UNIVERSITY OF CAPE COAST

APPROACHES TO LEARNING AND INITIAL PROFESSIONAL DEVELOPMENT OF ACCOUNTING STUDENTS IN GHANA

KENNEDY EKYEM

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BY

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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: Kennedy Ekyem

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 Bethel T. Ababio

ABSTRACT

The study assessed the effects of accounting students' approaches to learning on their initial professional development in the University of Cape Coast. The explanatory research design and the descriptive-inferential survey design were employed in the study. The stratified sampling and the systematic sampling techniques were also employed in the study. The ASSIST Scale was used to elicit responses on the students' approaches to learning and the IPD scale, birthed out of the IESs manual, was also used to measure the students' initial professional development. Out of 210 accounting students, 207 responded to the questionnaires. Mean, standard deviation, Friedman's test and the structural equation modelling were used to analyse the data from the accounting students. Findings indicated that they are more strategic in their learning. Also, findings indicated that strategic and deep approaches to learning had a significant positive effect on technical competence, professional skills, and professional values, ethics and attitudes development of accounting students, with the deep approach being the highest contributor to the three competencies development. However, the study also revealed that there is a significant negative effect of surface approach to learning on technical competence and professional skills development; and a non-significant negative effect on professional values, ethics and attitudes. Thus, the deep and the strategic approaches to learning increase the initial professional development of accounting students. Accounting educators are entreated to create a learning environment that would stimulate the use of the deep approach to learning so as to enhance the initial competencies development of accounting students.

KEYWORDS

Deep approach to learning

Professional Skills

Professional values, ethics and attitudes

Strategic approach to learning

Surface approach to learning

Technical Competence

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DEDICATION

To my parents: Mr. Nelson Yaw Ekyem and Mrs. Mary Ekyem

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LIST OF ABBREVIATIONS

AECC	-	Accounting Education Change Commission
ASSIST	-	Approaches and Study Skills and Inventory for Students
CPD	-	Continuing Professional Development
IAESB	-	International Accounting Education Standard Board
IES	-	International Education Standards
IFAC	-	International Federation of Accountants
IPD	-	Initial Professional Development
SAL	-	Students' Approaches to Learning
SEM	-	Structural Equation Modelling

CHAPTER ONE

INTRODUCTION

The fundamental question of how to improve the competency development of accountants remain with accounting educators. Indeed, there is no shortage of theories, but there is a lack of clear evidence to inform choices among the myriad alternatives. To what extent should accounting students emphasize their approaches to learning? To what extent should students focus attention on antecedents of an individual's learning to improve their initial professional development? What significant role can the initial professional development of students play in their accounting practices? Over the years, the competency development of accounting graduates has received myriads of commentaries from scholars. Undeniably, a lot of work has sought to explain the antecedents of the competency development of accounting students, but none has married approaches to learning and the initial professional development of students. Thus, the impetus for this study is to understand and explain the functions approaches to learning play on the initial professional development of accounting students. The chapter will capture background to the study, statement of the problem, purpose of the study, significance of the study, delimitation of the study, limitation of the study and organisation of the study.

Background to the Study

The evolution of the role of accounting in recent years has resulted in several changes and development in accounting education (Blewitt 2013; Burns & Scapens, 2000; Kelman 2005). Several significant changes have impacted on accounting education, including rapid changes associated with

globalisation (Poullaos, 2004; Zammuto, 2008; Parker & Guthrie, 2011), massification (Parker et al., 2011), technological innovation (Ellingson & Notbohm, 2012; Parkinson et al, 2012; Cameron & Dickfos, 2014; Delaney et al., 2013; Abed, 2014). It is widely acknowledged that the diversity of work that qualified accountants perform today has increased (Albrecht & Sack, 2000; Howieson, 2003). This has impacted on the competency requirements of a newly qualified accountant, as evidenced by International Education Standards (IES) 2, 3 and 4 (IFAC, 2015).

Hence, any accounting educational process needs to develop the requisite knowledge, skills, abilities and attitudes within a context of realistic professional tasks which are transportable within a constantly changing environment (Matthews & Candy, 1999; Albrecht & Sack, 2000; Lysaght & Altschuld, 2000; Raelin, 2000; Helliar, 2013; McPhail, 2016). Consequently, tasks performed by accountants have expanded over the years and have necessitated the transformation of the current competencies required by accounting graduates (Siegel, 2000; Stimpson, 2000; Jackson & Lapsley, 2003; Yasin et al., 2005). Essentially, in order for markets to function efficiently, reliable and credible financial information is vital. Producing high quality financial information is supported by sound accountancy education systems that develop and improve the competence of professional accountants (Karr 2005; Power et al., 2003; Steadman & Green, 1995).

Studies conducted in both the Western world and the developing world communicate a general dissatisfaction with the competencies development of accounting graduates relative to the demands in the business world (Gabbin, 2002; Lin, Xiong & Liu, 2005). Bui and Porter (2010) intimate that the

existing gap is corollary to the fact that the accounting education programs failed to provide the graduates with potential competencies (Knowledge, skills and personal qualities) required in the modern, sophisticated technology and the rapid changed business environment. Indeed, this assertion was corroborated by employers and recruiters. In response to this criticism, several research studies were conducted and committees have been formed by the bodies and organizations concerned with the accounting profession to identify and address the problems in accounting education. Bedford Committee in 1984, the Committee to Change of Accounting Education (AECC) in 1989, Pathways Commission and Joint working group to develop a curriculum in 2010, are some of the efforts spent by these committees.

The trite recommendations consequent to all these committees set up was a strong and continuous call for a reform (Merino, 2015). This was consistent with (Middleton, 2016) assertion that, although most professional committees have drawn attention to the need for a revolution in accounting education, however, the lack of systematic development in accounting education has led this development being merely a reaction to events. According to Middleton, the most crucial factors that led to this failure are that each researcher or a committee looked at the problem from their existing environment. Apparently, respective solutions recommended were usually scattered and incoherent and it deals with special cases of a specific environment without others. This contributed largely to the inconclusive settlement on the type of knowledge and skills required for students of accounting in light of the growing global accounting profession, and are the reason that led to the lack of access to appropriate solutions to this problem.

Pursuant to the numerous calls on professional development of students and also to strengthen public trust and confidence in the accounting profession, stakeholders came with international standards that sought to improve the quality of learning outcome in the accounting education. Subsequently, accounting education is guided by the standards issued by the International Accounting Education Standard Board (IAESB) operating under the auspices of the International Federation of Accountants (IFAC). IAESB has issued a framework on education standards that aim to facilitate the global mobility of competent professional accountants through learning and development- initial and continuing professional development (IAESB, 2017). The IAESB has adopted competency approach to accounting education which specifies an outcomes-based approach in integrating technical competence, professional skills, and professional values, ethics, and attitudes.

The IAESB has classified competencies into three different types; technical competence, professional skills, and professional values, ethics, and attitudes. Learning outcomes associated with these competency-types are specified respectively in the Education Standards IES 2, IES 3, and IES 4 (IAESB, 2017). IAESB defines technical competence as "the ability to apply professional knowledge to perform a role to a defined standard". Tertiary accounting education is classified as initial professional development (IAESB, 2017) and is distinguished from continuing professional development. Initial education includes all the training that aspiring accountants need to complete in order to begin their career. In spite of the strides made in the global reform in accounting education, various authors propose that the reforms must

culminate in accounting education enabling students to possess the necessary competencies for the work place (Awayiga et al., 2010, Zraa et al. 2011).

Notwithstanding the notable global efforts by the IAESB, a critique of literature indicates good graduates are technically competent, critical thinkers, able to solve problems and are excellent communicators (Booth et al., 1999; Davidson, 2002). In an effort to improve the quality of graduates some researchers have examined the relative merits of pedagogical approaches suggesting that improved learning outcomes can be achieved by the way in which educators present their learning materials (Berry, 1993; Campbell & Lewis, 1991; Hall et al., 2004). Understanding exactly how students approach learning has been identified as an important factor in inculcating the desired learning outcome (Biggs, 1979; Entwistle & Ramsden, 2015; Marton and Saljo, 1976; Pask, 1976). According to Biggs et al. (2001) student approaches to learning are conceived as forming part of the total system in which an educational event is located, where variables including students' approaches to learning and learning outcomes interact to umbrella the educational experience (Biggs, 1979, 1987; Birkett & Mladenovic, 2002).

Accounting graduates can only become competent professional accountants if they adopt the life-long learning concept, and thereby continually adapt to changes in the business environment (Hassall et al.). Students' approaches to learning literature have identified three approaches to learning; deep approach, surface approach and strategic approach (Booth et al., 1999; Duff, 2003; Gow & Kember, 1994; Sharma, 1997). Deep learning approach of students aim at having an in-depth understanding of the whole framework of the subject matter to be able to logically apply it to real life

situations (Hassal et al., 2010). Deep learners actively engage with the content of the learning material via critical integration of pre-existing knowledge and experience (Byrne et al., 2010; Entwistle, 2001; Turner & Baskerville, 2013). On the contrary, surface learning approach focuses on learning the material of the subject matter by rote without seeking an in-depth understanding (Byrne et al., 2010; Entwistle, 2001).

Surface learners spend more time memorizing the learning material to reproduce later (Boyce et al., 2001; Turner & Baskerville, 2013). Regarding the strategic approach, students focus on the need to achieve the highest possible performance score. Strategic learners effectively organize and analyze their studies (Duff et al., 2004). Students' approaches to learning concept is driven by the constructivist view of learning where learners construct their own knowledge rather than passively receiving information. Students must be active participants in the learning process, not passive recipients of information. This was corroborated in the Abbasi (2013) report which contemplated that in order to achieve quality competency development at the higher education, accounting students should identify and solve unstructured problems that require the use of multiple information sources. The AECC's calls to change accounting pedagogy focuses remarkably to develop the constructivist learning environments.

A number of researchers have sought to measure the effectiveness of accounting students' approaches to learning and correlate these scores with their academic performance (Booth et al., 1999; Byrne et al., 2002; Duff et al. 2004; Tan & Choo, 1990). Some studies posit that students who adopt more desirable approaches to learning (i.e. score higher on Deep Approach and

Strategic Approach dimensions) perform at an academically higher level. By contrast, Duff (2003) reports no relationship between self-reported approaches to learning and academic performance, a result attributed to the poor measurement qualities of scores produced by the approaches to learning inventory administered. However, there seems to be no published work on the relationship between students' approaches to learning and their subsequent initial professional development. Thus, the study seeks to examine students' approaches to learning of final year accounting students and its effects on initial professional development using structural equation modelling (SEM) techniques.

Statement of the Problem

Arguably, the continuing interest in the initial professional development of prospective accountants can be interpreted as an expression of the public dissatisfaction in the graduates in Ghana (Tuffour Kwarteng & Servoh, 2022). The rapid changing of the environment, particularly with advances in information technology and globalisation places an essential call on the university accounting programmes to provide graduates with strong technical knowledge and the essential skills to gain employment and make an immediate contribution to a business (Albrecht & Sack, 2000; Ellington, 2017; O'Connell et al. 2015). Accounting education globally has come under criticism for failing to address the competencies of graduates in today's dynamic business environment (Liebtag, 1987; Nelson & Hackenbrack, 1989; Inman et al., 1989; Gabbin, 2002; Lin et al., 2005; De Lange et al., 2006). Evidently, universities in Ghana employ the IES which ultimately focuses on developing the competencies of prospective professional accountants.

Professional competence goes beyond knowledge of principles, standards, concepts, facts, and procedures; it is the integration and application of technical competence, professional skills, and professional values, ethics, and attitudes. However, universities in Ghana have been greatly criticized for raising limited number of accounting graduates who are critical thinkers and make logical judgments on issues independently (Sam, 2020). The teaching of accounting in universities has predominantly been described to be overly technical, for students to grasp concepts and reproduce financial statements (Owusu et al., 2019). There has been a recent upsurge in the need for accounting instructors to move beyond just the impartation of technical knowledge and equip students with a deeper understanding of principles and concepts underpinning accounting practices (Sam, 2020). Undoubtedly, the ideal role of educators is to equip students with the relevant competencies for today's job market, however, graduates will learn how to become successful professional accountants if they adopt the life-long learning concept and thereby continually adapt to changes in the business environment (Owusu et al., 2019).

Scholars (Brown & McCartney, 1995) posit that initial professional development are best developed when the students interact positively with the learning context. Biggs (1987) intimated that student learning does not take place in a vacuum. More so, in higher education research, students tend to organize their learning behaviour according to their perceptions of the learning–teaching environment (Entwistle et al., 2015; Marton et al., 1976; Van Rossum & Schenk, 1984; Ramsden, 1983; Entwistle & Tait, 1990; Trigwell & Prosser, 1991). It is therefore critical that we understand how our

students learn and how it influences the learning outcome-initial professional development. According to Biggs (1979), in achieving positive output from learning, the process (i.e. learning approach) of acquiring the knowledge must be right. Notions of deep, strategic and surface approaches to learning have become relatively ingrained in how learning is understood in the context of higher education (Haggis, 2009).

Eley (1992), Booth et al. (1999) and Byrne et al., (2009) intimate that a deep approach and strategic approach are labelled as desirable and a surface approach is characterised as undesirable or maladaptive. This research focuses on using approaches to learning as a tool in developing the competencies of accounting students in the university. Also, the study seeks to assess the influence of the students' approaches to learning on initial professional development. That notwithstanding, there appears to be no available research work on approaches to learning and initial professional development of students in Ghana. Scholars (English et al. 2004; Hall et al., 2004; Byrne et al., 2005; Byrne et al, 2010; Teixeira et al., 2013) have contended that approaches to learning of accounting students may be attributed to the country-specific learning environment of existing studies. Notwithstanding this, most of the existing studies have focused extensively on the developed countries where the learning environment is characterized by a seemingly ideal learning situation. This study, thus aims at providing insights from a developing country's perspective. Sam (2020) and Owusu et al. (2019), focused on the approaches to learning and academic achievement of accounting students in Ghana and revealed that most of the students adopted the strategic approach. They further recommended the need for an intervention to encourage deep

learning approach. In contrast, this study used the Partial Least Square approach to establish the relationship and further assess the predictive effect of the approaches to learning on initial professional development of accounting major students in the University of Cape Coast.

Purpose of the Study

The general objective of the study is to assess the effect of approaches to learning on initial professional development of accounting students in the University of Cape Coast. The specific objectives were to;

1. determine the dominant approach to learning employed by accounting students.
2. determine the dominant initial professional development competency of accounting students.
3. assess the effect of surface learning on initial professional development of accounting Students.
4. assess the effect of deep learning on initial professional development of accounting students.
5. assess the effect of strategic learning on initial professional development of accounting students.

Research Questions

1. What is the dominant approach to learning of accounting students?
2. What is the dominant initial professional development competency of accounting students?

Research Hypothesis

H_{1a}: *Surface approach negatively affects technical competence development of accounting students in Ghana.*

H_{1b}: *Surface approach to learning negatively affects the professional skills development of accounting students in Ghana.*

H_{1c}: *Surface approach negatively affects the professional values, ethics and attitude development of accounting students in Ghana.*

H_{2a}: *Deep approach to learning positively affects technical competence development of accounting students in Ghana.*

H_{2b}: *Deep approach to learning positively affects the professional skills development of accounting students in Ghana.*

H_{2c}: *Deep approach to learning positively affects the professional values, ethics and attitude development of accounting students in Ghana.*

H_{3a}: *Strategic approach to learning positively affects technical competence development of accounting students in Ghana.*

H_{3b}: *Strategic approach to learning positively affects the professional skills development of accounting students in Ghana.*

H_{3c}: *Strategic approach to learning positively affects the professional values, ethics and attitude development of accounting students in Ghana.*

Significance of the Study

The study would help both domestic policymakers and international policymakers (i.e., IFAC) to provide quality Accounting education and subsequently produce competent accountants in the world. The findings of this study may provide guidance to educators to adopt effective teaching and learning component to improve the desired students' learning outcomes. The study also adds to the limited extant literature regarding approaches to learning and initial professional development of accounting students in developing countries, specifically Ghana. The study is significant to students

as it provides evidence on the need to adopt the right approach to learning accounting to enhance their initial professional development and any subsequent career development.

Delimitation of the Study

Students' approaches to learning literature has adequately addressed the antecedents and consequences of approaches to learning. Notwithstanding that, this study focuses solely on approaches to learning and its effect on the initial professional development of accounting students. The initial professional development as proposed by IEASB has five dimensions; however, this study is delimited to three of the dimensions-technical competence, professional skills and professional values, ethics and attitudes. According to IAESB 2017 annual report, the three dimensions form the professional accounting education component of a professional accounting education programme that aims to develop the professional competence of a professional accountant. The study is delimited to only final year Accounting Major students in the University of Cape Coast. The study area therefore excludes all other universities offering Accounting in Ghana. The results of the study therefore, can only be generalised in University of Cape Coast since the learning contexts in other universities may be different. However, the significance of the findings was not compromised. Furthermore, this study is strongly associated with the position of the Constructivist Learning Theory and Goal Orientation Theory as the theoretical basis. Again, Biggs' (1993) 3P model was adapted in explicating the interplay between approaches to learning and initial professional development of accounting students. Structural Equation Modelling was employed in this study.

Limitations of the Study

Byrne et al. (2005) intimated that the Approaches and Study Skills and Inventory for Students (ASSIST) would only yield valid and reliable scores on the learning approaches of a group of students, but would fail in capturing fully the complicated individuals' learning. Another major limitation of the study was the use of questionnaire which stalled the researcher from eliciting further details regarding the respondents' responses. Relative to the effects of this limitation, the respondents were sensitized to the prospects of the study to help elicit genuine responses. Again, there is paucity of extant literature on Approaches to Learning and Initial Professional Development of Accounting Students in the Ghanaian context, this notwithstanding, the theoretical position of the foregoing variables of study are quite clear and outstanding, hence the validity of the study would not be compromised in any way.

Organisation of the Study

The first chapter captured the introduction to the study; a background to the study; statement of the problem, purpose of the study; research questions, significance of the study, delimitation of the study, limitations of the study, and the chapter organisation. Also, a review of related literature was dealt with in the second chapter. The third chapter focused on the research methodology of the study; specifically, research approach, the study design, the study area, population of the study, sampling and sample size, data collection techniques, data analysis techniques, sources of data, tool for data collection and the structure of the questionnaire, validity and reliability of data. Chapter four further dealt with the presentation and analysis of data gathered from the respondents. Finally, Chapter five presented the summary of the study, conclusions drawn from the findings and then recommendations.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter reviews related and relevant literature on approaches to learning by scholars and other researchers and its effect on initial professional development. It reviews relevant previous work including relevant theoretical reviews. It explains some of the theories that frame the present study; and the empirical reviews and document the results of other studies that are closely related to the research work.

Theoretical Review

This section will address the theories that explain the relationship between approaches to learning and initial professional development. These theories include the Constructivist Learning theory and the Goal Orientation theory.

Constructivist learning theory

Constructivism is an approach to learning that posits that people actively construct or make their own knowledge and that reality is determined by the experiences of the learner (Elliott et al., 2001, p. 256). The demonstrable consequences of this view are highlighted in the fact that the focus is on the learner and not on the subject to be taught; and also, the position that knowledge is attributed to experiences constructed by the learner. This is consistent with Arends (1998) assertion, that constructivism believes in personal construction of meaning by the learner through experience, and that meaning is influenced by the interaction of prior knowledge and new events. This prior knowledge influences what new or modified knowledge an

individual will construct from new learning experiences (Phillips, 1995). The theory of constructivist learning is vital to understanding how students learn. Essentially, the Constructivists theory creates the latitude to appreciate students and their learning.

Students' approaches to learning align comfortably with the contemporary notion of constructivist learning. SAL researchers claim their instruments are based on a theoretical rationale grounded in how students actually go about learning tasks in educational settings. Ramsden (1992) suggests students' learning outcomes are directly influenced by their orientation to learning. An individual's orientation to learning is likely to be influenced by their prior educational experiences (Biggs, 1987). Pursuant to the principles of constructivism, students' approaches to learning literature discusses three approaches; surface approach, deep approach and strategic approach. The concept of students' approaches to learning is consistent with constructivists position in terms of the active participation of students, the construing of educational tasks and meaning individually. According to Biggs (1993), learners' approaches to learning are predominantly dictated by their prior experiences which eventually affects the learning outcome. Indeed, the primary goal of accounting education is to improve its quality of learning outcome with regard to several pertinent factors (Cholewinski, 2009; Jackson, 2006; Jia, 2010). The relevance of the constructivist learning theory in this study is by virtue of the fact that, this study is focused on the sole activities of the learner (the prior experiences, creation of knowledge, and active participation of the learner) and its consequence on the learning outcome-initial professional development.

Goal orientation theory

The concept of goal orientation is based on a social-cognitive theory of achievement motivation that specifies the kinds of goals that direct achievement-related behaviours (Maehr & Zusho, 2009). Achievement goal orientation (Dweck & Leggett, 1988; Ames & Archer, 1987) is a general motivation theory, which refers to the fact that the type of goal toward which a person is working has a tremendous impact on how they pursue the goal. Goal orientation research has its origin in a dichotomous framework distinguishing mastery and performance goals (Dweck & Leggett, 1988). When the orientation is toward truly understanding or mastering what is being taught or at least getting better at something, one speaks of a mastery orientation. An orientation toward simply obtaining a grade and/or outperforming others is a performance orientation (Elliott & Dweck, 1988). In general, individuals with a mastery goal orientation will work very hard, persist in the face of difficulty and frustration, will take risks and try things that they don't already know how to do.

The grade-oriented students are intent on appearing competent or at least avoiding appearing incompetent. As a result, they are less likely to persist if they make an error or have to put forth a lot of effort because either of these two outcomes would label them as incompetent. Research on goal orientation addresses questions about why students engage in academic work the way they do (Huang, 2012). According to DeShon and Gillespie (2005), studies of goal orientation focus on the choice of behaviour in achievement situations. Performance orientation involves an interpersonal desire to demonstrate competence and/or to outperform others, while mastery orientation is an

intrapersonal desire to enhance competence (Senko et al., 2011). The underlying performance orientation related desires of competence demonstration or outperforming others did not exclude each other in previous research. However, in reality, students are often led by the desire to pass their exams instead of the desire to outperform others as a way of demonstrating their competence.

An approach to learning is a concept about students' motivation on learning and the use of appropriate strategies by students (Zhang & Stenberg, 2000). It describes the nature of the relationship between the student, context, and task (Biggs et al., 2001). As it is known that the choice of behaviour (goal orientation) is related to achievement situations, it is worthwhile knowing if and how goal orientations affect the learning outcome of students in higher education. Elliot and McGregor (2001) found that goal orientations led to different patterns of learning behaviour. A distinction in such behaviours is found between surface learning and deep learning (Biggs et al., 2001; Entwistle, 1991). The latter is characterized by strategies such as elaborating on ideas, thinking critically, and linking or integrating one concept with another. Deep learning directs a student's attention toward comprehending what the author wants to say. It is associated with a willingness to understand and be engaged in meaningful learning. Surface learning, on the other hand, is characterized by strategies such as rote learning and reproduction of the learning materials and is associated with an economic way of being engaged in learning (Aharony, 2006; Biggs, 1987; Vanthournout et al.2013).

Mastery goal orientations have been shown to trigger a deep-level, strategic processing of information, while performance approaches have been

shown to trigger superficial, rote-level processing (Elliot et al., 1999; Covington, 2000; Elliot & McGregor, 2001). Just like the mastery orientation, deep learning is favored by educators because of the willingness of students to really understand the learning material (Aharony, 2006). The learning behaviour that students adopt can be influenced by both the learning context and the task (Biggs et al., 2001). Knowledge of both learning behaviours and goal orientations sheds light on what students are trying to achieve but also on why they are trying to do so (Cano & Berbén, 2014). In this study, it is postulated that based on Goal Orientation Theory, students adopt specific approach to learning driven by their motive and intention which in turn stimulates a learning outcome. This theory, therefore, implies that students whose motive is intrinsic and has the intention would adopt a particular learning approach, subsequently, the quality of the outcome.

Biggs 3P model

Biggs Learning Model (1979) has dominated the higher education literature to explain one the fundamental elements that exist in students' learning. According to Biggs (1979), student learning involved three stages that are input (presage), process and output which are closely interconnected. Input variables would include curriculum content and other features in the teaching context (Biggs, 1979). Input includes the content of the subject or course that is taught and delivered to the students. Process refers to how students interact with a learning context (Biggs, 1979). Process reflects the means, techniques or approaches in which the input (knowledge) is transformed into output (Ismail, 2009). In other words, the learning approaches may be different from one student to the others. Output is the

quality or achievement of the students resulting from input and process (Biggs, 1979). Svensson (1977) found that the process of learning affects learning outcomes. This corroborates the assertion by Biggs (1979) that learning approaches has direct impact on output or learning outcomes. The review of literature regarding Biggs' 3P model generally, posits that study processes employed by a student during learning is related to both the amount learned and eventually the quality of his learning.

Input (Presage) Phase

The input phase according to Biggs (1987) refers to factors that exist prior to a learning activity. Biggs (1987) further characterized this phase with two elements; personal and situational elements. The personal factors are dependent on the learner and may include the student's prior knowledge, abilities, intelligence, personality, conceptions and usual ways of learning (approaches and styles), and motivational factors, such as expectations and values. More precisely, it is widely recognized that effective and efficient learning need to be individualized, personalized and learner-controlled (Marton & Saljo, 1976). Situational factors are those factors that create the climate or environment in which the learning tasks are undertaken. The situational factors may encompass both the teacher and the institutional system and specifically capture the objectives, assessment methods, teaching methods, classroom climate and institutional procedure. These factors interact at the process level in order to determine the student's immediate activities related to learning, as these embody his or her approach. Many studies have focused on this phase as an antecedent on learning outcome, to wit, this study has no interest in the Presage phase.

Process Phase

This phase captures how learning tasks are undertaken, that is, the manner in which the student processes and carries out the task within a specific context. The main factor in this phase is determined by the learning activities that the student pursues. This phase is very indispensable in the Biggs model since it constantly points to the importance of what students do in order to learn. These activities that students carry out will depend on their reflection, including how they perceive themselves, and how they perceive the task and the context in which it takes place. Biggs (1985, 1987) calls this reflection "meta-learning"; it requires a certain amount of metacognition and constitutes the more or less conscious awareness and control over one's own learning. As a function of this, students may present different learning approaches in how they go about their activities. Biggs (2005) considers that the activities carried out when addressing tasks will be appropriate when they come from a deep approach, and inadequate when coming from a surface approach.

Learning outcome factors (Product Factor)

The final component of the 3P model of learning is the product factors, or more commonly referred to as learning outcomes. In this case, the learning outcomes were specified into three variables: quantitative outcomes (how much the student has learned), qualitative outcomes (how the student has learned) and affective outcomes (students' attitudes towards their study experience and level of engagement in college life). Biggs (1987a) suggests a learning task is successful if the outcome for the student includes positive feedback about the completed task, as well as an understanding of the purpose

underlying the learning task. It may not be useful to evaluate students' achievement with traditional metrics and methods. Generally, research has focussed on establishing a link between approaches to learning and available outcome measures, usually academic achievement (e.g., grade-point-average (GPA)) (Albaili, 1995; Duckwall et al., 1991; Eley, 19920. Contrarily, this study focused on the learning outcomes prescribed in the IESs in the form of a self-reported questionnaire.

To summarize, the essence of the 3Ps model is that achieving the quality of learning outcomes can largely be attributed to the activities of the learner. An important by-product of the 3Ps model is its emphasis on the process of learning and learning outcome. This is evident in the plethora of studies conducted to investigate the bilateral relationship between the approaches to learning and learning context and the approaches to learning and learning outputs (e.g., Campbell & Smith, 2001; Crawford et al., 1998; Dart et al., 1999; Dart et al., 2000; Goh, 2005; Hativa & Birenbaum, 2000; Lizzio et al., 2002; Ma, 1994; Ramsden, & Entwistle, 1981; Trigwell et al., 1999; Zeegers, 2001). However, this study attempts to focus on the way the students learn (process) and its effect on their Initial Professional Development (Product).

Conceptual Review

Conceptions of learning

Preliminary evidence about students' learning conceptions was observed in research conducted by Marton and Säljö (1976). Swedish university students were asked to read an academic article and then answer questions about its meaning. Subsequent analysis of their responses identified

two basic conceptions regarding the content of the learning task: surface and deep. In the surface learning conception, students focused on the text itself so that they could reproduce it later on. In the deep learning conception, students directed their attention towards what the learning material referred to-the signified in order to comprehend the author's intention and to construct meaning. These learning conceptions were related to learning outcomes, which were of a higher quality in students whose learning conceptions were deep. Subsequently, the terms 'deep' and 'surface' were "broadened and used to describe general approaches to studying" (Entwistle et al., 2001). These are ways of experiencing and handling learning situations, and refer both to people's intentions (motivation) and what they actually do (learning strategy).

Learning conceptions and approaches to learning are two interrelated but not identical constructs. A subtle difference concerns the respective focus of each. In studies of approaches to learning, "learners are engaged in reflecting on their engagement in a learning task. Their focus is in the object of learning and subsequently on themselves focusing on the object of learning. In studies of conceptions of learning, the learners' focus is supposed to be on learning itself (in a general sense)" (Lewis et al. 2001). Students' conceptions of learning can be classified into a hierarchical framework (Marton et al., 1993; Saljo, 1979; and Van Rossum et al., 1985). Students' learning conceptions could be classified as one of the following: Learning as memorizing, learning as acquiring knowledge, learning as application of knowledge, learning as making connections between parts of a subject and between subjects and learning as interpreting and understanding reality.

According to Ramsden (1992), learning as memorizing; learning as acquiring knowledge and learning as application of knowledge are external to the student while learning as making connections between parts of a subject and between subjects and learning as interpreting and understanding reality are internal and emphasize the personal aspect of learning. Further, Saljo (1979) highlights that each higher order conception subsumes all the conceptions below it. Thus, a student whose learning conception is 'application of knowledge' would implicitly also include 'learning as acquisition of knowledge' and 'memorization' as part of his/her learning conception. At the higher levels, associated with the constructive perspective, learning is seen as an active process in which learners construct their own meaning. That is, something student does to understand the world around them. At this juncture, it is important to understand that SAL researchers generally see conceptions of learning as malleable and dynamic, varying in response to the learning environment, and students' motives for learning. This view of learning contrasts with research considering learning styles, which views learning as a relatively fixed entity or trait.

At the same time, conceptions of learning are considered a presage factor leading to the adoption of particular learning approaches which subsequently affects the learning outcome (Biggs, 1989; Dart et al., 2000). Crawford et al. (1998) found that students' prior learning experiences and their prior study orientations, as manifested in the way students conceive a subject, influence students' approaches to learning. The relevance of the conceptions of learning palpably evident in literature and cannot be underemphasized. However, pursuant to the core impetus of this study, conceptions, and to a

larger extent the presage phase, is not a variable of concern. And it is as a result of the fact that more recent attempts by researchers have failed to assess the effect of approaches to learning on learning outcome devoid of the presage factors. Consequently, the scales that capture the conceptions of learning of students was discarded as opposed to the ordinary components of the ASSIT scale. All presage factors are not variables of interest in this study.

Approaches to learning

The approaches to learning is seen by many educators as powerful means of modelling student learning and the quality of learning outcomes (Duff et al., 2002). Approaches to learning refer to the intention students have facing a learning situation, as well as the corresponding strategies by which they achieve learning outcomes. An approach to learning is a concept about students' motivation on learning and the use of appropriate strategies by students (Zhang & Stenberg, 2000). It describes the nature of the relationship among the student, context, and task (Biggs et al., 2001). The approach to learning concept is a qualitative description of what and how students learn (Ramsden, 1992). Further, approaches to learning are not characteristics of students. Rather, they represent what a learning task or set of tasks is for the learner. An approach describes a relation between the student and the learning he or she is doing' (Ramsden, 1992).

The students' approaches to learning literature is characterised by three constructs (Marton & Saljo, 1976; Marton, 1988; Biggs, 1993): a deep approach, a surface approach and a strategic approach. These different approaches do not constitute a characteristic of the student but are, rather, response to the student's perception of the context within which teaching and

learning takes place. Approach to learning research focuses on how students approach their learning in specific learning contexts, conceiving learning to take place within the learning context. Thus, learning approach denotes how students prepare themselves for further stage of life and what the quality they achieve through the higher education programme (Malhi,2013). The approach to learning which students experience in response to their learning context will lead to qualitatively different and distinct types of learning outcomes.

The study focuses on all the three approaches to learning. A deep approach entails looking for meaning in the matter being studied and relating it to other experiences and ideas with a critical approach. Deep Approach is to engage in meaningful learning (Biggs, 1987, 1993; Tait & Entwistle, 1996; Marton et al., 1996). The student is intrinsically interested in the subject matter and attempts to maximise meaning from the learning experience, which eventually leads to active learning processes (Biggs, 1987; Biggs & Tang, 2011; English et al., 2004; Entwistle, 2000; Gordon & Debus, 2002). On the other hand, the surface approach's primary motive is to avoid failure. As the term surface suggests, it is a form of rote learning which aims at a narrow target of passing the required assessments and achieving the academic certification. More so, the strategic approach seeks to maximise the academic performance by effective study organisation, analysis of the structure and content of previous examinations to predict questions and an awareness of assessment demands.

A critical review of the several studies on approaches to learning, conclusively suggests that the approaches to learning cannot be construed to mean a stable or a personal trait of an individual. However, approaches to

learning has been characterized as “relational”, meaning they arise out of the relationship between students and their environments. Surface, deep and strategic approaches to learning are the prevailing approaches to learning in theory. The approaches to learning characterize the congruent motive-strategy packages, each comprising a motive and related strategy. Indeed, the trajectory of research studies on SAL has proven that deep approach can be seen to reflect what are generally held to be aims of higher education. The approach to learning a student adopts affects the effectiveness of their learning, independent of their own learning goals. A student who employs deep strategies reads widely and integrate new information with previous knowledge; surface strategies would read minimally and limit themselves to the information required to simply pass the subject.; and students employing achieving strategies are strategic about what they read, and organise their time to maximise their grades.

Surface approach to learning

Surface approach tends to jump through the necessary hoops in order to acquire the mark, or the grade, or the qualification instead of becoming interested and understanding the subject or content (Lubin, 2003). It treats students as passive learners and lacks the quality acquirement through deep approach to learning. On the one hand, surface approach to learning refers to the students’ intention to complete task requirements with minimum efforts. The surface approach is marked by the reproduction of knowledge, often through rote memorization, in order to avoid failure. This pattern of learning results in superficial study behaviours that meet minimum requirements to complete course tasks by expending as little effort as possible (Gordon &

Debus, 2002; Hall et al., 2004). Students do not seem to enjoy learning and they view the process as externally imposed (Lucas, 2001). Low levels and quality of understanding are unfortunate outcomes of the surface approach (Diseth & Martinsen, 2003; Marton & Säljö, 1976; Trigwell et al., 1999).

Entwistle and Ramsden (1983) asserts that students adopt surface approaches in higher education due to insufficient time, heavy workload, high anxiety, and lack of freedom in choice of learning strategies. More recently, research has suggested that the use of surface approaches, particularly linked with memorisation and rote learning, are over-simplifications of the learning approaches adopted by accounting students (Lucas & Meyer, 2003). Surface approaches are therefore considered less favorable because of educators' obvious discomfort with them as appropriate ways to learn, as well as their links to poorer academic performance (Byrne et al., 2002; Diseth, 2003; Diseth & Martinsen, 2003; Duff, 2004; Evans et al., 2003; Kates, 2002).

The review of extant literature implies that surface learning approaches may not be conducive to preparing students to assume roles in the dynamic and challenging accounting practice. Indeed, today's students, as intimated by Crittenden et al., 2019, need specialized skills and exposure to technologies so they are capable of analyzing data, integrating information, developing meaningful recommendations, and making important decisions that add value. However, there is growing recognition of some tasks where the surface approach is embraced and favored such as gaining immediate assessment about newly learned content or grasping basic facts and foundational material as a preface to higher levels of learning. It can also be posited from literature that students are more likely to adopt a surface learning approach when

instructors are teaching from an "information transition" perspective. Again, it must be said that the majority of the studies indicate that accounting students are more likely to adopt surface approaches rather than deep approaches to learning.

Deep approach to learning

Deep approach of learning motivates students towards active inquiry to understand the materials or subject, to interact vigorously with the contents, to relate the concepts with previous knowledge and real-life experience (Lubin, 2003). It enables students to acquire desired knowledge, skills and personal attributes; empowers them to optimize their potential; promotes deep understanding, reasoning and higher-order thinking; and fosters self-directed and lifelong learning (Malhi, 2013). Deep approach to learning refers to the use of the most appropriate cognitive activities for completing the task properly and meaningfully. Here students analyze, synthesize and evaluate main ideas, author's argument, themes, principles or successful applications to get the proper underlying meaning of the task as a whole. They integrate the task with real life situations to compare with their personal experiences and with other relevant knowledge (Biggs, 2003; Entwistle & Ramsden, 1983; Ramsden, 2003).

Prosser and Trigwell (1999) mentions that, in adopting deep approach, students have an intrinsic interest in the task and an expectation of enjoyment in carrying it out. In addition, good teaching and appropriate assessment system foster students' interest in a subject, which are crucial factors for adopting deep approaches to learning in higher education. Moreover, students' background knowledge and their level of interest provide favourable

conditions for deep approaches (Entwistle & Ramsden, 1983). Academics often believe that the ultimate purpose of higher education is "critical thinking" (Entwistle, 1997). The deep approach to learning is built on this premise of highly elaborate processing. Students using a deep approach set an intention to understand the meaning in the subject matter. They enjoy engaging in intellectual challenges, exploring interrelationships between concepts, and learning for intrinsic reasons (Diseth, 2003, 2007b; Sun & Richardson, 2012).

Many business educators strongly advocate the deep approach for learning (English et al., 2004; Kates, 2002; Luthfa, 2019) and some believe it is essential for preparing students for business professions (Hall et al., 2004). To support this notion, the marketing education literature includes many novel ideas regarding the course and program content, specific assignments, and modes of instructional delivery that encourage deep learning (Diamond et al., 2008; Kates, 2002; Vander Schee, 2011). Deep approaches have been linked with the development of critical thinking skills (Dahl et al., 2018), greater adaptability and flexibility (Schlee & Karns, 2017), perceptions of relevance (Entwistle & Tait, 1990), and establishing the foundations for lifelong learning (Boyer et al., 2014). Additionally, deep approaches are touted as the most desirable and valuable approach (Bradford, 2004), often because of consistent relationships found with positive learning outcomes and high-quality teaching (Trigwell & Prosser, 1991; Trigwell et al., 1999;).

It is clearly entrenched in SAL that the most desirable approach is the deep approach and it is largely attributed to the high quality of learning outcome associated with the approach. It can also be inferred; students who

follow deep approach, have a focus on the meaning in the argument, the message, or the relationships. This is understandable, because the deep approach to learning is the 'natural' approach and desirable in highly demanding university contexts. Therefore, it would seem appropriate that if a high level of understanding of a discipline is desirable among students, then it is important to encourage deep approaches to learning. More precisely, the dictates of IFAC suggests that the deep approach should be encouraged in accounting education to help yield in the development of competencies of aspiring professional accountants. Empirically, some studies, however, posited weak or no relationships between deep approaches and academic achievement.

Strategic approach to learning

This is referred to as strategic (Entwistle & Ramsden, 2015), or achieving (Biggs, 1987) learning. Strategic learners use 'cues and clues' about assessment and are motivated by learning that results in positive outcomes such as the achievement of high grades (Ramsden, 1979). The achieving motive is like the surface approach in that it is focused on the product (getting an "A" or winning an award). The strategy is to maximize the chances of obtaining high marks. While this hopefully involves a high level of effort to learn the topic (like the deep strategy), the learning is the means, not the end. In this approach learners organise their learning with the objective of achieving a high or positive outcome. Strategic learning can involve a combination of both deep and surface learning strategies depending on the tasks at hand. Strategic learning when closely allied with deep approaches to learning can deliver both success and good understanding of a subject.

The achieving-approach to learning, theorized (Biggs, 1987) and tested by a number of researchers (Kember & Leung, 1998; Sachs & Gao, 2000), is the alternative to both the deep and surface learning approaches. This approach to learning, according to Biggs' (1987) conceptualization, suggests that individuals may be motivated to compete and to obtain high academic grades. This achieving approach to learning involves study strategies that are context oriented and involve specific habits, such as systematic organization and the cost-effective use of effort and time management. Biggs' (1987) conceptualization also indicates that the achieving-level dimension may associate itself with both surface and deep-level approaches. For example, a student may systematically rote learn in order to obtain high academic grades or, alternatively, to gain deep meaning of contents, thereby constituting the approaches of surface achieving and deep achieving, respectively. Similar to these two approaches, the achieving approach encompasses both motive and strategy (Biggs, 1987).

Success is the underlying motive of the strategic learning approach and the intent is to excel on performance and achieve the highest grades possible by outperforming others (Ballantine et al., 2018; Diseth, 2007b; Entwistle et al., 2000). The strategic approach may incorporate elements of surface or deep processing (Hasnor et al., 2013), depending on which has the greater likelihood of producing high grades (Ballantine et al., 2018; Newble & Entwistle, 1986). As such, the strategic approach can result in a deep level of understanding of the material, but such learning is viewed by the student as incidental rather than the primary goal (Gordon & Debus, 2002). Some educators consider the strategic approach to be favorable and endorse its use

(Ballantine et al., 2018; Diseth, 2007b; Duff, 2004; Richardson, 2013; Rodriguez, 2009). Not surprisingly there exist many positive associations between the strategic approach and academic performance outcomes such as grades (Byrne et al., 2002; Diseth & Martinsen, 2003).

With recourse to the existing literature on SAL, students adopting a strategic approach have an achievement orientation, tend to pay careful attention to course assessment criteria, actively search for clues about what is testable material, and develop highly regulated methods of studying through the purposeful organization of effort and the effective management of time, materials, and environments. Studies have also suggested that a strategic approach measures "organized studying", "effort management" and "monitoring study". Indeed, many studies have concluded that the strategic approach is positively correlated with high learning outcomes. Be that as it may, other studies in other contexts have also concluded that adverse or no relationship exists between the strategic approach and leaning outcome. This essentially, posits the entrenched inconclusive character of the strategic approach on learning outcomes. However, the strategic approach's is recognized in several studies, hence its relevance in this study among accounting students.

Initial professional development (IPD)

Academic performance of students has been one of the most common measures regarding leaning outcome in accounting education. Examination results have commonly been used as a measure of learning outcome in studies both within the accounting discipline and in other contexts (Byrne et al., 2002; Trigwell & Prosser, 1991). Again, students' academic achievement is reflected

in their GPA, which is a critical factor in hiring decisions because it predicts performance (Jenkins, 1998). Academic achievement is the result of aligning students intellectual effort, i.e., critical thinking, with the criteria for high grades. Their use is justifiable, as they represent the way in which educational institutions or bodies signal successful achievement of learning objectives (Byrne & Flood, 2008). That notwithstanding, learning outcome includes the competencies of accounting students are also a learning outcome enshrined in the accounting curriculum.

Businesses need employees who think analytically and multi-dimensionally and integrate knowledge from many subjects while solving problems (Greiner et al., 2003). Business students are expected to develop the capacity to think, learn and behave autonomously, as well as understand organizational events from several perspectives and explore their different causes (Bartunek et al., 1983). Accordingly, skills that help business students to apply content material to the solution of real problems include problem solving, analytical skills and the ability to work as a team member, solve unfamiliar problems and plan work (Levenburg, 1996). The accountancy profession's ability to satisfy users' information needs contributes to an efficient economy that creates value to society. Indeed, the overall objectives of professional accounting education are to (a) develop the professional competence of aspiring professional accountants, and (b) develop and maintain the professional competence of professional accountants.

Initial Professional Development is the learning and development through which aspiring professional accountants first develop professional competence leading to performing a role as a professional accountant. IPD

includes professional accounting education, practical experience, and assessment. The International Accounting Education Standard Board (IAESB) defines Professional Accounting Education as Education and training that build on general education, and develop (a) technical competence, (b) professional skills, and (c) professional values, ethics, and attitudes. IPD continues until aspiring professional accountants can demonstrate the professional competence required for a role as a professional accountant. That notwithstanding, Professional accounting education programs are designed to support aspiring professional accountants to develop the appropriate professional competence by the end of Initial Professional Development (IPD). They may consist of formal education delivered through degrees and courses offered by universities, other higher education providers. O'Connell et al. (2015) point out that accounting education is primarily concerned with the initial professional development of accountants.

A number of the IESs include learning outcomes that establish the content and the depth of knowledge, understanding, and application required for each specified competence area. Learning outcomes can be achieved within the context of a work environment or a professional accounting education program. An example of a learning outcome for the technical competence of a professional accountant working in a financial accounting role is to "prepare financial statements, including consolidated financial statements, in accordance with International Financial Reporting Standards ("IFRSs") or other relevant standards". Achieving this learning outcome requires knowledge of the IFRSs, the ability to assess their relevance to the situation, and the ability to apply the requirements of the relevant IFRSs. The

IESs include competence areas that are categories for which a set of related learning outcomes can be specified.

The IAESB is an independent standard-setting body that develops education standards, implementation support materials, and application guidance for use by IFAC member bodies and other interested stakeholders in professional accounting education, such as: universities and education providers, employers, regulators, government authorities, accountants, and prospective accountants (IAESB, 2017). Under a shared standard-setting process involving the Public Interest Oversight Board (PIOB), which oversees the activities of the IAESB, and the IAESB Consultative Advisory Group, which provides public interest input, the IAESB develops its standards and guidance (Humphrey et al., 2011). IFAC provides financial, operational, and administrative support to the IAESB. This arrangement enables the highly qualified volunteers serving on the IAESB to focus purely on its standard-setting activities (IAESB, 2017).

The education of professional accountants in Ghana may start at the university and is completed after the degree via professional training experience and the ICAG examination (IAESB, 2017). It is, therefore, important to explore to what extent the IPD of aspiring professional accountants are developed in the University, where much of the professional accountancy preparation work is carried out. Adoption of the International Education Standards formulated by the IAESB at university level is a fundamental step for the education of professional accountants, offering them the opportunity to play an active role in the international debate on improvement of the profession (ICAG, 2019). Ignoring these international

standards (IES) would mean producing professional accountants without an international vision of the profession and with competences that can be used mainly in the local area (IAESB, 2017). The IESs formulated by the IAESB are eight (8), however for the purposes of the study, the researcher focused on IES 2, 3 and 4.

IES 2 requires that professional accounting study be part of a pre-qualification program and it should be long enough to enable candidates to gain necessary content of knowledge and competency in the areas of accounting and finance, organization and business, and information technology (IAESB, 2017). The broad topical requirements in these areas have not greatly changed over the years, but the content can change dramatically as world business changes. IES 3 discusses the professional skills requirement. The skills include intellectual skills, technical and functional skills, personal skills, interpersonal and communication skills, and organizational and business management skills (IAESB, 2017). General education requirements can assist in obtaining these skills. IES 4 prescribes the professional values, ethics, and attitudes required and the minimum subject areas required to attain this standard (IAESB, 2017).

Aspiring Professional Accountant

An aspiring professional accountant is an individual who has commenced a professional accounting education program as part of IPD (IAESB, 2017). IPD is the learning and development through which aspiring professional accountants first develop competence leading to performing a role as a professional accountant. IPD builds on general education and includes professional accounting education, practical experience, and

assessment. IPD continues until aspiring professional accountants can demonstrate the professional competence required for their chosen roles in the accountancy profession (IAESB, 2017).

Technical Competence (IES 2)

The inclusion of technical competence in IPD lays the base for performing a role as a professional accountant (IAESB, 2017). Technical competence is the ability to apply professional knowledge to perform a role to a defined standard. Further development of technical competence is a focus of Continuing Professional Development (CPD). Establishing the technical competence that aspiring professional accountants need to develop and demonstrate, serves several purposes. It protects the public interest, enhances the quality of the work of professional accountants, and promotes the credibility of the accountancy profession (IAESB, 2017). Competence areas within technical competence include financial accounting and reporting, taxation, and economics , management accounting and control, taxation, business and commercial law, audit and assurance, finance and financial management, financial markets, economics, business environment, international business and globalisation, corporate governance, business ethics, organisational behaviour, management and strategic decision-making, marketing, general knowledge of IT, designer of information systems, professional values and ethics, and quantitative methods (IAESB, 2017).

The learning outcomes for technical competence are to be achieved by aspiring professional accountants by the end of IPD, regardless of their intended future accounting specialization or role (IAESB, 2017). These learning outcomes provide the base to enable professional accountants to

develop specializations in different accounting roles, for example an audit engagement partner or taxation specialist. According to IAESB (2017) learning outcomes establish the content and the depth of knowledge, understanding, and application required for each specified competence area. Learning outcomes can be achieved within the context of a work environment or professional accounting education program (IAESB, 2017). Also, the learning outcomes associated with one competence area may be achieved across more than one course or subject dedicated to that area. In fact, the learning outcomes for financial accounting and reporting may be achieved across two or more financial accounting and reporting courses or subjects. The achievement of some learning outcomes may extend across several different courses or subjects, none of which may be devoted solely to that competence area prescribes the professional accountancy knowledge that all candidates require to function competently as professional accountants (IAESB, 2017).

The standard sets out in IAESB and IFAC manual clearly spells out the knowledge required in three key areas: accounting, finance and related knowledge; organizational and business knowledge; and IT knowledge. The IAESB manual unequivocally states that the knowledge may be gained in an academic environment (e.g., a university degree) or within a member body's own program of professional study. Indeed, the standard acknowledges the constant change and expansion of knowledge required for professional accountants and the necessity to adapt to the needs of the market. The standard also acknowledges that, as a result of these factors, the weighting of subjects can vary from one program to another. That notwithstanding, there seems to

be no literature that has matched approaches to learning and IES 2 development.

Professional Skills (IES 3)

The changes in the Organization's accounting skills requirements, needs fundamental changes in accounting education systems to meet these requirements. But the reality indicates otherwise, many professionals and employers feel that the accounting education does not provide the required quality of graduates that companies need today (Feucht et al., 2011; Jackling and De Lange, 2009). The great acceleration in the business environment has not offset by a fundamental change in accounting education to meet the needs of the new business environment. In many cases, the changes and developments taking place in the business environment not just incompatible with accounting graduates' competences, but even the new business environment rejects the traditional role of accountants because they not contributing to add value to their clients. This has caused a risk to the accounting profession. If educational institutions are unable to graduate accountants who meet the needs of the organization, the employers will be looking for people with another kind of knowledge that meets their requirements (Kushniroff, 2012).

IES 3 describes professional skills as the mix of skills that candidates need in order to qualify as professional accountants. The aim of this standard is to ensure that aspiring professional accountants are equipped with the appropriate mix of skills (intellectual, technical, personal, interpersonal, and organizational) to function as professional accountants in an increasingly complex and demanding environment. This IES 3 further defines skills as ‘the

capabilities required by professional accountants to demonstrate competence.' Capabilities include knowledge, skills, professional values, ethics and attitudes, and are aspects of competence that can be transferred across different environments. This International Education Standard (IES) prescribes the learning outcomes for professional skills that aspiring professional accountants are required to achieve by the end of Initial Professional Development (IAESB, 2017). Professional skills are the; intellectual, interpersonal and communication; personal and organizational skills that a professional accountant integrates with technical competence and professional values, ethics, and attitudes to demonstrate professional competence (IAESB, 2017).

One of the main challenges with this standard is understanding its intent. The standard looks at knowledge, skills, and abilities attained, not just knowledge (IAESB, 2017). This makes it difficult to create one method of achieving the standard. The capability to use the knowledge gained must be shown, and it can take years to develop this competency. In developed countries such as the USA, Australia, and New Zealand, competencies for accountants have been determined. It would be beneficial for developing countries if a model were built from these competencies for them to follow as it may boost their attainment. The benchmarking project will assist in determining where the developing countries are today compared with developed countries. It is important that the benchmarking promote high standards for all rather than using a common denominator approach. The relevance of any development intervention as intimated by scholars should be determined by an assessment of the requirements of the job.

These requisite skills as prescribed by literature, IFAC, other committees and IAESB are tailored to enable accountants to perform competently. A review of the literature indicated that the prescribed professional skills are what employers and HR managers expect students to possess. More so, there has been an increasing focus on professional skills and a considerable body of research in this area. A common theme emerges and can be summarized as, accounting educators worldwide are being urged to produce accounting graduates with a broader set of skills and attributes encompassing more than purely technical accounting expertise. And this is absolutely consistent with the framework posited by IAESB, specifically in IES 2. What is important, and perhaps deserves emphasis, is that how all these requisite skills can be achieved. It then corroborates the need to assess the specific approach to learning employed by accounting students and its consequences on the professional skills development.

Professional Values, Ethics and Attitudes

The scandals that were witnessed among Enron, WorldCom, Sunbeam, Xerox and Tyco in the US, HIH and Harris Scarfe in Australia and Parmalat in Europe have prompted public criticism of business and accounting practices. In particular, there has been criticism of the professional ethics displayed by some accountants and auditors. Business failures have exposed a culture of aggressive and creative accounting among some accountants. The concern for the accounting profession is that public confidence in accounting, and the auditing function in particular, has been undermined. The effect on the accounting profession's reputation is considered by some to be so severe that

the profession is facing a credibility crisis (Earley & Kelly 2004, Zabihollah 2004).

Responses at the regulatory, professional and industry levels have been well documented. However, according to Smith (2003, p. 47), new laws "will not restore confidence in capital markets. Confidence will only be restored by ethical leadership from the accounting profession, business community, and government''. There is now an increased awareness of ethics education in many professional programs and accounting curricula (Titard et al. 2004). In reviewing post-Enron accounting education, Ravenscroft and Williams (2004) comment that the entire accounting curriculum should be "demythologised" in order to examine where accounting education may have gone wrong in the past. Enriching ethics in accounting education and improving the moral behaviour of its members is viewed as one way to restore the credibility of the profession (McPhail, 2001).

In 2003, the IFAC (International Federation of Accountants) issued International Education Standard 4 Professional Values, Ethics and Attitudes**.** The aim of IES 4 (2003d) is to "ensure that candidates for membership of an IFAC member body are equipped with the appropriate professional values, ethics and attitudes to function as professional accountants. Professional values, ethics, and attitudes are the characteristics that identify professional accountants as members of a profession (IAESB, 201). They include the principles of conduct (ethical principles) generally considered essential in defining the distinctive characteristics of professional behaviour (IAESB, 2017). Learning and development continue throughout the career of a professional accountant; professional values, ethics, and attitudes achieved

during IPD are also relevant to continuing professional development (CPD) as careers of professional accountants change, and professional accountants gain exposure to a wider range of ethical issues (IAESB, 2017). This IES integrates relevant ethical requirements into professional accounting education. These relevant ethical requirements ordinarily set out five fundamental principles of professional ethics: integrity; objectivity; professional competence and due care; confidentiality; and professional behaviour. The objective of this IES is to establish the professional values, ethics, and attitudes that aspiring professional accountants need to develop and demonstrate by the end of IPD, in order to perform a role as a professional accountant (IAESB, 2017).

Professional values, ethics, and attitudes include a commitment to (a) technical competence and professional skills, (b) ethical behaviour (e.g., independence, objectivity, confidentiality, and integrity), (c) professional manner (e.g., due care, timeliness, courteousness, respect, responsibility, and reliability), (d) pursuit of excellence (e.g., commitment to continual improvement and lifelong learning), and (e) social responsibility (e.g., awareness and consideration of the public interest). The inclusion of professional values, ethics, and attitudes in IPD lays the base for performing a role as a professional accountant. Further development of professional values, ethics, and attitudes is a focus of continuing professional development. Acting in the public interest includes (a) developing an awareness and concern for impact on the public; (b) developing a sensitivity to social responsibilities; (c) lifelong learning; (d) a predisposition to quality, reliability, responsibility, timeliness, and courtesy; and (e) a respect for laws and regulations. This

supports the view that professional accountants contribute to confidence and trust in the functioning of markets and the economy in general.

This paper considers the thrust of IES 4 Professional Values, Ethics and Attitudes and addresses the issues that surround the concept of prescribing ethics education and its implementation in the curriculum. Discussion in this paper highlights the need to define ethics, professional values and attitudes applicable to accountants, evaluate the rationale for ethics education, minimise misconceptions and provide clear guidelines, methodology and development programs applicable in different cultures and environments. While limited research has been done on the ethics framework for accountants, the dimension of professional values, ethics and attitudes should be explained, defined and supported by the IFAC code of ethics. Ethics education provides a system conducive to moral change with enhanced ethical sensitivity and improved ethical decision-making skills. Further, in order to instil the significance of ethical behaviour, teaching ethics must be accompanied by practical application; ethics education should be reinforced by business organisations and professional leaders.

Review of Relevant Empirical Studies

Surface approach to learning and initial professional development (IPD)

Hasnor et al., (2013), in Malaysia examined the influence of the three different learning approaches (Deep Approach, Surface Approach and Strategic Approach) on students' academic achievement among the American Programme students of International Education College (INTEC), UiTM, Shah Alam. This study employed descriptive survey using cross sectional research design. A self-report questionnaire was used to gather information

related to the objectives of the study. The samples were drawn from the American Foundation Program at INTEC, Shah Alam. Two hundred and fifty-one (251) students were asked to complete the questionnaires. Out of them, 233 respondents returned the completed questionnaires. Students' approaches to learning (SAL) in higher education students in this study were assessed using Entwistle et al.'s (2000) ASSIST research instrument. The respondents were asked to indicate their degree of agreement with the statements, scored on a seven-point Likert-type.

Coefficient correlation was used to analyze the relationships between each independent variable (students' learning approaches) towards the dependent variable which is the respondents' academic achievement and Guildford's (1956) Rule of Thumb was applied to interpret the correlation between variables. It was found that only Surface Approach shows a correlation with academic achievement. The results showed Surface Approach had an inverse relationship with their r and p values (r= -0.213, p= 0.000) respectively. This proposed that the more the students use Surface Approach in their studies, the lower their academic achievement would be.

Trigwell and Presser (1991) studied the relationship between the observed approaches learning and the learning outcomes of 122 first-year nursing students. Using the SOLO taxonomy, they found no relationships between surface approaches to learning a qualitative or quantitative outcome measure. In a later study in the field of biology, Trigwell and Presser (1999) also made use of the SOLO taxonomy to analyse the learning outcomes, complemented with concept maps and phenomenographic methods. The 272 students involved in this study ended up in two clusters. In the first cluster,

there was relationship between low outcome measures, and high score on surface approaches. On the other hand, the second cluster reported high outcome score related to low surface approach scores. In the field of mathematics, Crawford et al., (1998) found strong correlation between 300 first-year students' observed approaches to learning and their final percentage mark in their first year mathematics course. Relatively high scores on the surface approach subscale were related to low marks in the final exam.

Anthony (2013), conducted a study and the aim of this paper was to provide a preliminary investigation into the approaches to learning of accounting students in the context of a South African university by sampling students studying a professionally accredited post-graduate programme. A further aim was to investigate the potential differences in these approaches to learning between each of the four core subjects of this post-graduate programme, as well as differences between male and female students, and students achieving differing academic grades. The Approaches to Study Skills Inventory for Students (ASSIST) was administered to a group of volunteer students all studying the Post-Graduate Diploma in Accounting (PGDA) at the University of Cape Town (UCT). The applicability of the ASSIST survey was tested via confirmatory factor analysis and thereafter the data was analysed to measure the general tendencies of students to favour either a Deep, Surface or Strategic approach to learning.

The findings of this study indicated the ASSIST survey was applicable within the African context. Barac (2012) investigated the learning approaches to the study of auditing of prospective chartered accountants also confirmed the applicability of the ASSIST scale in the African context. The PGDA

students rather felt discouraged from using a surface approach to learning – because the perceived it to be a step toward fostering competence in life-long learning. Owusu et al. (2019) explored the learning approaches of undergraduate Accounting students in Ghana and examined the differences in the learning styles of students based on their demographic characteristics. The study relied on the Approaches and Studies Skills Inventory for Students (ASSIST) scale, a set of questionnaires was developed and administered to 366 Accounting students from the University of Ghana Business School.

Sam (2020), in Ghana investigated the learning approach that most Bachelor of Education accounting students use for accounting as a course. Further, the study also examined the relationship between students learning approaches and academic achievement. Correlational design was used for the conduct of this study. Accounting education students of the University of Cape Coast were targeted, however, only the final year students (n = 154) were assessed due to three-month recess of schools as a result of the Covid-19 global pandemic. Entwistle et al.'s (2000) Approaches and Study Skills Inventory for Students was adapted and used to collect data on students learning approaches while Cumulative Grade Point Average (CGPA) was used as a measure of students' academic achievement. Mean and standard deviation was used to analyse the research question as Pearson's Product Moment Correlation Coefficient was used to test the hypothesis in the study.

The study discovered that the surface learning approach had an inverse relationship with academic achievement. Results indicate that there was a surface approach to learning showed a reverse relationship with performance ($r = -.23$, $p = .001$). The study concluded that the more students cling to the

use of Surface Approach to learning in their studies, the lower their academic achievement would be. This finding is consistent with previous research which has shown that consequently students who adopt a surface learning approach are incline to have lower achievement level (Biggs, 2003; Prosser and Trigwell, 1999; cited in Birenbaum, 2007).

Watkins (2000) conducted a cross-cultural meta-analysis relationship between students' approaches to learning and their academic performance. It was hypothesised that surface approaches to learning negatively correlated with students' grades. The results of his study were rather in the expected direction, with correlations of -.11 for surface. Surface learners do not personally engage in the learning process, their learning is limited by specific tasks, and they spend more time memorizing the learning material to reproduce later with the view that the ability to accurately reproduce the memorized facts leads to higher assessments score (Boyce et al., 2001; Turner & Baskerville, 2013). Because surface learning students invest less time in understanding the main concepts of the subject, they are also unable to assimilate and apply their knowledge to other information and real-life situations. Biggs (2003) found that student selection of using surface approach was crucially related to assessment and inappropriate workload.

The position of extant literature on the negative nexus between surface approach to learning and academic achievement (Booth et al. 1999; Byrne et al. 2002; Duff 2004). However, Lizzio et al (2002) conducted a study using 5000 samples from interdisciplinary subjects of university students in Australia to understand the perceptions of the learning environment and academic outcomes. They found that surface approach was positively

correlated with the quantitative learning outcome (GPA) and negatively associated with skills development. The learning assessment was explained to have an impact on surface approach to learning and then affected learning outcomes as expected by the curriculum. That notwithstanding, the dominant position of literature is that there exists a significant negative relationship between surface approach and academic performance. The intention and strategies employed in the surface approach to learning to a larger extent would not augur well for the Initial Professional Development of accounting students.

Thus, inferring from the position of literature, the more a student is clung to the surface approach, the less the Initial Professional Development. To wit, the study hypothesizes that the use of Surface Approach to learning has inverse effect on the Initial Professional Development of aspiring Accountants- technical competence; professional skills; and professional values, ethics and attitude. Hence, this study hypothesized:

H_{1a}: *Surface approach negatively affects technical competence development development of accounting students in Ghana.*

$H1_b$: *Surface approach to learning negatively affects the professional skills development of accounting students in Ghana.*

$H1_c$: *Surface approach negatively affects the professional values, ethics and attitude development of accounting students in Ghana.*

Deep approach to learning and initial professional development (IPD)

Researchers hold the view that the development of a deep approach is consistent with the avowed aims of university education (Hayes et al. 1997). A deep approach is likely to result from: high perceived relevance to students'

interests (Fransson, 1977); the interest, support and enthusiasm shown by the instructor (Ramsden, 1979) and an opportunity for students to manage (i.e., self-regulate) their own learning (Ramsden & Entwistle 1981). In particular, students will not develop capabilities in areas such as critical thinking, creative thinking, problem-solving, communication and teamwork unless they experience deep learning (Trigwell & Prosser, 1991). Typical of the deep learning approach of students is a personal interest in learning. Students who adopt a deep approach to learning, aim at having an in-depth understanding of the whole framework of the subject matter to be able to logically apply it to real life situations (Montaño et al., 2010).

Deep learners seek to expand their knowledge of the subject by actively engaging with the content of the learning material and simultaneously focus on understanding the practical meaning and implication of the material via critical integration of pre-existing knowledge and experience (Byrne et al., 2010; Entwistle, 2001; Turner & Baskerville, 2013). Byrne et al. (2002) concluded that there is a positive relation between the deep approach and high academic performance. From the literature, the deep approach to learning is expected to associate with desirable learning outcomes (Drew & Watkins, 1998; Cano, 2005; Diseth, 2007). For instance, the students who use deep approach should be able to gain better score (GPA), higher quality of transferable skills and other positive qualitative learning outcomes. Jackling (2005) supports this finding that the deep approach is related to higher academic performance. Duff (2004) and Eley (1992) also reported that the deep approach has a positive correlation with performance.

In the research work of Cano and (2007), learning approaches were significant factors predicting students' learning outcomes, indicating the higher usage of deep approach, the better learning result achieved by the students. Moreover, Entwistle et al., (2000) mentioned that the academic success was directly engaged deep approach to learning that rewarded by appropriate evaluation system. Cano (2005) and Watkins (2000) also confirmed that students who scored higher in the deep approach gained higher level of learning achievement. However, in the study of Hasnor et al., (2013) who investigated the influence of learning approaches on academic achievement among Malaysian students using self-reported survey using a sample size of 223 of university students. Gijbels et al., (2005) and Byrne et al.'s (2004) found that deep the approach had no significant relationship with academic achievement. The deep approach to learning has also been found to be unrelated to academic achievement in more recent research (Diseth, 2007; Diseth & Martinsen, 2003; Diseth et al., 2010; Diseth et al., 2006). There are also other studies that support this finding whereby they found that deep approach did not result in higher grades on the evaluation (Minbashian, et al., 2004; Trigwell & Prosser, 1991). These scholars subsequently concluded that the evaluation system rarely rewards deep approach to learning and some assessment only assesses knowledge sufficient for the use of a surface approach.

Richardson (2003) also investigated relationship between approaches to studying and perceptions of academic quality in a short web-based course using 400 participants in United Kingdom. The result showed that the academic attainment was positively related with student perception of

academic quality. Çetin (2015) investigated the relationship between academic success, individual motivation and learning approaches among 536 students enrolled in teaching division of Canakkale Mart University in Turkey. The result showed that the academic success (i.e. GPA) was positively related with deep approach. The learning achievement was explained by the academic motivation and learning approaches (r=0.78), in which the motivation stimulated the deep approach and then affected the learning achievement.

Based on these findings, the current study would establish the hypotheses to investigate the relationships between learning approaches and learning outcomes-Initial professional development; technical competence; professional skills; and professional values. Ethics and attitudes of accounting students in Ghana. In this line, the study postulates that students who adopt a deep learning approach are inclined to be at a higher performing level in their Initial Professional Development. Thus, the study hypothesised:

$H2_a$: *Deep approach to learning positively affects technical competence development of accounting students in Ghana.*

$H2_b$: *Deep approach to learning positively affects the professional skills development of accounting students in Ghana.*

$H2_c$: *Deep approach to learning positively affects the professional values, ethics and attitude development of accounting students in Ghana.*

Strategic approach and initial professional development (IPD)

The primal intention of a strategic learner is to achieve the highest possible performance score. Basically, in this approach to learning students choose between a surface and deep approach to learning, and allocate their time and intellectual resources to be consistent with the necessities of their

assessment structure (Turner & Baskerville, 2013) and achieve the maximum academic performance (Watkins, 2000). Strategic student learners effectively organize and analyze the structure and content of how previous students were assessed, including examinations, to predict the next assessment criteria to inform their approach to studying the subject matter (Duff et al., 2004). Existing studies mostly suggest that although accounting students are mostly surface learners, they tend to employ strategic learning approach in some instances but rarely employ deep learning approach as they find this method very challenging (Barac, 2012; Byrne et al., 2010; Byrne & Flood, 2005; Byrne et al., 2009; Davidson, 2003; English et al., 2004; Flood & Wilson, 2008; Hall et al., 2004; Teixeira et al., 2013; Turner & Baskerville, 2013).

Byrne et al. (2010) examined the learning approaches of accounting and science students in Ireland and found that while accounting students were more strategic learners than science students, the science students adopt a deep approach to learning than their accounting counterparts. Considering auditing as a subfield of accounting, Barac (2012) showed the preference of strategic learning approach by prospective charted accountants in South Africa to support similar studies by Flood and Wilson (2008) in Ireland and Teixeira et al. (2013). As Valadas et al. (2010) point out, students who adopt the Strategic learning approach are performance oriented and can achieve higher performance without really appreciating the subject matter at hand. Strategic learners are usually unable to integrate current and existing knowledge and in most cases are unable to meaningfully apply concepts that they have been taught in school to actual situations (Valadas et al., 2010). These studies indicate a positive relationship between strategic approach and study success.

In summary, research has generally shown that strategic approaches to learning are positively correlated with academic achievement, (Diseth, 2003; Diseth et al., 2010; Duff, 2003). Indeed, Rodriguez's (2009) study found evidence that academic achievement was greater when business students combined strategic and deep learning rather than adopting deep learning alone. This view is supported by Duff (2004a) and Richardson (2013) who also promote strategic learning as a desirable approach despite its extrinsic motivations. The study, therefore hypothesized:

$H3_a$: *Strategic approach to learning positively affects technical competence development of accounting students in Ghana.*

$H3_b$: *Strategic approach to learning positively affects the professional skills development of accounting students in Ghana.*

$H3_c$: *Strategic approach to learning positively affects the professional values, ethics and attitude development of accounting students in Ghana.*

Lessons Learnt on Empirical Study

According to Byrne et al., (2004), the variances in the aims and scopes existing in the SAL has made it difficult to have a clear idea or pattern concerning the specific accounting students' learning approaches employed in all accounting programme. That notwithstanding, the literature frequently reports that accounting students tend to adopt either strategic or surface approaches over deep approaches to studying (Duff, 1999; Flood and Wilson, 2008). In some cases, strategic approaches to studying prove to be dominant (Byrne et al., 2009; Flood and Wilson, 2008). In addition, research provides evidence that there is a significant positive relationship between the deep approach and the total assessment mark and a highly significant positive

relationship between the strategic approach and the total assessment mark, as well as a highly significant negative relationship between surface approaches and assessment marks (Byrne et al., 2002). Effectively, accounting research reveals a general consensus over the need to encourage deep approaches to studying in higher education (Byrne et al., 2004; Duff, 1999; 2002).

In fact, finding ways of promoting deep learning is an increasingly important topic in higher education (Duff, 1999,). Also, the accounting profession, which provides a career path for many accounting graduates, expects future members to demonstrate knowledge and competencies associated with high quality learning and outcomes (Byrne et al., 2002). Therefore, the understanding of concepts is an indispensable factor in determining the quality of the learning outcome (Byrne et al. 2002, p. 27).

Conceptual Framework

Following the discussions that led to the formulation of the three hypotheses, the model below was developed to reflect the narration. The conceptual framework represents the position of theories (Constructivist Learning Theory and Goal Orientation Theory) and arguments of the study. It can be inferred from the framework as presented in Figure 1 that approaches to learning; Surface Learning (SL), Deep Approach (DL) and Strategic Approaches (SAL) have a significant relationship with the Initial Professional Development (Technical Competence, Professional Skills, Professional values, ethics and attitudes) hence the hypotheses.

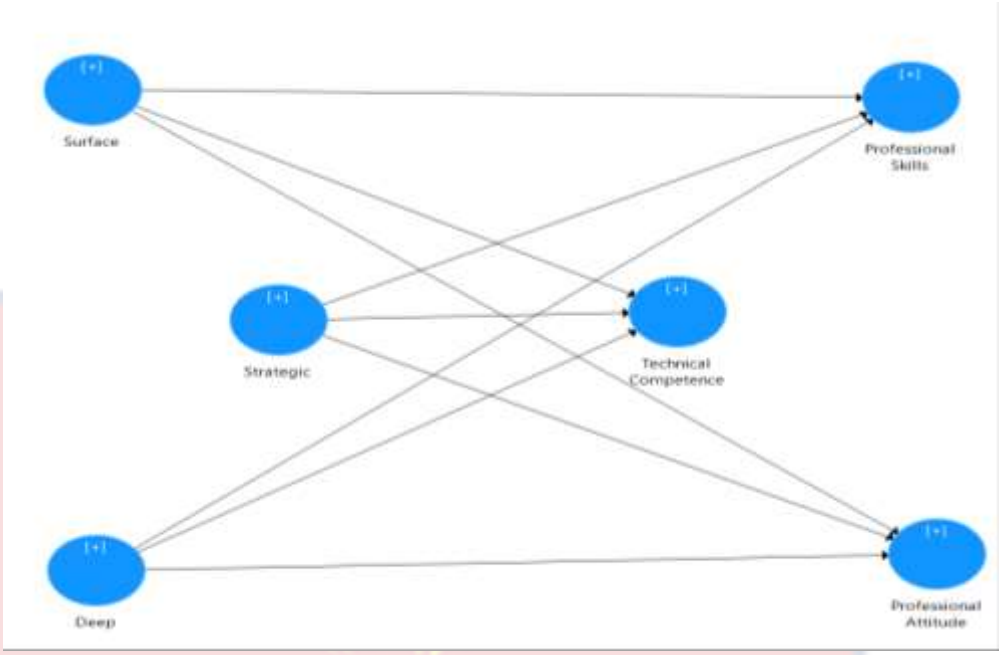

Figure 1: Conceptual Framework on the Approaches to Learning-Initial Professional Development Nexus
Author's Construct: (Ekyem, 2021)

Chapter Summary

The chapter reviewed the literature on the conceptual, theoretical and empirical issues relating to the research problem. Important issues and lessons from the review informed the conceptual framework of the study. The review underpinned the methodology, discussions, conclusions and recommendations of the study. Predominantly, studies on approaches to learning were carried out in Asia, America and Europe raising questions regarding the applicability of their findings in developing African countries. In line with that, the findings of the studies vary contextually. Also, the dominant instrument employed by the previous studies to measure approaches to learning was Study Process Questionnaire, and Revised Approaches Study Inventory. However, in Ghana, literature indicates that the ASSIST scale is the prevailing one. Indeed, it is in pursuance to the calls by Owusu et al. (2019) and Sam (2020) indicating a paucity in the extant literature on approaches to learning in the Ghanaian

context, that the current study sought to fill by providing scholarship. Empirically, most of the studies focused on the approaches to learning-academic achievement/academic performance nexus.

In contrast, there seems to be no literature on approaches to learning and Initial Professional Development of aspiring accountants. To wit, the study was conducted with a rigorous quantitative method of analyzing approaches to learning and Initial Professional Development variables using the partial least square, structural equation modelling (SEM). The SEM technique has been considered to be one of the most important components of applied multivariate statistical analyses and has been employed by many researchers in different fields such as economics, education, marketing, medicine, and a variety of other social and behavioural sciences (Al-Ansari et al., 2013). According to Babin et al., (2008), SEM can be seen as a statistical methodology that takes a confirmatory (i.e., hypothesis-testing) approach to the analysis of a structural theory on a given phenomenon.

Also, Wong (2013) sees SEM as a term that conveys two essential notions of the procedure: (a) that the causal processes under study are provided by a group of structural (i.e., regression) equations, considering the measurement error, and (b) that these structural associations can be modelled pictorially to facilitate a clearer conceptualization of the theory and hypotheses understudy. In that light the study seeks to conceptualize the approaches to learning and their hypothesized relationship with initial professional development, driven by the Constructivist Learning theory and the Goal Orientation theory.

CHAPTER THREE

RESEARCH METHODS

Overview

This chapter presents the research methods employed in the study. It describes the selected research methods, justifying their fitness for the study's objectives. In this chapter, the study describes the research philosophy on which the research study design was premised. The chapter further describes the research design, study area, population, data collection instruments, validity and reliability tests, sample and sampling procedure, data collection procedures, ethical considerations and data processing and analyses.

Research Paradigm

In a research procedure, every researcher is guided by certain beliefs, values and a view of the world (Adjei, 2019). Guba (1990), referred to such beliefs and values as paradigms or philosophical assumptions which precede the conduct of a study. Additionally, Saunders, Lewis and Thornhill (2007) assert that research philosophy refers to a system of beliefs and assumptions about the development of knowledge. Saunders et al (2007) identified five major philosophies that have shaped social science research over the years: positivism, critical realism, interpretivism, postmodernism and pragmatism. This study adopts the positivist approach.

According to Saunders et al (2007), positivism relates to the philosophical system that embraces issues that can be scientifically verified and hence provides a basis for generalisation. This means that positivists focus on procedures that lead to the generation of facts uninfluenced by human interpretation. It is based on the use of existing theory to develop hypotheses.

These hypotheses would be tested and confirmed, in whole or part, or refuted, leading to the further development of theory which then may be tested by further research (Creswell, 2013; Saunders et al, 2007). According to Saunders et al. (2007), and Sekaran and Bougie (2010), positivism give room for objective reality and has the goal of universal truth that deals with human practices in the field of management sciences.

The dictates of the positivism afford the study to ultimately hypothesize and test theories and relationships. Positivism is therefore an appropriate guide for the study.

Research Approach

The types of philosophies (positivism, interpretivism and pragmatism) embraced by an individual researcher often lead to adopting a strong qualitative, quantitative, or mixed-methods approach in their research (Creswell & Creswell, 2018). Saunders et al. (2016) provide posit that quantitative research method permits the researcher to isolate and define variables and link them together to frame research hypotheses. Also, the quantitative research method allows for objectivity with respect to the processes involved in the data collection and analysis. Creswell (2014) asserted that the quantitative approach deals with explaining phenomena by collecting numerical data that are analysed using mathematically based methods (in particular statistics). Yates (2004) emphasised that the quantitative approach functions by developing testable hypothesis as well as theories which can be generalised.

The quantitative approach is based on information that can be measured numerically, hence it is the purpose or objective of the survey that

gives direction as to the approach that should be used. These questions are presented as information converted into numbers. The data collection techniques used under the quantitative research approach is usually questionnaires, surveys, personality test and standardized research instruments (Creswell, 2013). The quantitative approach is, however, criticized for its rigidity, artificial nature and ineffectiveness in gauging human behaviour as well as not helpful in generating theories (Crotty, 1998).

Pursuant to the nature of the research problem, objectives and the hypotheses being investigated in this study, positivism led the study to adopt the quantitative approach.

Research Design

The researcher employed the explanatory research design, because the study sought to identify relationship between a set of variables (dependent and independent) as well as determine the best predictor(s) of the dependent variable from independent variables of the study (Creswell, 2012). Also, the descriptive-inferential survey design was adopted for this study to enable the researcher to describe systematically and accurately characteristics of the given population and also to discover the relationships existing between the variables for generalizations (Tabachnick & Fidell, 2007).

Study Area

The University of Cape Coast is a public collegiate research university located in Cape Coast, Ghana. The university was established in 1962 out of a dire need for highly qualified and skilled manpower in education. It was established to train graduate teachers for second cycle institutions such as teacher training colleges and technical institutions, a mission that the two

existing public universities at the time were unequipped to fulfil. The university has since added to its functions the training of doctors and health care professionals, as well as education planners, administrators, legal professionals, accounting educators and professional accountants, which is however qualified by the writing of professional exams.

The University of Cape Coast basically have two faculties for training accounting major students, i.e., the Department of Business and Social Sciences Education (DOBSSE) and the School of Business (SoB). The course structure and contents designed by these faculties for their accounting students exhaustively capture the dictates in the IESs (ICAG, 2017). Essentially, this compliance is evidently demonstrable in the fact that, students having earned a degree from either DOBSSE or SoB are entitled to exemptions regarding their entry into the professional accountancy bodies (ICAG and ACCA).

Thus, the study focusses on the University of Cape Coast accounting because the accounting courses taught align with the dictates of the IFAC; it encompasses people of diverse background such as gender, age and programme of study. This made it a good representation of all undergraduate final year students in the country and allows the findings of the study to be generalized.

Population

The population of the study was the 2020/2021 final year accounting students of the University of Cape Coast, with a total population of 460 (Students Records and Management Information Section (SRMIS, UCC, 2021). The population for this study is made up of all final year accounting students in the University of Cape Coast. The target population consists of

final year B.Com Accounting students and final year B.Ed Accounting students mainly because of its proximity to the researcher, as well as cost and financial constraint. The first, second and third years were not included because they had not taken adequate accounting courses to equip them with the requisite competencies expected after going through the higher education. Table 1 presents the population distribution.

Table 1: Population Distribution of Accounting Students

Programme	No. of Students
B.Ed Accounting	166
B.Com Accounting	294
Total	460

Source: Academic Affairs, University of Cape Coast, 2021

Sample and Sampling Procedures

Kariuki, Wanjau and Gakure (2011) recommended that researchers should resort to the determination of an optimum sample size for their studies. The optimum sample size is often determined either by direct calculation using appropriate statistical formulas or by reference to tables, which set out recommended sample sizes for a given population (Sekaran & Bougie, 2016). The sample size of the study was two hundred and ten (210) students. This was determined using Krejcie and morgan (1970) sample determination table. Based on a sample size of 210, a proportionate representation was calculated for each programme. The population and sample distribution between the two programme of studies is indicated in Table 2.

Table 2: Population Distribution of Accounting Students

Programme	No. of Students	Sample
B.Ed Accounting	166	76
B.Com Accounting	294	134
Total	460	210

Source: Academic Affairs, University of Cape Coast, 2021

Literature has established that for a study to produce results that are representative of the whole population, probability sampling sampling techniques are the most valid choice (Saunders et al., 2007). It was on this premise that a probability sampling technique was employed, precisely the stratified sampling technique. Students were further selected using the systematic sampling technique from the students' lists taken from the students' record department of the school.

Data Collection Instrument

The study relied on the ASSIST Scale and IPD scale (Appendix A).

The ASSIST Scale

Students' approach to learning in accounting education courses were measured using an adapted Etwinstle et al. (2000) Approaches and Studies Skills Inventory for Students (ASSIST) scale (ASSIST, 1997). The scale primarily focuses on the motive and strategy of a learner, the use of the scale would afford the study the approach to learning used by accounting students. The ASSIST scale has 52 items (statements) made up of 13 subscales, with each subscale consisting of four statements. The 13 subscales are further grouped under three main themes: deep, surface and strategic approaches to learning. The instrument has been employed in many empirical studies both beyond and within the confines of Ghana, including (English, Luckett, &

Mladenovic, 2004; Flood & Wilson, 2008, Flood & Harris 2004; Byrne et al., 2004, Sam, 2020; Owusu et al., 2019). The respondents were asked to indicate their degree of agreement with statements scored on a seven-point Likert scale. Factor analytic studies across a range of disciplines have consistently reproduced the theoretically proposed three-factor structure-deep, surface and Strategic. Also, Internal consistency has been found to be high for the main scales, while it has been deemed acceptable or in the lower range for the subscales (Byrne, Flood, & Willis, 2004; Diseth, 2001; Kreber, 2003; Richardson, 2005, 2010; Valadas, Goncalves, & Faísca, 2010, Bonsaksen, Småstuen, et al., 2017). Hence, the scale was adopted.

IPD Scale

The dependent variable of this study, Initial Professional Development, was measured by the respective individual learning outcomes enshrined in the International Education Standards, i.e. IES 2, 3 and 4. Due to the general acceptance of the IESs and its application in accounting education in the Ghanaian context, it is only reasonable that a research instrument is borne out of the Standards. That notwithstanding, the instrument was further enhanced to capture the biographical data, like gender, age and department of the respondents. The Questionnaire consists of 52 items, i.e. TC1 to TC25, PS1 to PS17, PA1 to PA10 (see Appendix A), which are also subscales of the three dimensions under IPD; technical competence, professional skills and professional values, ethics and attitudes. Each item is measured by a Likert-type scale from 1 (least agreement) to 7 (highest agreement). The use of a questionnaire is justified since based on the busy nature of the respondents; they could best provide responses in a non-supervised way. The questionnaire

for the study comprised four (4) sections – A, B and C. Section A was used to collect demographic information of the respondents, as such variables were measured in a categorical manner.

Sections B and C were used to capture information on Approaches to learning and Initial Professional Development respectively. All items in section B and C were measured on a seven-point Likert-type scale. With one indicating least level of agreement with the statements and seven indicating highest level of agreement. The Likert-scale facilitated the measuring of attitudes of respondents through the combination of scores of those respondents on different items into a single index (Likert, 1932).

Validity and Reliability

Validity and reliability tests were conducted on the instrument to ensure credible data elicited. The establishment of content and construct validity of the instrument is critical (Vogt, 2007). The ASSIST Scale has been found to possess high internal consistency across all jurisdictions (Byrne, Flood, & Willis, 2004; Diseth, 2001; Bonsaksen, Småstuen, et al., 2017). However, the scale for measuring the IPD of accounting students was newly formulated from the IESs. Pre-test has proven to uncover biased or ambiguous questions. It also provides adequate information on the adequacy, reliability, and validity of the research instrument (Saunder et al., 2011). The collected feedback from the pre-testing process is used to revise the drafted questionnaire in order to modify and further improve it (Ticehurts &Veal, 2000). Hence, the study pre-tested the research instrument by randomly selecting 30 final year accounting students from the University of Cape Coast based on the recommendation by Hunt, Sparkman, and Wilcox (1982).

Students were asked to underline difficulties in completion and understanding questions and items, to improve investigator familiarity with respondents, and to evaluate fieldwork arrangement and average completion time and cost which can help to establish the content validity. The results collected was put to a reliability test using the Cronbach alpha. Table 3 presents the Pre-test reliability results.

Table 3: Reliability results from the Pre-Test

Scale	No. of Respondents	Cronbach's Alpha
Surface Learning	30	.947
Deep Learning	30	.913
Strategic Learning	30	.921
Technical Competence	30	.975
Professional Skills	30	.965
Professional Values Ethics and attitude	30	.954

Source: Fieldwork (2021)

The results presented a Cronbach Alpha minimum value of 0.921 and a maximum value of 0.975, clearly indicating a highest form of reliability of the scales as against the 0.70 threshold.

Assessment of Measurement Models for the Study

The measurement model assessment begun with the evaluation of the indicator loadings. A PLS algorithm was run to generate indicators for the assessment of the measurement model. In evaluating the measurement model, all that indicators that had lower loadings were dropped, however indicators with higher loadings were maintained (Hair et al., 2016). This notwithstanding, some indicators with loadings above 0.5 but had conceptual relevance, to the extent that it did not suffer the reliability of the constructs were maintained. Ultimately, this phase of checks was to strengthen the

reliability and validity of the constructs in focus. Table 4 presents the Outer Loadings of the Indicators.

Table 4: Outer Loadings of Indicators

	Deep	PA	PS	Sta	SA	TC
DL1	.732					
DL10	.870					
DL11	.889					
DL12	.882					
DL13	.849					
DL14	.853					
DL15	.864					
DL16	.856					
DL2	.653					
DL3	.891					
DL4	.870					
DL5	.876					
DL6	.892					
DL7	.864					
DL8	.846					
DL9	.891					
PA3		.805				
PA5		.881				
PA6		.828				
PA7		.877				
PA8		.824				
PA9		.805				
PS10			.770			
PS11			.798			
PS12			.790			
PS13			.742			
PS14			.772			
PS3			.825			
PS4			.765			
PS5			.807			
PS6			.776			
PS7			.810			
PS8			.822			
PS9			.850			
SL10					.802	
SL11					.738	
SL12					.721	
SL13					.787	
SL14					.833	
SL2					.662	
SL3					.633	
SL4					.674	
SL5					.583	
SL6					.792	

SL7		.861	
SL8		.889	
SL9		.716	
STA1	.672		
STA10	.817		
STA11	.793		
STA12	.823		
STA13	.814		
STA14	.842		
STA15	.837		
STA16	.792		
STA17	.798		
STA18	.821		
STA19	.800		
STA2	.626		
STA20	.780		
STA3	.755		
STA4	.798		
STA5	.760		
STA6	.819		
STA7	.727		
STA8	.785		
STA9	.818		
TC10			.788
TC13			.790
TC14			.783
TC15			.747
TC16			.761
TC17			.776
TC18			.780
TC19			.809
TC20			.743
TC21			.757
TC22			.785
TC23			.799
TC24			.761
TC3			.788
TC4			.753
TC5			.718
TC6			.735
TC7			.747
TC8			.739
TC9			.747

Source: Field Data (2021)

Assessing internal consistency reliability

The internal consistency of the measurement model was also put to test. This was to judge the consistency of results across items on the same test.

It was checked to determine whether the items measuring a construct are similar in their scores, if the correlations between the items are large (Drolet & Morrison, 2001). The composite reliability is a more appropriate measure of internal consistency than the Cronbach's alpha (Rossiter, 2002). The composite reliability threshold is 0.70 as posited by Bagozzi and Yi (1988). The reliability results are presented in Table 5.

Table 5: Reliability of the main study

	Cronbach's Alpha	Rho_ A	Composite Reliability	Average Variance Extracted (AVE)
Deep	0.974	0.977	0.977	0.724
Professional Skills	0.947	0.948	0.953	0.631
Professional attitudes	0.914	0.917	0.934	0.701
Strategic	0.967	0.969	0.970	0.617
Surface	0.939	0.992	0.943	0.563
Technical Competence	0.963	0.964	0.966	0.586

Source: Field Data (2021)

The results in Table 5 indicate that all latent variables in this study are reliable, as they all loaded above the 0.7 threshold by (Bagozzi & Yi, 1988). Deep Approach had the highest score of composite reliability (0.977); this was followed by Strategic approach (0.970), Technical competence (0.966), Professional Skills (0.953), Surface approach (0.943) and professional values, ethic and attitudes (0.934). The results indicate that the model has internal consistency reliability.

The average variance extracted was used in assessing convergent validity. Convergent validity is the extent to which a measure correlates

positively with alternative measures of the same construct (Hair et al, 2017). An AVE value of 0.50 or higher indicates that, on average, the construct explains more than half of the variance of its indicators. Conversely, an AVE of less than 0.50 indicates that, on average, more variance remains in the error of the items than in the variance explained by the construct. The results from Table 5 indicate that all constructs have an AVE of more than 0.5. With the highest being deep approach and the least being technical competence. This means that the constructs in this model are able to account for more than half of the variance in their indicators.

As part of assessing the measurement model, discriminant validity was also assessed.

Assessing discriminant validity

Discriminant validity is the extent to which a construct is truly distinct from other constructs by empirical standards. Thus, establishing discriminant validity implies that a construct is unique and captures phenomena not represented by other constructs in the model (MacKinnon, 2008). The Discriminant validity was measured using the Heterotrait-Monotrait Ratio (HTMT) and the Fornell- Lacker Criterion. According to Henseler et al., (2015), a latent construct has discriminant validity when its HTMT ratio is below 0.850. The Fornell-Larcker also compares the square root of the AVE values with the latent variable correlations (Fornell & Larcker, 1981). Specifically, the square root of each construct's AVE should be greater than its highest correlation with any other construct. (Hair et al. 2013). Table 6 presents the results for the Fornell-Larcker Criterion.

Table 6: Fornell-Larcker Criterion for Checking Discriminant Validity

	Deep	PA	PS	STA	S	TC
Deep	**0.851**					
PA	0.495	**0.837**				
PS	0.528	0.812	**0.794**			
STA	0.475	0.528	0.549	**0.786**		
S	0.043	-0.122	-0.156	0.057	**0.751**	
TC	0.606	0.709	0.808	0.603	-0.155	**0.766**

Source: Field Data (2021)

The results from Table 6 indicate that the square root of each variable is well above their correlations with other constructs in the study. This means that each construct is unique and no two constructs capture the same phenomenon.

Whilst most research relies on the Fornell-Larcker criterion and cross loadings when investigating discriminant validity (Hair et al., 2012), Henseler et al., (2015) have posited that these criteria perform poorly in terms of disclosing discriminant validity problems. Instead, researchers should use the HTMT criterion, which is defined as the mean value of the indicator correlations across constructs (i.e. the heterotrait-heteromethod correlations) relative to the (geometric) mean of the average correlations of the indicators measuring the same construct. High HTMT values indicate a problem with discriminant validity. Based on simulation and previous research, Henseler et al. (2015) recommend that HTMT values should not exceed 0.90 if the path model includes constructs that are conceptually similar. Table 7 presents the results for the HTMT ratio.

Table 7: Heterotrait - Monotrait Ratio (HTMT)

	Deep	PA	PS	STA	S	TC
Deep						
PA	**0.520**					
PS	0.542	**0.871**				
STA	0.482	0.553	**0.565**			
S	0.098	0.119	0.124	**0.121**		
TC	0.618	0.753	0.845	0.618	**0.153**	

Source: Field Data (2021)

In this study, all the values of HTMT are less than the threshold value of 0.90 as presented in Table 7; hence, the constructs are devoid of discriminant problems.

Common Method Bias

Common method bias (CMB) or variance occurs due to inherent nature of self-reporting measures (Podsakoff, MacKenzie & Lee, 2003). Thus, CMB happens when biases in responses are as a result of the instrument. Put differently, the instrument introduces a bias, hence variances, which you will be analysing. CMB is a biasing of results that are caused by a common method, such as a single survey (Favero & Bullock, 2015). CMB can be tested using Harman's single factor test (Podsakoff & Organ, 1986) and VIF scores (Kock & Lynn, 2012). Following from the recommendations from scholars this study employed the full collinearity test as it is an effective alternative for the identification of common method bias (Kock & Lynn, 2015).

The occurrence of a VIF greater than 3.3 is proposed as an indication of pathological collinearity, and also as an indication that a model may be contaminated by common method bias. Therefore, if all VIFs resulting from a full collinearity test are equal to or lower than 3.3, the model can be

considered free of common method bias Kock and Lynn (2012). Table 8 presents the VIFs obtained for all the latent variables in our models, based on a full collinearity test.

Table 8: Full Collinearity Results for CMB

	Deep Learning	Professional Skills	Professional Values	Strategic Learning	Surface Learning	Technical Competence
Deep Learning		1.676	1.655	1.637	1.362	1.516
Professional Skills	2.897		2.984	3.007	3.012	3.212
Professional Values	2.880	2.061		2.876	3.038	2.879
Strategic Learning	1.692	1.700	1.684		1.547	1.579
Surface Learning	1.058	1.092	1.076	1.029		1.064
Technical Competence	3.282	2.775	3.104	3.051	3.141	

Source: Field Data (2021)

From Table 8, the model is devoid of common method bias since all the VIFs generated is below the 3.3 threshold (Kock & Gaskins, 2014).

Data Collection Procedures

210 survey questionnaires were distributed to the respondents of with the expectation of obtaining a high response rate (Sekeran, 2010). However, the study recorded a 98.6% response rate because 207 students responded to the questionnaire. Only 1.4% (3 respondents) failed to return the instrument. The success is attributed to direct contact and follows up between research assistants and the respondents.

Data Processing and Analysis

Upon receiving the data collected, the completeness and eligibility of respondents were checked. Then, it was coded and entered into MS Excel. After it was exported into SPSS 26 and Smart PLS 3 to obtain descriptive and inferential statistical analyses respectively. The statistical tools for data analysis were frequency and percentages; mean and standard deviation; Friedman's test and SEM (Smart- PLS). All hypotheses were tested at 0.05 level of significance, however in the case of Friedman's test, the Bonferroni alpha level (.05/3) was used to establish statistical significance. The Bonferroni alpha is important when a single analysis has been conducted at multiple levels to help reduce the likely inflated alpha value (Field, 2009)

Data collected on respondents' characteristics were analysed through the use of frequencies and percentages. These statistical tools were used because the demographic variables for the analysis were categorical (nominal and ordinal levels of measurement), hence was out of appropriateness that such tools were used. Data gathered on Research Question One and Two were analysed through mean and standard deviation and Friedman's test. The research questions required the respondents' level of approaches to learning and levels of competencies development. To wit, an average score was required to determine their levels of each construct. It is noteworthy, that the mean is a composite score representing a distribution of scores in a given population. It is only appropriate to employ mean when a variable is measured in either interval or ratio level. Both approaches to learning and initial professional development were measured on a seven-point Likert scale.

The use of standard deviation was necessary and appropriate since it provides understanding to the degree to which responses on the constructs are dispersed or clustered from the mean. The Friedman's test facilitated in comparing the differences in the approaches to learning and the competencies development of the accounting students. Its use was to determine the levels of approaches to learning used by accounting students and the levels of their competencies' development.

Ultimately, Structural equation modelling was used to answer the third, fourth and fifth objectives. These objectives were intent on assessing the effect of approaches to learning on initial professional development of accounting students. PLS- SEM was considered the appropriate tool because it is a rigorous, powerful, multivariate technique found progressively in scientific investigations to test and evaluate multivariate causal relationships. Unlike other modelling approaches, SEM test the direct and indirect effects on pre-assumed causal relationships. According to Babin et al., (2008), SEM can be seen as "a statistical methodology that takes a confirmatory (i.e., hypothesis-testing) approach to the analysis of a structural theory on a given phenomenon".

The Partial Least Squares path modelling technique was selected in this study mainly due to its ability to deal with normality violations (i.e. multivariate normality) thus, it does not require the hard assumption of the distributional properties of raw data, among other rationales that include; PLS handles both reflective and formative indicators; PLS ensures against improper solutions by the removal of factor indeterminacy; PLS is robust in dealing with data noise and missing data; PLS applies many parameters in a

complex model with normal residual distributions; PLS handles collinearity in the independent latent variables; PLS has more statistical power than a maximum-likelihood covariance-based SEM method and is a prediction-oriented technique in maximising the variance explained in the latent variables; PLS allows simultaneous modelling of the relations among latent variables; PLS combines regression and factor analysis within the measurement model in each run; PLS is more advantageous in case of new and refined measures; and PLS does not necessitate a large sample size (for example, 200 or fewer cases), (Haenlein & Kaplan, 2004; Henseler et al., 2009; Ronkko & Evermann, 2013).

A common goal of PLS-SEM analyses is to identify key success factors and sources of competitive advantage (Albers 2010; Hair et al. 2012a) for important target constructs such as customer satisfaction and customer loyalty (Fornell et al. 1996) or behavioural intentions and user behaviour (Venkatesh et al. 2003). For creating and estimating complex path models with latent variables and their relationships, PLS-SEM has achieved widespread popularity in the social sciences (Sarstedt 2019). A key methodological reason for PLS-SEM's attractiveness is that the approach follows a causal-predictive paradigm, in which the aim is to test the predictive power of a model carefully developed on the grounds of theory and logic (Chin et al. 2020). In addition, PLS-SEM enables researchers to estimate very complex models with many constructs and indicator variables, with considerably smaller sample size requirements compared to factor-based SEM methods. PLS-SEM also offers much flexibility in estimating multifaceted

model relationships such as in conditional process models (Sarstedt et al. 2020a) or higher-order models (Sarstedt et al. 2019).

Specifying the Structural Model

The structural model displays the relationships (paths) between the constructs on the proposed study model. This study sought to assess nine hypotheses, specifically the effect of surface approach, deep approach and strategic approaches to learning on Initial Professional Development of accounting students in the University of Cape Coast. However, according to Hair, Sarstedt, Hopkins, and Kuppelwieser (2014), the evaluation of the structural model includes assessing collinearity among constructs, coefficient of determination, predictive relevance, effect size, path coefficient and its significance. As recommended by Wong (2013), all outer model loadings should be significant at the chosen alpha level. As presented in Appendix E all T statistics of the outer model loadings are larger than 1.96 meaning that all outer model loadings are significant at the chosen alpha level of .05.

Ethical Consideration

As averred by Saunders et al. (2007), any social researcher should unequivocally express their intentions and their adherence to the ethics of research in seeking permission from the respondents. The study was consistent all ethical procedures instituted by the University of Cape Coast. The first port of call in that regard was obtaining ethical clearance from the Institutional Review Board to carry out the research. Respondents were therefore assured of anonymity and confidentiality. Thus, respondents were assured that their names would not be disclosed. More so, all information received from them (respondents) would be treated with the highest degree of

confidentiality. In addition to this, the researcher also informed the respondents that they had the sole prerogative in giving or withholding their responses, however the respondents were strictly assured of the ethical considerations. Finally, no information was withheld about the study's possible risks, discomfort or benefits or deliberately deceive study subjects on these matters.

Chapter Summary

The study guided by positivism, coupled with the quantitative approach, employed the explanatory correlational design and descriptive inferential survey to examine the approaches to learning and its effect on the initial professional development of accounting students. The approach led the study to gather quantitative data from the final year accounting students (N= 207) to describe their levels of approaches to learning and their levels of initial professional development. The questionnaire used for collecting data met the attributes of reliability and validity and hence was adjudged reliable. Frequency, mean and standard deviation, Friedman's test and PLS- Sem were the statistical tools used to analyse data gathered on the research questions and hypotheses. Where applicable, either tables and or figures were used in reporting results. The chapter provides that all ethical consideration was met. It enshrines that the anonymity of the respondents is protected and the results will be used for purely academic purposes. The next chapter presents the results obtained and its discussion in order to address the research problem.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The chapter begins with a discussion on the demographic characteristics of the respondents' age, sex, and programme of study. The chapter also focuses on the levels of approaches to learning and the levels in the initial professional development of accounting students using the mean and standard deviation. Further, normality test is run subsequent by Friedman's non-parametric test. Again, PLS-SEM is run to further establish the effect of surface approach, deep approach and strategic approach on technical competence, professional skills and professional attitudes, ethics and values. Discussions are presented according to the objectives of the study.

Background Characteristics of Respondents

This section presents the background characteristics of the respondents, which are age, sex and programme of study. These variables were of essence because it brings to bear the background characteristics of the respondents which may inform inferences to be drawn. The demographic variables were measured on a nominal scale questionnaire with the exception of age which was measured on the ordinal scale. Thus, the use of the frequency and percentage was appropriate statistical tool. Respondents were final year accounting students in the University of Cape Coast. Table 9 presents their demographics, specifically their sex, age and programme of study.

Table 9: Demographic Characteristics of Respondents

		Frequency	Percentage
Gender	Male	131	63.3
	Female	76	36.7
Age (In Years)	21-30	193	93.2
	31-40	14	6.8
Programme of study	B.Ed. Accounting	74	35.7
	B.Com Accounting	133	64.3

Source: Field data (2021)

Majority of the respondents were male accounting students (n = 131, 63.3%), while the remaining were female accounting students (n = 76, 36.7%). The gender dimension of the respondents suggest the existing male dominance in the accounting field. Table 9 shows that the majority (n = 193, 93.2%) of respondents were within ages 21-30 years and the remaining (n = 14, 6.8%) were within 31-40 years. Out of the 207 respondents, majority were the Bachelor of Commerce Accounting students (n = 133, 64.3%) whilst the remaining (n = 74, 35.7%) were B. Ed Accounting Students.

Presentation and Discussion of Results

Research Question 1: Dominant Approach to Learning Used by Accounting Students

The objective was to determine the dominant approach to learning employed by accounting students. In order to achieve this objective, the following research question was formulated: What is the dominant approach to learning used by accounting students? The ASSIST Scale facilitated the collection of relevant data on the approaches to learning. The Descriptive results are presented in Table 10, and the detailed results can be found in Appendix B of the study.

Table 10: Approaches to Learning of Accounting students

Approaches to Learning	Mean	SD
Surface Approach	3.48	1.28
Deep Approach	4.67	1.47
Strategic Approach	4.96	1.12

Source: Field Survey, (2021)

Generally, the accounting students indicates they are highly strategic learners (M = 4.96, SD = 1.12), followed by Deep learning approach (M = 4.67, SD = 1.47) and then the use of the surface approach to learning (M = 3.48, SD = 1.28).

In relation to strategic learning approach, with reference to Appendix B, respondents agree highly that when they have finished a piece of assignment they check it through to see if it really meets the requirements (M = 5.26, SD = 1.48), they think about what they want to get out of this course to keep them studying well focused (M = 5.22, SD = 1.43); they feel that they are getting on well, and this helps them put more effort into the course work (M = 5.11, SD = 1.39). They seem to highly go over an assigned work carefully to check the reasoning (M = 5.10, SD = 1.29), they seem to highly indicate that they feeling that they are doing well on the accounting courses are very important to them (M = 5.07, SD = 1.34), they highly agree that effort put into studying is because they are intent on doing well academically (M = 5.04, SD = 1.41). Strategic learners, before starting work on an assignment or exam question first think of the best way to tackle it (M = 5.01, SD = 1.47), they are highly sensitive to what lecturers seem to think is important and concentrate on that (M = 4.99, SD = 1.40).

With reference to Appendix B of the study, Strategic learners are quite systematic and organized when it comes to revising for exams (M = 4.98, SD = 1.43), they are intrinsically motivated (M = 4.97, SD = 1.48). Also, the results indicate that strategic learners are intent on impressing the examiner when working on an assignment. (M = 4.97, SD = 1.41). They also provide for themselves favourable conditions that would help them get on with their course work easily (M = 4.94, SD= 1.48), they are pretty good at getting to work whenever they need to (M = 4.93, SD= 1.35), they generally make good use of their time (M = 4.93, SD= 1.42) and they are also keen on the expectations of examiners when undertaking any academic work (M = 4.90, SD = 1.40). Strategic Learners are quite proactive with their academic work (M = 4.88, SD = 1.42), they tend to review carefully course tutors' comments just to improve on their marks in the subsequent academic assignment (M = 4.87, SD = 1.39).

They organize their study time carefully to make the best use of it (M = 4.77, SD = 1.45), also, they usually plan out their week's work in advance (M = 4.70, SD = 1.50) and they tend to follow up on some of the reading materials suggested by lecturers or tutors (M = 4.53, SD = 1.60). Further, the deep approach to learning adopted by the accounting students were evident in the subconstructs. The results in Appendix B indicate that respondents are excited about some of the ideas they come across on the course (M = 4.80, SD = 1.71), they are very much intent on being able to follow the direction of an academic argument and to understanding the rationale (M = 4.80, SD = 1.56), they further agree that some academic topics excites them to keep on studying (M = 4.79, SD = 1.63).

Again, respondents agree that when working on a new topic they try to see how all ideas fit together (M = 4.78, SD= 1.64), they admit that studying academic topics can be quite exciting (M = 4.78, SD = 1.63) and they carefully examine the details of every content they read to see how they relate (M = 4.73, SD = 1.70). More so, respondents affirm that they look at the evidence carefully and formulates their own conclusions about what they study (M = 4.71, SD = 1.64). Also, the results presented in Appendix B of the study, show that deep learners reflect on what they intend to learn when reading (M = 4.69, SD = 1.81). Respondents also indicates that they try to relate ideas they come across in other topics or other courses whenever possible (M = 4.69, SD = 1.66), they often find themselves questioning things they hear at lectures or read in books (M = 4.68, SD = 1.62).

Respondents also indicate that they regularly think about ideas from lectures when doing other things (M = 4.68, SD = 1.68), before tackling a problem or assignment they first try to work out what lies behind it (M = 4.67, SD = 1.74). The accounting students also indicate that ideas in course books or articles often set them off on long chains of thought of their own (M = 4.59, SD = 1.70), they like to play around ideas of their own when learning (M = 4.57, SD = 1.71), they usually set out to understand for themselves the meaning of what they must learn (M = 4.38, SD = 2.31) and they try to resonate with the meaning a learning material is communicating (M = 4.33, SD = 2.08).

The study results in Appendix B showed that accounting students in the University of Cape Coast use the surface approach to learning (M = 3.48, SD = 1.28). Surface learners often worry about coursework they think is

complex to do (M = 3.80, SD = 1.77), also, respondents agree that they direct their studying closely to just what seems to be required for assignments and exams (M = 3.73, SD = 1.69), they further agree that they like to be told precisely what to do in essays or assignments (M = 3.68, SD = 1.70). Again, respondents agree that they concentrate on learning those bits of information they must know to pass tests (M = 3.68, SD= 1.64), respondents often worry about whether they will ever be able to cope with the course work properly (M = 3.63, SD = 1.71). Respondents subscribe to the fact that they often feel they are drowning in the sheer amount of material they must cope with (M = 3.62, SD = 1.63).

Interestingly, respondents often seem to panic if they get behind with their course work (M = 3.61, SD = 1.79), they do wonder whether the course work is worthwhile (M = 3.36, SD = 1.74), they tend to read very little beyond what is required to pass tests (M = 3.45, SD = 1.74). Respondents also find much of the course work disinteresting or irrelevant (M = 3.45, SD = 1.80). Respondents; however, admit that they find it difficult to identify what is important in lectures, so they try to get down all they can (M = 3.43, SD = 1.69). Respondents further agree they often have trouble in making sense of the things they must remember (M = 3.36, SD= 1.65). That notwithstanding, respondents consider rote memorization as a good deal of what I learn (M = 3.25, SD= 1.64), take the accounting course for other reasons, other than their interests (M = 3.33, SD = 1.78), they agree what study seem unrelated bits and pieces (M = 3.30, SD = 1.73) and they have regrets for taking this programme (M = 2.65, SD = 1.61).

Summarily, all three approaches to learning are prevalent among the accounting students. However, the accounting students tend to employ the strategic approach highly (M = 4.96, SD = 1.12), followed by Deep learning approach (M = 4.67, SD = 1.47) and then the use of the surface approach to learning (M = 3.48, SD = 1.28). This notwithstanding, in order to determine the dominant approach to learning, differences in the mean score were examined through the Friedman's test, equivalent to one-way repeated measures ANOVA. Prior to using the Friedman's test, a normality test was run on the distribution to know the appropriate statistical tool to use. The results on the normality test are presented in the Table 11.

Table 11: Test for Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Stat.	Df	Sig.	Stat.	Df	Sig.
Surface Approach	.077	207	.005	.978	207	.003
Deep Approach	.174	207	.000	.891	207	.000
Strategic Approach	.117	207	.000	.941	207	.000

Source: Field Survey, (2021)

The Kolmogorov-Smirnov Test in Table 11 shows that the data distribution for surface approach KS (207) =.077, p =.005 was not statistically significantly different from a normal distribution. This indicates that the distribution is normal for surface approach. The results also indicated that the deep approach KS (207) =.174, p =.000, and strategic approach KS (207) =.117, p =.000, were all statistically significantly different from a normal distribution, which suggests that the distribution is asymmetrical. Notwithstanding that, the Shapiro-Wilk test for surface approach W (207) =.978, p =.003 was significant, indicating that the data is not normally

distributed. This suggests that the distribution is not normal/symmetrical. Deep approach W (207) =.891, p =.000 and strategic approach W (207) =.941, p =.000 was significant, meaning the data is not normally distributed. The data was asymmetrical. Therefore, the non-parametric equivalent of the repeated measures ANOVA, the Friedman Test, was used to test for differences. The results are presented in Table 12.

Table 12: Friedman Test

Approaches to Learning	Mean Rank	Percentiles		
		25th	50th (Median)	75th
Surface Approach	1.43	2.438	3.375	4.438
Deep Approach	2.20	3.688	5.125	5.750
Strategic Approach	2.37	4.150	5.200	5.800
N		207		
Chi-Square (χ^2)		107.259		
Df		2		
Asymp. Sig.		.000		

Source: Field Survey, (2021)

The Friedman test was used to determine if there are differences in the three approaches to learning employed by accounting students. There are statistically significant differences in students' approaches to learning across surface approach, deep approach and strategic approach to learning (χ^2 (2) = 107.259, p < .01). This clearly indicates that accounting students use different approaches to learning while on the accounting programme. The differences generated and supported by the Friedman's test however spares the details in the existing differences, hence, the need for a post hoc analysis. Results of the post hoc are analysis are presented in Table 13.

Table 13: Wilcoxon Signed Ranks Test

	DA-SA	STA-DA	STA-SA
Z	-7.740	-2.638	-10.366
Asymp. Sig. (2-tailed)	.000	.008	.000

Source: Field Survey, (2021)

Wilcoxon signed-rank tests was run for the post hoc analysis to determine the exact differences in the approaches to learning as elicited by Friedman's test. Effectively, the Bonferroni adjustment was applied on the significant results generated by the Wilcoxon tests. This was done by dividing the initial significance level (0.05) by the number of the Wilcoxon tests performed. The new significance level was 0.05/3 = 0.017. This posits that p-value larger than 0.017 means the results are not statistically significant.

The Median (Inter Quartile Range) of the levels of the approaches to learning for surface approach, deep approach and strategic approach were 3.38 (2.44 to 4.39), 5.13 (3.69 to 5.75), and 5.20 (4.15 to 5.80), respectively. From Table 13 deep approach employed by accounting students was statistically and significantly dominant than surface approach ($Z = -7.740$, $p < .017$). Also, strategic approach was more used by accounting graduates than deep approach ($Z = -2.638$, $p < .017$). Finally, strategic approach was statistically and significantly used by the students than the surface approach to learning ($Z = -10.366$, $p < .017$).

The findings suggest that strategic approach was the most employed approach by the accounting students. This was followed by deep approach, and finally, accounting students indicated that surface approach to learning was the least used in the accounting discipline.

Discussion for Research Question 1

Studies clarify that the possibility of accounting students applying various learning approaches at different levels of their studies is undeniable (Hall et al., 2004; Ballantine et al., 2008). The results of the study show that accounting students are highly strategic and deeper in their approaches to studying than they being Surface learners. Specifically, this finding may suggest that majority of accounting students are keener on excelling in academic achievement at the expense of gaining a more in-depth understanding of the issues they are exposed to in class. The findings in this study corroborate with Byrne et al. (2010) findings that accounting students are more strategic learners. Same is consistent with Barac (2012) assertion that students learning auditing (an accounting course) are more strategic in their learning which supported the findings of Flood and Wilson (2008).

That notwithstanding, deep approach students show interest in the content, while strategic approach users show the alertness to assessment demands. In essence, this finding shows that accounting students truly aim at maximizing their performance to excel, and at the same time they also use various strategies to help them understand their studies. However, Hall et al. (2004) argued that some low-level competencies in accounting can be effectively learned with a surface learning approach. It is also argued that the nature of accounting studies may require some form of memorization and rote learning at all levels from introductory accounting to senior level accounting units (Birkett & Mladenovic, 2009). As a matter of fact, research also recommends combining deep and strategic approaches together as it is more

academically rewarding (Lindblom-Ylanne et al., 1999; Mattick et al., 2004; Guilding & McManus, 2002; Baeten et al., 2010).

The findings of accounting students being strategic in their learning point to the fact that they have their focus on achieving high grades in combination with well-organised studying and attention to assessment requirements. Thus, the students only prioritise implementing plans to achieve higher grades without necessarily focusing on deeper understanding of concepts taught. The outcome corroborates with Valadas et al. (2010) averment that students who adopt the strategic learning approach are performance oriented and do achieve higher performance without really appreciating the subject matter at hand. Again, Valadas et al. suggests that strategic learners are usually unable to integrate current and existing knowledge and are usually unable to meaningfully apply concepts that they have been taught in school to actual situations. By necessary implication, the educational system existing in accounting education greatly emphasizes passing examination at the expense of the students' in-depth knowledge.

Practically, it is trite practice to find students go the extra mile to make the best of grades in their examinations and thus, would seek to study primarily for the examination purposes.

Research Question 2: Dominant Initial Professional Development Competency of Accounting Students

The levels of the competencies developed in the accounting students were examined to know the highest competency developed by the accounting students. In order to achieve this objective, the following research question was formulated as: What is the dominant initial professional development

competency of accounting students? The IESs was used as a guide to collect relevant data on the competencies developed by accounting students. The descriptive results are presented in Table 14, and the detailed results can be found in Appendix B.

Table 14: Dominant Initial Professional Development Competency of Accounting students

IPD	Mean	SD
Technical Competence	5.14	1.03
Professional Skills	5.31	.99
Professional Values,	5.40	1.02

Source: Field Survey, (2021)

The table presented indicates the three competencies (knowledge, professional skills and professional values) an accounting student is expected to develop after going through Higher Education (IEASB, 2017). As concluded by Tufuor-Kwarteng and Servoh (2022); and Hasnor et al., (2013), the three competencies are significant predictors of accountants' professional competence.

The results presented show that accounting students appear highly developed in all three competencies (knowledge, skills and attitude). However, they indicated they are highly developed in professional values, ethics and attitude (M = 5.40, SD = 1.02) than in the Professional Skills (M = 5.31, SD = .99) and Technical Competence (M = 5.14, SD = 1.03) dimension.

With regards to the professional values, ethics and attitude development of accounting students, the results in Appendix B of the study, indicate that, they are perceived to highly able to analyze the relationship between laws, regulations and the public interest (M = 5.55, SD = 1.25),

anticipate the role of ethics to business and good governance (M = 5.48, SD = 1.19) uphold the principle of integrity in all their dealings (M = 5.43, SD = 1.25) and also able to analyze the consequences of unethical behaviour (M = 5.43, SD = 1.22). Further, they are able to uphold the principle of confidentiality in all their dealings (M = 5.41, SD = 1.32), explain the nature of ethics (M = 5.37, SD = 1.24), demonstrate professional behaviour in compliance with standards (M = 5.37, SD = 1.21), demonstrate professional competence and due care in all their dealings (M = 5.36, SD = 1.20), apply the principle of integrity to ethical dilemmas (M = 5.35, SD = 1.27) and able to explain the role of ethics within the accounting profession (M = 5.26, SD = 1.25).

Per the input from the respondents , the results in Appendix B of the study indicate that they very highly developed to communicate clearly and concisely both in writing and orally (M = 5.50, SD = 1.38), apply professional scepticism through critical assessment of information (M = 5.40, SD = 1.18).The results further indicate that they are equipped with research skills in the business field (M = 5.40, SD = 1.29), they are able to listen actively and make sound deductions (M = 5.38, SD = 1.30); able to demonstrate awareness of cultural and language differences in all communication (M = 5.37, SD = 1.29). They are also highly committed to lifelong learning (M = 5.33, SD = 1.32), they are able to identify and evaluate alternatives to make reasonable conclusions with recourse to relevant facts (M = 5.31, SD = 1.13). Respondents are highly able to delegate to deliver assignments (M = 5.29, SD = 1.27), motivate and develop others (M = 5.29, SD = 1.14), anticipate challenges and pan potential solutions (M = 5.2657, SD = 1.18).

They are able to apply critical analysis, reasoning and innovative thinking to solve problems (M = 5.27, SD = 1.32), influence others to work toward a common goal (M = 5.26, SD = 1.26), solve complex and multi-faceted problems (M = 5.26, SD = 1.26), manage time and resources to achieve professional commitments (M = 5.25, SD = 1.26), appropriately seek counsel to get a problem solved (M = 5.24, SD = 1.23). Accounting students are able to appreciate the relevance of compliance to organizational structures and practice (M = 5.23, SD = 1.22), cooperate and work in a team to achieve common goals (M = 5.17, SD = 1.47).

The afore-presented clearly describes the level of development regarding the final year accounting students in the University of Cape Coast. This may be attributed to the role of various accounting departments in the schools and also the efforts of the students. Students and stakeholders are therefore encouraged to put in the necessary interventions to make this feat a sustainable one.

Respondents highly able to analyze financial and non-financial information to provide relevant information for decision making (M = 5.43, SD = 1.34), evaluate the appropriateness of accounting policies used to prepare financial statements (M = 5.29, SD = 1.18), explain how theories may be used to enhance organizational performance (M = 5.2705, SD = 1.41) and apply business techniques to support management decision making (M = 5.25, SD = 1.26). Respondents are highly developed that they are able to interpret financial statements and related disclosures (M = 5.23, SD = 1.36), interpret sustainability reports and integrated reports (M = 5.24, SD = 1.36), define the place of ICT in accounting practices (M = 5.19, SD = 1.36), analyze an

organisation's cash flow and working capital requirements (M = 5.19, SD = 1.17), conversant with the market structures (M = 5.18, SD = 1.29) and also the respondents also concurred on the score that they are able to apply accounting principles to transactions (M = 5.18, SD = 1.45).

Accounting students also agree highly that they can apply relevant auditing standards to audit financial statements (M = 5.18, SD = 1.35), understand the basic principles of microeconomics and macroeconomics (M = 5.17, SD = 1.34), explain and apply the agency theory in an organization (M = 5.17, SD = 1.34); have mastery in Capital budgeting techniques (M = 5.17, SD = 1.40) and able to prepare Consolidated financial statements in accordance with IFRSs and other relevant standards (M = 5.16, SD = 1.40). They can also explain the stages involved in performing audit (M = 5.15, SD = 1.35), use ratio analysis, trend analysis and cashflow analysis to analyze the present and future financial position of an organization (M = 5.13, SD = 1.29), prepare financial statements in accordance with IFRSs and other relevant standards (M = 5.10, SD = 1.45) and able to make effective comparisons on the sources of financing existing in an organization (M = 5.10, SD = 1.29).

Results in Appendix B of the study indicate that respondents are highly developed to prepare income tax liability for an individual and an organization (M = 5.10, SD = 1.31). Respondents are very much abreast of the national taxation compliance and filing requirements (M = 5.08, SD = 1.40), they are able to explain the laws and regulations applicable to the environment in which a professional accountant may operate (M = 5.06, SD = 1.37), they are able to explain the laws and regulations governing legal entities (M = 5.06, SD = 1.28), assess the risks of material misstatements in the financial statements

(M = 5.05, SD = 1.39), evaluate the performance of products and business segments (M = 5.02, SD = 1.34); differentiate between tax planning, tax avoidance and tax evasion (M = 5.01, SD = 1.40). That notwithstanding, respondents highly agreed that, they are able to explain how strategies are designed and implemented in business entities (M = 4.96, SD = 1.51) and also prepare business reports to support management decision making (M = 4.87, SD = 1.42).

Accounting students are highly developed in all three competencies, professional values, ethics and attitude (M = 5.40, SD = 1.02), professional skills (M = 5.31, SD = .99) and technical competence (M = 3.48, SD = 1.28). However, in order to determine the highest competency developed-differences in the competencies developed in accounting students, as anticipated by IES, differences in the mean score were examined through the Friedman's test, equivalent to one-way repeated measures ANOVA. A normality test was run to cement the appropriateness of the statistical tool to perform the test for differences. The results from the test for normality are presented in Table 15.

Table 15: Test for Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Stat.	Df	Sig.	Stat.	Df	Sig.
Technical Competence	.103	207	.000	.944	207	.000
Professional Skills	.130	207	.000	.939	207	.000
Professional Values, Ethics, and Attitudes	.113	207	.000	.947	207	.000

Source: Field Data (2021)

The Kolmogorov-Smirnov Test in

showed that the data distribution for professional values, ethics, and attitudes KS (207) =.113, p =.000; professional skills KS (207) =.130, p =.000;

technical competence KS (207) =.103, p =.000 were statistically significantly different from a normal distribution. This suggests that the distribution is not normally distributed. However, the Shapiro-Wilk test for professional values, ethics, and attitudes W (207) =.947, p =.000; professional skills (W (207) =.939, p =.000); and technical competence (W (207) =.944, p =.000) were all statistically and significantly different from a normal distribution, meaning the data is not normally distributed. The nature of the distribution therefore necessitated the use of a non-parametric equivalent of the repeated measures ANOVA. Thus, the Friedman Test, was used to test for differences. The results are presented in Table 16.

Table 16: Friedman Test

Initial Professional Development	Mean Rank	Percentiles		
		25th	50th (Median)	75th
Technical Competence	1.72	4.464	5.393	5.929
Professional Skills	2.01	4.882	5.529	6.000
Professional Values, Ethics, and Attitudes	2.27	5.000	5.600	6.000
N	207			
Chi-Square (χ^2)	32.713			
Df	2			
Asymp. Sig.	.000			

Source: Field Survey, (2021)

The Friedman test was used to explore if there are differences in the Initial Professional Development levels of the accounting students. There were statistically significant differences in students' initial professional development across technical competence, professional skills, and professional values, ethics, and attitudes (χ^2 (2) = 32.713, p < .01). This means

that accounting students may possess different levels of development in the three competencies at the final level in the accounting programme. Subsequently, a post hoc analysis was performed to obtain the details of the existing differences. Results of the post hoc analysis are presented in 17.

Table 17: Wilcoxon Signed Ranks Test

	PS – TC	PVEA – PS	PVEA – TC
Z	-4.135	-2.958	-5.379
Asymp. Sig. (2-tailed)	.000	.003	.000

Source: Field Survey, (2021)

Post hoc analysis with Wilcoxon signed-rank tests was used to explore the exact differences. Consequently, there was a need to apply Bonferroni adjustment on the significance of results gotten from Wilcoxon tests. This was done by dividing the initial significance level (in this case, .05) by the number of Wilcoxon tests performed. The new significance level was now .05/3 = .017. This means that if the p-value is larger than .017, the results are not statistically significant.

The Median (Inter Quartile Range) of perceived development levels for technical competence, professional skills, and professional values, ethics, and attitudes were 5.39 (4.46 to 5.93), 5.53 (4.88 to 6.00), and 5.60 (5.00 to 6.00), respectively. From Table 17, professional skills developed in accounting graduates were statistically and significantly higher than technical competence ($Z = -4.135$, $p < .017$). Also, professional values, ethics, and attitudes was more developed in accounting graduates than professional skills ($Z = -2.958$, $p < .017$). Finally, professional values, ethics, and attitudes was statistically and significantly developed in the graduates than the development of technical competence ($Z = -5.379$, $p < .017$).

The findings suggest that professional values, ethics, and attitudes was the most developed competence in graduates. This was followed by professional skills, and finally, graduates suggested that technical competence was the least developed after their university education.

Discussions for Research Question 2

Professional values, ethics and attitudes (IES 4) explains the characteristics that help identify an individual as a member of the accounting profession. The characteristics include the principles of conduct (e.g., ethical principles) generally associated with and considered essential in determining the distinctive features of professional behaviour (IAESB, 2017). This attitudinal competency, just like the other competencies, would help the accounting graduate/accountant discharge his/ her job duties. The competency requires that accounting graduates be able to first identify ethical issues in situations and then apply the appropriate attitude, values, and ethics in such situations (Busuioc et al., 2019). According to IFAC. International Ethics Standards Board for Accountants (IESBA; 2015), professional values, ethics, and attitudes can be summarised into one's commitment to five main principles: integrity, objectivity, confidentiality, professional competence/due care, and professional behaviour.

The finding suggests that accounting students in the University of Cape Coast are more inclined in developing their attitudinal competency. This inclination may be due to the fact that the students are much aware the role ethics play in the accounting field. It may also be accounted on the score that the principles of ethics are common in their daily activities which stretches even beyond accounting. IFAC (2015), declared that all aspiring accountants

and accountants must have an adequate understanding of the principles of professional ethics and the underlying rationale of the constraints that professional ethics place on professional accountants. Accountants must be aware of the pressures involved in observing and upholding ethical standards and must also know it applies in public practice, in industry or commerce, in the public sector or in education (IFAC, 2015). The results also corroborates the assertion that ethics competency requires that accountants are able to identify ethical issues in situations and then apply the appropriate attitude, values, and ethics in such situations (Busuioc et al.,2019).

According to IAESB (2017) Professional skills (IES 3) specify the skills as the competency that individuals who have gone through the accounting education are expected to possess and demonstrate. The professional skills include intellectual, interpersonal/communication, personal, and organisational skills. According to Awayiga et al. (2010), employers and stakeholders are so much keen on the professional skills that aspiring accountants possess, for it plays a significant role in performing their mandate at various institutions. Again, Awayiga et al. (2010) also reported on the dissatisfaction expressed by employers regarding the level of skills of graduates possess when they enter the accounting field. This report largely contradicts the learning outcomes anticipated by IAESB and further entrench the importance of professional skills competency development. These skills enable accounting graduates to perform their role as account officers to an acceptable level (Busuioc et al., 2019; Crawford et al., 2014; (IAESB, 2017).

The IAESB (2013) posits professional skill as the second competence to be provided through accounting education. Having gone through accounting

education, it is expected of accountants and aspiring accountants to demonstrate that they possess the requisite skills. IAESB (2017), intimates that aspiring accountants and accountants should possess and apply intellectual, interpersonal/communication, personal, and organisational skills. Further, Busuioc et al., (2019); Crawford et al., (2014) and IAESB, (2017) avers that these skills enable accountants to perform their role to the desired level. The findings in this study indicates that accounting students in the University of Cape Coast highly possess professional skills which is consistent with the expectations of IES 3. Thus, the aspiring accountants possess the intellectual, interpersonal/communication, personal, and organisational skills that will enable them function competently (Busuioc et al., 2019; Crawford et al., 2014 and IAESB, 2017). This development may be imputed on the level of the students and also on the teaching and learning activities.

Technical competence (IES 2) is the first professional competency prescribed by the IAESB. This IES establishes the learning outcome in terms of how accounting graduates should apply accounting knowledge to a defined standard (Busuioc et al., 2019; Crawford et al., 2014; (IAESB, 2017). The learning outcome of technical competence includes financial accounting and reporting, management accounting, financial management, taxation, audit and assurance, governance, risk management and internal control, business laws and regulations, information technology, business/organisational environment, economics, and business strategy/management. The position of IAESB (2017) is that an aspiring accountant or accountant after going through accounting education must have demonstrably mastered all these courses in order to perform any accounting role to a defined standard. Indeed, the results

presented indicates that accounting students in the university of cape coast are very highly developed in knowledge and understanding of accounting concepts and theories.

Technical competence is the ability to apply professional knowledge to perform a role to a defined standard. Competence areas within technical competence include financial accounting and reporting, taxation, and economics, management accounting and control, taxation, business and commercial law, audit and assurance, finance and financial management, professional values and ethics, and quantitative methods (IAESB, 2017). The findings of the study posit that accounting students in the University of Cape Coast highly possess the required knowledge base. The findings also suggest that learning outcomes for technical competence by the end of IPD have been achieved (IAESB, 2017). It can be inferred from the findings that the students are highly endowed with knowledge and understanding in various courses needed to perform their functions to a defined standard. This may be attributed to the fact that accounting education system and even employers reward students who have myriad of knowledge in the accounting field.

Structural equation model

In order to test hypothesis 1, 2 and 3 the PLS-SEM was run. However, the PLS-SEM has specific assumptions undergirding its use. They include sample size and multicollinearity. Again, the Coefficient of determination, predictive relevance and effect sizes were computed using the PLS-SEM.

Sample Size

For sample size, Hair et al.'s (2011) formula for calculating the minimum sample size requirement for use in PLS-SEM was applied. The

minimum sample size should be equal to the larger of the following (1) ten times the largest number of formative indicators used to measure one construct or (2) ten times the largest number of structural paths directed at a particular latent construct in the structural model. For this study, the largest number of structural paths directed at a particular latent construct in the structural model is 9. Hence, the minimum sample size will be 9 * 10 = 90. While the 10 times rule offers a rough guideline for minimum sample size requirements, PLS-SEM, like any statistical technique, requires researchers to consider the sample size against the background of the model and data characteristics (Hair et. al.,2012). Since 207> 90, the minimum sample size requirement was duly met.

Multicollinearity

That notwithstanding, Table 18 shows the result for assessing multicollinearity among the indicators for this study. In the context of PLS-SEM, a VIF value of 5 and higher poses a potential collinearity problem (Hair et al., 2011). More specifically, an indicator's VIF level of 5 indicates that 80% of its variance is accounted for by the remaining formative indicators associated with the same construct.

Table 18: Multicollinearity of Constructs

	Technical Competence	Professional Skills	Professional Values
Surface	1.004	1.004	1.004
Deep	1.291	1.291	1.291
Strategic	1.293	1.293	1.293

Source: Field data, Ekyem (2021)

The results in the table shows a minimum VIF of 1.004 and a maximum of 1.293. The output obtained, therefore, indicated that the constructs were devoid of multicollinearity.

Explanation of target endogenous variable variance

The Coefficient Determination (R^2) is a measure of the model's predictive accuracy. In other words, the R^2 presents the exogenous variable's combined effect on the endogenous variable(s). Hair et al. (2014) advanced that a coefficient of determination (R2) of 0.25, 0.5 and 0.75 are considered as weak, moderate and substantial respectively for structural models. The results are presented in Table 19

Table 19 shows that the coefficient of determination, R^2, for the Technical Competence, Professional Skills and Professional Values, Ethics and Attitude endogenous latent variables is 0.534, 0.431 and 0.381 with an Adjusted R^2 of 0.527, 0.423 and 0.372 respectively. This means that the three latent variables i.e. S, D, and Sta moderately explain 53.4% of the changes in technical competence development of accounting students in Ghana; moderately accounts for 43.1% of the changes in professional skills development of accounting students in Ghana; moderately accounts for 38.1% of the variance in professional values, ethics and attitude of accounting students in Ghana as shown in Table 19.

Table 19: Structural Model Coefficient of Determination, Predictive Relevance and Effect Size

		R^2	Adj. R^2	Q^2	f^2
Technical Competence,	S→TC	0.534	0.527	0.304	0.082
	D→TC				0.288
	STa→TC				0.288
Professional Skills	S→PS	0.431	0.423	0.265	0.066
	D→PS				0.166
	STa→PS				0.212
Professional Values, Ethics and Attitude	S→PA	0.381	0.372	0.263	0.040
	D→PA				0.127
	STa→PA				0.186

Source: Field data (2021)

The Q^2 was used to assess the predictive relevance of the inner model. Specifically, a Q^2 value larger than zero for a particular endogenous construct indicates the path model's predictive relevance for this particular construct (Chin, 1998; Henseler et al., 2009). It is claimed that a Q^2 larger than 0 means that the model has predictive relevance, whereas a Q^2 lower than 0 implies that the model is deficient in predictive relevance (Hair et al., 2011; Roldán et al., 2012). As presented in Table 19, the model has predictive relevance since Stone-Geisser's value for all the endogenous constructs are higher than 0; technical competence (Q^2 = .304), professional skills (Q^2 = .265), and professional values, ethics, and attitudes (Q^2 = .263).

The effect size for each path model is determined by calculating Cohen's f^2. The f^2 is computed by noting the change in R^2 when a specific construct is eliminated from the model. Based on the f^2 value, the effect size of the omitted construct for a particular endogenous construct can be determined and values of 0.02, 0.15, and 0.35 can be viewed as indicating that an

independent latent variable has a small, moderate or large effect respectively at the structural level (Roldán & Sanchez-Franco, 2012). The results presented in Table 19 shows the effect size of each predictor on the endogenous variables. Table 19 indicates that the effect sizes of the various structural paths in the model where S→TC is small, S→PS is small and S→PA is also small. Again, the effect sizes of D→TC is moderate, D→PS is moderate, D→PA is moderate, STa→PS is moderate, STa→TC is moderate and STa→PA is moderate.

Hypothesis Testing

This study sought to assess nine hypotheses, specifically the effect of surface approach, deep approach and strategic approach on Technical competence development of accounting students. Subsequently, the effect of surface approach, deep approach and strategic approach on professional skills development of accounting students was also assessed. Again, the effect of surface approach, deep approach and strategic approach on professional values, ethics and attitude was assessed.

Hypothesis 1: Surface Approach and Initial Professional Development

The first hypothesis sought to assess the effect of surface approach to learning on technical competence development of accounting students in Ghana. Using the Pls-Sem algorithm in the Smartpls (Ringle et al., 2005) software, the analysis of the data collected showed that surface approach had a negative and significant effect on technical competence development. The results are presented in Table 20.

Table 20: Structural model results for hypothesis 1

Hypothesis	Beta	Std Dev.	t-value	P-value
S→TC	-0.196	.075	2.621	.009
S→PS	-0.193	.089	2.180	.030
S→PA	-0.158	.088	1.802	.072

Source: Field data, Ekyem (2021)

H_{1a}: *Surface approach negatively affects technical competence development of accounting students*

Analysis of the data collected showed that surface approach had a significant negative effect on technical competence (β= -0.196, $p<0.05$; Table 20). This finding is consistent with the assertion that accounting students that employ surface approach to learning perform poorer. Thus, the technical competence development of accounting students would be compromised when surface approach is used. The inverse relationship between the variables abundantly indicates that the higher the frequency in the surface approach the lesser the technical development of students. Indeed, the empirical argument here is that a student committed to a surface approach to learning will not go deep, no matter how much time there is, no matter how much concentration there is during that time (Marton 1992; Prosser 1993). The beta coefficient in the same direction as hypothesized, hence the hypothesis "*Surface approach negatively affects technical competence development"* was supported.

$H1_b$: *Surface approach to learning has a negatively affect the professional skills development of accounting students in Ghana*

Based on the path estimation, the results of the PLS-SEM showed that surface approach to learning had a negative and a significant effect on professional skills development of accounting students in Ghana (β = -0.193,

p< 0.05; Table 20). The result supports the hypothesis that surface approach has a negative effect on professional skills. The results are consistent with what was hypothesized.

$H1_c$: *Surface approach negatively affects the professional values, ethics and attitude*

Based on the path estimation, the results of the PLS-SEM showed that surface approach to learning had a negative and a non-significant effect on professional values, ethics and attitude development of accounting students in Ghana (β = -0.158, p> 0.05; Table 20). The result is inconsistent with the hypothesis that surface approach has a negative effect on professional values, ethics and attitude. Hence, the hypothesis is not supported.

The structural equation model generated by the PLS-SEM is presented in figure 2. The model bears the pictorial form of all the variables in the study; the measurement model as well as its structural model.

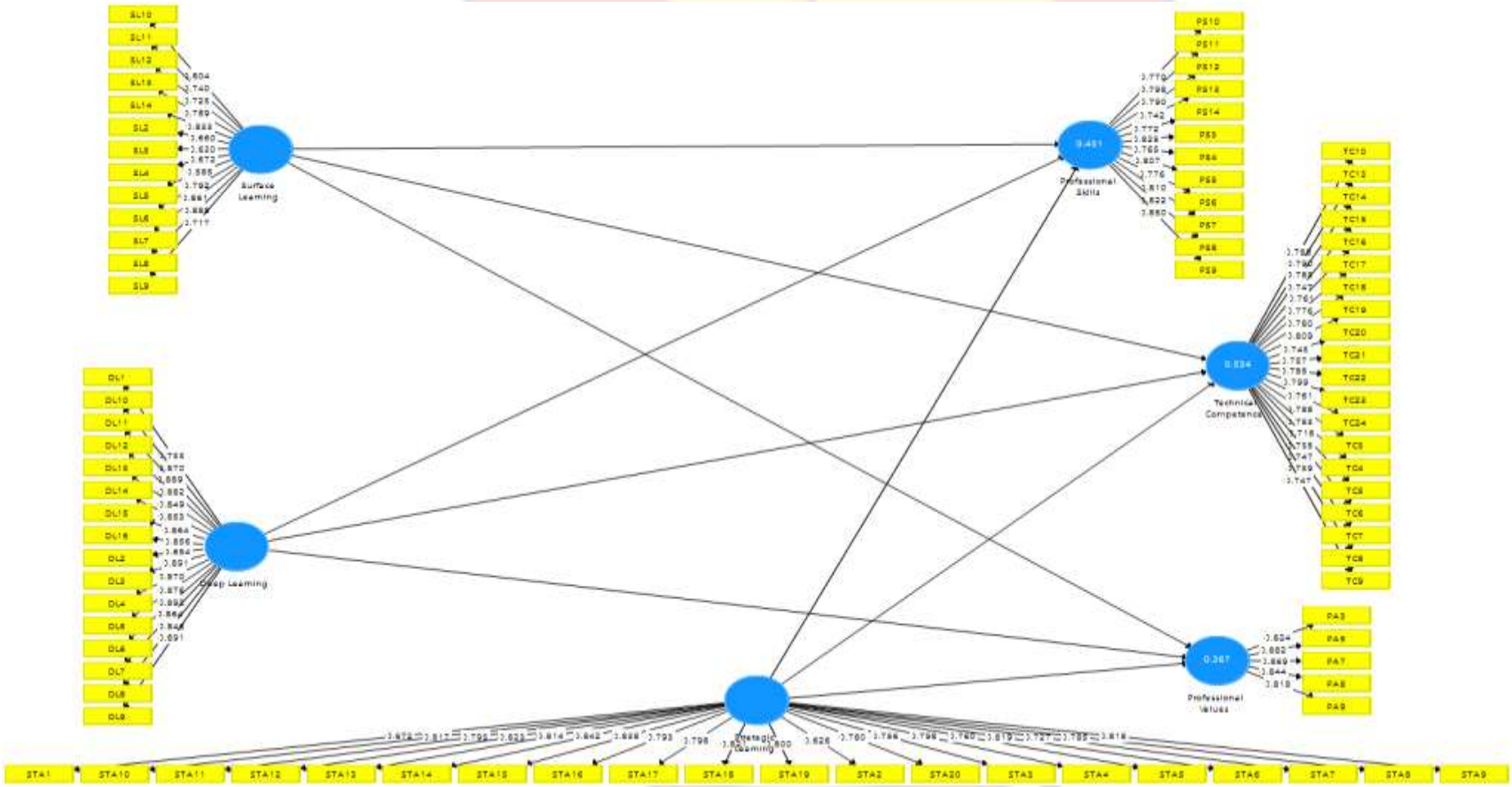

Figure 2: Structural Equation Model

Discussion on Hypothesis 1: Surface Approach and Initial Professional Development

The findings posit that the use of the surface approach would adversely affect the initial professional development of the student. It must be noted also that technical competence is the ability to apply professional knowledge to perform a role to a defined standard. This development phase seeks to ensure that aspiring accountants are well versed with the theoretical and conceptual underpinnings of accounting. It is expected that all aspiring accountants are very much familiar with the foundations of financial reporting, taxation, business law, economics, audit and assurance etc. By necessary implication, it can be inferred from the results presented that the use of surface approach would only mean that aspiring accountants would be detached from the accounting courses and would only focus on meeting the minimum requirements as the course may demand. Thus, the use of the surface approach would hinder the technical competence development of accounting students as there exists a negative nexus between surface approach to learning and academic achievement (Booth et al. 1999; Byrne et al. 2002; Duff, 2004).

This position was also reiterated by Hasnor et al. (2013) that surface approach has an inverse relationship with their academic achievement. The findings also indicated a significant negative effect of surface approach on professional skills development of students. Thus, a student who engages in the surface approach would develop poor professional skills as anticipated by IFAC. This position is consistent with Lizzio et al. (2002) finding that surface approach is negatively associated with skills development. This may be

attributed to the fact that, professional skills cannot be developed by mere rote memorization, and just meeting minimum requirements. From the literature, the characteristics of surface approach students were defined as intention to merely cope with course requirements by memorizing the tasks and finding the correct answers rather than engaging in critical analysis and relying on independent inquiry (Entwistle, 2005). Such the approach produced low learning outcome and is negatively associated with desirable academic achievements. However, Vann (2016) posits that surface approach can improve skills development and course satisfaction.

Again, the results showed in respect of the third hypothesis indicated a non-significant negative relationship between surface approach and professional values, ethics and attitude development of accounting students. The result is conversely related to what was hypothesized. It leads to a conclusion that professional values, ethics and attitudes development of accounting students is not necessarily stimulated by surface approach to learning. According to Trigwell and Presser (1991), they found no relationship between surface approaches to learning and learning outcome. Thus, inferring from the findings presented above, the more a student is clung to the surface approach, the less the Initial Professional Development. This result supported the theoretical model suggested by (Entwistle & Ramsden, 2015); Drew & Watkins, 1998; Cano, 2005; Diseth, 2007) who found that surface approach students achieved lower academic results for their study. This result was consistent with previous research by Hasnor et al. (2013) reported the surface approach had inversely correlation with learning outcomes. The more students use surface approach, the lower score they gain.

Richardson (2003), posits that the use of the surface approach can be attributed to the assessment techniques available for each course of study, to wit, stakeholders are encouraged to create a mechanism that would discourage the use of surface approach to learning in order to meet the aims and objectives of IFAC in developing the competencies of prospective accountants.

Hypothesis 2: Deep Approach and Initial Professional Development

$H2_a$: *Deep approach to learning positively affects technical competence development of accounting students in Ghana*

Based on the path estimation, the results of the PLS-SEM showed that deep approach to learning had a positive and a significant effect on technical competence development of accounting students in Ghana ($\beta = 0.418$, $p < 0.05$; Table 21). The result supports the hypothesis that deep approach has a positive effect on technical competence. The results are consistent with to what was hypothesized.

Table 21: Structural model results for hypothesis 2

Hypothesis	Beta	Std Dev.	t-value	P-value
D→TC	.418	.056	7.388	.000
D→PS	.395	.064	5.424	.000
D→PA	.385	.066	4.859	.000

Source: Field data, Ekyem (2021)

$H2_b$: *Deep approach to learning positively affects the professional skills development of accounting students in Ghana*

Based on the path estimation, the results of the PLS-SEM showed that deep approach to learning had a positive and a significant effect on professional skills development of accounting students in Ghana ($\beta = 0.395$,

p< 0.05; Table 21). The result supports the hypothesis that deep approach has a positive effect on professional skills. The results are consistent with to what was hypothesized.

H2$_c$: *Deep approach to learning positively affects the professional values, ethics and attitude development of accounting students in Ghana*

The output of the PLS-SEM estimation showed that deep approach to learning had a positive and a significant effect on professional values, ethics and attitude development of accounting students in Ghana (β = 0.385, p< 0.05; Table 21). The result supports the hypothesis that deep approach has a positive effect on professional values, ethics and attitude. The results are consistent with to what was hypothesized.

Discussion on Hypothesis 2: Deep approach and Initial Professional Development

The findings indicated that there exists a significant positive effect of deep approach to learning on the initial professional development of accounting students. Conclusively, the more an accounting student seeks to understand and master the contents and concepts of a learning material, the more the student develops his technical competence, professional skills and professional values, ethics and attitude. This conclusion is consistent with the findings of Cano (2005) and Watkins (2000) that students who scored higher in deep approach gained higher level of learning achievement. Indeed, the academic achievement of deep learners is accounted for their penchant to expand their knowledge base by actively engaging with the content of the learning material and simultaneously focusing on understanding the practical meaning and implication of the material (Byrne et al., 2010; Entwistle, 2001;

Turner & Baskerville, 2013). Scholars (Byrne et al., 2002; Drew & Watkins, 1998; Cano, 2005; Diseth, 2007; Jackling, 2005; Duff, 2004 & Eley 1992) have notoriously posited that the students who use deep approach should be able to gain better score (GPA), higher quality of transferable skills and other positive learning outcomes.

The deep approach to learning is constituted with individualised engagement towards a learning process, adequate prior knowledge and high curiosity concerning the subject matter. On the one hand, it fosters learners to become independent, realise accountability towards their learning process and develop individualised abstract structures concerning acquired information (Entwistle, 1988). On the other hand, it is also propelled if the teacher demonstrates individual interest on the concept, links new knowledge to basic foundation contexts learners have acquired, commits students in an active learning process through showing compatibility and impartiality when appraising expected learning performances (Biggs, 1999; and Entwistle, 1988), which substantiates the position of the constructivist learning theory. On that account, the teacher is incapable of delivering Deep Approach to learning but can generate environments in which that can develop (Barac, 2012).

Accounting learners in universities are expected to produce distinct learning results (Booth et al., 1999). So, it is crucial to inculcate a culture that involves independence in students, capable of propelling them to deeper and appreciable levels of academic mastery (Byrne et al. 2010). In another study, the International Federation of Accountants (IFAC) informs that “if accounting graduates are to meet the future challenges of the profession, they

must develop the knowledge, skills and competencies necessary to become independent, lifelong learners" (Byrne et al., 2004, p. 451). Sharma (1997) posits that enhancing deep approaches to learning among students is very crucial in order to produce competent qualified accountants. This was evident in the Bedford and Shenkir report (1987), which states that accounting education should discourage passive and rote learning, but instead focus on the student being active and learning to learn. So, Deep Approaches to learning produces successful learning results (Pask, 1976). The employment of the deep would enhance the academic achievement- initial professional development of accounting students.

Gijbels et al., (2005) and Byrne et al.'s (2004) intimated that deep approach had no significant relationship with academic achievement. Also, literature (Diseth, 2007; Diseth & Martinsen, 2003; Diseth & Kobbeltvedt, 2010; Diseth et al., 2006) averred that the deep approach to learning is unrelated to academic achievement. There are also other studies that support this finding whereby they found that deep approach did not result in higher grades on the evaluation (Minbashian et al., 2004; Trigwell & Prosser, 1991). Chen & Xue (2015) investigated the relationships between academic self-concept, learning strategies and academic achievement found that deep approach did not have a significant relationship on academic achievement. The reasoning posited by Chen & Xue (2015) were related to the inconsistent result of learning assessment and lack of academic achievement that reflected the exam score required by performance evaluation criteria. Also, students who utilize deep approach normally spend more time on exploring

fundamental aspects of the subject to build the solid academic experience so they would not be typically conductive to gaining high exam score.

That notwithstanding, it can be inferred from the foregoing discussion that the use of the deep approach would clothe the accounting students with the necessary competencies to becoming competent accountants. Thus, the deep approach would help accounting develop their critical thinking skill, their knowledge base. This is consistent with Sam (2020) who posited that there is a significant positive effect of deep approach to learning on academic performance of B.Ed accounting students in the university of Cape Coast. Again, Cano (2005) and Watkins (2000) also confirmed that students who scored higher in deep and strategic approach gained higher level of learning achievement. The findings are consistent with the hypothesis that deep approach to learning has a significant positive effect on the initial professional development of accounting students. Hence, students should be encouraged to engage in the deep approach to learning so as to help achieve the academic goals dictated by IFAC.

Hypothesis 3: Strategic Approach and Initial Professional Development

$H3_a$: *Strategic approach positively affects technical competence development of accounting students in Ghana*

With recourse to path estimation, the results of the PLS-SEM indicated that strategic approach to learning had a positive and a significant effect on technical competence development of accounting students in Ghana (β = 0.416, $p < 0.05$; Table 22). The result supports the hypothesis that strategic approach has a positive effect on technical competence. The results are consistent with to what was hypothesized.

Table 22: Structural model results for hypothesis 3

Hypothesis	Beta	Std Dev.	t-value	P-value
STa→TC	.416	.063	6.626	.000
STa→PS	.359	.068	5.768	.000
STa→PA	.321	.075	5.140	.000

Source: Field data (2021)

H3$_b$: *Strategic approach positively affects the professional skills development of accounting students in Ghana*

Based on the path estimation, the results of the PLS-SEM showed that strategic approach to learning had a positive and a significant effect on professional skills development of accounting students in Ghana ($\beta = 0.359$, $p < 0.05$; Table 22). The result supports the hypothesis that strategic approach has a positive effect on professional skills. The results are consistent with to what was hypothesized.

H3$_c$: *Strategic approach to learning positively affects the professional values, ethics and attitude development of accounting students in Ghana*

The results of the PLS-SEM showed that strategic approach to learning had a positive and a significant effect on professional values, ethics and attitude development of accounting students in Ghana ($\beta = 0.321$, $p < 0.05$; Table 22). The result supports the hypothesis that strategic approach has a positive effect on professional values, ethics and attitude. The results are consistent with to what was hypothesized.

Discussion on Hypothesis 3: Strategic Approach and Initial Professional Development

The findings of the study indicate that there is a significant positive relationship between approaches to learning and initial professional development of accounting students in Ghana. Thus, accounting students who

use strategic approach would develop their technical competence, professional skills and professional values, ethics and attitudes. The result is in line with most studies (Diseth, 2003; Diseth et al., 2010; Duff, 2003) which affirm the significant positive relationship between strategic approach and the initial professional development of students. The interplay of strategic approach and initial professional development of students may be attributed to so many factors. Principally, the intention of a strategic learner is to achieve the highest possible performance score (Turner & Baskerville, 2013). Relatively, strategic learners choose between a surface and deep approach to learning and allocate their time and intellectual resources to be consistent with the necessities of their assessment structure and achieve the maximum academic performance (Watkins, 2000).

Diseth et al., (2010) investigated roles of learning experience, efforts, motives and learning strategies of psychology students on academic achievement and found out that students using the strategic learning directly increase the academic achievement. Strategic student learners effectively organize and analyze the structure and content of how previous students were assessed, including examinations, to predict the next assessment criteria to inform their approach to studying the subject matter (Duff et al., 2004). It can be inferred that, the dynamism in the strategic approach rewards students, to wit their competencies development. The findings of the study are consistent with the assertion by Valadas et al. (2010) that students who adopt the Strategic learning approach are performance oriented and can achieve higher performance. The motive of accounting students to excel in their initial professional development triggered the use of the strategic approach and

consequently the increase in the development of their competencies, which is consistent with the dictates of the goal orientation theory.

Same finding was presented in the research that strategic approaches to learning are positively correlated with academic achievement. Indeed, Rodriguez's (2009) study found evidence that academic achievement was greater when business students combined strategic and deep learning rather than adopting deep learning alone. This view is supported by Duff (2004a) and Richardson (2013) who also promote strategic learning as a desirable approach despite its extrinsic motivations. That notwithstanding, Valadas et al. (2010) intimated that with strategic learners, they focus on high performance without really appreciating the subject matter at hand. Thus, strategic learners are usually unable to integrate current and existing knowledge and in most cases are unable to meaningfully apply concepts that they have been taught in school to actual situations (Valadas et al., 2010). In other words, strategic learners may be excelling greatly in their professional development but may also be lacking in-depth understanding of the accounting concepts and theories.

It can be inferred that the more a student uses the strategic approach to learning accounting courses, the higher the student develops his technical competence, professional skills and professional values, ethics and attitude. Apparently, accounting students in the University of Cape Coast are more sensitive to the modes of assessment, are so much intent on excelling in the academic engagement, are performance oriented and hence the increase in their initial professional development. It must however be stated that, since strategic learning is in the midway of deep and strategic learning, and it is dependent on the demands of the course, one may use surface approach under

the guise of strategic approach which would result in lower professional development. As stated by IEASB (2017), the only approach that guarantees lifelong learning, comprehensive professional development and an in-depth understanding of the Course is the deep learning approach. Institutions are therefore admonished to employ teaching methods, assessment techniques and all other possible factors that would stimulate the use of the deep approach in order to achieve a corresponding increase in the initial professional development of accounting students as anticipated by the IAESB.

Chapter Summary

The chapter covered the analyses and discussions on the demographic characteristics of final year accounting students in the University of Cape Coast. It assessed the levels of surface approach, deep approach, strategic approach, technical competence, professional skills and professional values, ethics and attitudes off accounting students in Ghana. More so, the chapter assessed the effect of surface approach, deep approach and strategic approach on technical competence, professional skills and professional values, ethics and attitudes using the Smart-PLS (Ringle et al., 2005) software. The next chapter deals with the summary, conclusions and recommendations.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

The chapter of this study starts with a summary of the objectives of the study, research methods employed in collecting and analysing data to obtain findings in addressing the research questions and hypothesis formulated on accounting students' approaches to learning and their initial professional development. Subsequent to the key findings relating to each objective, conclusions are drawn and recommendations are posited for policy making and practice. The chapter also captured suggestions for future research.

Summary of the Study

The study assessed the effect of accounting students' approaches to learning on their initial professional development in the University of Cape Coast. The specific objectives were: Research Questions

1. What is the dominant approach to learning employed by accounting students?
2. What is the dominant initial professional competency development of accounting students?

Further, these hypotheses were formulated

Research Hypothesis

H_{1a}: Surface approach negatively affects technical competence development of accounting students in Ghana.

H_{1b}: Surface approach to learning negatively affects the professional skills development of accounting students in Ghana.

H_{1c}: Surface approach negatively affects the professional values, ethics and attitude development of accounting students in Ghana.

H_{2a}: Deep approach to learning positively affects technical competence development of accounting students in Ghana.

H_{2b}: Deep approach to learning positively affects the professional skills development of accounting students in Ghana.

H_{2c}: Deep approach to learning positively affects the professional values, ethics and attitude development of accounting students in Ghana.

H_{3a}: Strategic approach to learning positively affects technical competence development of accounting students in Ghana.

H_{3b}: Strategic approach to learning positively affects the professional skills development of accounting students in Ghana.

H_{3c}: Strategic approach to learning positively affects the professional values, ethics and attitude development of accounting students in Ghana.

Also, Constructivists learning theory and Goal Orientation theory underpinned the study. These theories facilitated the explanation of the accounting students' approaches to learning and their initial professional development nexus.

Driven by positivism, the study employed the explanatory research design and the descriptive-inferential survey design. The stratified sampling and the systematic sampling techniques were also employed in the study. The ASSIST Scale was used to elicit responses on the students' approaches to learning and the IPD scale, birthed out of the IESs manual, was also used to measure the students' initial professional development. From a population of 460 students from the University of Cape Coast, 210 were sampled using the

stratified sampling technique and the systematic simple random technique. In total 207 responses were obtained from the students. Mean, standard deviation, Friedman's test and the structural equation modelling were used to analyse the data amassed from the accounting students.

The demographic information and the levels of accounting students' approaches to learning and their initial professional development were analysed using descriptive statistics (Frequency, percentages, mean and standard deviation). The hypotheses were analysed using partial least squares structured equation modelling techniques with the aid of the Smart-PLS version 3.0. An alpha level of 0.05 was used for all tests of significance.

Summary of major findings

The focus of the first objective was on the levels of Approaches to learning of the respondents (accounting students).

1. Generally, the findings indicated that accounting students employ the three approaches to learning in their respective accounting courses. Specifically, the findings indicated accounting students are more strategic (M = 4.96, SD = 1.12) in their learning, followed by the deep approach (M = 4.67, SD = 1.47) and then the surface approach (M = 3.48, SD = 1.28).
2. With regards to the initial professional development of the accounting students, the study found that, they are generally very highly developed in all three competencies. Particularly, they are more developed in the professional values, ethics and attitudes (M = 5.40, SD = 1.02) than in professional skills (M = 5.31, SD = 0.99) and technical competence (M = 5.14, SD = 1.03).

3. With respect to the third objective, the effect of surface approach on initial professional development (technical competence, professional skills and professional values, ethics and attitude) was assessed. The study found that surface approach had a significant negative effect on technical competence ($\beta = -0.196$, $p < 0.05$) and professional skills ($\beta = -0.193$, $p < 0.05$). However, the surface approach had a non-significant negative effect on professional values, ethics and attitude ($\beta = -0.158$, $p > 0.05$).
4. With respect to the fourth objective, the effect of deep approach on initial professional development (technical competence, professional skills and professional values, ethics and attitude) was assessed. Regarding this objective, it was found that deep approach to learning had a positive significant effect on technical competence ($\beta = 0.418$, $p < 0.05$), professional skills ($\beta = 0.395$, $p < 0.05$) and professional values, ethics and attitude ($\beta = 0.385$, $p < 0.05$) of accounting students in the University of Cape Coast.
5. With respect to the fifth objective, the effect of strategic approach on initial professional development (technical competence, professional skills and professional values, ethics and attitude) was assessed. Regarding this objective, it was found that strategic approach to learning had a positive significant effect on technical competence ($\beta = 0.416$, $p < 0.05$), professional skills ($\beta = 0.359$, $p < 0.05$) and professional values, ethics and attitude ($\beta = 0.321$, $p < 0.05$) of accounting students in the University of Cape Coast.

6. The deep approach to learning contributes largely to technical competence development than surface approach and strategic approach. The deep approach to learning contributes largely to professional skills development than surface approach and strategic approach. The deep approach to learning contributes largely to professional values, ethics and attitude development than surface approach and strategic approach. The approaches to learning explain i.e. surface, deep and strategic explain 53.4% of the changes in Technical competence of accounting students in the University of Cape Coast. The approaches to learning explain i.e. surface, deep and strategic explain 43.1% of the changes in professional skills of accounting students in the university of cape coast. The approaches to learning explain i.e. surface, deep and strategic explain 38.1% of the changes in professional values, ethics and attitude of accounting students in the university of cape coast.

Conclusions

Subsequent to the findings of the study, the following conclusions were drawn.

For the first objective, the study found that accounting students are more strategic in their approach to learning. The findings of the study also indicated that the accounting students employ the deep learning approach more than the surface approach. The findings are consistent with the position of literature, that accounting students are more interested in excelling in the accounting programme. Thus, accounting students are more goal oriented and so would utilize all their time and resources to excel in all courses. Also, the

accounting students are extremely sensitive to the assessment techniques deployed by each course moderator. It is noteworthy that the dominant use of the strategic approach may not necessarily mean they are getting an in depth understanding or appreciation of the contents, however may be scoring high marks in all assessments.

With respect to the second objective, the results indicated that there exists a very high level of initial professional development (technical competence, professional skills and professional values, ethics and attitude) among accounting students in the University of Cape Coast. This indication, clearly meets the aspirations of Institution of Higher Education, IFAC, ICAG and other accounting education agencies. Interestingly, the students are dominantly developed in the professional values, ethics and attitude; than in the professional skills and technical competence. This connotes that, students are morally informed of the practical issues subsisting beyond the classroom and the role ethics play in that regard. It can also be implied that the students' technical competence are relatively less developed because the contents are quite enormous and technical to grasp unlike the two other competencies.

With respect to the hypotheses tested, the study found that deep approach and strategic approach to learning had a positive effect on initial professional development (technical competence, professional skills and professional values, ethics and attitudes) of the accounting students and these effects were significant at varied degrees. These findings are consistent with the position of literature that deep approach and strategic approach to learning has a positive relationship with academic achievement. That notwithstanding, the study also found that the surface approach to learning had a negative effect

on initial professional development (technical competence, professional skills and professional values, ethics and attitudes) and these effects were significant with the exception of professional values, ethics and attitude. With respect to the various approaches to learning, deep approach was the highest contributor to technical competence, professional skills and professional values, ethics and attitude; followed by strategic approach to technical competence, professional skills and professional values, ethics and attitude; however, surface approach was the least contributor to technical competence, professional skills and professional values, ethics and attitude.

Further, the general expressions of the findings are that; the more a student employs the deep approach to learning the higher the tendency of developing the three competencies; also, the more a student uses the strategic approach to learning the higher the potency of developing the three competencies; however, the more a student employs the surface approach the less the development of the three competencies. Conversely, the default caveat associated with the use of strategic approach may sometimes compromise on the required development expected.

Summarily, accounting students in the University of Cape Coast are strategic learners. To wit, they may be attaining good grades in most of the accounting courses but may not necessarily be developing in all three competencies. More so, the assessment techniques existing in the University of Cape Coast may favour the strategic learners. Approaches to learning to a larger extent are significant predictors of initial professional development of accounting students. Hence the necessary attention must be channelled to this theory to enhance competencies development of the accounting students.

Pursuant to the findings of the study, the deep approach has the highest significant positive effect on all the three competencies which strictly corroborates the position of IFAC. Consequently, the right learning environment should be created; the right teaching strategies should be employed to stimulate gross usage of the deep approach to learning in all accounting programmes in Ghana.

Recommendations

Based on the major findings and conclusions presented, accounting teachers, accounting students, policy makers, accounting institutions and IFAC member bodies are advised to:

1. IAESB, accounting institutions must ensure that accounting courses adopt and maintain an assessment technique such as portfolio assessment that would stimulate students to use the deep learning approach at the expense of the other approaches.
2. IFAC member bodies and accounting teachers must ensure that accounting students are sent to the field to experience practical ethical issues rather than assimilating just the theoretical positions in ethics. It is safe to say that even though the students have demonstrably indicated they are highly abreast of the ethical principles, it must be enhanced. Also, Higher Accounting Institutions must make internship programmes mandatory to afford the students enhanced professional skills that employers seek. Teachers must employ the right teaching strategies in teaching students the concepts, standards and theories in accounting also relevant tutorial sessions must be organised regularly to enhance their understanding.

3. Accounting teachers must discourage the students from using the surface approach to learning as it lacks the significant potency to develop their requisite competencies. Assessment techniques used must not reward rote memorisation and reproductions of contents.
4. Accounting institutions must employ the teaching strategies that direct students to self-regulate their learning which would broaden their appreciation of conceptual understanding and applications in accounting. Thus, a natural environment must be created to encourage the use of deep approach to approach to learning and as it consequently increases the development of their competencies.

Suggestions for Further Research

The study focused on accounting students' approaches to learning and their initial professional development in the University of Cape Coast. The study did not include accounting students in the other higher education institution in Ghana. Also, the study did not focus on the antecedents (prior experiences, personality traits), of accounting students' approaches to learning. Therefore, future research should focus on:

1. assessing the effects of accounting students' approaches to learning on their initial professional development in all higher accounting education institutions in Ghana.
2. assessing the role of personality traits on the accounting students' approaches to learning and their initial professional development nexus.
3. examining the effect of accounting students' approaches to learning on their continuing professional development.

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APPENDICES

APPENDIX A

Questionnaire

UNIVERSITY OF CAPECOAST

DEPARTMENT OF BUSINESS AND SOCIAL SCIENCES EDUCATION

QUESTIONNAIRE ON APROACHES TO LEARNING AND INITIAL PROFESSIONAL DEVELOPMENT OF ACCOUNTING STUDENTS IN THE UNIVERSITY OF CAPE COAST

Dear Sir/Madam,

This research instrument is designed to assess the effect of Approaches to learning on initial professional development of accounting students in the University of Cape Coast. This is in partial fulfilment in the award of a Master's degree at the University of Cape Coast. As a result, any information given would be treated with utmost confidentiality. Please select the appropriate options for the questions by ticking their corresponding boxes.

Section A: Background of respondents

1. Sex of respondent: [1] Male [2] Female
2. Age (years) of respondent: [1] 21– 30 [2] 31 – 40 [3] 41 –50 [4] 51– 60
3. Programme of Study: [1] B. Com Accounting [2] B. Ed Accounting

Section B: Approaches to Learning

Section B seeks to measure the dominant approach to learning adopted by accounting students. Please indicate the extent of your **agreement** with the following statements on a 7-point scale (Please circle your answer). Where 1 = lowest Agreement and 7 = Highest agreement

	Approaches to Learning							
SL1	I find myself wondering whether the work I am doing is worthwhile.	1	2	3	4	5	6	7
SL2	I find much of the work disinteresting or irrelevant.	1	2	3	4	5	6	7
SL3	I have regrets for taking this programme.	1	2	3	4	5	6	7
SL4	I take this course for other reasons, other than my interests.	1	2	3	4	5	6	7
SL5	I consider rote memorizing a good deal of what I learn.	1	2	3	4	5	6	7
SL6	Much of what I'm studying makes little sense: it's like unrelated bits and pieces.	1	2	3	4	5	6	7
SL7	I find it difficult identifying what is important in lectures, so I try to get down all I can.	1	2	3	4	5	6	7
SL8	I often have trouble in making sense of the things I must remember.	1	2	3	4	5	6	7
SL9	I tend to read very little beyond what is required to pass tests.	1	2	3	4	5	6	7
SL10	I concentrate on learning just those bits of information I must know to pass tests.	1	2	3	4	5	6	7
SL11	I direct my studying closely to just what seems to be required for assignments and exams	1	2	3	4	5	6	7
SL12	I like to be told precisely what to do in essays or other assignments.	1	2	3	4	5	6	7
SL13	Often, I feel I am drowning in the sheer amount of material we must cope with.	1	2	3	4	5	6	7
SL14	I often worry about whether I'll ever be able to cope with the work properly.	1	2	3	4	5	6	7
SL15	I often seem to panic if I get behind with my work.	1	2	3	4	5	6	7
SL16	I often worry about work I think are complex to do.	1	2	3	4	5	6	7

DL1	I usually set out to understand for myself the meaning of what I must learn.	1	2	3	4	5	6	7
DL2	When I am reading an article or book, I try to find out myself exactly what the author means.	1	2	3	4	5	6	7
DL3	When I am reading, I reflect on what I am trying to learn from it.	1	2	3	4	5	6	7
DL4	Before tackling a problem or assignment I first try to work out what lies behind it.	1	2	3	4	5	6	7
DL5	I try to relate ideas I come across to those in other topics or other courses whenever possible.	1	2	3	4	5	6	7
DL6	When I am working on a new topic, I try to see in my own mind how all ideas fit together.	1	2	3	4	5	6	7
DL7	Ideas in course books or articles often set me off on long chains of thought of my own.	1	2	3	4	5	6	7
DL8	I like to play around ideas of my own even if they don't get me very far.	1	2	3	4	5	6	7
DL9	I look at the evidence carefully and try to reach my own conclusion about what I'm studying.	1	2	3	4	5	6	7
DL10	Often, I find myself questioning things I hear at lectures or read in books.	1	2	3	4	5	6	7
DL11	I examine the details of every content I read carefully to see how they relate.	1	2	3	4	5	6	7
DL12	It's important for me to be able to follow the direction of an academic argument and to understand the rationale.	1	2	3	4	5	6	7
DL13	Regularly I find myself thinking about ideas from lectures when I'm doing other things.	1	2	3	4	5		7

DL14	I find that studying academic topics can be quite exciting.	1	2	3	4	5	6	7
DL15	Some of the ideas I come across on the course are exciting.	1	2	3	4	5	6	7
DL16	I sometimes get very interested in academic topics which excites me to keep on studying them.	1	2	3	4	5	6	7
STA1	I manage to find conditions for studying which allow me to get on with my work easily.	1	2	3	4	5	6	7
STA2	I think I'm quite systematic and organized when it comes to revising for exams.	1	2	3	4	5	6	7
STA3	I'm good at following up some of the reading suggested by lecturers or tutors.	1	2	3	4	5	6	7
STA4	I usually plan out my week's work in advance, either on paper or in my head.	1	2	3	4	5	6	7
STA5	I organize my study time carefully to make the best use of it.	1	2	3	4	5	6	7
STA6	I'm pretty good at getting down to work whenever I need to.	1	2	3	4	5	6	7
STA7	I work steadily through the term or semester, rather than leave it all until the last minute.	1	2	3	4	5	6	7
STA8	I generally make good use of my time during the day.	1	2	3	4	5	6	7
STA9	When working on an assignment, I am keeping in mind how best to impress the marker.	1	2	3	4	5	6	7
STA10	I look carefully at tutors' comments on course work to see how to get higher marks next time.	1	2	3	4	5		7
STA11	I keep in mind who is going to mark an assignment and what they are likely to be looking for.	1	2	3	4	5	6	7

STA12	I keep an eye open for what lecturers seem to think is important and concentrate on that.	1	2	3	4	5	6	7
STA13	It is important to me to feel that I am doing as well as I really can on the courses here.	1	2	3	4	5	6	7
STA14	I put a lot of effort into studying because I'm determined to do well academically.	1	2	3	4	5	6	7
STA15	I feel that I am getting on well, and this helps me put more effort into the work.	1	2	3	4	5	6	7
STA16	I don't find it at all difficult to motivate myself.	1	2	3	4	5	6	7
STA17	I go over the work I have done carefully to check the reasoning and that it makes sense.	1	2	3	4	5	6	7
STA18	I think about what I want to get out of this course to keep my studying well focused.	1	2	3	4	5	6	7
STA19	Before starting work on an assignment or exam question, I think first how best to tackle it.	1	2	3	4	5	6	7
STA20	When I have finished a piece of work, I check it through to see if it really meets the requirements.	1	2	3	4	5	6	7

Section C: Initial Professional Development

This Section is focused on measuring the initial professional development of accounting students in accordance with the dictates of IESs. Please indicate the extent of your **agreement** with the following statements on a 7-point scale. (Please circle your answer) Where 1 = Least agreement and 7 = Highest agreement

CODE	STATEMENTS							
	Technical Competence							
TC1	I am able to apply accounting principles to transactions.	1	2	3	4	5	6	7
TC2	I am able to evaluate the appropriateness of accounting policies used to prepare financial statements.	1	2	3	4	5	6	7
TC3	I am able to interpret financial statements and related disclosures.	1	2	3	4	5	6	7
TC4	I am able to prepare financial statements in accordance with IFRSs and other relevant standards.	1	2	3	4	5	6	7
TC5	I am able to prepare Consolidated financial statements in accordance with IFRSs and other relevant standards.	1	2	3	4	5	6	7
TC6	I am able to interpret sustainability reports and integrated reports.	1	2	3	4	5	6	7
TC7	I have the ability to apply business techniques to support management decision making.	1	2	3	4	5	6	7
TC8	I am able to analyze financial and non-financial information to provide relevant information for decision making.	1	2	3	4	5	6	7
TC9	I can prepare business reports to support management decision making.	1	2	3	4	5	6	7
TC10	I can evaluate the performance of products and business segments.	1	2	3	4	5		7
TC11	I am able to make effective comparisons on the sources of financing existing in an organization.	1	2	3	4	5	6	7
TC12	I can analyze an organisation's cash flow and working capital requirements.	1	2	3	4	5	6	7
TC13	I am able to use ratio analysis, trend	1	2	3	4	5	6	7

	analysis and cashflow analysis to analyze the present and future financial position of an organization.							
TC14	I have mastery in Capital budgeting techniques.	1	2	3	4	5	6	7
TC15	I can differentiate between tax planning, tax avoidance and tax evasion.	1	2	3	4	5	6	7
TC16	I am able to prepare income tax liability for an individual and an organization.	1	2	3	4	5	6	7
TC17	I am very much abreast of the national taxation compliance and filing requirements.	1	2	3	4	5	6	7
TC18	I can apply relevant auditing standards to audit financial statements.	1	2	3	4	5	6	7
TC19	I can assess the risks of material misstatements in the financial statements.	1	2	3	4	5	6	7
TC20	I can explain the stages involved in performing audit.	1	2	3	4	5	6	7
TC21	I can explain and apply the agency theory in an organization.	1	2	3	4	5	6	7
TC22	I am able to explain the laws and regulations governing legal entities.	1	2	3	4	5	6	7
TC23	I am able to explain the laws and regulations applicable to the environment in which a professional accountant may operate.	1	2	3	4	5	6	7
TC24	I am able to define the place of ICT in accounting practices.	1	2	3	4	5	6	7
TC25	I am able to explain how theories may be used to enhance organizational performance.	1	2	3	4	5	6	7
TC26	I am able to explain how strategies are designed and implemented in business entities.	1	2	3	4	5	6	7
TC27	I am conversant with the market structures.	1	2	3	4	5	6	7
TC28	I understand the basic principles of microeconomics and macroeconomics.	1	2	3	4	5	6	7
	Professional Skills							
PS1	I am committed to lifelong learning.	1	2	3	4	5	6	7
PS2	I am able to apply professional skepticism through critical assessment of information.	1	2	3	4	5	6	7
PS3	I am able to manage time and resources to achieve professional commitments.	1	2	3	4	5	6	7

PS4	I am able to anticipate challenges and pan potential solutions.	1	2	3	4	5	6	7
PS5	I am to appreciate the relevance of compliance to organizational structures and practice.	1	2	3	4	5	6	7
PS6	I am able to motivate and develop others.	1	2	3	4	5	6	7
PS7	I am able to delegate to deliver assignments.	1	2	3	4	5	6	7
PS8	I am able to influence others to work toward a common goal.	1	2	3	4	5	6	7
PS9	I am able to apply critical analysis, reasoning and innovative thinking to solve problems.	1	2	3	4	5	6	7
PS10	I am to solve complex and multi-faceted problems.	1	2	3	4	5	6	7
PS11	I am able to appropriately seek counsel to get a problem solved.	1	2	3	4	5	6	7
PS12	I am able to identify and evaluate alternatives to make reasonable conclusions with recourse to relevant facts.	1	2	3	4	5	6	7
PS13	I have developed my research skills in the business field.	1	2	3	4	5	6	7
PS14	I am able to communicate clearly and concisely both in writing and orally.	1	2	3	4	5	6	7
PS15	I am able to cooperate and work in a team to achieve common goals.	1	2	3	4	5	6	7
PS16	I am able to listen actively and make sound deductions.	1	2	3	4	5	6	7
PS17	I am able to demonstrate awareness of cultural and language differences in all communication.	1	2	3	4	5	6	7
	Professional Attitudes, Ethics and Values							
PA1	I am able to explain the nature of ethics.	1	2	3	4	5	6	7
PA2	I am able to explain the role of ethics within the accounting profession.	1	2	3	4	5	6	7

PA3	I am able to analyze the consequences of unethical behaviour.	1	2	3	4	5	6	7
PA4	I am able to apply the principle of integrity to ethical dilemmas.	1	2	3	4	5	6	7
PA5	I am able to uphold the principle of integrity in all my dealings.	1	2	3	4	5	6	7
PA6	I am able to uphold the principle of confidentiality in all my dealings.	1	2	3	4	5	6	7
PA7	I am able to demonstrate professional competence and due care in all my dealings.	1	2	3	4	5	6	7
PA8	I am able to demonstrate professional behaviour in compliance with standards.	1	2	3	4	5	6	7
PA9	I am able to anticipate the role of ethics to business and good governance.	1	2	3	4	5	6	7
PA10	I am able to analyze the relationship between laws, regulations and the public interest.	1	2	3	4	5	6	7

Thank you.

APPENDIX B

Detailed Level of Approaches to Learning and Level of Initial Professional Development Results

Approaches to Learning

Surface Approach	Mean	Standard Deviation
I often worry about course work I think are complex to do.	3.8019	1.7748
I direct my studying closely to just what seems to be required for assignments and exams	3.7295	1.6849
I like to be told precisely what to do in essays or other assignments.	3.6812	1.6994
I concentrate on learning just those bits of information I must know to pass tests.	3.6812	1.6354
I often worry about whether I'll ever be able to cope with the course work properly.	3.6280	1.7099
Often, I feel I am drowning in the sheer amount of material we must cope with.	3.6232	1.6319
I often seem to panic if I get behind with my course work.	3.6087	1.7890
I find myself wondering whether the course work I am doing is worthwhile.	3.5556	1.7419
I find much of the course work disinteresting or irrelevant.	3.4493	1.7997
Imoderately it difficult identifying what is important in lectures, so I try to get down all I can.	3.4251	1.6989
I often have trouble in making sense of the things I must remember.	3.3575	1.6451
I consider rote memorizing a good deal of what I learn.	3.3527	1.6447
I take this course for other reasons, other than my interests.	3.3285	1.7758
Much of what I'm studying makes little sense: related bits and pieces.	3.2995	1.7256
I have regrets for taking this programme.	2.6473	1.6028
Total	**3.4765**	

Deep Approach	Mean	Standard Deviation
Some of the ideas I come across on the course are exciting.	4.8019	1.7107
It's important for me to be able to follow the direction of an academic argument and to understand the rationale.	4.7971	1.5634
I sometimes get very interested in academic topics which excites me to keep on studying them.	4.7874	1.6320
When I am working on a new topic, I try to see in my own mind how all ideas fit together.	4.7826	1.6388
I find that studying academic topics can be quite exciting.	4.7826	1.6299
I examine the details of every content I read carefully to see how they relate.	4.7295	1.7022
I look at the evidence carefully and try to reach my own conclusion about what I'm studying.	4.7101	1.6408
When I am reading, I reflect on what I am trying to learn from it.	4.6908	1.8118
I try to relate ideas I come across to those in other topicisr other courses whenever possible.	4.6908	1.6579
Often, I find myself questioning things I hear at lectures or read in books.	4.6812	1.6235
Regularly I find myself thinking about ideas from lectures when I'm doing other things.	4.6763	1.6799
Before tackling a problem or assignment I first try to work out what lies behind it.	4.6667	1.7432
Ideas in course books or articles often set me off on long chains of thought of my own.	4.5942	1.6980
I like to play around ideas of my own even if they don't get me very far.	4.5652	1.7079
I usually set out to understand for myself the meaning of what I must learn.	4.3768	2.3114
When I am reading an article or book, I try to find out myself exactly what the author means.	4.3333	2.0785
Total	**4.6667**	

Strategic Approach	Mean	S D
When I have finished a piece of assignment or exam, I check it through to see if it really meets the requirements.	5.2609	1.4811
I think about what I want to get out of this course to keep my studying well focused.	5.2222	1.4309
I feel that I am getting on well, and this helps me put more effort into the course work.	5.1063	1.3894
I go over the assigned work I have done carefully to check the reasoning and that it makes sense.	5.1014	1.2788
It is important to me to feel that I am doing as well as I really can on the courses here.	5.0725	1.3437
I put a lot of effort into studying because I'm determined to do well academically.	5.0435	1.4118
Before starting work on an assignment or exam question, I think first how best to tackle it.	5.0097	1.4714
I keep an eye open for what lecturers seem to think is important and concentrate on that.	4.9903	1.4004
I think I'm quite systematic and organized when it comes to revising for exams.	4.9758	1.4260
I don't find it at all difficult to motivate myself.	4.9710	1.4810
When working on an assignment, I am keeping in mind how best to impress the marker.	4.9710	1.4173
I manage to find conditions for studying which allow me to get on with my course work easily.	4.9420	1.4769
I'm pretty good at getting down to work whenever I need to.	4.9324	1.3385
I generally make good use of my time during the day.	4.9275	1.4209
I keep in mind who is going to mark an assignment and what they are likely to be looking for.	4.8986	1.3950
I work steadily through the term or semester, rather than leave it all until the last minute.	4.8841	1.4163
I look carefully at tutors' comments on course work to see how to get higher marks next time.	4.8744	1.3913
I organize my study time carefully to make the best use of it.	4.7681	1.4462
I usually plan out my week's work in advance, either on paper or in my head.	4.7005	1.4902
I'm good at following up on some of the reading suggested by lecturers or tutors.	4.5314	1.6033
Total	**4.9592**	

Initial Professional Development

Technical Competence	Mean	Standard Deviation
I am able to analyze financial and non-financial information to provide relevant information for decision making.	5.4348	1.3418
I am able to evaluate the appropriateness of accounting policies used to prepare financial statements.	5.2850	1.1787
I am able to explain how theories may be used to enhance organizational performance.	5.2705	1.4122
I have the ability to apply business techniques to support management decision making.	5.2464	1.2627
I am able to interpret financial statements and related disclosures.	5.2319	1.3633
I am able to interpret sustainability reports and integrated reports.	5.2367	1.3571
I am able to define the place of ICT in accounting practices.	5.1932	1.3587
I can analyze an organisation's cash flow and working capital requirements.	5.1884	1.1651
I am conversant with the market structures.	5.1836	1.2942
I am able to apply accounting principles to transactions.	5.1787	1.4488
I can apply relevant auditing standards to audit financial statements.	5.1787	1.3517
I understand the basic principles of microeconomics and macroeconomics.	5.1739	1.3433
I can explain and apply the agency theory in an organization.	5.1739	1.3361
I have mastery in Capital budgeting techniques.	5.1691	1.4023
I am able to prepare Consolidated financial statements in accordance with IFRSs and other relevant standards.	5.1643	1.4011
I can explain the stages involved in performing audit.	5.1546	1.3493
I am able to use ratio analysis, trend analysis and cashflow analysis to analyze the present and future financial position of an organization.	5.1256	1.2785
I am able to prepare financial statements in accordance with IFRSs and other relevant standards.	5.1014	1.4529
I am able to make effective comparisons on the sources of financing existing in an organization.	5.1014	1.2939
I am able to prepare income tax liability for an individual and an organization.	5.0966	1.3110
I am very much abreast of the national taxation compliance and filing requirements.	5.0773	1.3983
I am able to explain the laws and regulations applicable to the environment in which a professional	5.0580	1.3676

accountant may operate.		
I am able to explain the laws and regulations governing legal entities.	5.0580	1.2834
I can assess the risks of material misstatements in the financial statements.	5.0483	1.3926
I can evaluate the performance of products and business segments.	5.0193	1.3437
I can differentiate between tax planning, tax avoidance and tax evasion.	5.0145	1.3986
I am able to explain how strategies are designed and implemented in business entities.	4.9565	1.5115
I can prepare business reports to support management decision making.	4.8696	1.4236
TOTAL	**5.1425**	

Professional Skills	Mean	Standard Deviation
I am able to communicate clearly and concisely both in writing and orally.	5.5024	1.3790
I am able to apply professional skepticism through critical assessment of information.	5.4010	1.1818
I have developed my research skills in the business field.	5.4010	1.2917
I am able to listen actively and make sound deductions.	5.3816	1.2976
I am able to demonstrate awareness of cultural and language differences in all communication.	5.3671	1.2887
I am committed to lifelong learning.	5.3285	1.3213
I am able to identify and evaluate alternatives to make reasonable conclusions with recourse to relevant facts.	5.3140	1.1333
I am able to delegate to deliver assignments.	5.2850	1.2737
I am able to motivate and develop others.	5.2850	1.1410
I am able to anticipate challenges and pan potential solutions.	5.2657	1.1832
I am able to apply critical analysis, reasoning and innovative thinking to solve problems.	5.2609	1.3181
I am able to influence others to work toward a common goal.	5.2560	1.2607
I am to solve complex and multi-faceted problems.	5.2560	1.2569
I am able to manage time and resources to achieve professional commitments.	5.2512	1.2559
I am able to appropriately seek counsel to get a problem solved.	5.2415	1.2305
I am to appreciate the relevance of compliance to organizational structures and practice.	5.2271	1.2194
I am able to cooperate and work in a team to achieve common goals.	5.1739	1.4710
Total	**5.3058**	

Professional Values, ethics and attitudes	Mean	Standard Deviation
I am able to analyze the relationship between laws, regulations and the public interest.	5.5507	1.2526
I am able to anticipate the role of ethics to business and good governance.	5.4783	1.1899
I am able to uphold the principle of integrity in all my dealings.	5.4348	1.2519
I am able to analyze the consequences of unethical behaviour.	5.4348	1.2245
I am able to uphold the principle of confidentiality in all my dealings.	5.4106	1.3185
I am able to explain the nature of ethics.	5.3720	1.2432
I am able to demonstrate professional behaviour in compliance with standards.	5.3671	1.2110
I am able to demonstrate professional competence and due care in all my dealings.	5.3575	1.1978
I am able to apply the principle of integrity to ethical dilemmas.	5.3527	1.2681
I am able to explain the role of ethics within the accounting profession.	5.2560	1.2491
Total	**5.4015**	