Principal Axis Factoring.





**SECTION B: Pre-service Preparation**

Please indicate your level of agreement to the following statements that are related to your pre-service preparation at the first degree level. Responses to the statements are measured numerically using a four-point discrete scale such that the higher the number the more you agree and the lower the number the more you disagree with the statements.

<b>Statements on face-to-face interaction</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. The course tutors were competent in facilitating face-to-face sessions.				
2. Our interaction with our tutors at the learning centre is effective.				
3. I found the interactions with colleagues during face-to-face sessions stimulating.				
4. I do <u>not</u> have any medium created by course tutors or the university to interact with tutors both offline and online.				
5. Interactions during face-to-face sessions were student-centred.				
6. I am developing a lot of efficiency because my tutors always promote effective ways for me to interact with the content or concepts to be learned				
7. My tutors create a platform for group work and discussions for as to interact with colleague course mates in order to seek and construct knowledge.				
8. My tutors always come together to shear ideas on how to assist us grow our practical skills of teaching.				
<b>Statements on assessment techniques</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. Test items (quiz/exams) were such that they helped me to apply what we learnt in class to real life situation.				
2. Test items (quiz/exams) helped me to develop critical thinking skills.				
3. Quick release of assessment results during the programme motivated me to be serious with studies.				
4. The test items (quiz/exam) during the programme covered the three domains of learning.				
5. My University mounted at least a semester course in assessment in schools during my pre-service preparation.				
6. My teacher education programme made me familiar with a variety of assessment techniques.				
7. My teacher education programme taught me how to use assessment to diagnose students' academic problems.				
8. My teacher education programme equipped me with the requisite knowledge for crafting test items.				
<b>Statements on pedagogical quality</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. There is a disconnection between the content I learnt during my pre-service preparation and what I am teaching now.				
2. Tutors use good teaching learning materials in instruction				

which enhance my understanding.				
3. My teacher education programme equipped me with varieties of teaching methods.				
4. Tutors do <u>not</u> cater for individual differences in their instructional processes.				
5. My University preparation helped me to present lessons in a logical manner.				
6. My University gave me enough preparation in educational research methods.				
7. My University prepared me on how to use teaching learning materials to enhance students, understanding of lessons				
8. My University trained me on how to improvise teaching learning materials				
<b>Statements on classroom management</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. During my training as an accounting teacher, I was given enough tuition on classroom management skills.				
2. My institution prepared me in how to manage over enrolled class				
3. My training as an accounting teacher equipped me with the relevant knowledge for enhancing students' engagement.				
4. I was trained in how to use instructional techniques to manage disruptive student's behaviour.				
5. My University mounted a semester course in classroom management during my pre-service preparation.				
6. I am knowledgeable about effective classroom management strategies.				
7. My University prepared me on how to determine class rules and regulations.				
8. My University adequately prepared me in the area of classroom discipline.				
<b>Statements on quality of faculty</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. Course tutors on the programme are well trained and highly qualified.				
2. The course tutors are very professional in their work.				
3. The course tutors on the programme are <u>not</u> able to show enough skills and competencies when teaching.				
4. The course tutors are knowledgeable about how and when to help students overcome their learning difficulties in the courses they teach.				



**SECTION C: Teachers' Effectiveness (Practicum)**

Please indicate your level of agreement to the following statements that focus on the effectiveness of your teaching. The responses to the items are measured numerically using a four-point scale such that the higher the number the more you agree and the lower the number the more you disagree to the items.

<b>Statements on Teachers' Effectiveness</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. Through this programme I can now use variety of teaching methods to meet different learning needs of learners.				
2. When preparing my lesson notes, I am able to now consider individual students' learning needs.				
3. The programme has broadened my subject knowledge to relate lessons to students' real experience.				
4. The programme let me know that chairs and tables should be arranged to facilitate group learning.				
5. Through this programme, I am now able to mix both girls and boys for class assignment.				
6. Through this programme, I can now find out the concerns of students who misbehave in my class.				
7. Through this programme, I can now use examples to explain concepts in my lessons.				
8. Through this programme, I can now give prompt feedback to my students on their assignments (e.g. homework, class test).				
9. Through this programme, I can now develop different assessment techniques to promote students' learning.				
10. With the help of this programme, I can now value reflection of my own practice to improve students' learning.				
11. The programme taught me to develop love for the teaching profession to serve as role model to my students.				
12. The teaching practice exercises were very helpful to me during the programme as a pre-service teacher.				

*THANK YOU*

## APPENDIX C

## Sample letter for Request for information

UNIVERSITY OF CAPE COAST  
COLLEGE OF EDUCATION STUDIES

FACULTY OF HUMANITIES &amp; SOCIAL SCIENCES EDUCATION

DEPARTMENT OF BUSINESS &amp; SOCIAL SCIENCES EDUCATION

Telephone: 0209408788

EXT. (268), Direct: 35411.

Telegrams &amp; Cables: University, Cape Coast.

Email: [dbsse@ucc.edu.gh](mailto:dbsse@ucc.edu.gh)UNIVERSITY POST OFFICE  
CAPE COAST, GHANA*Our Ref: DoBSSE/**Your Ref:*DATE: 19<sup>th</sup> July, 2021MIS Section  
University of Cape Coast  
Cape Coast**REQUEST FOR INFORMATION**

Mr. Albert Kofi Thompson is an MPhil student of this Department reading Accounting Education. He requires information regarding the enrollment statistics of B.Ed Accounting students (Sandwich). This is to enable him complete chapter three of his thesis.

We request that you kindly offer him the necessary assistance to enable him obtain this information.

We count on your usual cooperation.

Thank you.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'B. Acquah'.

Dr. Bernard Y. S. Acquah

**Head**

## APPENDIX D

## Sample Letters for Ethical Clearance

C/O Mrs. Janet Thompson

Box 101

Cape Coast

11<sup>th</sup> November 2021

The Chairperson  
Institutional Review Board  
University of Cape Coast  
Dear Sir/Madam,

**APPLICATION FOR ETHICAL REVIEW AND CLEARANCE OF NEW  
PROPOSAL**

I Albert Kofi Thompson an MPhil Accounting Education Programme humbly write to apply for an ethical review to be performed on my research proposal. This is to enable me gain the authorized clearance to undertake data collection for my study entitled "**Teacher trainees' assessment of University of Cape Coast Bachelor of Accounting programme: The case of sandwich students**". I am a student pursuing a Master of Philosophy degree in Accounting Education

I have received the approval from my supervisor and my department to carried out the study. I have attached this letter with the consent letter from my supervisor, cover letter from my department (Department of Business and Social Science Education) and other document relevant for the review.

I sincerely anticipate a timely consideration.

Yours faithfully,



Albert Kofi Thompson  
EH/ACD/19/0006  
(Investigator)

COLLEGE OF EDUCATION STUDIES  
FACULTY OF HUMANITIES & SOCIAL SCIENCES  
EDUCATION

**Department of Business & Social Sciences Education**

TELEPHONE: +233 03321 35411/ +233 03321 32480/3,  
EXT. (268), Direct: 35411.  
Telegrams & Cables: University, Cape Coast.



University Post Office,  
Cape Coast, Ghana.

OUR REF: DOBSSE/63/v.4/  
YOUR REF:

Date: 4<sup>th</sup> November, 2021

The Chairperson  
Institutional Review Board  
UCC  
Cape Coast

Dear Sir,

**LETTER OF CONSENT**

As the Supervisor, I write to formally inform you that I give my consent for Mr. Albert Kofi Thompson to apply for clearance from IRB in order to enable him undertake data collection for MPhil thesis titled **"Teacher Trainees' Assessment of University of Cape Coast Bachelor of Education Accounting Programme: The Case of Sandwich Students"**

I am counting on your usual cooperation.

Thank you.

Yours Faithfully,

**Prof. Joseph Tufuor Kwarteng**

(Supervisor)



UNIVERSITY OF CAPE COAST  
COLLEGE OF EDUCATION STUDIES  
FACULTY OF HUMANITIES & SOCIAL SCIENCES EDUCATION  
DEPARTMENT OF BUSINESS & SOCIAL SCIENCES EDUCATION  
UNIVERSITY POST OFFICE  
CAPE COAST, GHANA

Telephone: +233 209408788  
EXT. (268), Direct: 35411  
Telegrams & Cables: University, Cape Coast.  
Email: [dbase@ucc.edu.gh](mailto:dbase@ucc.edu.gh)  
Our Ref: DoBSSE/37/V.2/68  
Your Ref:



DATE: 8<sup>th</sup> 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. Albert Kofi Thompson, and has accordingly given the said candidate the permission to apply for ethical clearance from IRB in order to enable him to undertake data collection.

He is working on the Research Topic: "Teacher Trainees' Assessment of University of Cape Coast Bachelor of Accounting Programme: The Case of Sandwich Students."

We count on your usual cooperation.

Thank you.

Yours faithfully,

**DR. BERNARD Y. S. ACQUAH**  
**HEAD**

## UNIVERSITY OF CAPE COAST

## INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309  
E-MAIL: irb@ucc.edu.gh  
OUR REF: UCC/IRB/A/2016/1318  
YOUR REF:  
OMB NO: 0990-0279  
IORG #: IORG0009096

12<sup>TH</sup> APRIL, 2022

Mr. Albert Kofi Thompson  
Department of Business and Social Sciences Education  
University of Cape Coast

Dear Mr. Thompson,

**ETHICAL CLEARANCE – ID (UCCIRB/CES/2021/169)**

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research **Teacher-trainees' Assessment of University of Cape Coast Bachelor of Education in Accounting Programme: The Case of Sandwich Students**. This approval is valid from 12<sup>th</sup> April, 2022 to 11<sup>th</sup> March, 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,

A handwritten signature in blue ink, appearing to read 'Samuel Asiedu Owusu'.

Samuel Asiedu Owusu, PhD  
**UCCIRB Administrator**

ADMINISTRATOR  
INSTITUTIONAL REVIEW BOARD  
UNIVERSITY OF CAPE COAST