UNIVERSITY OF EDUCATION, WINNEBA

CURRICULUM AND PEDAGOGIC EFFECT ON STUDENTS ENTREPRENEURIAL INTENTIONS: A STUDY OF UNDERGRADUATE BUSINESS PROGRAMMES OF A PUBLIC UNIVERSITY IN GHANA

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JUNE 2023

DECLARATION

Student's Declaration

I, Michael Amoh Asiedu, declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature: ……..…….

Date: ……..…….

Supervisor's Declaration

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis/dissertation/project as laid down by the University of Education, Winneba.

Prof. Dandy George Dampson (Ph.D)

Signature: ……..…….

Date: ……..…….

DEDICATION

I dedicate this work to my lovely wife (Amonbea), children (Nana and Maame), and my late parents (Mr. & Mrs. Gyamfi).

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To God be the glory!

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ABBREVIATIONS

AC	Abstract Conceptualisation
ACET	African Center for Economic Transformation
AE	Active Eperimentation
AVE	Average Variance Extract
BBA	Bachelor of Business Administration
CE	Concrete Experience
ELT	Experiential Learning Theory
ILO	International Labour Organisation
NABCO	Nation Builders' Corp
NPP	New Patriotic Party
PBC	Perceived Behavioural Control
PLS-SEM	Patial Least Square Structural Equation Modelling
RO	Reflective Observation
TPB	Theory of Planned Behaviour
UE	European Union
UEW	University of Education, Winneba
UGAG	Unemployed Graduate Association of Ghana
USA	United States of America
VIF	Variance Inflation Factors

ABSTRACT

This study assessed the entrepreneurial content of five Bachelor of Business Administration (BBA) curricula of a public university in Ghana in order to establish the effect of pedagogy on BBA students' entrepreneurial self-efficacy, innovation, and intentions. The study utilized an expalnatory research design in its analysis. Purposive sampling was used to select five BBA programme documents for the study. The study had a target population of 1359 business students from levels 300 and 400. A sample size of 300 was determined using Cochran's sample size determination formula. The sample size was however increased to 500. A simple random sampling was used to select the respondents while, content analysis was employed to assess the curricula to ascetain the volume/frequency of entrepreneurial content embedded in the curricula. Patial Least Square-Structural Equation Modelling was used to ascertain the effect of pedagogy on students's entrepreneurial efficacy, innovation, and intentions. It was discovered that only 6% out of the entrepreneurial content themes is embedded in the general courses in the first two years of the programmes. It was also discovered that BBA Marketing programme had the highest frequency of 6 (33.33%) entrepreneurial themes among the five programmes. Formal lecture was found to be the most popular among the various teaching techniques used for instruction. It was also established that pedagogies have a significant positive effect on entrepreneurial self-efficacy, innovation, and intentions. It is therefore recommended that the curricula of BBA programmes be revised to increase the frequency of entrepreneurial content. It is also recommended that the School adopts pedagogies that re-inforce entrepreneurial self-efficacy and develop entrepreneurial intentions. This study's contribution is the discovery of the limited entrepreneurial content in the BBA curricula and the recommendations made based on the findings.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The field of entrepreneurship education (EE) is ideal for developing and advancing societies, as it serves as a catalyst for social cohesiveness, economic growth, organizational success, and personal fulfillment (Porfírio et al., 2021). Due to this, entrepreneurship education programs (EEP) have grown dramatically throughout the world in the last 20 years (Hernández-Sánchez, Sánchez-García, & Mayens, 2019).

The first entrepreneurship course was offered at Harvard Business School in 1947 under the name Management of New Enterprises. A year later, the Research Center in Entrepreneurial History was established as a center for entrepreneurship research (Landström, 2020). Nevertheless, courses on entrepreneurship started to show up at American universities, and in 1967 Stanford and New York University hosted the first MBA programs on entrepreneurship. A first-degree program in entrepreneurship was introduced by Babson College in 1968. The way that entrepreneurship is taught has started to change, allowing students from all levels of education and all higher education courses to receive the instruction they need to acquire entrepreneurial abilities. In order to prepare and enable them to face professional challenges, create their own jobs, and develop innovative and valuable solutions to various emerging social and economic problems, such as the unemployment, environment, poverty, social exclusion, and sustainability, entrepreneurial programs have been developed and implemented on all continents. Furthermore, with the aforementioned competences serving as a framework,

entrepreneurship education was thought to have the goal of fostering an entrepreneurial culture (Römer-Paakkanen & Suonpää, 2017).

With the goal of making entrepreneurs in mind, interest in educational interventions in the form of intervention programs has increased. These interventions consist of deliberate and systematic actions that arise from identifying a population's needs, aiming to achieve particular goals based on theoretical models, and offering activities and instructional resources for their implementation and assessment (Jardim et al., 2021). As a result, research on these interventions has involved the widest range of beneficiaries across all continents. These references indicate the need for entrepreneurial skills by highlighting the rise in entrepreneurship-related educational initiatives worldwide in recent years. An exemplary case study is EEP in secondary schools in Hong Kong, as reported by Cheung (2008), who found that 70% of schools use EEP for longer than three years, that activities in most programs (48%) span one or more school years, and that a variety of teaching strategies are used, most commonly workshops (46%), competitions, case studies, and mentoring. However, 75% of schools continue to employ conventional teaching strategies such as formal lecture.

In order to build the components of an entrepreneurial culture, educational environments that support the development of value propositions, original socio-professional projects, practical products, and creative services must be established. The development of appropriate curriculum and the application of suitable pedagogical strategies is implied by this teaching-learning process. They may include instructional games, entrepreneur biographies, group dynamics, or business models.

The concept of curriculum is commonly thought of as encompassing what teachers will teach and what learners will learn. However, the term encompasses more

than that. It is also closely linked to how effectively learners acquire knowledge and skills - in other words, the outcomes of education. As an umbrella term, curriculum covers a wide range of experiences, such as the teaching curriculum, learning curriculum, testing curriculum, administrative curriculum, and the hidden curriculum. The word "curriculum" comes from the Latin verb "currere," which means "to run." "Currere" was later transformed into a diminutive noun, which referred to a "racing chariot" or "race track." (Pratt, 1994, p.5). Cicero expanded the term to include "curriculum vitae," which means "the course of one's life," and "curricula mentis," which metaphorically refers to "the (educational) course of the mind." It was not until the nineteenth century that the term became commonly used in the field of education.

The purpose of a curriculum is to accomplish specific educational aims and objectives. Rather than narrowly viewing curricula as strictly classroom-based content or specific learning goals, it can be helpful to consider them more comprehensively as programs designed to provide a range of experiences.

Taking this approach to defining curriculum, Marsh (1997) describes it as "a connected group of plans and experiences that a student undertakes under the direction of the school" (p.5).

Curriculum cannot achieve its aims, goals, objective without the appropriate pedagogies for its effective implementation. It is therefore imperative to assign equal level of importance to pedagogy. In Greece's ancient times, teaching was regarded as an art, and the concept of a teacher emerged. However, only the affluent could provide their children with education by enrolling them in schools. The educator's role was critical in the learning process, as they imparted valuable knowledge and wisdom to their students. The initial pedagogues were not educators themselves, but rather enslaved individuals who were employed by affluent members of society to

accompany their children to school. These slaves were viewed as knowledgeable and wise individuals who imparted knowledge to the children under their care. This is how the term pedagogue came into existence, referring to a leader of children who provided academic as well as moral guidance to students.

Paulo Freire, a Brazilian educator, defines pedagogy as "the art and science of teaching people how to learn" (Freire, 1970). He emphasizes the importance of critical thinking and active participation in the learning process. Lev Vygotsky, a Russian psychologist, views pedagogy as a social and cultural process that involves the transfer of knowledge and skills from more knowledgeable individuals to less knowledgeable ones. He emphasizes the role of interaction and collaboration in the learning process (Vygotsky, 1978). Jean Piaget, a Swiss psychologist, sees pedagogy as a process of cognitive development that occurs through a series of stages. He emphasizes the importance of hands-on, experiential learning in the development of mental structures and concepts (Piaget, 1970). Overall, pedagogy can be understood as the art and science of teaching, involving the use of various methods and strategies to facilitate the learning process and promote the acquisition of knowledge and skills. Pedagogy can be defined as the methods and techniques used in educating students, encompassing both theoretical and practical aspects. It involves a symbiotic relationship between cultural factors and learning techniques. The primary objective of pedagogy is to leverage the students' prior knowledge and foster the development of their skills and attitudes. Through pedagogy, students gain a deep understanding of the subject matter and learn to apply that knowledge to their everyday lives beyond the classroom.

Pedagogy can have a significant impact on students' intentions by shaping their attitudes, beliefs, and values towards learning. Effective pedagogy can help to

create a positive learning environment, which can foster students' motivation and interest in the subject matter. When students feel engaged and motivated, they are more likely to have a positive intention towards learning. Furthermore, pedagogy can influence intention by promoting the development of students' cognitive and metacognitive skills. When students learn how to learn effectively, they are more likely to feel confident in their ability to succeed and to have a positive intention towards continuing to learn.

Pedagogy can also influence intention by providing students with opportunities to apply their learning to real-world contexts. When students see the relevance and practical value of what they are learning, they are more likely to have a positive intention towards using that knowledge in their future endeavors. Effective pedagogy can play a crucial role in shaping students' intentions towards learning, by fostering their motivation, confidence, and practical skills. Practical skill development through effective curriculum and pedagogy is one effective means of dealing with graduate unemployment. Effective curriculum and pedagogy can turn job seekers to entrepreneurs.

Entrepreneurship is the process of creating and managing a business venture to achieve a specific goal, typically involving the production of goods or services for profit. Entrepreneurs are individuals who identify opportunities, take calculated risks, and mobilize resources to create innovative products or services. Entrepreneurship involves a range of activities, including market research, product development, fundraising, marketing, sales, and customer service. Entrepreneurs must be willing to take calculated risks, learn from their failures, and adapt quickly to changing market conditions. Entrepreneurship is a critical driver of economic growth and job creation, as new businesses can bring new products, services, and ideas to the market. It also

provides opportunities for individuals to pursue their passions, create value, and make a positive impact on their communities.

Entrepreneurship can be approached in many ways, from starting a small business to launching a startup with significant growth potential. Entrepreneurs can also choose to focus on a variety of sectors, such as technology, healthcare, social enterprise, or creative industries. Entrepreneurship requires a range of skills, including creativity, innovation, problem-solving, communication, and leadership. Entrepreneurs must be able to identify market needs, develop solutions to meet those needs, and communicate the value of their products or services to potential customers. Entrepreneurship is a critical driver of innovation, economic growth, and job creation. It provides opportunities for individuals to pursue their passions, create value, and make a positive impact on society. However, entrepreneurship also involves significant challenges and risks, requiring entrepreneurs to be resilient, adaptable, and resourceful in the face of uncertainty.

Unemployment has been a widespread crisis, affecting almost every nation in the world, much like a global pandemic, due to its damaging and indiscriminate impact. The International Labour Organization (ILO) stated that the worldwide unemployment rate in 2020 was 6.471% of the total workforce (ILO, 2021). In Africa, the phenomenon is very scary. The youth unemployment phenomenon has become a national security matter many countries are grappling with, which in some cases has led to political upheavals. Sub-Sahara Africa recorded 6.63% unemployment rate in the year 2020 (ILO, 2021). In the circles of sub-Sahara Africa, Ghana's unemployment rate was recorded at 4.51% in 2020 (ILO, 2020).

Maslen's (2019) study of the fluctuations in global graduate employment showed that among recent graduates in the European Union (EU) and its related

countries, Malta had the highest employment rate of 96 percent. The report also disclosed that 96.4 percent of graduates in the United States and 70 percent in Australia secure employment shortly after graduation. However, the scenario in Africa is different. A 2016 report by the African Centre for Economic Transformation (ACET) stated that approximately 50 percent of African graduates fail to secure employment annually (ACET, 2016). Dealing with graduate unemployment remains a significant challenge for many governments in Sub-Saharan Africa. For instance, graduate unemployment in Ghana has risen from 14.7 percent in 1987 to 40 percent in 2011 (Baah-Boateng, 2015; Zakaria et al., 2014). Previously, Aryeetey (2001) found that about half of the graduates from higher educational institutions in Ghana usually remain unemployed for two years after completing their required national service. In Ghana, the issue of graduate unemployment led to the formation of the renowned Unemployed Graduates Association of Ghana (UGAG) in 2011.

To address the unemployment issue with its related economic and social difficulties in a sustainable manner, focus should be placed on instilling and promoting an entrepreneurial mindset through entrepreneurship education (Mundy & Verger, 2015; Mayhew et al., 2012). Entrepreneurship education produces more entrepreneurs who can generate more job opportunities for poverty alleviation and economic growth (Adekiya & Ibrahim, 2016; Gerba, 2012; Küttima et al., 2014; Linán & Chen, 2009; Pedrini et al., 2017). Entrepreneurship education involves imparting knowledge in the areas of business creation and management to students, with the goal of igniting their interest in starting a business (DeTienne & Chandler, 2004). Given the increasing number of graduates and the limited job prospects, it is crucial to evaluate the curriculum and teaching methodologies to determine their impact on the cultivation of entrepreneurial skills. In a webinar organized on the

21st of October 2021 by The University of Ghana, through the Institute of Applied Science and Technology in partnership with the Global Entrepreneurship Network, Ghana, Prof. Kanes Rajah, the Executive Director, Centre for Executive and Professional Development, London, emphasized the need for skills to be taught at the university level to add value to students and the need for the universities to change from the old ways of teaching to new approaches that enable the youth to create their businesses. Educational institutions would have to take a closer look at their curriculum content and the way they teach, and align it with present day realities, as the value of a university is measured by how easily its graduates find jobs (myjoyonline, 2017).

The need to examine factors that impact entrepreneurship intention in the connection between entrepreneurship education and entrepreneurial intention has become a crucial area of research to establish evidence-based understanding of the impact of entrepreneurial education on entrepreneurship intention. In a meta-analysis by Bae et al. (2014), they highlighted that entrepreneurship intentions are influenced by other factors and therefore, "the varying effects of entrepreneurship education on entrepreneurship intentions occur through (mediated by) those factors" (p. 242). They therefore called for future empirical studies to explore the mediating factors in the relationship between entrepreneurship education and entrepreneurship intentions. In this context, entrepreneurial self-efficacy has emerged from the literature as a potential mediating factor. Entrepreneurial self-efficacy refers to an entrepreneur's belief in their capability to succeed in specific entrepreneurial situations or tasks (Devonish et al., 2010). Those with high self-efficacy tend to show higher intrinsic interest in entrepreneurial behaviors and activities (Boyd & Vozikis, 1994; Krueger, 2009; Miranda et al., 2017).

Additionally, an assessment of efficacy increases the likelihood that an individual's intention will lead to action (McGee et al., 2009). The connection between entrepreneurship education and the development of entrepreneurial self-efficacy is well established in literature, as entrepreneurial education can provide the skills and attitudes needed for success in entrepreneurial tasks. As a result, high levels of self-efficacy can lead to increased interests in entrepreneurial behaviour and a higher likelihood of turning intentions into actions. However, the extent to which entrepreneurial self-efficacy acts as a mediator in the relationship between entrepreneurship education and entrepreneurial intention has not been well studied, particularly in Africa.

It has been recognized that very few studies have explored the mediating role of entrepreneurial self-efficacy in the relationship between entrepreneurship education and entrepreneurial intention, mainly outside of the African context. However, given the cultural differences in entrepreneurship education in Sub-Saharan Africa, it is necessary to examine this issue specifically in the African context. The study adds to the research on entrepreneurship education in Sub-Saharan Africa by investigating whether entrepreneurial self-efficacy can act as a mediator between entrepreneurship education and entrepreneurial intention. It makes a theoretical contribution to the field as the mediating role of entrepreneurial self-efficacy in the relationship between entrepreneurship education and entrepreneurial intention has not been widely studied, particularly in the African context.

1.2 Statement of the Problem

In contemporary societies, the persistent challenge of graduate unemployment underscores a critical need to reevaluate and innovate educational approaches, particularly within the context of entrepreneurial curriculum and pedagogies. As the

gap between traditional academic programs and the dynamic demands of the job market widens, there is an urgent necessity to investigate and enhance entrepreneurial education as a potential solution.

Graduates often face challenges in aligning their academic knowledge with the evolving needs of the job market. Investigating how entrepreneurial curriculum and pedagogies can bridge this gap by instilling practical skills, industry-relevant knowledge, and an entrepreneurial mindset is essential for addressing the root causes of graduate unemployment. Many graduates lack the practical skills demanded by employers, leading to a disconnect between academic knowledge and workplace requirements. Examining how entrepreneurial curriculum can integrate hands-on experiences, real-world projects, and industry collaborations to nurture the skills necessary for employment and entrepreneurship is crucial. Entrepreneurship presents an alternative avenue for graduates to create employment opportunities rather than solely relying on existing job markets. Investigating how entrepreneurial curriculum and pedagogies can cultivate an entrepreneurial mindset and provide the necessary tools for graduates to embark on entrepreneurial ventures contributes to a more comprehensive solution to unemployment.

Also, collaborative efforts between educational institutions and industries are integral to ensuring that entrepreneurial education aligns with industry needs. Examining the effectiveness of such collaborations and stakeholder engagement in shaping entrepreneurial curriculum can provide insights into creating more responsive and industry-relevant educational programs.

Addressing these challenges through the study of entrepreneurial curriculum and pedagogies for dealing with graduate unemployment is vital for developing

informed strategies that empower graduates to not only secure employment but also contribute to economic growth through entrepreneurial initiatives.

Institute of Statistical Social and Economic Research (ISSER) of the University of Ghana revealed in their report that only 10 per cent of graduates in Ghana finds jobs after their first year of completing school (ISSER, 2017). They further indicate that due to various challenges, it takes many graduates up to 10 years to secure employment. So, by estimation, using 2020/21 National Service year, only approximately 8,648 out of the 86,478 service personnel deployed are likely to secure jobs after national service. It may take up to 10 years for the remaining 77,830 to be employed permanently.

According to the Ghana Statistical Service (GSS), the unemployment rate among tertiary education graduates in Ghana was 7.3% in 2019 (GSS, 2019). In that same report, total labour force in Ghana was 13.35 million. This places uemployed graduates at almost a million in 2019. The uemployment situation in Ghana is a national security matter that all hands including higher educational institutions must be brought on deck to deal with.

In an effort to address the unemployment challenge, earlier studies have focused their efforts from various angles. Adu et al. (2020) investigated the factors that moderate the link between entrepreneurial education and entrepreneurial goals among Ghanaian undergraduate students. They found that, except for self-efficacy, other factors such as behavioural control, risk-taking ability and pro-activeness mediate the relationship between entrepreneurial education and entrepreneurial intentions of students. Ampong (2020) examined the worsening graduate unemployment phenomenon in Ghana considering the negative effects associated with this setback and strategies that can be adopted to address them. He recommends

that instituted policies must aim at innovating Ghana's educational curriculum to make it more entrepreneurial.

Prior research efforts suggest that entrepreneurial education boosts entrepreneurial intention. For instance, out of 41 studies that evaluated the impact of entrepreneurship education, 33 discovered good impacts, six discovered no effect, and two discovered adverse effects (Lorz et al., 2011). Bae et al. (2014) reported in their meta-analysis that although entrepreneurship education has a favourable impact on entrepreneurial intention, the impact is negligible. Thus, entrepreneurship education can have a favourable impact on entrepreneurial intention (Gerba, 2012; Pedrini et al., 2017 2017), a negative impact (Martin et al., 2013; Oosterbeek et al., 2010), or no impact (do Paço et al., 2015) on entrepreneurial intention. This discrepancy in the results is consistent with the claims made by some earlier researchers (Bechard & Gregoire, 2005; Harrison & Leitch, 2005), who claimed that despite the existence of a body of literature on entrepreneurship education, there is still a lack of evidence and knowledge about how it affects entrepreneurship intentions and behaviors.

Additionally, research on entrepreneurship education in Africa is still in its early stages compared to other parts of the world (Nabi et al., 2017; Gerba, 2012; Naude & Havenga, 2005). In Ghana, studies on entrepreneurship education and its impact on entrepreneurial efficacy and intention appears to be limited. More empirical data is needed to expand stakeholders' understanding and deepen their insights so that appropriate interventions can be made.

Majority of the prior research efforts have concentrated on emerging and advanced economies outside of Ghana, leaving an empirical loophole regarding the Ghanaian context especially concerning business students which needs to be filled. The recommendations based on these prior studies outside Ghana may not

appropriately apply to the Ghanaian environment. The obvious dearth of empirical literature on entrepreneurial content and the entrepreneurial intentions development in Ghanaian context is a major gap that ought to be filled.

Additionally, many empirical studies on the subject have utilised single theory to underpinened their studies. This phenomenon confined the studies into a limited perspective. The current study deploys a multi-theoretic approach to ascertain the explanatory variables. The multiple underpinning theories give the study a bigger perspective in the identification of the determinants of entrepreneurial intention development.

This research therefore aims to offer actionable recommendations for educators, policymakers, and stakeholders to enhance the efficacy of entrepreneurial education in mitigating the pressing issue of graduate unemployment.

1.3 Purpose of the Study

The study's overall purpose is to evaluate the frequency of entrepreneurial content in the Bachelor of Business Administration (BBA) curricula and to establish the influence of pedagogy on students' entrepreneurial innovation, efficacy, and intentions.

The study is intended to address the following specific objectives to accomplish the overarching purpose.

1. Evaluate the frequency of entrepreneurial content in Bachelor of Business Administration (BBA) programme curriculum.
2. Ascertain the extent of vertical and horizontal articulation of entrepreneurial content in BBA programme curriculum.

3. Identify the frequently used teaching methods for instructions in the BBA programme.
4. Establish the pedagogical effect on students' entrepreneurial efficacy, innovation, and intentions.

1.3.1 Research Questions

The following are the major research questions posed to solicit data for the above specific objectives.

1. What is the frequency of entrepreneurial content in the BBA curricula in the the School of Business of a Ghanaian University?
2. What is the extent of vertical and horizontal articulation of entrepreneurial content in the BBA curricula in the the School of Business of a Ghanaian University?
3. What are the frequently used teaching methods for instruction in the BBA programmes in the School of Business of a Ghanaian University
4. To what extent does pedagogy affect students' entrepreneurial efficacy, innovation, and intentions?

1.4 Significance of the Study

This section discusses the significance of the study. It concentrates on the theoretical, policy, and practical relevance of the study.

1.4.1 Theoretical Significance

The study is underpinned by the concept of Self-efficacy and the Theory of Planned Behaviour by Albert Bandura and Icek Ajzen respectively. The study of innovation, efficacy and entrepreneurial intentions contributes to theory as the study explores how the variables of the two theories may reinforce innovation, efficacy, and

entrepreneurial intentions through curriculum and pedagogies. By investigating innovation, efficacy, and entrepreneurial intentions, the study sheds light on how curriculum and pedagogy can shape students self-efficacy, assertivess to results, subjective norms, and perceived behavioural control. It enhances the understanding of how curriculum and pedagogy can serve as a mechanism to to improve students entrepreneurial rediness in order to mitigate the graduate unemployment conumdrum.

1.4.2 Policy Significance

The study provides enough evidence for higher education regulatory agencies such as Ghana Tertiary Education Commission to set a threshold of entrepreneurial content for tertiary institutions curricula. The need to make the youth more entrepreneurial to mitigate the unemployment situation would influence the decision as to the extent to support the higher institutions with appropriate infrastructural need of the educational intitutions to offer effective entrepreneurial training. Secondly, educational institutions will contribute to addressing the unemployment challenge by designing curricula that inculcate adequate entrepreneurial content that develops learners' efficacy, innovation and intention for entrepreneurship.

1.4.3 Practical Significance

The study provides insights into entrepreneurial curricula and pedagogies, which can guide the development of regulations and guidelines for entrepreneurial content articulation and pedagogies in tertiary education programmes. Policymakers can use the findings to establish entrepreneurial content thresholds or benchmarks that enhance the development of entrepreneurial innovation, self-efficay and intentions of learners. The study's aim of establishing the basis of using curriculum and pedagogy

to build the learners entrepreneurial confidence can inform policies aimed at mitigating graduate unemployment.

1.5 Delimitations and Assumptions

Delimitations are design criteria that the researcher controls which define the study's scope (Simon, 2011). The focus on curriculum and pedagogy alone in this study suggests that the graduate unemployment challenge is mainly as the result of inadequate entrepreneurial curriculum and effective pedagogy. Other variables such as the conducive environment for business development, access to initial capital, negative assertiveness to entrepreneurial results, past experiences among others which may equally have impact were not considered in the study.

The study was concentrated on only one business school of a public university in Ghana. This would conveniently limit the generalization of the study's findings. The respondents of the study were made up of only levels 300 and 400 business students of one university. The results might turnout differently if the study had considered various levels from different universities.

Another delimiteation of this study is the sampling and methods for gathering data. The study is constrained by the theoretical framework's restriction of the study's attention to just factors influencing self-efficacy as presented by Albert Bandura's definition of self-efficacy which serves as a determinant of intention according to Ajzen Theory of Planned Behavior. Additionally, the study restricts the self-efficacy proxies to solely entrepreneurial education. This could impact the study's results because other theories might interpret the findings differently. Also, only business students of the university served as the subjects of this study. The study's findings might change if the scope had been extended to include all universities in Ghana.

Considered true and fundamental to the study are assumptions (Simon, 2011). The primary presumption guiding this study is that the target students were forthcoming with information on the pedagogies of their teachers and their own learning preferences in the manner that was expected of them. The identity of respondents is hidden in order to promote honest collaboration throughout the data collection process. Another presumption is that the surveys were created with a continued emphasis on pedagogies and learning preferences in order to elicit replies from respondents. A third supposition is that using primary data gives researchers the chance to investigate entrepreneurial education firsthand, resulting in more thorough documentation of the usage of entrepreneurial pedagogies and learning methods.

1.6 Definitions and Key terms

The following definitions of key concepts and phrases related to the issue are provided in this section:

- **Curriculum:** The totality of experiences that occur for students as they move through a program of study.
- **Pedagogy:** the study of the methods and activities of teaching, especially as related to the transfer of knowledge from one person to another.
- **Entrepreneurial intention**: It is a psychological idea that refers to one's purpose to develop into an entrepreneur or one's deliberate process of starting a firm.
- **Entrepreneurship curriculum:** Any programme that promotes entrepreneurial attitudes and abilities, which involves cultivating particular personal attributes, not just ones that are immediately focused on business formation. The concept encompasses a wide range of circumstances, objectives, techniques, and instructional strategies.

- **Entrepreneurship education:** It is a method of instructing and learning that entails identifying, assessing, and seizing chances in unpredictably changing environments. It also refers to the style of training that fosters entrepreneurial attitudes and abilities.
- **Entrepreneurship:** It is the procedure for identifying, assessing, and taking advantage of chances.
- **Pedagogy or teaching methods:** The method utilized to deliver course material and meet learning goals.
- **Practice-based pedagogies:** Teaching approach that emphasizes learning through hands-on experience and active participation in real-world contexts.
- **Problem-based pedagogies:** Teaching approach that centers on presenting students with real-world problems or scenarios and encouraging them to find solutions to these problems.
- **Horizontal articulation:** Inclusion of complementary and diverse topics in various courses that are related to the subject matter. This approach exposes students to a wider range of skills and knowledge that can be applied to the subject matter.
- **Vertical articulation:** The alignment and sequencing of a stand-alone course material in a logical and structured way, so that students learn progressively more complex concepts and skills in a cohesive and coordinated manner.

1.7 Organisation of the Thesis

The thesis is structured under five chapters. The first chapter consist of the introduction, which delves into detail, about the study's background, problem description, research purpose and specific objectives, research questions, significance of the study, delimitation, and definition of terms. The Literature Review section

forms Chapter Two, and it provides further in-depth awareness of all major conceptual, theoretical, and empirical concerns as well as theoretical and conceptual framework of the study. The third chapter details the research technique/methodology employed for accomplishing the study's objectives. The processes for study design, information sources, data collection, and analysis are all addressed. In Chapter Four, the actual observations and findings of the study are presented and analyzed statistically in synchrony with each research objective. In Chapter Five, the synopsis of findings, discussions of the results, link to other research findings, as well as the theoretical, practical, and policy implications.

1.8 Chapter Summary

This chapter has provided a background to the study, and historical antecedents of some of the key concepts pursued in the study. The chapter also defines the problem, clearly stating the theoretical motivations, empirical lacunas, methodological issues, and practical problems that prompted the conduct of this investigation. Afterward, the research objectives, and research questions, were stated. In addition, the chapter also provides some rationales that support the Significance of the study and also highlights the delimitations of the study in addition to definition of terms. We now move on to the second chapter, where conceptual, theoretical, and empirical reviews are presented and discussed leading to the presentation of theoretical and conceptual framework of the study.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

This chapter focuses on the review of concepts of of the variables being studied, the theories underpinning the study and the prior empirical literature that identifies current trend of empirical studies in the area as well as further establishing gaps to substantiate the hypotheses of this study.

2.2 Conceptual Review

This section reviews the concepts of curriculum, pedgogy, entrepreneurship, entrepreneurship education and entrepreneurship learning.

2.2.1 Concept of Curriculum

The term curriculum" has been defined and discussed in a variety of ways by different scholars and researchers in the field of education. According to the Encyclopedia of Education, curriculum is "the formal or informal set of planned learning experiences provided by an educational institution, which include content, activities, materials, resources, and assessment (Squires, 2003). Curriculum can also be defined as a plan for achieving educational goals and objectives through the design, implementation, and assessment of educational activities, experiences, and programs. (Null & Levstik, 2015). Ornstein and Hunkins (2013) describe curriculum as the planned and guided learning experiences and intended outcomes, formulated through the systematic reconstruction of knowledge and experiences, under the auspices of the school, for the learners' continuous and willful growth in personal-social competence.

These definitions highlight several key aspects of curriculum, including the idea that it involves planning and intentional design, that it is guided by educational goals and objectives, and that it is intended to facilitate the growth and development of learners. In addition to these definitions, it is also useful to consider the various components of a curriculum. The following elements are often included in discussions of curriculum:

- **Goals and Objectives:** These are the overarching aims of the curriculum, including what students are expected to learn and achieve.
- **Content:** This refers to the specific subject matter or knowledge that is included in the curriculum.
- **Methods and Strategies:** These are the instructional techniques and approaches used to teach the content.
- **Assessment:** This involves the process of evaluating student learning and progress, often through tests, quizzes, and other types of assessments.
- **Resources and Materials:** This includes the textbooks, technology, and other tools that are used to support the teaching and learning process.

Curriculum goals and objectives are a critical component of designing and implementing an effective educational programme. Goals are broad statements that describe what students should be able to know, understand, and do as a result of their learning experiences, while objectives are specific, measurable outcomes that are used to assess student learning. The following are some examples of how curriculum goals and objectives are defined and discussed in literature. According to Tyler (2013), curriculum objectives specify the changes in behavior expected of students as a result of their experiences in the school. Tyler emphasized the importance of clearly stating objectives to guide curriculum design and evaluation. He suggested that objectives

should be derived from an analysis of societal needs, the subject matter, and the abilities and interests of students.

Wiles and Bondi (2019) describe curriculum goals as broad statements that describe the overall intended outcomes of instruction, while objectives are specific statements that describe the expected student behaviors or achievements that are necessary to meet the goals. They note that objectives should be specific, measurable, achievable, relevant, and time-bound (SMART), and that they should be aligned with the overall goals of the curriculum. Ornstein and Hunkins (2019) define curriculum goals as general statements of intended educational outcomes and objectives as specific statements of expected educational outcomes. They emphasize that goals and objectives should be aligned with the school's mission and philosophy, and that they should be based on an analysis of student needs, interests, and abilities. The ultimate need of learners is to become productive, either to gain employment or to create jobs with the application of their learning experinces. Curriculum developers must ensure that curriculum goals and objectives are saturated with adequate experiences that builds their entrepreneurial self-efficacy and intention. Curriculum goals and objectives play a critical role in guiding curriculum design, instruction, and assessment. By clearly articulating what students are expected to know and be able to do, educators can ensure that their instructional activities are aligned with the desired learning outcomes, and that students are able to demonstrate their knowledge and skills in a meaningful way.

Curriculum content refers to the specific knowledge, skills, and concepts that are included in an educational program. The content of a curriculum is typically based on a combination of academic standards, subject-specific frameworks, and the expertise of educators and curriculum specialists. According to the National Council

of Teachers of Mathematics (NCTM), curriculum content describes what students should know and be able to do in the content area being studied. (NCTM, 2014). The NCTM emphasizes the importance of a coherent and focused curriculum that is based on a deep understanding of the subject matter, and that provides students with opportunities to engage in mathematical practices such as problem-solving, reasoning, and communication. Wiggins and McTighe (2005) describe curriculum content as the specific knowledge and skills that students are expected to learn. They emphasize the importance of designing a curriculum that is aligned with the desired learning outcomes, and that provides students with opportunities to transfer their learning to real-world situations. Curriculum content is a critical component of an effective educational program, as it provides students with the knowledge and skills they need to succeed in their academic and personal lives. By carefully selecting and designing curriculum content, educators can ensure that their students are engaged in meaningful and relevant learning experiences that prepare them for the challenges of the future.

Ornstein and Hunkins (2019) describe curriculum content as the subject matter or knowledge that is to be learned. They note that curriculum content should be based on a careful analysis of societal needs, student needs and interests, and the expertise of educators. Research has shown that curriculum content that is relevant and authentic to students' lives can increase engagement and motivation. A study by Hughes and Kwok (2007) found that a social studies curriculum that incorporated local history and current events improved students' understanding and interest in the subject. Similarly, a study by Lundeberg et al. (2011) found that a science curriculum that included real-world examples and applications improved students' attitudes towards science.

Effective curriculum content should also be culturally responsive, meaning that it acknowledges and respects the diversity of students' backgrounds and experiences. A study by Gay (2010) found that culturally responsive teaching, which includes curriculum content that reflects the cultures and experiences of diverse students, can improve academic achievement and cultural competence. Curriculum content can be enriched by making interdisciplinary connections between subject areas. A study by Czerniak et al. (2013) found that a science and mathematics curriculum that integrated concepts and skills from both subjects improved students' understanding and motivation in both areas. Curriculum content can also be delivered through project-based learning, which engages students in hands-on and collaborative activities that connect to real-world issues and problems. A study by Krajcik et al. (2014) found that a project-based science curriculum improved students' understanding of science concepts and skills, as well as their ability to apply them to real-world situations.

2.2.2 The Concept of Pedagogy

Pedagogy is the art and science of teaching, and involves the strategies and methods used by educators to facilitate learning in their students. Effective pedagogy involves a range of teaching strategies and approaches that are grounded in educational research and evidence-based practice. A range of pedagogical approaches have been developed and used in different educational contexts, each with its own strengths and limitations. Some of the most common pedagogical approaches are Inquiry-based learning, Collaborative learning, Differentiated instruction, Direct instruction, Project-based learning, among others.

Inquiry-based learning is a pedagogical approach that emphasizes student-centered, experiential learning. Inquiry-based learning involves students asking

questions, conducting investigations, and exploring new concepts and ideas. A meta-analysis by the National Science Foundation found that inquiry-based learning can improve students' critical thinking skills, conceptual understanding, and motivation to learn (National Science Foundation, 2017).

Collaborative learning involves students working together in groups to achieve learning objectives. Collaborative learning can help students develop communication and teamwork skills, which can promote peer-to-peer learning and problem-solving. A study by the University of Michigan found that collaborative learning can improve student engagement, critical thinking skills, and academic performance (Johnson et al., 2014).

Differentiated instruction is a pedagogical approach that involves tailoring teaching strategies and materials to meet the diverse needs and interests of students. Differentiated instruction can help students stay motivated and engaged, which can improve academic outcomes for students with varying levels of ability. A review of research by the National Center on Accessible Educational Materials found that differentiated instruction can improve student achievement and reduce achievement gaps (National Center on Accessible Educational Materials, 2018).

Direct instruction is a structured, teacher-led approach to teaching that emphasizes clear learning objectives, explicit instruction, and frequent feedback. Direct instruction can help students acquire new knowledge and skills quickly and efficiently. This can be particularly effective for students with learning difficulties or gaps in prior knowledge. A study by the University of Oregon found that direct instruction can improve student achievement in reading, math, and other subjects (Archer & Hughes, 2011).

Project-based learning is a pedagogical approach that involves students working on long-term, interdisciplinary projects that require them to apply knowledge and skills in real-world contexts. Project-based learning can help students develop problem-solving and critical thinking skills, this can promote creativity and innovation. A meta-analysis by the Buck Institute for Education found that project-based learning can improve student achievement, engagement, and motivation to learn (Buck Institute for Education, 2016).

2.2.3 Meaning of Entrepreneurship

Various disciplines have many different ideas about the nature of entrepreneurship. According to Kuratko et al. (2015), entrepreneurship should be understood from a wide variety of perspectives, including those from economics, finance, sociology, history, psychology, and anthropology. These fields offer a variety of theories and unique frames of reference to define entrepreneurship. As a result, entrepreneurship has been the subject of a vast number of studies, but there hasn't been a consensus on how to define it. According to Hitt et al. (2011), entrepreneurship is the creation and management of fresh, novel, and distinctive organizations. According to Malibari and Bajaba (2022), entrepreneurship integrates several academic fields, including sociology, psychology, anthropology, and economics. To provide definition, a simple classification based on characteristic, behaviour, and opportunity identification may not be sufficient.

An entrepreneur is an inventor, according to Juliana et al. (2021), who may introduce any form of originality in products, new production and operations techniques, new sources, first-hand business models, or novel markets. According to Foriwaa and Akuamoah-Boateng (2013), entrepreneurship is the act of starting a new business or buying an existing one. According to Sedeh et al. (2021), entrepreneurship

involves starting new businesses as well as ongoing innovative efforts. According to Cha and Bae (2010), entrepreneurship should involve seeing and seizing business possibilities. It's conceivable to say that there is a loose consensus that entrepreneurship involves creating originality, identifying opportunities, and starting a firm.

Three approaches to entrepreneurship have been discovered by Kobia and Sikalieh (2010). The first is the trait approach, which emphasizes the individual characteristics of the entrepreneur, such as motivation, personality, focus, locus of control, and capacity for taking risks. This strategy is backed by several academics, and there aren't many compelling arguments against it. From the standpoint of high-risk taking tendencies, Shane (2007) discusses entrepreneurship. He explains a temperamental feature that gauges a person's drive to engage in risky activities. Given that taking risks is one of the core characteristics of entrepreneurship, a high propensity for taking risks is strongly related to value-added entrepreneurial activities (Bae et al., 2014; Chand & Ghorbani, 2011; Frank et al., 2010;).

Jones and Iredale (2010) support the opposite point of view, arguing that those who lack the high propensity for taking risks typical of most entrepreneurs should be omitted from the categorisation. This view is supported by Bae et al. (2014), who claim that the trait approach falls short of providing an answer to the question of what an entrepreneur is. The trait approach has not been effective, and Kobia and Sikalieh (2010) emphasize that it might not provide an all-encompassing definition of entrepreneurship. Because of this approach's static nature, which hinders the development of entrepreneurial education, academics have begun to oppose it.

The second method emphasizes entrepreneurial behaviour over many other characteristics, making it the most important one. An entrepreneur, according to Fayolle and Gailly (2015), is a person who develops an innovative venture and oversees it using strategic management techniques. Profit and growth are typically what drives these people. According to Kobia and Sikalieh (2010), being an entrepreneur is not a fixed characteristic of an individual but rather a character that an individual may adopt to create an organization. The opportunity identification strategy is considered to be the third. Shane and Venkataraman (2000), Eckhardt and Shane (2003), all make the case that entrepreneurship is a sector where diverse potential for future goods and services are investigated. Entrepreneurs essentially look for ways to make money by employing a variety of resources, Shane (2007) emphasizes. Therefore, entrepreneurship involves the appropriate fusion of an entrepreneurial person with a variety of current opportunities.

The notion of entrepreneurship as it is applied to entrepreneurship education elements is adopted in the current study. As a result, the concept of an entrepreneur may be defined as a person who is influenced by entrepreneurship education and its components (role model, feedback, business plan activities, and entrepreneurial network) to cultivate a goal to start their own business. Because this will provide students with an entrepreneurial intelligence in the learning process and advance their knowledge about entrepreneurship, this study hypothesizes that understanding the impact of specific education components is essential to developing an effective entrepreneurship course or program. The focus of this study is on how entrepreneurship education affects the growth of entrepreneurial efficacy and intention.

2.2.4 Entrepreneurship Education

Entrepreneurship education is an activity that instructs participants on how to launch a business to generate income and promote economic growth (Boldureanu et al., 2020). de Sousa et al. (2022) suggest that participants in entrepreneurship education programs gain a better understanding of new start-ups and receive instruction on how to run them successfully. But according to Gautam and Singh (2015), entrepreneurship education is primarily a means of enhancing one's capacity for creativity and innovation. Education in entrepreneurship is sometimes thought of as instruction in spotting opportunities, allocating resources wisely, and, most significantly, starting new businesses (Scott, 2017). According to Adeel et al. (2023), entrepreneurship education aims to teach students how to recognize and investigate a variety of opportunities as well as how to make wise selections when deciding which ones to follow.

It is encouraging to note that many nations are thoughtfully investing in entrepreneurial education at the secondary, primary, and higher education levels (Sánchez, 2013; Katz, 2003; Brush et al., 2003). Exploring the effects of these interventions has sparked a great deal of curiosity (Dickson et al., 2008; Pittaway & Cope, 2007). According to Jones and Iredale (2010), the development of entrepreneurship education from 1,900 institutions worldwide since the 1950s shows that such programs and related training assist students in displaying entrepreneurial behavior. For both individual and institutional goals, economics education and entrepreneurial business designs have received a lot of attention in recent years (Jones & Iredale, 2010), with a focus on brand-new start-ups and entrepreneurship aspirations. In recent years, there has been literature that emphasizes how universities

play a crucial role in entrepreneurship's contribution to societal and economic development (Markuerkiaga et al., 2014).

There is a lot of discussion surrounding entrepreneurial education, especially how education affects intention and its antecedents, including attitude toward behavior, subjective norm, and perceived behavior (Kirkley, 2017). Numerous studies highlight the fact that entrepreneurship is not innate and that certain characteristics can be improved through instruction and training (Neck & Greene, 2011). This claim is supported by Frank et al. (2010), who claim that intentions are neither mysterious nor genetically ingrained. They contend that, like the sciences, entrepreneurship can be learned and improved. Kuratko (2005) challenges the notion that entrepreneurship is an inherent quality by putting forth different teaching techniques and paradigms. Sánchez (2013) asserts that entrepreneurial education is a key strategy for enabling entrepreneurship because it fosters people's sense of autonomy and courage, encourages the recognition of various career options, broadens perspectives by enabling people to recognize opportunities and offers knowledge that people can utilize to take advantage of new business chances. The proper training to start and maintain a firm is provided to learners through entrepreneurship education.

- **Characteristics of entrepreneurial curriculum**

Muller (2011) looked for the impact of entrepreneurial course elements on intention in her study. She found that prior intention, attitude, subjective norm, and perceived behavioral control affect intention to become an entrepreneur as shown in Table 2.1 below.

Table 2. 1: Category Scheme-Entrepreneurship Course Characteristics

a) General impact of entrepreneurship courses
b) Course characteristics with influence on attitude • Role models • Practical experiences
c) Course characteristics with influence on perceived subjective norms • Provide a platform to build an entrepreneurial network
d) Course characteristics with influence on perceived behavioural control • Practical knowledge • Business planning • Role models • Entrepreneurial networks • Explorative and interactive elements • Feedback • Supportive infrastructure

Source: *Muller (2011)*

Zierer and Seel (2012) claim that after examining contemporary textbooks, they discovered two approaches that are particularly common: teaching-centered didactics and critical-constructive didactics. As explained by an extension of Klafki's "didactic analysis," critical-constructive didactics aids in the creation of concepts for tutoring plans (Meyer & Rakhkochine, 2018). Conditional analysis is used as the first phase in a two-part matched analysis technique that identifies the socio-cultural backgrounds of students, teachers, and institutions.

This study focuses on sustainable and problem-centric approaches. Seven different questions are addressed in relation to the second strategy, the didactic analysis. Here, the first three questions are interactive and based on reason, consistency, and the study material's current and future applicability. The answers to these questions can be used to determine whether or not students are bringing a certain degree of enthusiasm and a particular set of expectations, and they can also be used to gauge how much impact they have on the topic's result. The course content, objectives, and general organization are the main points of emphasis in question four, which is about theme structure. It also emphasizes how to properly connect the

course's goals and structure in order to achieve the desired goals. The clarity of learning outcomes and their assessment is the subject of question number five. It should be very evident that the right assessment methods were utilized to look at the students and that they are meeting these learning objectives. The learning process is successful if students are able to meet the objectives.

The next problem is deciding how to convey content properly once the teacher is clear on the objectives, learning outcomes, and assessment methods. Considering this, question six focuses on the usability and presentation of learning information. Here, a number of variables are taken into account, including the pupils' ages, backgrounds, experiences, and levels of aptitude, as well as the teaching approach. The seventh question ensures that all the others have been addressed collectively rather than individually and are essential components of teaching and learning.

- **Pedagogies for entrepreneurial education**

According to several experts in the field of entrepreneurial education, when it comes to starting a firm and recognising opportunities, effective teaching entrepreneurship incorporates both the science and the art of entrepreneurship (Greenberg et al., 2011; Kirby, 2004). On the one hand, science typically uses traditional teaching methods to describe the theoretical and practical understanding about entrepreneurship, business, and management (Fiet, 2000; Rae, 2005).

However, the art of entrepreneurship deals with new methods of thinking, such as innovation, creativity, and effective reasoning, which appear to be more difficult because they call for hands-on actions (Heinonen & Poikkijoki, 2006). For instance, Kirby (2004) claimed that entrepreneurial education must also teach the soft skills that entrepreneurs need to make decisions in the face of uncertainty, such as problem-solving and risk-taking, in addition to the science, such as entrepreneurship

theories and subject knowledge. According to the assessment of the literature, effective entrepreneurship education for the twenty-first century calls for entrepreneurship educators to select the precise pedagogical methods that tend to function better with the type of entrepreneurial learning they want students to develop. This implies that entrepreneurship pedagogies must include both the art and science of entrepreneurship. To achieve student learning, entrepreneurship pedagogies should be viewed as a means rather than an aim (Fayolle, 2013). There are some differences of opinion regarding the most effective pedagogies for educating entrepreneurs, according to many research on teaching methodologies.

The science of entrepreneurship is represented by what is teachable, whereas the art of entrepreneurship is represented by what is not teachable. Through a review of the literature on entrepreneurial education, two primary categories of pedagogical approaches were found as traditional, and innovative methods. The most prevalent pedagogies employed in entrepreneurship education are listed in Figure 2.1, which divides them into traditional or passive and innovative or active pedagogies based on the literature review.

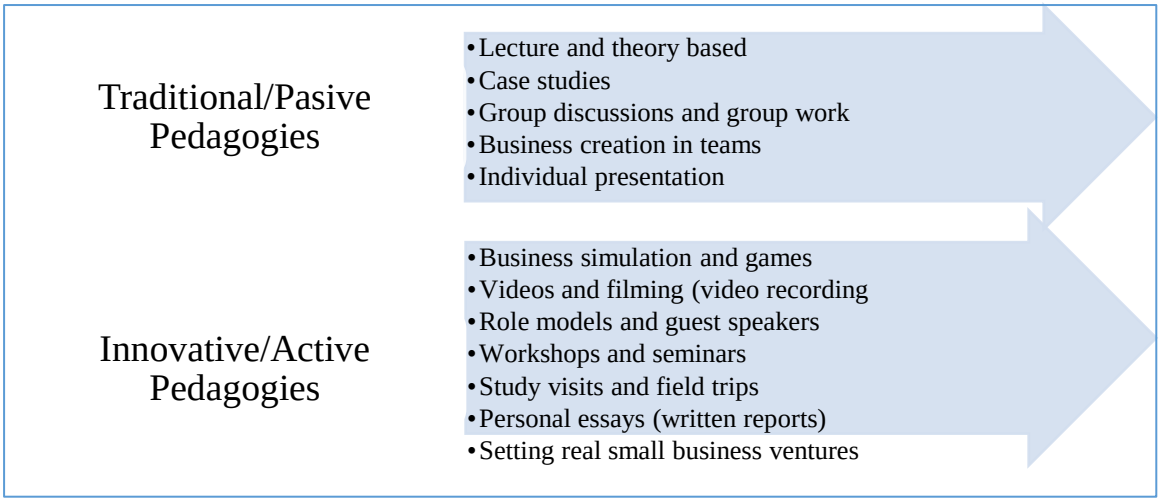

Figure 2. 1: Traditional verses Innovative Pedagogies in Entrepreneurial Education

Source: Adopted from Zepeda (2015)

The traditional or passive approaches, which are frequently employed in business education, are less successful at promoting entrepreneurial abilities (Ahmad et al., 2018). When it comes to enhancing students' learning, active or innovative approaches are those pedagogies that are more action-based or experiential (Gibb, 2002).

In traditional or passive teaching techniques like lectures and seminars, students only learn about entrepreneurship from passively reading and listening to the teacher rather than actively participating in group activities (Gibb, 2002). Lectures, seminars, case studies, and business planning are some of the most prevalent pedagogies utilized in entrepreneurship education. The preparation of business plans is one of the most common and established teaching methods used in classrooms, followed by lectures and case studies (Heinonen & Poikkijoki, 2006). Because none of these successfully activate entrepreneurship learning and thinking, they are collectively referred to as traditional entrepreneurship pedagogies or passive techniques (Mwasalwiba, 2010). Instead of emphasizing teaching students how to think entrepreneurially, traditional pedagogies, such as those frequently employed in business classrooms, are concentrated on imparting knowledge and facts about entrepreneurship (Krueger, 2007). Some of these conventional methods of entrepreneurship education are process-oriented (Neck & Greene, 2011), but not all of them encourage aspiring businesspeople to assume more responsibility for their educational and professional development (Mwasalwiba, 2010).

Some studies found that the optimum entrepreneurship education scenario should involve more than only examining the firm creation process as it is reflected in the entrepreneurship learning model. Developing an entrepreneurial perspective, mindset, and abilities that everyone in society can learn could be one of the teaching

approaches in entrepreneurship education (Kirby, 2004; Kuratko, 2005; Sarasvathy, 2008). The primary goal of traditional teaching techniques like lectures and seminars is to impart knowledge of facts and ideas. Some claim that traditional pedagogies are ineffective at changing students' behaviors, skills, and mindsets so that they can become entrepreneurial thinkers (Henry et al., 2003; Mwasalwiba, 2010). As a result, some argue that they are inappropriate for encouraging people to become more entrepreneurial (Krueger, 2007).

Innovative pedagogies in entrepreneurship classes call for a context-rich learning environment where students actively participate in the learning process. The educators' roles as coaches and facilitators. One of the most widely used pedagogies is the simulation of the business formation process since it can provide a learning environment that mimics some aspects of entrepreneurship (Pittaway & Cope, 2007b). It may be possible to better support students in becoming more entrepreneurial in their current companies or in starting new enterprises by developing and utilizing new holistic and interactive entrepreneurship pedagogies. In the literature, there are many instances of unconventional pedagogies and methodologies being used for entrepreneurship. Examples include an entrepreneurial direct approach (Pittaway & Cope, 2007a) and an all-encompassing, effect-based approach to entrepreneurship (Koivumaa & Puhakka, 2013). The complexity and incongruence of entrepreneurial education are best illustrated by the common perception of entrepreneurial teaching methods, which shows that different approaches are used to achieve different goals and that the planning for entrepreneurial education does a poor job of separating the different types of learning objectives (Msasalwiba, 2010). However, by utilizing more active pedagogies, students can develop their own business proposition, which

necessitates experimentation, trial and error, and problem-solving (Pittaway & Cope, 2007a; Politis, 2005).

The use of pedagogies focused on action, self-analysis, and reflexivity in entrepreneurship education is being advocated by an increasing number of researchers. To address the connections between the kind of teaching technique and learning results, more study is necessary (Fayolle, 2013). Entrepreneurship education should go beyond teaching students how to draft company plans (Huber et al., 2014). Students must be assisted in developing entrepreneurial thinking through pedagogies in entrepreneurship education. Because of this, institutions and entrepreneurship instructors must adapt their perceptions of entrepreneurship education in light of new entrepreneurship theories (Fisher, 2012). Rather than viewing entrepreneurship as solely the process of starting a business, Effectuation views it as a way of thinking and acting (Sarasvathy & Venkataraman, 2011).

Therefore, using a variety of pedagogies and action-based methodologies seems to operate better under these new viewpoints (Huber et al., 2014). Learning-by-doing pedagogies (Gibb, 2002; Neck & Greene, 2011), experiential learning activities (Kolb, 2014), such as business simulations, games, and contests, reflective practice (Schön, 1983, 1987), and effective theory can all be used to support students' learning through entrepreneurship (Greenberg et al., 2011; Sarasvathy, 2008). These methods of instruction are more effective than lectures and seminars (Mwasalwiba, 2010). Unfortunately, those pedagogies haven't been widely used in entrepreneurship classrooms since they're challenging to teach and demand a lot of the teachers' time and energy.

Though additional empirical study is required, effectuation theory as pedagogy has raised concerns about the causation-based (conventional) model of

entrepreneurship's general applicability. This raises the possibility that effectuation theory could be a major tool for entrepreneurship education (Huber et al., 2014). One of the few papers that mentions effectuation as an entrepreneurship pedagogy contends that a variety of pedagogical techniques must be used to effectively educate entrepreneurship. In other words, by using emergent pedagogies and an effectuation-based framework, students could be prepared for uncertainty. The framework for teaching entrepreneurship based on effectuations needs to be improved, but it might be based on action-based learning techniques such learning scenarios with a real-world context, immersive learning environments, and an entrepreneurial attitude (Koivumaa & Puhakka, 2013; Pittaway & Cope, 2007).

Consequently, considering the future of entrepreneurial education as a dynamic and evolving subject, teaching future entrepreneurs necessitates imparting entrepreneurial skills to students utilizing novel and unconventional teaching methodologies based on action and practice (Neck & Greene, 2011). In conclusion, lectures, literature reviews, seminars, and exams are frequently used in entrepreneurial education at the university level. These traditional pedagogies are primarily theory-based and place an emphasis on successful examples of entrepreneurs in business. Because teachers use them to teach students about entrepreneurial characteristics and to learn more about entrepreneurship theory, they represent a passive type of education. Although teaching entrepreneurship information and substance is simple and necessary for entrepreneurial education (Haase & Lautenschläger, 2011), it shouldn't be the main emphasis. According to recent studies conducted around the world, it is more important than ever that we find, develop, and seize possibilities presented by individuals who are entrepreneurial (Koivumaa & Puhakka, 2013).

- **Learning categories in entrepreneurship education**

The process of learning about entrepreneurship known as entrepreneurial learning encompasses both implicit and explicit knowledge to handle complicated problems and make business decisions in unpredictable situations (Fayolle, 2013). Learning how to start, run, and manage a business requires social interaction as well as the ability to recognize and seize opportunities (Cope, 2005). Some individuals see entrepreneurship education as a collaborative effort (Heinonen & Pokkijoki, 2006). However, an emerging and transversal concept of entrepreneurial learning in the context of education promotes learning that can be acquired and experimented by students in a suitable classroom environment in which the educator applies teaching methods that train students to develop an entrepreneurial perspective, mindset, and skills (Sarasvathy, 2008; Krueger, 2007).

The first authors to categorize and explore several types of entrepreneurial learning were Fayolle (2007) and Gibb (2002). (i.e., entrepreneurial goals, outcomes, objectives or aims as interchangeable terms). If educators do not have a clear grasp of the type of learning they wish to impart to students, they will often have difficulty teaching the topic because entrepreneurship courses and programs have diverse objectives or aims. Entrepreneurship educators, according to Fayolle (2008), must first determine the proper conditions and components in order to implement their programs and improve student learning. Identifying the type of entrepreneurial education learning process the teacher wishes to create, offer to pupils, and why is one of these requirements (Fayolle & Gailly, 2008). By identifying different learning objectives, educators may be better able to assess student requirements and use assessment criteria and instructional strategies that are more carefully considered.

The most frequently mentioned learning objectives for entrepreneurial education are (a) learning about entrepreneurship, (b) learning for entrepreneurship, and (c) learning through entrepreneurship, according to previous studies (Gibb, 2002; Fayolle, 2013; Fiet, 2001; Kozlinska, 2012; Krueger, 2007; Maritz & Brown, 2013; Mwasalwiba, 2010). Table 2.2 provides a detailed explanation of these learning typologies.

Table 2.2: Learning Processes in Entrepreneurial Education

Learning process	**Key dimensions**	**Relevant concepts and theories**
Learning about entrepreneurship or becoming a professor or instructor of entrepreneurship education	Theoretical aspects of the phenomenon as a field of study. Entrepreneurial knowledge	Entrepreneurship as a field of study (Fisher, 2012)
Learning for entrepreneurship or learning how to start a business	The wide concept of entrepreneurship Professional/practical dimensions (know what, know how, and know who), business creation process. Learning through doing	Effectuation (Sarasvathy, 2008) Learning through doing models of the mind (Krueger, 2007)
Learning through-in entrepreneurship or learning how to be a resourceful, entrepreneurial person	Entrepreneurship as a process of creativity and action. Spiritual aspects (know why and know when). entrepreneurial mindsets and abilities	An entrepreneurial intention (Azjen, 1991). An entrepreneurial mindset (applied at the individual level)

Source: Authors construct

Although there is a hazy line between these entrepreneurial learning typologies and entrepreneurial education programs (Mwasalwiba, 2010), research on teaching and learning in entrepreneurship suggests that programs' effectiveness depends greatly on the coherence between their various elements, such as the learning objectives and instructional strategies (Maritz & Brown, 2013). In fact, Kozlinska

(2012) noted that it is challenging to find an entrepreneurial education program that focuses just on the first purpose, preferring instead to combine two to three learning objectives. According to Hytti and O'Gorman (2004) and Maritz and Brown (2013), these three types of learning have gained some empirical evidence. These findings demonstrate that, through a revision of entrepreneurial education programs, most of them were created to assist people in learning about entrepreneurship, followed by initiatives to help people become entrepreneurial so they can behave and think like entrepreneurs.

There is still a lack of knowledge regarding the most effective ways to accomplish these goals, even though the entrepreneurial education program's learning typology is applicable (Wang & Chugh, 2014). Even though there is a big difference in the goals and teaching strategies for entrepreneurship education, most instructors use a mix of the three primary perspectives. When it comes to how entrepreneurship is taught, many ideas and methods might be used, which can lead to some confusion. Entrepreneurship educators find it difficult to select pedagogical approaches that are in line with the goals of their courses, the environment, and the types of students they serve (Fayolle, 2013). To adopt entrepreneurial habits, students must learn not just about or for entrepreneurship, but also via entrepreneurship (Balan & Metcalfe, 2012; Fayolle & Gailly, 2008; Kirby, 2004; Neck & Greene, 2011; Read & Sarasvathy, 2005).

Learning about entrepreneurship puts an emphasis on the theoretical underpinnings of the entrepreneur-as-individual and concentrating on the entrepreneurial knowledge that the student has absorbed (Neck & Greene, 2011). Learning about entrepreneurship, which entails learning about entrepreneurship topics, theories, and models, is the best method to define how learning occurs in this

approach. This kind of education places an emphasis on both the unique traits of the successful entrepreneur as well as the function of the entrepreneur in the development of enterprises. This emphasis is problematic because it neglects to foster the soft skills that are essential for entrepreneurship, like creativity, innovation, risk-taking, and problem-solving (Gibb, 2002). Instead of teaching students how to develop abilities for opportunity discovery, the goal of teaching about entrepreneurship is to have students get a general awareness of entrepreneurship as a phenomenon (Mwasalwiba, 2010). Entrepreneurship educators who pursue this learning objective likely view knowledge as an accumulation of data, facts, and content about entrepreneurship; this kind of knowledge is consistent with a behaviorist theory based on the acquisition of information such as hard facts about entrepreneurship and the business market (Krueger, 2007). The points were backed by Gibb (2002), who asserted that entrepreneur knowledge is content knowledge that is fact-based, objective, and frequently behaviorist in nature since it does not develop the entrepreneurial skills and competencies that students require.

It is possible that learning about entrepreneurship won't aid students in acquiring the entrepreneurial techniques and methods necessary for entrepreneurial education (Gibb, 2002). Sadly, learning about entrepreneurship mostly focuses on imparting entrepreneurial conduct, which encompasses the personality traits and professional profile necessary for a successful entrepreneur. O'Connor (2012) argues that utilizing idealized profiles of successful entrepreneurs may be dangerous since it may result in the exclusion of some students who do not fit these criteria. Students need to master entrepreneurial skills that go beyond comprehension and imitation of entrepreneur information; they need to learn how to behave like entrepreneurs and make entrepreneurial judgments (Krueger, 2007; Sarasvathy, 2008).

Learning for entrepreneurship is a term used by Gibb (2002) to describe teaching students' entrepreneurial attitudes and abilities in order to help them become entrepreneurs. This style of education emphasizes the analysis of theoretical or content knowledge (stages of company creation) through experiential learning rather than just the gathering of data and content (writing business plans). Learning about entrepreneurship shifts away from entrepreneur activities and attributes in favor of a more cognitive realm (Neck & Greene, 2011). There is limited information regarding how cognitive research on entrepreneurship will help to better understand how entrepreneurs recognize and seize opportunities and how they combine information, cognition, and creativity (Corbett, 2005).

Some experts contend that it is critical to look at how entrepreneurs think and make decisions in order to better understand the process of entrepreneurship (Cope, 2005; Corbett, 2005). Effectuation theory might be useful in this regard (Sarasvathy, 2008). This kind of instruction focuses on helping students develop their entrepreneurial talents through hands-on experience and entrepreneurial thought (Pittaway & Cope, 2007a). However, the learning for entrepreneurship approach presupposes that the process of starting a business is linear and predictable, however, according to researchers, entrepreneurship is neither linear nor predictable (Gibb, 2002). Therefore, it is essential to apply new pedagogies that might encourage reflective practice and learning through entrepreneurship to inform further action and a better entrepreneurial learning close to real experiences (Kolb, 2014; Schon, 2017; 1987). This is because entrepreneurial learning requires the development of skills such as innovation, creativity, and frustration tolerance in uncertain environments.

Learning through/in entrepreneurship indicates the individual learning process to find, assess, and take advantage of chances. This kind of education aids

one's development as an entrepreneur. This entails adopting an entrepreneurial mindset and style of life to promote the development of novel, creative solutions to organizational and social problems. Promoting an entrepreneurial mentality or entrepreneurial thinking as well as developing entrepreneurial abilities in university students entails giving learning from inside priority above merely disseminating information about or for entrepreneurship (Krueger, 2007). In terms of entrepreneurship teaching, emerging researchers contend that learning through entrepreneurship should be placed at the center of educational processes (Fisher, 2012; Koivumaa & Puhakka, 2013; Neck & Greene, 2011; Sarasvathy, 2008).

Entrepreneurs are action-oriented, and learning happens via experience and discovery, according to a widely held belief (Pittaway & Cope, 2007a). Businesspeople learn by doing, experimenting, and solving problems (Cope, 2005). It is important to keep in mind that different learning styles call for various pedagogies. However, student learning is still crucial regardless of methodology (Fayolle, 2013). However, more innovative teaching models and pedagogies for entrepreneurial education are required than the already utilized traditional form to encourage entrepreneurial learning, skills, and thinking in students (Fayolle & Gailly, 2008; Kirby, 2004; Neck & Greene, 2011; Ahmad et al., 2018). According to some researchers, entrepreneurship education should only use cutting-edge teaching techniques that promote learning through entrepreneurship because they will assist students in developing entrepreneurial behaviors (O'Connor, 2012), entrepreneurial thinking (Sarasvathy, 2008), and a set of entrepreneurial skills and values (Mwasalwiba, 2010; Neck & Greene, 2011). The teaching of entrepreneurship is seen as a toolkit of several pedagogies to assist students in navigating the complexity and

uncertainty that traditional pedagogies do not take into consideration, according to this new trend in entrepreneurial learning at the student level.

2.3 Theoretical Underpinnings

The relevant theories underpinning this study are Bandura's Concept of Self-efficacy, and Ajzen's Theory of Planned Behaviour. Below is a detailed discussion of each of the two theories.

2.3.1 Concept of Self-efficacy (Bandura 1997)

It is more likely that someone will launch a business if they have confidence in their abilities to do so. Ajzen and Shapero's psychological idea of perceived behavioural control and believed possibility was used to describe this potential behavioral pattern. Both of these ideas are connected to a component of the social cognitive model of perceived self-efficacy, according to Bandura (1989). Since they are both based on the premise that, in addition to knowledge and abilities, human beliefs also play a significant role in accomplishing desired goals, perceived behavioural control and perceived feasibility are similar. Because it is so difficult for a new start-up to forecast the behavior of stakeholders, employees, and consumers, as well as future profits, sales, and challenges, belief is a fundamental component of entrepreneurship as well. Therefore, a firm belief can undoubtedly aid in overcoming such trying circumstances, and entrepreneurship education programs can drive entrepreneurs. As a result, strong beliefs foster intentions, which are crucial for launching a firm. The likelihood of coming up with a successful and lucrative business is increased by a strong belief.

Individuals' ideas of their own efficacy are the main emphasis of the concept of self-efficacy, and this is a significant aspect that affects what they can do (Bandura,

1977). Changes in self-perception affect both the performance of different people with the same set of talents and the performance of the exact same person in other contexts. As a result, people can do amazing feats and overcoming challenges when they have a strong sense of efficacy. Even if a person has the necessary information and skills, a fragile feeling of efficiency and self-doubt can overcome abilities and cause failures because they may not trust their capacities. (Bandura, 1997). The conclusion is that "perceived self-efficacy is a positive capability" (Bandura, 1997, p. 36). Strong self-efficacy is only one component of success, and strong beliefs can bring about success with the appropriate set of skills and knowledge. However, it is also necessary that a person continually improve in order to achieve the desired goals, and entrepreneurship education programs are helpful for updating a person's skills (Bandura, 1997). Self-efficacy is significantly influenced by domain-specific variables. For instance, a person's confidence in their mathematical abilities in a technical environment may cause them to have less confidence in the same set of abilities in a non-technical environment. Bandura (1997).

Bandura outlined various ways in which efficacy beliefs impact both creativity and logical reasoning. He contends that it will be challenging for people to push themselves if they have reservations about their talents and are unwilling to complete challenging activities. If difficult circumstances emerge, the person may feel worried and worn out and may soon give up. People who are under stress may draw attention to their flaws and point out difficulties with the task at hand. Because the stressful scenario increasingly impacts the person's efforts and analytical thinking, the outcome is a vicious cycle. In the end, the person will put the blame on their own lack of personal or professional qualities or possibly the difficulty of the work. They would gradually lose confidence in their abilities, which will immediately cause them to do

poorly on the work (Bandura, 1997). Contrarily, a consistent perception of effectiveness in various ways results in improved sociocognitive functions in relevant sectors (Bandura, 1997). Success is more likely if people can see challenges as opportunities rather than threats. People will take more interest and engage in activities with higher degrees of dedication if their self-confidence is better and they have the ability to turn risks and problems into opportunities. They will take pleasure in the entire procedure that results in the achievement of objectives. People will develop self-efficacy if they can manage challenging circumstances. Therefore, it is crucial to handle self-efficacy beliefs carefully because they affect both the success and failure of human performance (Bandura, 1997).

After examining the crucial role that self-efficacy plays, it is vital that entrepreneurship education take into account training individuals about various ways to improve personal talents and efficacy beliefs. The above discussion of the concept demonstrates the relevance of it in this study. According to Bandura (1977), there are four main informational sources that can moderate the influence of self-efficacy beliefs. Therefore, entrepreneurship education must consider how these four elements - enactive mastery, vicarious experience, verbal persuasion, and emotional cues-can be used effectively.

The first factor that boosts one's efficacy belief is active mastery experiences. Building self-efficacy depends heavily on individual success and failure. Success is a good thing since it boosts self-assurance. On the other hand, failure can reduce self-efficacy. Understanding the elements that contribute to success is fascinating. If success is simple, someone can count on it frequently and without much effort, and they won't be equipped to handle challenges. However, if success occurs after persistent work and after overcoming obstacles, then a strong belief in one's own

ability to succeed might be developed. By exercising self-control and turning setbacks into learning experiences and failures into achievements, one can develop their sense of self-efficacy and grow stronger as a result (Bandura, 1997). When compared to alternative impact mechanisms (such as strategy modeling, cognitive simulations of good performances, tutorial instructions, etc.), enactive mastery emerges as the winner.

Enactive mastery is more important than secondhand experiences, realistic mock scenarios, or verbal instructions for forming more firm ideas about one's self-efficacy (Bandura, 1997). The subject of this study is entrepreneurial training. It is vital to clarify how self-efficacy relates to entrepreneurship education. It's crucial to consider how to structure curricula while instructing courses in entrepreneurship education so that students can develop crucial entrepreneurial skills by having high self-efficacy and sensitivity (Zhao et al., 2005).

Bandura emphasizes that a variety of factors, including task complexity, amount of effort necessary, past self-knowledge outlines, rigorous self-monitoring, and reconstruction of enacted experiences or success histories, influence cognitive processing. Focusing on the utilization of information from enactive mastery experiences in an entrepreneurship education setting is the most crucial assignment. The suggested approach is the choice that students in entrepreneurship education programs must develop an idea, compose a business plan, and then conceptualize a firm. Students engaging their cognitive skills this way may eventually help them become more effective as individuals in holding certain ideas. In essence, success rates are higher if mentored by an experienced entrepreneur. Knowledge of these events that link actions to successes and failures may eventually result from repeated encounters with a mentor.

The second most crucial factor in developing self-efficacy beliefs is vicarious experience. Comparing one's accomplishments to those of others can change how effective they appear, and this improves one's perception of their own abilities. The benefits of role models for learning are numerous. Bandura concurs with social learning models. He asserts that there are some characters that influence viewers of television or other media, and viewers may unconsciously or intentionally align their behavior with these personalities (Bandura, 1976). As a result, educators should exercise extreme caution when employing case studies, the internet, and other resources because they have the potential to have a negative impact on students.

Verbal persuasion, which inspires and persuades individuals about their skills, is the third crucial component. It is based on verbal encouragement and community culture. This idea is extremely pertinent to entrepreneurship education and can be applied in a variety of ways, such as in the form of remarks, compliments, and constructive criticism shared in one-on-one sessions. To create opportunities for continued development, feedback should be given in a constructive and encouraging manner. A teacher must spend time with their pupils to thoroughly comprehend their needs and expectations if they are to accomplish this.

The fourth significant source which is the state of one's physiological and affective behavior as a measure of their capability, is called "physiological and emotional states as a measure of capability" (Bandura, 1997). After being cognitively processed, all the information from the corresponding four states may have an impact on how effective one feels (Bandura, 1997). Selection, judgment, and integration are components of this cognitive processing of the data obtained from the four steps that are supported by different heuristics and may aid in the development of self-efficacy beliefs (Bandura, 1997). The enactive mastery experience mentioned earlier, which

serves as a crucial source of efficacy knowledge, since it produces first-hand and real evidence of one's capabilities, offers one explanation for this. But how effective it is, depends on the individual. To raise self-efficacy and the degree to which people can maximize it, the cognitive process is crucial. Here, it's important to understand established self-knowledge structures, task complexity, background circumstances, and required effort. Considerations such as thorough self-monitoring and past goal accomplishments are also relevant. All these have an impact on the mind (Bandura, 1997). Successful entrepreneurs have the ability to bounce back from setbacks.

According to Bandura, self-efficacy plays a significant role in determining an individual's direction of action, level of effort expended, and level of perseverance (Bandura, 1997). Thus, with thorough understanding of one's talents, institutional limitations may be readily overcome, and opportunities can be used to one's full advantage (Bandura, 1997). Additionally, self-efficacy is crucial for entrepreneurship success since it affects how one thinks in challenging circumstances (Bandura, 1997). Therefore, it is important to incorporate some self-efficacy reflection into entrepreneurship education courses to help students become practically engaged and perform entrepreneurially in their own businesses.

2.3.2 Theory of Planned Behaviour (Ajzen, 1991)

Entrepreneurial intention has been explained using a variety of models, including those proposed by Shapero and Sokol (1982) and Bird (1988). Ajzen's theory of planned behavior (TPB) has had the most impact (Krueger et al., 2000; Linán & Chen, 2009). This theory offers a comprehensive theoretical framework that makes it possible to comprehend intentions while taking both societal and individual aspects into consideration (Krueger et al., 2000). In fact, TPB has emerged as one of the psychological theories most frequently employed to explain and forecast human

behavior, including entrepreneurship (Carr & Sequeira, 2007; Kolvereid, 1996; Krueger & Casrud, 1993; Tkachev & Kolvereid, 1999). Since entrepreneurial behavior is intentional, intentions are considered to be reliable predictors of behavior by entrepreneurship scholars (Bird, 1988; Krueger & Casrud, 1993). Such intention theories, which include the idea of planned behavior, have already received support from research. (Jones & Iredale, 2010; Ghani et al., 2014) or the two-factor model (Kruger et al., 2000).

According to Ajzen (1991), a combination of three crucial factors (assertiveness toward results, apparent behavioral control, and perceived subjective norm) can influence an individual's entrepreneurial intentions. Behavior-related attitudes, perceived behavioral control, and subjective norms are three independent factors that influence intentions (Ajzen 1991; 2002). According to the theory, a person's actions come from his or her intents to carry out those actions, and the resultant intent is further influenced by that person's perspective on those actions and by their own personal standards.

A person's attitude toward the behavior is important because their own opinions about engaging in a behavior are crucial. These can come from assessing one's ideas about a situation and can be either negative or good. It may be the individual's appraisal of the numerous outcomes anticipated if a specific course of action has been chosen to address a situation. As a result, a formal definition of overall attitude is the sum of each person's appraisals of the consequences and the desirability of all possible behaviors. The term "perceived behavioral control" (PBC) relates to a person's view of how easy or difficult it is to do tasks like beginning and maintaining a business. It is the product of a collection of available, pertinent, and

governing beliefs. The belief about the elements which can act as a catalyst, and some can restrain the overall behaviour).

Additionally, it is one of the key elements in the idea of planned behavior. The achievement motivation theory developed by Atkinson in 1964 includes certain PBC components. The anticipated likelihood that someone will complete a particular task is how it is defined (Dinc & Budic, 2016). This construction especially refers to how simple or difficult it is to carry out the behavior (Tkachev & Kolvereid, 1999). The pertinent study on perceived behavioral control is dominated by Bandura and his collaborators (Bandura et al., 1977; Bandura et al., 1980), while Ajzen distinguishes between the locus of control and perceived behavioural control. Similar to how Ajzen and Madden (1986) found that perceived behavioural control expectations increased the predictions of behavioural intentions, de Vries et al. (1988) support this finding. In contrast to the locus of control, which is more stable and does not change over time, perceived behavioral control may fluctuate over time. Additionally, the locus of control asserts that people's success is dependent on the amount of work they put in. The research conducted by Khuong and An (2015) on 401 students between the ages of 18 and 24 shows that perceptions of entrepreneurship, both positive and negative, moderate the association between entrepreneurial intention and the entrepreneur network (external environment). The mediator effect of perceived behavioral control in boosting entrepreneurial intention is also suggested by Khuong & An (2015).

Lorti and Castogiovanni (2015) examined a total of 42 articles that suggest a connection between entrepreneurship and TBP. TBP is a useful forecasting method for predicting entrepreneurial ambitions, according to a total of 21 research studies. According to Souitaris et al. (2007), an entrepreneurial program can have an impact on students' approaches, personal standards, perceived behavioural control (PBC), and

inclinations to start a new project. Based on the example of various Nordic nations in the Global Monitoring dataset, Arenius and Kovalainen (2006) conducted a similar study and discovered a similar persuasive association.

Furthermore, Katz (2003) used TPB to first conceptualize and explain individualistic intentions in business backgrounds. The author discovered that the techniques, arbitrary standards, and PBC served as a backdrop for commercial endeavors. Prior exposure to family enterprises was found by Carr and Sequeira (2007) to be a predictor of the development of business creation goals in entrepreneurs, in addition to the three antecedents mentioned above. As a result, it can be said that TPB is an effective theoretical model to illustrate and anticipate entrepreneurial goals for company initiatives given the wide variety of learning outcomes it has produced. Interesting suggestions about the connection between Perceived Behavioural Control and intention and behavior are made by Sancho et al. (2022) in a theoretical article. They contend that the entrepreneurial self-efficacy of an individual is directly related to the process of starting a firm. In particular, the association between self-efficacy and intention may be to blame for growing intention regarding entrepreneurship (Wilson et al., 2007; Zhao et al., 2005). Entrepreneurial self-efficacy is the conviction that one can successfully carry out the numerous roles and duties involved in entrepreneurship (McGee et al., 2009). Self-efficacy stimulates entrepreneurship intentions (Benzing et al., 2009; Birtchnell, 2011; Caiazza & Vope, 2016; Sancho et al., 2012). The association between self-efficacy and entrepreneurial inclinations was not supported statistically by Benzing et al. (2009). For students in entrepreneurship education, examples of successful business planning and working with successful entrepreneurs are crucial topics (Honig, 2004). These are the main driving forces behind why students in entrepreneurship education programs continue,

which can ultimately result in higher success expectations and increased entrepreneurial self-efficacy. Entrepreneurship education and entrepreneurial inclinations are moderated by business self-efficacy according to Levenburg and Schwarz (2008). Because current research also tries to relate entrepreneurial behavior and entrepreneurial intention in beginning a firm, this study is a significant contribution to the field of study.

The emergence of TPB, according to Lorti and Castogiovanni (2015), points to the need to investigate the connections between entrepreneurship and business planning (Castrogiovanni, 1996; Delmar & Shane, 2003). Future research could empirically examine the entire TPB model, according to Lorti and Castogiovanni's (2015) observation. They come to the conclusion that there is some overall validity in the use of statistical techniques like structural equation modeling to identify complicated mediation and partial mediation connections.

The domains that influence salient research include pedagogy, economic and social sciences, psychology, and many more that are related to three key study areas, namely educational science, social cognition, and entrepreneurial education, which are utilized to build theoretical frameworks (Oviawe, 2010). The main objectives of entrepreneurship education are to improve thinking abilities and foster a good attitude toward entrepreneurial activities, which may give students the opportunity to recognize and/or find business opportunities (Fayole et al., 2006; Busenitz et al., 2003). Because it has been demonstrated that purpose and its antecedents can predict entrepreneurial behavior, entrepreneurship experts have recently begun to pay intention and its antecedents more attention (Entrialgo & Iglesias, 2016). Entrialgo and Iglesias (2016) claim that TPB is the most widely used intention model.

2.4 Entrepreneurial Teaching Pedagogies

The effects of investments in human capital largely depend on the type of investments made (Marvel et al., 2016). In the field of entrepreneurial education, this implies that we may expect that the features of entrepreneurial education programs affect the extent to which students learn from education (Martin et al., 2013). Pedagogy has been acknowledged to be a key driver of the effectiveness of entrepreneurial education programs (Béchard & Grégoire, 2005). Broadly speaking, entrepreneurial education pedagogies can be classified into 'practice-oriented' or 'theoretical-oriented' (Piperopoulos & Dimov, 2015). While in the latter the student is a passive recipient of knowledge and the teacher initiates the learning process, in practice-oriented entrepreneurial education the student is responsible for constructing learning through experience (Gielnik et al., 2015). Rather than imparting knowledge, teachers adjust their training in relation to their students' needs (Honig, 2004; Mustar, 2009).

Many authors have emphasized that entrepreneurial education should adopt a learner-centred perspective, where students are encouraged to directly experience entrepreneurship in order to learn (Béchard & Grégoire, 2005; Fletcher, 2007; Löbler, 2006). Through experiential learning, educators help students to develop the tacit knowledge, which entrepreneurs normally acquire from experience (Honig, 2004; Walter & Dohse, 2012) that formal education may struggle to deliver (Politis, 2005). To achieve this goal entrepreneurial education can assume a 'practice-oriented' approach aimed at recreating in an educational setting, the context in which entrepreneurs learn (Gielnik et al., 2017). For example, simulations are designed to replicate entrepreneurial practice in the context of entrepreneurial education programs (Pittaway & Cope, 2007b). Since simulations help students to connect course contents

with practical knowledge (Zantow et al, 2005), learners are facilitated in acquiring expertise from additional entrepreneurial education activities. Thus, we may expect that if entrepreneurial education is imparted mainly by adopting a 'practice-oriented approach', students will benefit from attending additional entrepreneurial education initiatives in a similar fashion, as do students with founding experience.

Furthermore, this approach offers the opportunity to appreciate in concrete applications the value of what has been learnt (Mueller & Anderson, 2014). For these reasons we may expect that a practice-oriented pedagogy will help students to better learn when they are exposed to an increasing number of entrepreneurial education initiatives. Besides providing students with a surrogate of entrepreneurial experience, practice-oriented pedagogies prevent students from depreciating the stock of knowledge acquired from education. When the focus of education is mainly on imparting hard facts on business creation, students will be more likely to perceive their knowledge as inadequate. Such education is necessary to provide a general understanding of entrepreneurship phenomena but has a lower effect on the development of the student's entrepreneurial skills and abilities. On the other hand, if the pedagogy is more practice-oriented, students will perceive to have a more complete understanding of entrepreneurship (Piperopoulos & Dimov 2015). We then postulate that: Entrepreneurial pedagogies have positive influence on entrepreneurial intentions.

2.5 Action Learning

As a learning tool, action learning is considered tremendously effective intervention in leadership and management development and has its applications at different learning conditions (Marquardt & Banks, 2010). Action learning is an outcome-oriented and highly tangible approach (Bolt, 2005; Day, 2000; Raelin,

2007), as it helps in understanding complex problems through team building and developing leadership traits (Kramer, 2008; Marquardt, 2004; Raelin, 2009). Action learning involves both contextual and practical elements of learning (Pedler et al., 2005; Raelin, 2007). It brings in proper balance between action and learning, tackles real-world problems and develops collaboration among other learners (Park et al., 2013). The origin of action learning can be traced back to Revans (1982), when it was used in the coal mines of Wales.

As the application of action learning changes from discipline to discipline, its implementation procedure differs. This leads to multiple variants of action learning like businessdriven action learning (Boshyk & Dilworth, 2010), virtual action learning (Dickenson et al., 2010), and critical action learning (Vince, 2004). Revans (1982) broadly described the framework of action learning by integrating real-world problems work-based and a team-learning process. In the action learning setup, an individual will reflect his/her work with peers, generating multiple insights with the interaction of each other on a problem.

Action learning enhances the learners' understanding through reflection among like-minded peers (Revans, 1982). The 'action' in the action learning is the learning outcome and an input to the learning process, in this process learning is attained at individual, group and organizational level (Raelin, 2008). The action learning is also presented in pedagogical context, that people learn more effectively working on real-time problems, which are encountered while achieving their learning objectives (Day, 2000; Reynolds and Vince 2004). Entrepreneurial learning is more practical and action-oriented (Rae, 2004; Neck et al., 2014), and related to the real-time problem in the actual working condition. Hence, action learning is the most

advocated approach by several scholars (Rasmussen & Sørheim, 2006; Morris et al., 2013; Järvi, 2015).

Entrepreneurial education has been developed into a broader domain of knowledge over a period (Katz, 2003; Kuratko, 2005). The categories of entrepreneurial education are based on the learning objectives and target audiences (Bae et al., 2014; Robinson et al., 2016). The entrepreneurial education, targeting the graduates and students through higher education, is offered with three types of courses (Robinson et al., 2016) categorized as 'about,' 'for' and 'through' (Pittaway & Edwards, 2012). Majority of university level entrepreneurship courses are designed to increase entrepreneurial awareness and to develop entrepreneurial intentions (Garavan & O′ Cinneide, 1994). Offering entrepreneurial education in these different contexts presents a unified definition stating entrepreneurial education as 'any pedagogical or process of education for entrepreneurial attitudes and skills' (Fayolle et al., 2006). The entrepreneurial education, in its present stage, is more focused on the type of delivery and pedagogical approach for enhancing the entrepreneurial outcome (Nabi et al., 2017).

Researchers on entrepreneurial education and pedagogy called for testing of different pedagogical approaches for effective delivery of entrepreneurial education and measuring the outcome through entrepreneurial intention (Bae et al., 2014; Fayolle & Liñán, 2014). Entrepreneurial intention and entrepreneurial self-efficacy Entrepreneurial intention is defined as individual's desire to establish and manage any new venture (Crant, 1996). The intended behavior is systematically preceded by a conscious decision to act (Laviolette et al., 2012). There is enough empirical evidence to support that intention as the best predictor of planned behavior (Bagozzi et al., 1989; Bae et al., 2014), it holds good even for entrepreneurship (Krueger et al., 2000).

Ajzen's (1991) theory of planned behaviour (TPB) and Shapero and Sokol's (1982) model of the entrepreneurial event are the fundamental theories on which intention model is grounded (Krueger & Brazeal, 1994; Krueger et al., 2000).

Entrepreneurial intention model reflects the influence of perceived desirability, personal attitude, perceived social norms, self-efficacy and entrepreneurial knowledge on entrepreneurial intention (Liñán, 2004). Among these, entrepreneurial self-efficacy is the strongest and critical antecedent in developing entrepreneurial intention (Krueger & Brazeal, 1994; Drnovsek & Erikson, 2005; Barbosa et al., 2007; Laviolette et al., 2012). The concept of self-efficacy is also perceived as an independent concept developed from social cognitive theory (Bandura et al., 1961). According to Bandura et al. (1961) self-efficacy is defined as 'the extent to which individuals believe they are capable of organizing and effectively executing actions to produce attainments.' Taking this cue, self-efficacy can be viewed as a strong predictor of entrepreneurial intention. A recent study also upholds the existence of a strong relationship between entrepreneurial self-efficacy and entrepreneurial intention which justifies the former's impact on the latter (Schenkel et al., 2014).

Traditional classroom pedagogy is the most extensively used pedagogic practice in entrepreneurial education. Classroom teaching, case studies, writing a business plan, guest talk by entrepreneurs are dominant tools used for entrepreneurial education (Solomon, et al., 2002) in traditional pedagogic approach. Robinson et al. (2016) highlighted the limitation of traditional pedagogic approach in entrepreneurial education. Even though traditional pedagogy offers well-defined rules, proper planning, and stability in classroom, it tends to reduce creative learning and lacks action and experiential part of entrepreneurial learning (do Paço et al. 2011). Traditional classroom pedagogy is ineffective in developing actionable outcome in

entrepreneurial learning (Higgins & Elliott, 2011). Recent studies on entrepreneurship intention also questioned the effectiveness of traditional pedagogy in developing entrepreneurial intention (Bae et al., 2014; Nabi et al., 2017). There has been call for changing entrepreneurial education pedagogy and to switch toward innovative pedagogical approach (Kuratko, 2005). Jones and English (2004) suggest an alternative pedagogic approach for entrepreneurial education, a different learning environment is required to support the study of entrepreneurship within a university setting.

Essentially, a teaching style that is action-oriented, encourages experiential learning, problem solving, project-based learning, creativity, and is supportive of peer evaluation. Many studies have apprised the effectiveness of action learning in entrepreneurial education (Järvi, 2015; Neck et al., 2014; Ho et al. 2018). Järvi (2015) argues that entrepreneurial learning is a continuous process, and entrepreneurial skills and behavior can effectively be developed through reflective and action learning. Neck et al. (2014) proposed an action-oriented pedagogy for effective entrepreneurial learning. Based on the literature evidence we state that entrepreneurial pedagogy significantly increases entrepreneurial self-efficacy.

2.6 Self-Efficacy and Innovation

Self-efficacy is the strong personal belief in skills and abilities to initiate a task and lead it to success (Bandura, 1997). It is the perceptions of self-efficacy, rather than objective ability, that motivates individuals to demonstrate entrepreneurial behavior. Unlike other personality traits of entrepreneurship which are relatively static, self-efficacy is affected by contextual factors such as education and past experiences (Hollenbeck & Hall, 2004). Some researchers believe that self-efficacy is similar to other personal traits such as locus of control, although they are different in

some respects. 'Locus of control' is the overall belief in ones' power over the outcomes of actions, whereas self-efficacy is profound self-confidence in accomplishing specific tasks (Boyd & Vozikis, 1994). Moreover, self-efficacy is domain specific and varies across tasks and situations (Wilson et al., 2007) it can also be generalized to other related tasks or performances (Chen et al., 1998).

More interestingly, self-efficacy is one of the core components of entrepreneurial intention models and mostly operationalized as feasibility, although there are some subtle technical differences between them (Ajzen, 2002; Segal et al., 2005). Purposeful education enhances students' entrepreneurial efficacy through providing them attitudes, knowledge and skills to cope with the complexities embedded in entrepreneurial tasks such as opportunity seeking, resource assembling, and leading the business to success (Wilson et al., 2007). In fact, education enhances entrepreneurial efficacy of students through providing experience of mastery, role models, social persuasion and support by involving them in hands-on learning activities, business plan development, and running simulated or real small business (Fiet, 2000; Segal et al., 2005).

Furthermore, education plays a crucial role in developing students' entrepreneurial efficacy through involving them in various entrepreneurial activities and increasing their desirability to step into venture creation by highlighting the merits, values and advantages of entrepreneurship (Segal et al., 2005); as well as encouraging and supporting them to start-up their own business. Hence, improving student's entrepreneurial efficacy enables them to put more efforts over a longer time, persist the challenges and develop plans and strategies to achieve higher entrepreneurial goals (Shane et al., 2003). In addition, higher entrepreneurial efficacy is associated with higher intention to become an entrepreneur (Segal et al., 2005).

Although, there is few empirical evidence on the influence of entrepreneurship education and training on entrepreneurial efficacy (Chen et al., 1998). Chen et al. (1998) introduced entrepreneurial self-efficacy (ESE) as the criteria to distinguish entrepreneurs from those who do not intend to create their own business. Choosing entrepreneurship, management, and organizational psychology students as the participants of the study, they conclude that entrepreneurship education was effective in developing entrepreneurial self-efficacy and consequently intention of students to set up their own business.

On the impacts of education in entrepreneurial capability development of students, Rae and Carswell (2000) proposed a model at the heart of which is self-efficacy. They looked at the process of learning entrepreneurial behaviour through a lens of life-story process and argued that entrepreneurs' self-confidence and self-belief is highly affected by active learning, relations, known capabilities, and personal theory. They act as motivational engine of entrepreneurial capabilities. Importantly, self-efficacy increases over time and through involving in experiential learning activities. Zhao et al. (2005) also stressed the mediating role of entrepreneurial self-efficacy on the relationship between entrepreneurship courses and university students' entrepreneurial intention. They argued that entrepreneurship education should not only focus on technical aspects of entrepreneurship, but it also should strengthen students' self-confidence to become entrepreneurs through offering them variety of learning opportunities.

The attempt to identify who wants to become an entrepreneur, how a successful entrepreneur behaves, and which factors affect the decision to create a venture, has led to the emergence of two main streams of entrepreneurship research. First, the researchers focused on linking certain personality traits or characteristics

such as 'self-efficacy' (Ajzen, 2002; Wilson et al., 2007), 'need for achievement' (Hansemark, 1998) and 'tolerance for ambiguity' (Teoh & Foo, 1997) to entrepreneurial behaviour based on the assumption that entrepreneurs are endowed with unique traits which make them distinguishable from others (Gu¨rol & Atsan, 2006) and motivate their entrepreneurial behaviours. Through the next stream, scholars investigated the contributions of demographic and contextual factors such as age, gender, work experience, and job dissatisfaction in mobilizing entrepreneurship behaviour (Liñán et al., 2005; Wilson et al., 2007).

According to Bird (1988), intention is the state of mind directing a person's attentions and action towards self-employment as opposed to organizational employment. Intention has been also defined as the efforts of a person to carry out entrepreneurial behaviour (Liñán & Rodríguez, 2004). It is the result of perceived control over behaviour (perceived ability to perform entrepreneurial behaviour); attitude toward behaviour (the degree to which a person has a positive or negative evaluation or appraisal of entrepreneurial behaviour); and subjective and social norms (the perceptions of how significant others think about being an entrepreneur, the strength of the motivation to comply with them, and social support to carry out the entrepreneurial behaviour). All these factors act as the motivation and emotional tendency which influence and direct entrepreneurial behaviour. Importantly, these factors can be affected by 'exogenous influences' such as personality traits and education (Segal et al., 2005; Liñán, et. al., 2005; Souitaris et al., 2007). Attitudes towards self-employment are the difference between perceptions of personal desirability to become self-employed or employed by an organization. Therefore 'high' attitude towards self-employment actually indicates that the respondent is more in favor of self-employment than organizational employment (Kolvereid, 1996).

2.7 Empirical Review

Numerous studies have already been conducted that focused on the topic of the present study, although their main points of interest were from other angles. Adu et al. (2020) investigated the variables that mediate the association between undergraduate students in Ghana's entrepreneurship education and intentions. According to the study, the association between entrepreneurial education and intentions is mediated by entrepreneurial attitudes and behaviors. They did not consider the content of the curriculum or pedagogical methods.

Blass (2018) looked at the ideal curriculum for aspiring business owners as well as successful entrepreneurs. The study concluded that prospective business owners need to learn about themselves and how to manage themselves, not a business curriculum. The issue is how and where they will acquire knowledge about themselves. In the grand scheme of things, curriculum and pedagogy still matter. In Kenyan universities, students seeking entrepreneurship degrees were studied by Karanja et al. (2016) to determine the impact of the entrepreneurship curriculum on fostering entrepreneurial intention. The result supports other studies' findings that entrepreneurship education aids in fostering an entrepreneurial mindset. To give the program a more practical orientation, they recommended that curriculum designers consider the pedagogy of entrepreneurship in Kenyan universities.

Asamani and Menah (2013) investigated the relationship between the academic programs that students read and specific personal traits and entrepreneurial propensity. Age, gender, and academic programs of students were found to have no discernible influence on their propensity for entrepreneurship. According to research, students' leadership qualities, task performance attitudes, achievement attitudes, and

risk-taking qualities all have a beneficial impact on their propensity for starting their own business.

The positive effect of entrepreneurial education on entrepreneurial outcome is well acknowledged among researchers (Kolvereid & Moen, 1997; Galloway & Brown, 2002; Bae et al., 2014). Galloway and Brown (2002) find that individuals who opted for entrepreneurial education at graduate level exhibit a high degree of intention to start new venture. A recent meta-analysis has also indicated positive influence of entrepreneurial education on entrepreneurial intention (Bae et al., 2014). Wilson et al. (2007) have found influence of targeted education in enhancing the degree of self-efficacy. Entrepreneurial self-efficacy is influenced by role models (Laviolette et al., 2012), and helps an individual from judging their capability with personal comparison (Wilson et al., 2007). Studies have documented the influence of entrepreneurial education on entrepreneurial self-efficacy and subsequent influence on entrepreneurial intention (Chen et al., 1998; Laviolette et al., 2012; Schenkel et al., 2014). Acknowledging the contribution of previous studies (Chen et al., 1998; Laviolette et al., 2012; Schenkel et al., 2014), we can therefore propose that Pedagogy has a positive effect on entrepreneurial self-efficacy, innovation, and entrepreneurial intention.

Kolvereid and Isaken (2006) defined self-employment as the situation in which individuals are faced with two alternatives when selecting a career – either as self-employed or employed in an organization. An attitude towards self-employment is an individual perception on working as the owner of a business. Jackson and Rodkey (1994) argued that an attitude towards entrepreneurship is an important aspect which predict potential entrepreneur in future. Previous studies showed that attitudes towards self-employment is associated with self-employment intentions (Kolvereid &

Isaken, 2006). For instance, Kolvereid and Isaken reported that attitude towards self-employment predicts self-employment intentions. Currently, little is known about the actual impacts of entrepreneurship education programs on developing entrepreneurial intention of students particularly in universities (Collins et al., 2006).

Through a longitudinal study over a period of 18 months, Audet (2002) questioned the temporal stability of entrepreneurial intention of undergraduate university students from business administration programs. The study has some significant findings. First, it confirms the validity of the Theory of Planned Behaviour to explain students' intention to go into a business at some point in their life. Second, entrepreneurial intention varies over time; therefore, it is difficult to establish the association between entrepreneurial intention and actual venture creation. Finally, entrepreneurial intention changes due to the impacts of some positive factors (e.g. being more mature, being your own boss, money, freedom, and opportunity recognition) and negative factors (reality shock and corporate orientation). Liñán, et. al., (2005) applied Theory of planned Behaviour to investigate entrepreneurial intention of 354 undergraduate students of Business Science and Economics in two public universities. The findings indicate that intention is a function of perceived self-efficacy (control over behaviour); personal attitudes; and perceived subjective and social norms. Interestingly, entrepreneurial knowledge affects entrepreneurial intention but through interaction with antecedents of intention particularly perceived self-efficacy.

According to Luthje and Franke (2003) successful research universities seem to promote entrepreneurial activities among students. They claimed that it is widely unknown whether contextual founding conditions or rather personality traits drive the students' career decision towards self-employment. Fei et al. (2019) argued that to

design effective programs, policy makers have to know which of the factors mentioned above should be heavily emphasized. The findings of the study conducted by Thompson (2009) revealed that the career preferences and entrepreneurial conviction are influenced by the image of entrepreneurship as a career alternative and the support received from the university environment. Franke and Luethje (2004) found that after four years of following business courses the business students' interest in pursuing self- employment seemed to dissipate. This argument had resulted in a desire to conduct research with the aim of investigating the entrepreneurial self efficacy and entrepreneurial intention of university students.

2.7.1 Attitude and Entrepreneurial Intentions

Entrepreneurship intention encompasses attitudes towards the pursuit of entrepreneurship as a career option, and a willingness to act (Ajzen, 1991; Krueger et al., 2000). According to Ajzen (1991), intentions are "assumed to capture the motivational factors that influence a behaviour; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert in order to perform the behaviour" (p. 18). While not all intentions translate into actual actions, there is still consensus that entrepreneurial intentions represent an important step in the formation of entrepreneurial behaviour and thus, regarded as a determinant of actual entrepreneurial behaviour (Ajzen, 1991; Krueger and Brazeal, 1994). It has been recognised that the inclusion of entrepreneurship education courses in the university curriculum can raise entrepreneurial intention (Smith et al., 2006), as it represents a major way of equipping people with the requisite knowledge, skills and attitudes to pursue entrepreneurial careers (Souitaris et al., 2007).

Entrepreneurship education teaches students the necessary behavioural traits an entrepreneur needs to possess to handle ambiguities and complexities to be

successful (Neck & Greene, 2011). It involves mixing mental factors (knowledge, skill, and experiences) with inspirational factors to energise and shape the entrepreneurial intention of students (Locke, 2000). It arouses and unearths entrepreneurship potential students are unaware of (Laukkanen, 2000). Thus, it allows people to acquire the multiple skills and talent required for the development of entrepreneurial ventures (Neck & Greene, 2011). Opponents of entrepreneurship education proposition argue that entrepreneurs must possess some special inborn attributes which promote entrepreneurship activities (Cope, 2005). Besides, entrepreneurial behaviours may be necessity driven. For example, most entrepreneurial activities in Sub-Saharan Africa are undertaken by individuals without entrepreneurial education and/or a lot of formal education. The necessity-driven nature of entrepreneurship in Africa is as a result of high unemployment rates (Aryeetey, 2001; Baah-Boateng, 2015; Zakaria et al., 2014), low salaries (Evans & Leigthon, 1989), marginalisation (Acheampong, 2013), and harsh economic environment. This consequently makes most Africans with little formal education or no entrepreneurship education to find creative and innovative means of meeting their basic needs of survival by engaging in self-employment behaviours. While the above criticisms are true to some extent, there is a general agreement that entrepreneurship education can lead to entrepreneurial intention. Potential entrepreneurs are able to learn by modelling good business practices and behaviours (Gartner, 1985).

According to the European Commission (2012), "entrepreneurship education in higher education improves students' basic competence in entrepreneurship reinforces students' entrepreneurial intentions (p.7). Empirically, studies demonstrate that entrepreneurship education can influence the development of entrepreneurial intentions (Adekiya & Ibrahim, 2016; Ali, 2013; Krueger, 2009; Lee & Wong, 2004;

Linán & Chen, 2009; Müller, 2011; Pedrini et al., 2017). Using data from 602 Iranians, Ali (2013) concluded that the "completion of one entrepreneurship course increases the likelihood of having entrepreneurial intention by 1.3 times" (p.868). Küttima et al. (2014) also showed that students who participated in entrepreneurship education in 17 European countries develop intentions to engage in entrepreneurship.

In Nigeria, Adekiya and Ibrahim (2016) demonstrated that entrepreneurship education impact significantly on entrepreneurial intention among final year students. Prior to this, Gerba's (2012) study involving Ethiopian students revealed that students who participated in entrepreneurial training develop higher intention to engage in entrepreneurship. Recently, Pedrini et al. (2017) used the "E4impact MBA" programme at the Catholic Institute of Business and Technology in Accra (Ghana) as a case study and indicated that entrepreneurial education significantly increases students' entrepreneurial intentions. While these findings suggest positive impacts of entrepreneurship education on entrepreneurial intentions, entrepreneurship education research in Africa compared to other regions in the world (Nabi et al., 2017; Naude & Havenga, 2005) is relatively limited and needs more empirical evidence to deepen the insights of and expand stakeholders' understanding for the implementation of necessary policy and practical interventions. Accordingly, we hypothesised that pedagogy has an/a (in) direct influence on entrepreneurial intentions.

2.7.2 Self-efficacy and Innovation

In Bandura's research, self-efficacy appeared as a new concept applied in the field of entrepreneurship in the 1990s and was regarded as a relatively stable psychological capital of entrepreneurs (Ibrayeva, 2006). Self-efficacy refers to the self-confidence intensity of entrepreneurs on whether their own entrepreneurial skills can complete various entrepreneurial activities, reflecting the belief that entrepreneurs

are equipped with the competency to influence their surroundings and succeed through corresponding actions (Boyd & Vozikis, 1994; Chen et al., 1998). As a kind of belief in accomplishing a certain goal or task, the concept of self-efficacy has been accepted as useful to explain the development of entrepreneurial intention and the decisionmaking process afterward (Liu et al., 2019).

Influenced by environmental and personal factors, entrepreneurs are able to reinforce their ability to cope with negative emotions and pressures while continuously exposed to an entrepreneurial environment (Gist & Mitchell, 1992; Shepherd, 2004), so their self-efficacy can be obtained, modified, and enhanced (Chen et al., 1998; Barz et al., 2015), and to further affect their performance via utilizing originality, resourcefulness, and other skills (Gist & Mitchell, 1992; Mcgee & Peterson, 2017). Starting from the aspect of process flow, Scott and Bruce (1994) pointed out that, to be innovative, individuals have to seek support for their ideas and establish alliances to realize the ideas through the buildup of prototypes or models, and finally lead to new products or services.

Innovation is a complex process along the generation, promotion, and practice of new ideas (Brown & Duguid, 1991; Kazadi et al., 2016), and innovation is regarded as the behavior by which individuals generate new ideas or solutions after identifying and analyzing problems, and further support-seeking, capacity recognition, and practice (Scott & Bruce, 1994; Kang et al., 2016). In the field of entrepreneurship, innovation can be demonstrated in different stages of planning, organizing, implementing, and controlling (Beaver & Prince, 2002). Innovation is closely related to entrepreneurial creativity, which is promoted and constrained by many mechanisms, including perception, motivation, knowledge, ability, and belief (Barakat et al., 2014). On the other hand, self-efficacy has been proved to correlate

with several behaviors, such as opportunity identification and failure learning, as well as innovation associated with entrepreneurship (Chen et al., 1998; Dempsey & Jennings, 2014).

Innovation is frequently recognized as an important activity and goal by entrepreneurs (Erikson, 2002). As a psychological self-cognition of entrepreneurs, self-efficacy may affect their innovation in different ways. Firstly, the entrepreneurial environment is full of opportunities, and innovation performance in entrepreneurship can be associated with psychological satisfaction by entrepreneurs with high self-efficacy (Chen et al., 1998). Secondly, innovation is a process characterized by risks and uncertainties, and people with high self-efficacy are more capable of embracing the reality (Mcgee & Peterson, 2017). To follow that, people with self-efficacy set higher expectations on results than those at a lower self-efficacy level, who prefer to be conservative while setting innovation goals and practice (Tolli & Schmidt, 2008; Caines et al., 2019). In other words, entrepreneurs with a great sense of self-efficacy are more confident in achieving self-concordant goals and more likely to overcome difficulties in the process of innovation, which stimulates the modification and reinforcement of self-efficacy as a return. Like the research of Chen and Zhou (2017), Wei et al. (2020) in their study has generated evidence that self-efficacy has a positive effect on promoting innovation of entrepreneurs. On the contrary, individuals with low self-efficacy often doubt their ability of innovation; hence, they are prone to avoiding problems or even quitting when encountering obstacles, especially when they are emotionally exhausted (Neumeyer et al., 2018). Based on the above theoretical analysis and deduction, this thesis postulate that Self-efficacy improves innovation.

2.8 Theoretical Framework

Bandura's Concept of Self-efficacy, and Ajzen's Theory of Planned Behaviour are the two relevant theories underpinning this study.

Bandura believes that self-efficacy is highly important in determining how individuals act, how much effort they put in, and how persistent they are (Bandura, 1997). Thus, a good understanding of one's abilities can help overcome any institutional obstacles and make the most of available opportunities (Bandura, 1997). Self-efficacy is a critical factor in determining entrepreneurial success since it influences one's thinking in challenging situations (Bandura, 1997). Therefore, entrepreneurship education curriculum should include opportunities for students to reflect and develop their self-efficacy in order that they can venture into entrepreneurship after graduation.

The theory of planned behavior (TPB) developed by Ajzen provides a comprehensive framework for understanding intentions, considering both societal and individual factors (Krueger et al., 2000). TPB has become one of the most widely used psychological theories for explaining and predicting human behavior, including entrepreneurship (Carr & Sequeira, 2007; Kolvereid, 1996; Krueger & Casrud, 1993; Tkachev & Kolvereid, 1999). Given that entrepreneurial behavior is intentional, many scholars of entrepreneurship consider intentions to be a reliable predictor of behavior (Bird, 1988; Krueger & Casrud, 1993). Ajzen (1991) suggests that an individual's entrepreneurial intentions can be influenced by a combination of three important factors: their assertiveness towards results, their perceived behavioral control, and their subjective norm. According to the theory, a person's actions stem from their intentions to perform those actions, and those intentions are further influenced by the

person's perception of the actions and their personal standards as shown in Figure 2.2 bwlow.

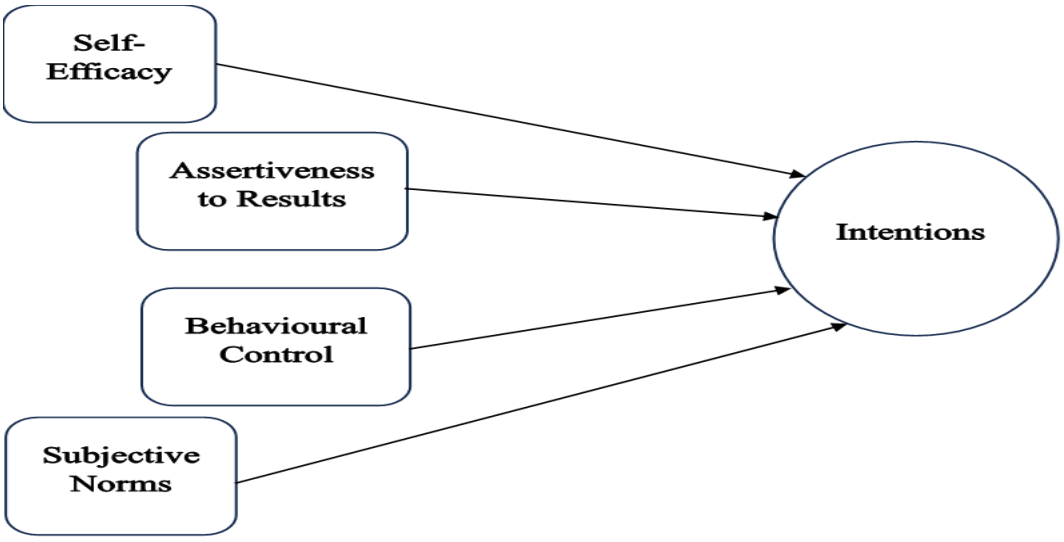

Figure 2. 2: Theoretical Framework

Source: *Author's construct*

Entrepreneurial education is characterized with problem-based and practice-based pedagogies that re-inforce positive attitude towards behavior, subjective norm, and perceived behavioural control towards entrepreneurship. Problem-based pedagogies are a type of educational approach that focuses on solving real-world problems as a means of promoting learning. Instead of traditional lecture-based learning, students are presented with authentic, complex, and often interdisciplinary problems that require them to work collaboratively and apply critical thinking and problem-solving skills to come up with solutions. A study by Nieder et al. (2016) found that medical students who were taught using a PBL approach performed better on clinical skills assessments than those taught using traditional lecture-based methods. Similarly, in engineering education, PBL has been shown to be effective in promoting creativity, teamwork, and problem-solving skills (Hmelo-Silver et al., 2007). In a study by Adams et al. (2014), engineering students who were taught using

a PBL approach had higher levels of creativity and problem-solving skills than those taught using traditional methods.

The benefit of problem-based pedagogies is that they promote critical thinking, collaboration, and communication, which are essential for success in the workplace (National Research Council, 2012). Additionally, problem-based pedagogies have been shown to be effective in promoting student engagement and motivation (Hmelo-Silver et al., 2007). problem-based pedagogy promotes assertiveness towards results by instilling a proactive mindset, developing critical thinking and problem-solving skills, fostering reflection and feedback, and nurturing effective collaboration and communication abilities. By engaging learners in authentic problem-solving experiences, this approach equips them with the confidence and skills necessary to assertively pursue and achieve desired outcomes. It provides learners with opportunities to actively engage in problem-solving tasks. By tackling real-world problems and working towards solutions, learners gain firsthand experience and develop a sense of mastery over the subject matter. This mastery experience contributes to building their perceived behavioral control, as they gain confidence in their ability to apply knowledge and skills to solve complex problems (Bandura, 1977). Problem-based pedagogy often involves collaborative learning experiences where learners work together in groups to solve problems. This collaborative environment provides opportunities for social interactions and discussions, allowing learners to share perspectives, negotiate solutions, and collectively construct knowledge (Dolmans et al., 2013). Through these interactions, learners are exposed to diverse viewpoints and gain insights into different approaches to problem-solving, which can influence their subjective norms by broadening their understanding of what is socially acceptable or expected behavior.

Practical-based pedagogies are educational approaches that emphasize learning through hands-on experiences, experiments, and simulations. Practical-based pedagogies help learners to develop practical skills and competencies that can be applied to real-world problems. The benefit of practical-based pedagogies is that they provide learners with an opportunity to actively engage with course materials, which can improve their understanding and retention of information. For example, in a study by Stoloff et al. (2013), students who participated in hands-on activities in a physics course performed better on exams and were more likely to retain the information they learned than students who only attended lectures. Practical-based pedagogies have also been shown to be effective in promoting the development of 21st-century skills, such as critical thinking, problem-solving, and creativity. In a study by Chen and Yen (2013), students who participated in a project-based learning approach in a computer science course developed higher levels of critical thinking skills than those who only received traditional instruction. Similarly, in a study by Breslow et al. (2013), students who participated in a game-based learning approach in a computer science course demonstrated higher levels of creativity and problem-solving skills than those who only received traditional instruction. The problem-based and the practical-based pedagogies can have a great influence on learners' attitude towards behavior, subjective norm, and perceive behavioural control to build intention through innovation and efficacy.

Practice-based pedagogy cultivates an action-oriented mindset in learners. Through hands-on experiences, learners are actively engaged in tasks and projects that require them to apply their knowledge and skills to real-world situations. This process encourages learners to take ownership of their learning and develop a sense of agency and assertiveness towards achieving desired results. By experiencing the direct impact

of their actions, learners become more motivated and driven to achieve tangible outcomes. Practice-based pedagogy often incorporates guided practice and feedback loops, where learners receive guidance, support, and constructive feedback from instructors or mentors. Through this iterative process, learners could refine their skills, adjust, and improve their performance over time.

The provision of feedback and guidance helps learners understand what they are doing well and where they need to make improvements. This process contributes to the development of perceived behavioral control as learners gain a better understanding of their strengths and areas for growth, leading to increased confidence in their ability to perform the behavior successfully (Hattie & Timperley, 2007). Practice-based pedagogy often exposes learners to professional communities, where they interact with practitioners, industry experts, or members of a specific field. Engaging with professional communities provides learners with exposure to the norms, values, and expectations of that particular community. Through these interactions, learners internalise the subjective norms prevalent within the professional context, shaping their own beliefs and behaviors to align with those norms.

2.9 Conceptual Framework of the Study

Based on the linkage of the two theories (Bandura's Concept of Self-efficacy, and Ajzen's Theory of Planned Behaviour) and the concept of problem-based and practice-based pedagogies, this study therefore is conceptualised in Figure 2.3 below.

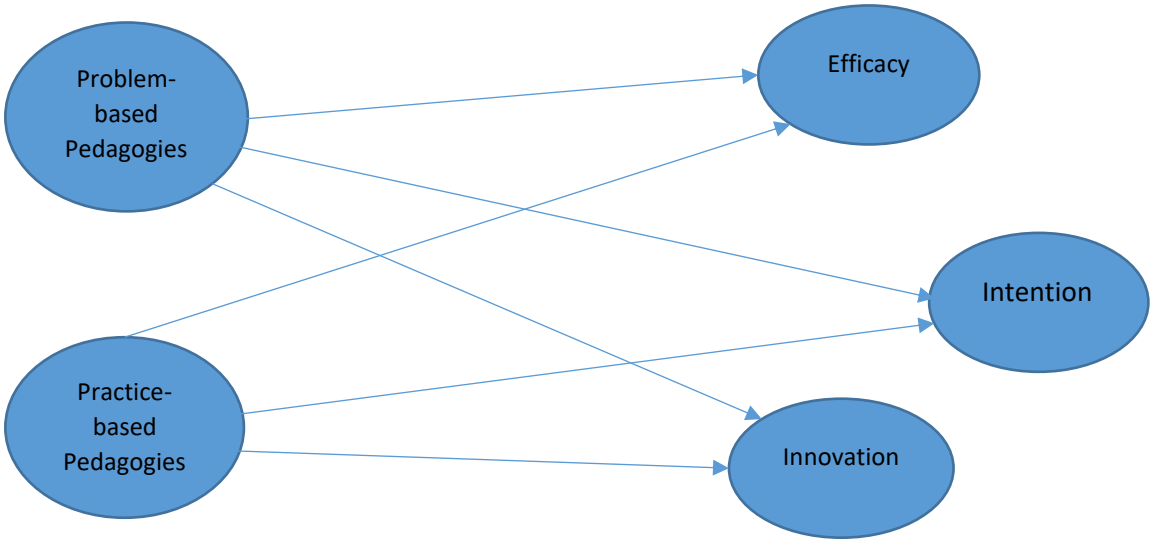

Figure 2. 3: The Conceptual Framework of the Study
Source: Author's construct

In conclusion, the literature review reveals key trends in entrepreneurship education highlighting the significance of curriculum and pedagogy for the development of self-efficay, innovation and entrepreneurial intentions. Most of the studies reviewed suggest the influence of entrepreneurial education on entrepreneurial intentions, others also argue that entrepreneurial intentions development is largely based on the business environment. Also, the dominant research approach adopted by various studies was qualitative. It is therefore important to quantitatively measure the impact of entrepreneurial education. The review also discovered that most extant empirical studies were conducted outside Ghana leaving contextual lacuna. Overall, the synthesis of these sources emphasizes the need for further investigation into the frequency of entrepreneurial curriculum in academic programmes and the effect of pedagogies on innovation, self-efficacy, and entrepreneurial intention.

2.10 Chapter Summary

The chapter focused on extant empirical literature to make the relationships of the variable under the study feasible. The relationships established makes it

reasonable to postulate the various hypothesis for the study. The chapter justifies the influence of entrepreneurial pedagogies on self-efficacy, innovation, and intention. It also establishes how self-efficacy can also affect innovation, and intention, as well as the effect of how innovation also affects intention.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter of the study presents the methodology followed in conducting the research. The chapter discusses the research philology and research paradigms underpinning the study. Besides, the chapter presents information regarding the research design and approach, including data collection, analysis and ethical procedures followed in gathering data. Therefore, three major sections constitute the chapter, entailing research philosophy, research design and approach, and data collection and analysis.

3.2 Research Philosophy

The philosophical stance of the researcher as far as this study is concerned is that of a positivist paradigm. The positivist paradigm asserts that knowledge is derived from direct experience and, as a result, it dismisses any preconceived notions, universal or absolute concepts. It maintains the belief that there exists only one objective reality. In simpler terms, positivism argues that only knowledge based on information obtained through observation, including measurement, can be considered reliable and trustworthy (Quinlan & Zikmun, 2015). According to Hjørland (2005), positivism can be seen as synonymous with traditional empiricism. This means that positivist knowledge, in contrast to theological and metaphysical knowledge, is based on empirical evidence. It asserts that empirical knowledge, obtained through observation and experience, is the only valid and reliable form of knowledge. In other words, observation and experience are considered the sole legitimate sources of knowledge from a scientific perspective (Hjørland, 2005). Positivism typically restricts data collection and interpretation to a narrow scope, aiming for objectivity.

Researchers following the positivist approach rely on established theories to formulate hypotheses (Saunders et al., 2019). They actively interact with the world to collect data and make observations based on the hypotheses they have developed. These hypotheses are subsequently tested to evaluate their validity and support the positivist stance. Blumberg et al. (2014) outline three key attributes associated with positivism. Firstly, they argue that positivist research is conducted in a value-free manner, meaning that researchers aim to minimize the influence of personal biases or subjective judgments. Secondly, positivism assumes that the social world exists externally and can be observed objectively, independent of individual perspectives. Finally, positivism posits that there is a clear distinction and independence between the researcher and the subjects being studied, ensuring an objective and unbiased examination of the phenomena under investigation. According to Saunders et al. (2016), positivist researchers commonly employ methodologies such as questionnaires, structured interviews, structured non-participant observation, and official statistics. These methods are chosen with the aim of generating reliable data that can be replicated by other researchers.

The researcher's positivist philosophical stance is justified because this study aims to evaluate the frequency of entrepreneurial content in the Bachelor of Business Administration programmes curricula based on objective entrepreneurial themes, ascertaining the extent of vertical and horizontal strategy for entrepreneurial content articulation, as well as identifying entrepreneurial teaching methods. It also seeks to establish the influence of pedagogy on students' entrepreneurial innovation, efficacy, and intention. These connote an objective perspective which aims to test hypotheses about theory, undertake statistical measurements, and generalise results about the population of emphasis.

3.3 Research Reasoning Logic

The present study employs a deductive approach. Deductive reasoning is a method of arriving at a conclusion through a logical deduction from a set of premises that are based on a theory or principles (Sekaran & Bougie, 2019; Bell et al., 2018; Saunders et al., 2019). If the premises are true, then their conclusion must also be considered true. Deductive reasoning aims to reach a certain and logical conclusion supported by the given premises. The process of deductive reasoning starts with identifying a set of premises based on a theory or principles. These premises are assumed to be true and serve as the foundation for the reasoning process (Sekaran & Bougie, 2019; Bell et al., 2018; Saunders et al., 2019). The next step is to logically deduce the conclusion by applying rules and principles of logic, mathematics, or formal logic. In the current study, a conceptual framework was proposed in chapter two of this report along with its associated constructs and hypotheses. The researcher then gathered data from the sample population to test these hypotheses following scientific procedures testing the hypotheses that practice-based, and problem-based pedagogies have effect on students' innovations, efficacy, and entrepreneurial intentions. Since the study begins by formulating hypotheses about a specified theoretical model, the deductive theory is applied in this study.

3.4 Research Context

The study was conducted in a business school at a public university located in the Central Region of Ghana. The School has been in existence for over 13 years and has since graduated over 4,500 students.

The School was selected as a case study for two resons. The first is that the Faculty is one of the youngest business faculties in the country. It graduated its first batch of students in the year 2013. They are highly likely to be contributing

significantly to the current graduate unemployment situation in the country. Secondly, it is also not likely to have graduates "old boys and girls" occupying higher positions of various organisations due to the faculty's short time of existence. Young graduates of the School may face challenges of advocacy and recommendation for jobs as compared to the old business faculties in other universities that have existed for a longer period. The School's graduates are likely to face bigger unemployment challenges. It is therefore appropriate that the programme curricula empower the graduates to develop entrepreneurial self efficacy as well as intentions to establish their own businesses to mitigate the unemployment challenges they may face. Hence the evaluatuation of entrepreneurial content in the curricula and the effect of pedagogy on students' entrepreneurial efficacy and intentions.

The study focused on Bachelor of Business Administration curricula because it is one programme that graduates a large number of students for the job market and therefore may contribute significantly to the proportion of the unemployed graduates.

Again, by the nature of training for business students they are expected to have a higher tendency for business development and management which should put them on a better pedestal in terms of self job creation to avoid being unemployed.

3.5 Research Approach

The approach of this study is quantitative. A quantitative research approach seeks to measure and quantify relationships between variables. It involves collecting numerical data through surveys, experiments, and other quantitative methods. The data collected in quantitative research is typically analyzed using statistical methods to identify patterns and relationships between variables. According to Creswell (2013), quantitative research is used to test hypotheses, make predictions, and

generalize findings to a larger population. According to Creswell and Creswell (2017), quantitative research is an approach to inquiry involving collecting and analyzing numerical data, applying statistical tests, and drawing conclusions based on the analysis.

Quantitative research strives to be objective and minimize researcher bias. It emphasizes standardized data collection methods and statistical analysis techniques that are designed to reduce subjectivity and ensure replicability of results. (Creswell, 2014). Statistical analysis enables researchers to make inferences about the population based on the collected data. The quantitative approach provides precise and quantifiable measurements, which allows for a high degree of reliability in the findings. Statistical tests can assess the level of confidence or significance in the results obtained. (Babbie, 2016). Quantitative research according to Creswell and Creswell (2017), employs various statistical techniques to analyze the data, including descriptive statistics, inferential statistics, correlation analysis, regression analysis, and hypothesis testing. These analyses help researchers draw meaningful conclusions and identify relationships between variables. The numerical and empirical nature of quantitative research makes it valuable for informing policy decisions and making evidence-based recommendations. Policymakers and decision-makers often rely on quantitative research to understand the impact of interventions, evaluate outcomes, and guide resource allocation. (Neuman, 2013)

This study implements the quantitative approach because the study seeks to establish relationships among variables (Practice-Based, Problem-Based, Innovation, Efficacy, and Intentions), as well as establishing the impact of Practice-Based, and Problem-Based pedagogies on Innovation, Efficacy, and Intentions.

3.6 Research Design

Research design is a set of procedures used to conduct research and gather, analyze, interpret, and report data (Sekaran & Bougie, 2019; Bell et al., 2018; Saunders et al., 2019). Research design has three main forms: descriptive, explanatory, and exploratory (Saunders et al., 2019).

The descriptive research design is used to describe the characteristics of a population or object of interest and is best suited for answering research questions such as "what," "where," and "when" (Hair et al., 2019; Saunders et al., 2019). This design uses observational methods and descriptive statistics but is limited in explaining the cause of an event. The explanatory research design aims to explain a subject matter and establish predictive relationships between variables of interest (Hair et al., 2019; Saunders et al., 2019; Given, 2008). This type of research uses testable hypotheses and statistical methods to determine cause-and-effect relationships and predict outcomes (Given, 2008). The exploratory research design is used when the researcher has limited understanding of the subject matter, or the research question is not well-defined. This design uses literature reviews, observations, and interviews to gather data and gain a deeper understanding. It is frequently conducted using qualitative methods to acquire comprehensive information and is characterized by flexibility (Creswell & Creswell, 2017)

In this study, explanatory design is implemented. The study focuses on understanding the relationships between variables and seeks to determine why certain outcomes occur. Explanatory research design allows researchers to investigate cause-and-effect relationships between variables. By manipulating independent variables and measuring their effects on dependent variables, researchers can provide explanations for observed outcomes. Yin (2018) also argues that by establishing

causal relationships, explanatory research design increases the generalizability of findings. This allows researchers to make predictions or apply their findings to different populations, settings, or contexts. Explanatory research design provides valuable insights for practical applications and decision-making. By uncovering causal relationships, researchers can identify interventions, strategies, or policies that may lead to desired outcomes or address specific problems. (Trochim & Donnelly, 2008).

It is as the results of the above justification that explanatory research design was adopted for this study. The design helps to establish relationships among variables (Practice-Based, Problem-Based, Innovation, Efficacy, and Intentions), as well as establishing the impact of Practice-Based, and Problem-Based pedagogies on Innovation, Efficacy, and Intentions.

3.7 Population and Sampling

3.7.1 Population

A research population is a complete set of individuals or objects possessing the characteristics or attributes studied in a particular research project. It is a group of subjects the researcher intends to generalise about, based on the study's results. The population of this study comprised of all Bachelor of Business Administration (BBA) curricula and all students pursuing BBA programmes in various public universities in Ghana.

The target population comprised of all the BBA curricula (Tables 3.3 & 3.3a – 3.3e in Appendix A) and all level 300 and 400 Bachelor of Business Administration students at the selected university. The target population of the students was 1,359 obtained from the students list received from the Exam Officers of the five

departments within the School. The levels 300 and 400 groups were targeted because they have had exposure to over 87-100% of their repective programme curricula at the time of the survey (2021/2022 Academic Year, 2nd Semester).

3.7.2 Sample and Sampling Tehnique

Five curricula consisting of 25 core courses in the first two years and 77 courses excluding 7 core courses in the last two years of the programmes were sampled for curricula analysis for the evaluation of entrepreneurial content. To establish the impact of pedagogy on entrepreneurial innovation, efficacy, and intention, the sample size of 500 students was used.

The study adopted purposive sampling technique for selection of curricula for the content analysis. Purposive sampling is a type of non-probability sampling method that involves selecting participants or units based on specific criteria (Sekaran & Bougie, 2019). Purposive sampling is appropriate in situations where the researcher wants to study a specific population or phenomenon and when the characteristics of the population are critical to the research question or objective (Creswell, 2014). The units are chosen based on their relevance to the research question, availability, or other predetermined criteria.

Also, in the case of the students, Cochran (1977) guided the determination of a minimum required sample size, using the Rao-soft software. The software's parameters were set as follows; 5% margin of error, 95% confidence interval, and 50% response distribution. This produced a minimum required sample size of 300 from a target population size of 1,359 students. To increase the confidence level beyond 95% the sample was increased to 500 students and the response rate of 99.2% (496) was achieved. This sample size is adequate considering the partial least squares

structural equation modelling, which is adopted in this study, which accommodates small sample sizes (Hair et al., 2019). The study applied a simple random sampling technique for selecting the representative sample. In simple random sampling, each member of the population has an equal and independent chance of being selected for the sample (Sekaran & Bougie, 2019). The justification for using simple random sampling is that it is the most straightforward and objective method of selecting a sample. It eliminates the potential for researcher bias and provides a representative sample that accurately reflects the characteristics of the population (Sekaran & Bougie, 2019; Saunders et al., 2019). Additionally, the use of simple random sampling can reduce the risk of sampling error, since the sample is selected at random rather than through a subjective or selective process. As a result, the findings of a study using simple random sampling can be considered more generalizable to the population (Sekaran & Bougie, 2019).

3.8 Instrumentation

A research instrument is a device employed to gather, gauge, and scrutinize data that pertains to the goals of a study. This tool could encompass methods like interviews, assessments, questionnaires, or checklists, and its selection typically depends on the researcher's study objectives and chosen research approach (Creswell, 2013; Crano et al., 2015). This study deployed content-analysis and questionnaires for collection of data on curricula and students respectively.

The content analysis-oriented instrument was employed to assess entrepreneurial content in the BBA curricula. The content analysis was based on 18 entrepreneurial themes developed by Sirelkhatim and Gangi (2015) as indicated below in Table 3.1.

Table 3. 1: Entrepreneurial Content Themes

S/N	THEMES
1	Business Plan (BP)
2	Marketing (MKT),
3	Small Business Management (SBM)
4	Simulation (SIM)
5	Case Study (CS)
6	Networking (NTWK)
7	Product Development (PD)
8	Opportunity Recognition (OR)
9	Business Finance (BFIN)
10	Idea Generation (IG)
11	Internship (INT)
12	Incubation (INC)
13	Selling and Sales (S&S)
14	Idea Pitching (IP)
15	Mentoring (MEN)
16	Guest Speakers (GS)
17	Role Playing (RP)
18	Team Building (TB)

Source: Sirelkhatim & Gangi (2015)

Sirelkhatim and Gangi's entrepreneurial content reflects real-world challenges and opportunities in the business environment. Aligning curricula with their entrepreneurial themes ensures that students are exposed to practical and current issues they might encounter in their future careers. Entrepreneurial themes often require critical thinking and problem-solving skills. Incorporating these into a business curriculum helps develop students' abilities to analyze situations and find innovative solutions. Entrepreneurship is closely linked to creativity and innovation. Themes such as product and market development, and business model innovation encourage students to think creatively and explore new ideas.

Many business graduates aspire to become entrepreneurs or work in innovative roles within established organizations. Sirelkhatim and Gangi's entrepreneurial content themes provide insights and skills relevant to starting a business or fostering innovation within existing structures. The themes emphasize practical skills, including business planning, financial modeling, and market analysis. Such practical applications enhance students' ability to apply theoretical knowledge in real-world scenarios. Many industries value entrepreneurial skills and mindsets in employees. A curriculum aligned with Sirelkhatim and Gangi's entrepreneurial content themes ensures that graduates possess the skills and perspectives that are highly sought after by employers. Exposure to the entrepreneurial content can cultivate an entrepreneurial mindset, characterized by a willingness to take calculated risks, resilience in the face of failure, and a proactive approach to identifying and capitalizing on opportunities.

The study administered a structured questionnaire developed based on the study's underpinning theories and prior empirical studies in conducting the data gathering exercise. The questionnaire was sectionalized into two parts. The first part used a five-point Likert scale measure to collect respondent responses regarding the dependent and independent constructs. Considering that the constructs of interest are latent, using Likert scale questionnaires was appropriate. Likert scale instrument helps researchers to measure latent variables using several proxy indicators. The second part collected respondent demographic information inclusing age, sex, and family entrepreneurial background. Table 3.2 below contains dependent and independent variables of interest for which data was gathered.

Table 3. 2: Dependent and Independent Variable for the Study

S/N	Variable	Definition	Sources
1	Entrepreneurial Intention	Intention to start new business	Lee-Ross (2017); Liñán (2005)
2	Entrepreneural efficacy	Entrepreneurial skill and competence	Setiawan (2014); Zhang and Huang (2021)
3	Entrepreneurial Innovation	It is the skill and imagination to create new things	Ismail, Azizan & Azman (2011); Wathanakom et al. (2020)
4	Problem-based teaching	A student-centered pedagogy in which students learn about a subject through the experience of solving an open-ended problem.	Bhide (1996)
5	Practice-based teaching	A pedagogy emphasizing practical application of knowledge and skills in real-world context	Bhide (1996)

Source: Researcher's compilation

In all, there were 5 main variables of interest. Entrepreneurial intention was the dependent variable. This variable was a latent construct proxied by a series of measurement items using the five scale Likert questionnaires. From Table 3.2, Problem based teaching, and Practice based teaching are the independent constructs examined for their effect on entrepreneurial efficacy, innovativeness, and entrepreneurial intentions. These are also latent constructs measured using Likert scale questionnaires.

3.8.1 Instrument Reliability and Validity

Hair et al., (2022) recommended that researchers must first check for the validity and reliability of the measurement, as well as the structural model before moving to the presentation and interpretation of results. Therefore, the study evaluates the

measurement model using three major tests, internal consistency, convergent validity, and discriminant validity.

- **Assessment of internal consistency**

The internal consistency evaluates whether several indicators that lay claim to measure the very underlying construct have similar results. It measures the reliability of the measurement model. The study measures internal consistency using the composite reliability test (Hair et al., 2022). Composite reliability tests require that a construct has a test score of equal to or above 0.70 to be considered reliable. A higher composite reliability score means a higher internal consistency.

- **Assessment of indicator reliability**

As a criterion, an indicator whose correlation with its latent construct should be at least 0.708 is reliable. It is important to know that the literature recommends a loading of at least 0.708 for a construct to be included as an indicator, however, such a rule might be violated based on the content validity, the average variance extracted and the composite reliability (Hair et al., 2022).

In addition, a recommendation for the assessment of indicator reliability augments other internal consistency tests. It must confirm the reliability of the measurement model (Hair et al., 2022). As a rule of thumb, an indicator that has a loading of 0.708 or above is regarded reliable (Hair et al., 2016).

- **Convergent validity**

This assesses the scope to which indicators that claim to measure an underlying construct are positively related (Hair et al., 2022). To establish convergent validity at the construct level, Fornell and Larcker (1981) suggested using the average variance extracted (AVE) as a yardstick for convergent validity assessment. As a rule

of thumb, an AVE value of at least 0.5 is necessary. The inference is that the construct explains at least 50% (half) of variations in its fundamental indicators.

- **Discriminant Validity**

The discriminant validity assessment has the goal to ensure that a reflective construct has the strongest relationships with its own indicators than any other construct in the path model (Hair et al., 2022). The discriminant validity test measures whether measurements that claim not to be related are not related. Three principal tests are used to assess the discriminant validity of a construct; the Heterotrait-Monotrait Ratio of Correlations, the Fornell-Larcker criterion of discriminant validity, and the Cross Loadings Criterion (Hai et al., 2014), however in this study Heterotrait-Monotrait Ratio of Correlations, and Fornell-Larcker criterion of discriminant validity are used for discriminant validity test. Heterotrait-monotrait (HTMT) ratio of correlation according to Henseler et al (2015) can achieve higher specificity and sensitivity rates (97% to 99%) compared to the cross-loadings criterion and Fornell-Lacker. HTMT values close to 1 indicate a lack of discriminant validity. Some authors suggest a threshold of 0.85 (Kline 2011). In addition, Gold et al. (2001) argued with it and proposed a value of 0.90. A latent construct should explain better the variance of its own indicator rather than the variance of other latent constructs. Therefore, the square root of each construct's AVE should have a greater value than the correlations with other latent constructs. (Hair et al., 2022).

3.9 Data Sources and Collection Procedures

This section discusses the sources of the data collected and applied in this study's analysis and how they were gathered.

The study used both primary and secondary data for the study of pedagogic impact, and the frequency of entrepreneurial content respectively. The curricula were obtained from the offices of the departmental heads, whiles, questionnaires were admistered to student to obtain data for the analysis of the impact of pedagogy on innovation, efficacy, and entrepreneurial intentions.

In sourcing for the secondary data (curricula), three key inclusion criteria informed the purposive selections of curriculum for content analysis. First, the curriculum must be approved and run by the School for at least three years. Secondly, the curriculum should be accredited by the Ghana Tertiary Education Commission. This was to ensure that only official and reliable documents are used for the study. Finally, the curricula were selected based on informativeness. Thus, a curriculum must include detailed content, such as the aim of the programme, course objectives, course content, and teaching mode to be regarded as informative. Tables 3.1a to Table 3.1f in the Appendix show the distribution of the courses in the five programmes used in the study.

Following existing literature and expert recommendations, predefined codes (labels) were developed concerning entrepreneurship curriculum articulation strategies. The researcher analysed the curricula to identify entrepreneurial content. Identification of whether the entrepreneurial content has been articulated using the vertical or horizontal approaches was done. Curricula contents were classifed under predefined entrepreneurial codes. During the coding exercise, the unit of analysis was constituted by sentences and phrases which discussed entrepreneurship issues.

The study's process of sourcing for primary data started by getting familier with the list of students' index numbers for each of the five BBA programmes. Index numbers were randomly selected from the list of each programme. The researcher

studied the teaching timetable to identify the meeting days and time of students for each of the programmes. Lecture halls were visited after permission from the faculty board and the lecturers in charge of the respective classes for the administration of the questionnaires. In the lecture halls the questionnaires were administered to the students whose index numbers were ramdomnly picked from the list of the population. Whenever pre-selected students were absent, the questionnaire was administered randomly to other students in the class who had not participated.

3.10 Data Analysis Procedures

Two primary quantitative data analysis methods are frequently employed. Descriptive statistics, which are used to elucidate specific phenomena, and inferential statistics, which are employed for making predictions. Each of these methods utilizes distinct techniques tailored to their respective purposes.

3.10.1 Application of Descriptive Statistics in the Current Study

Descriptive statistics were applied to the first three research objectives. The first research objective is to evaluate the frequency of entrepreneurial content in Bachelor of Business Administration (BBA) programme curriculum. The second objective sought to ascertain the extent of vertical and horizontal articulation of entrepreneurial content in BBA programme curriculum. The third objective identifies the frequently used teaching methods for instructions in the BBA programme.

In addressing the above objectives, descriptive statistics, mainly, percentages and means are used. Percentages and means make data easier for people to understand and interpret. The simplified percentages and means help policymakers and the public to appreciate the issues involved without difficulties. According to Provost and Fawcett (2013), percetages and means are effective for comparing data between

different categories or groups, which is especially useful for identifying patterns and trends. Percentages and means can highlight disparities and variations in data, making them ideal for showcasing differences and outliers. (Witte & Witte, 2017).

3.10.2 Application of Inferential Statistics in the Current Study

Inferential statistical methods were applied to research objectives four where regression method was performed. The fourth research objective sought to establish the pedagogical effect on students' entrepreneurial efficacy, innovation, and intentions.

The Partial Least Squares Structural Equation Modeling (PLS-SEM) technique was utilized to analyze quantitative data collected from the survey. This method was chosen due to its suitability for predicting relationships between variables that are not directly observable, unlike other statistical methods like ordinary linear regression.

This study aims to predict the relationship between predefined independent variables (Practice-Based pedagogies, and Problem-Based pedagogies) and dependent variable (efficacy, innovation, and entrepreneurial intentions). The choice of PLS-SEM was also influenced by the complexity of the structural model, which involved multiple direct and indirect relationships. Thus, the structural model used in the study contains multiple direct and indirect relationships, justifying the application of PLS-SEM. Additionally, as the research model in this study involves latent variables that cannot be directly measured, SEM techniques are appropriate. For instance, the latent construct "entrepreneurial intention" can only be measured through its manifest indicators or proxies.

PLS-SEM analysis consists of two stages: measurement model assessment and structural model assessment. In the first stage, the measurement model is evaluated to

ensure the validity and reliability of the proxies or variables used to measure the latent variables in the structural model. Four tests are performed in this stage including Indicator reliability assessment, internal consistency assessment, Convergent validity assessment, and Discriminant validity assessment.

The second stage of PLS-SEM analysis (the Structural Model Assessment) involves several critical tests. These include collinearity tests, path significance assessment, evaluation of the coefficient of determination, determining the effect size, and assessment of predictive relevance. The Variance Inflation Factor (VIF) is used to quantify collinearity and a VIF value of 5 or above indicates a potential problem. The significance of relationships between variables is determined using either t-statistics or P-values. In this study, all tests were carried out at 5% significance level, hence a P-Value lesser than or equal 0.05 is regarded significant. The coefficient of determination (R-square) measures the extent to which independent constructs explain the dependent constructs.

3.11 Ethical Concerns

In conducting this research, ethical considerations were at the forefront of the research process. The study was guided by the ethical principles outlined by the University of Education, Winneba. The following measures were taken to ensure that the rights of the participants were protected and that the study was conducted in an ethical manner.

First, before collecting data, informed consent was obtained from all participants. The participants were given a clear explanation of the purpose of the study, their rights, and the potential risks and benefits associated with participation. They were also informed that they could withdraw from the study at any time and

their responses would be kept confidential. Also, the participants' responses were kept confidential and only used for the purposes of this study. The participants' names and any other identifiable information were not shared with any third parties. Moreover, anonymous data collection methods were used. No participant was identified by name or any other personal information in the analysis or presentation of the results.

3.12 Chapter Summary

This chapter has discussed the various methods and techniques applied to aid the achievement of the study's objectives. It discusses the paradigms and philosophical orientations of the researcher and how they influenced choices of appropriate research designs and methods. The chapter also addresses the population and sample size issues, together with instrumentation and how the reliability and validity of the various developed instruments are achieved. The chapter also addresses the various statistical techniques that are implemented to achieve the study's objectives in addition to the hardware and software that aided the analysis.

CHAPTER FOUR

PRESENTATION OF ANALYSIS AND RESULTS

4.1 Introduction

This chapter presents the results of the study. It is divided into two main parts. The first part consists of the outcome of the examination of the undergraduate business programmes with respect to the level of entrepreneurial content integration and how they have been integrated into the curricula. The second aspect examines and presents findings from the survey conducted. The survey results provide numerical data on the influence of teaching pedagogies, entrepreneurial self-efficacy, innovation, and family entrepreneurial history on students' entrepreneurial intentions.

4.2 Respondents Background

A total of 500 questionnaires were handed out, and 496 were received, representing a 99% response rate. As Table 4.1 displays majority of participants were males (50.8%). Table 4.2 also shows that most of the participants (76.1%) were in their fourth year which is ideal for this study because level 400 students have had almost a full exposure to the entire curriculum. It is also noted in Table 4.3 that as many as 60.5% of the respondents have not started any form of business by themeselve. Table 4.4 shows the age distribution of the participants, with 68.4% fallen between 18 and 27 years old, and 26.2% within the ages of 28 and 37 with only a small percentage (5.4%) constituting the rest. This is comprehensible because a large majority of regular undergraduate students fall in the ages of 18-25.

Table 4. 1: Gender of Respondents

GENDER	Freq.	Percent	Cum.
Females	244	49.19	49.19
Males	252	50.81	100.00
Total	496	100.00	

Table 4. 2: Respondents Level/Class

EDULEV	Freq.	Percent	Cum.
Level 300	119	23.99	23.99
Level 400	377	76.01	100.00
Total	496	100.00	

Table 4. 3: Business Ownership

BUSOWN	Freq.	Percent	Cum.
No	300	60.48	60.48
Yes	196	39.52	100.00
Total	496	100.00	

4.3 RQ1. What is the Frequency of Entrepreneurial Content in the BBA Curricula?

Research objectives one (1) of the study sought to find the frequency/volume of entrepreneurial content embedded in the undergraduate business curricula. The specific courses found to contain some entrepreneurial content as indicated Table 4.4 below are Entrepreneurship and Small Business Management, Principles of Management, Basic Accounting 1, Basic Accounting 11, and Financial Management. These courses are offered as a general course in the first two years of all programmes (Accounting, Banking and Finance, Human Resource Management, Procurement & Supply Chain Management, and Marketing). In this regard, the study sought to answer the question concerning what type of entrepreneurial content is integrated in undergraduate curriculum and what form of integration strategy is utilized.

The themes used to assess entrepreneurial content in the curricula are Business Plan (BP), Marketing (MKT), Small Business Management (SBM), Simulation (SIM), Case Study (CS), Networking (NTWK), Product Development (PD), Opportunity Recognition (OR), Business Finance (BFIN), Idea Generation (IG), Internship (INT), Incubation (INC), Selling and Sales (S&S), Idea Pitching (IP), Mentoring (MEN), Guest Speakers (GS), Role Playing (RP), and Team Building (TB) as adapted from Sirelkhatim & Gangi (2015). As a reaction to whether there is an element of entrepreneurship content in the curriculum or not, the researcher used "X" to represent non-existence, and "✓" to represent existence of the entrepreneurial content in the curriculum.

Table 4. 4: Entrepreneurial Curriculum Content Analysis (Levels 100 & 200)

Courses	BP	MKT	SBM	SIM	CS	NTWK	PD	OR	BFIN	IG	INT	INC	S&S	IP	MEN	GS	RP	TB
MiEcons	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PoMgt	✓	X	X	X	X	X	X	✓	✓	✓	X	X	X	X	X	X	X	✓
French	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HRM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Comm.Skills	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
BusComS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
BAcct 1	X	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X	X	X
MaEcons	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
BusMaths	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
POMkt	✓	✓	X	X	X	X	✓	✓	X	X	X	X	✓	✓	X	X	X	✓
IntProMgt.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
African Stud.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ent&SBM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓	X	X	X	X
BAcct 2	X	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X	X	X
OrgB	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
QuanT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Business Law	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ProjMgt	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Liberal studies	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EOG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
P&OM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cost Acct	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Public Admin	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fin. Mgt	X	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X	X	X
Part&ComLaw	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TrendsInEdu	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Source: Field Data (2023)

It was revealed from the content analysis of the general courses offered in the first 2 years of the program (Table 4.4 above) that only six courses (Principles of Managemt, Basic Accounting 1, Principles of Marketing, and Entrepreneurship & Small Business Management, Basic Accounting 2, and Financial Management) out of 25 courses, had some entrepreneurial content embedded in them.

4.3.1 Entrepreneurial Content Appearance in General Courses

As noted above, 13 out of 18 themes constituting entrepreneurial content appeared in various courses, albeit, very limited in frequency. Out of the 25 courses, Business Plan appeared in only three courses, ie. Principles of Management, Principles of Marketing, and Entrepreneurship & Small Business Management. The Marketing theme was identified only twice in Principles of Management and Principles of Marketing. Small Business Management was recorded only once in Entrepreneurship & and Small Business Management course which was a similar case with Simulation, Case Study, and Networking. Out of the 25 general courses only two had Product Development, and Opportunity Recognition appearing in them. The Business Finance theme appeared in 5 courses which happens to be the theme with the highest frequency. Idea Generation, Sales and Selling, Idea Picthing, and Team Building appeared twice each in various courses. The summary of the various themes appearances in the various courses are summarized in Table 4.5 below.

Table 4. 5: Summary of Entrepreneurial Curriculum Content in General Courses

S/N	Entrepreneurship Content Theme	Frequency/ No. of Courses	Name of Courses
1	Business Plan (BP)	3	Princ. of Mgt, Princ. Of Mkt, Ent & SBM
2	Marketing (MKT)	2	Princ. of Mkt, Ent & SBM
3	Small Business Management (SBM)	1	Ent & SBM
4	Simulation (SIM)	1	Ent & SBM
5	Case Study (CS)	1	Ent & SBM
6	Networking (NTWK)	1	Ent & SBM
7	Product Development (PD)	2	Princ. of Mkt, Ent & SBM
8	Opportunity Recognition (OR)	3	Princ. of Mgt, Princ. Of Mkt, Ent & SBM
9	Business Finance (BFIN)	5	Princ. of Mgt, Basic Acct 1, Ent & SBM, Basic Acct 2, Fin. Mgt.
10	Idea Generation (IG)	2	Princ. of Mgt, Ent & SBM
11	Internship (INT)	0	0
12	Incubation (INC)	0	0
13	Selling and Sales (S&S)	2	Princ. Of Mkt, Ent & SBM
14	Idea Pitching (IP)	2	Princ. Of Mkt, Ent & SBM
15	Mentoring (MEN)	0	0
16	Guest Speakers (GS)	0	0
17	Role Playing (RP)	0	0
18	Team Building (TB)	2	Princ. of Mgt, Princ. Of Mkt.
	Total	**27**	

Source: Field Data (2023)

In all, there were 27 appearances of the various entrepreneurial themes in only 6 courses out of 25 general courses as indicated in Table 4.6 above. If all the themes had appeared in all the general courses, there would have been 450 (18 X 25) appearances. Currently, the frequency of entrepreneurial content embedded in the general curriculum is 6% (27/450), which is woefully inadequate.

4.3.2 Entrepreneurial Content Appearance in Specialised Programmes

The entrepreneurial content analysis in the the specialization programmes for the last two years of the programmes used the same entrepreneurial content themes as used in the general courses. As a reaction to whether there is an element of entrepreneurship content in the curriculum, the researcher used "yes" to represent existence, and "no" to represent non-existence of entrepreneurship content in the curriculum. The findings from Table 4.5 above revealed that each undergraduate program has some elements of entrepreneurial content in their respective curriculum but not very pervasive. The five Bachelor of Business Administration (BBA) programmes specialisations (Human Resource Managemet, Accounting, Marketing, Banking & Finance, and Procurement & Supply Chain Management) are assessed as follows:

Table 4. 6: Entrepreneurial Curriculum Content in Specialised Programmes

SN	THEMES	BBA HRM	BBA ACC	BBA MKT	BBA BNK	BBA PRO
1	Business plan	No	No	No	No	no
2	Marketing	No	No	Yes	No	no
3	Small business management	No	No	No	No	no
4	Simulations	No	No	No	No	No
5	Case studies	No	No	No	No	No
6	Networking	No	No	No	No	No
7	Product Development	No	No	Yes	no	No
8	Opportunity recognition	No	No	No	no	No
9	Finance	No	No	No	yes	No
10	Incubators	No	No	No	no	No
11	Guest Lecturers	No	Yes	Yes	yes	No

Table 4. 6: Continues.

12	Selling and sales	No	No	Yes	no	No
13	Mentoring	No	No	No	no	No
14	Team building	No	Yes	Yes	Yes	No
15	Generating ideas	No	No	No	No	No
16	Internships	Yes	Yes	Yes	Yes	Yes
17	Pitching ideas	No	No	No	No	No
18	Role-playing	No	No	No	No	No

Source: Field Data (2023)

The analysis in Table 4.6 above demonstrates a limited entrepreneurial content in the specialised programmes just as the case in the first two years of the programmes. Out of the 18 entrepreneurial content themes used for the analysis, a maximum of 6 themes amounting to 33.33% were recoreded in various programmes. BBA Marketing was the programme with the highest appearance of 6 (33.33%) entrepreneurial themes made up of marketing, product development, guest lecturers, selling and sales, team building and internship. Procurement and Supply Chain Management, and Human Resource Management programmes recorded one theme each which translates to approximately 5.6% entrepreneurial content. With BBA Accounting programme, the entrepreneurial content found in the programme was equivalent to 16.67%, while Banking and Finance programme contains 22.22% of the expected entrepreneurial content.

In summary, 27 appearances of the various entrepreneurial themes were recorded in only 6 courses out of 25 general courses. If all the themes had appeared in all the general courses, there would have been 450 appearances. This amounts to 6%, the frequency of entrepreneurial content embedded in the general curriculum. Also,

out of the 18 entrepreneurial content themes used for the analysis, a maximum of just 6 themes amounting to 33.33% were recoreded in the specialized programmes.

4.4 RQ2. What is the Extent of Vertical and Horizontal Articulation of Entrepreneurial Content in the BBA Curricula?

Entrepreneurship & Small Business Management course was found to be a stand-alone course which contained most of the entrepreneurial content themes and cuts across all programmes. The course is therefore articulated using vertical integration approach. Out of the 27 appearances of entrepreneurial content themes in the general courses, 44.4% (12 Appearances) appeared in Entrepreneurial and Small Business management course whilst the rest scareters through just 5 courses out of 24 as indicated in Table 4.4 above.

As revealed by Table 4.6, Human Resource Management, and Procurement & Supply Chain Management specialisations recorded only one out of 18 entrepreneurial content themes, which was found in a stand-alone course (Industrial Internship). This course is taken by all students irrespective of the the programme specialisation. With respect to BBA Accounting, only 3 entrepreneurial content themes were identified, namely, guest lecturers, team building, and internship. Banking and Finance specialisation recorded 4 themes (finance, guest lecturers, team building, and internship). Marketing specialisation recorded the highest number of entrepreneurial content themes, namely, marketing, product development, guest lecturers, selling & sales, team building and internship. Cumulatively, only 6 out of the 18 themes appeared in the the various programme with Marketing specialisation recording the maximum six.

4.5 RQ3. What are the Frequently used Teaching Methods for Instruction in the BBA Programmes?

This section sought to provide answers to research question three (3), thus, which entrepreneurial teaching method(s) are frequently used in BBA programmes instructions? Table 4.7 below shows teaching methods prevalent in in BBA curricula instruction from the perspective of the BBA students.

Table 4. 7: Entrepreneurial Teaching Methods for Instructions

Variable	Obs	Mean	Std. Dev.	Min	Max
CASTU	496	3.512	.66	2	4
GUSPE	496	2.482	.699	2	4
GRODIS	496	4.198	.668	3	5
FORMLEC	496	6.849	.359	6	7
ROPPLAY	496	3.847	.685	2	5
INTENT	496	1.115	.344	1	3
INDEPRO	496	3.228	1.012	2	5
GRPRO	496	4.45	1.422	2	6
SIM	496	1.292	.601	1	3
NEWVEN	496	3.69	1.186	2	6
SEM	496	5.317	.963	3	6
PROSOL	496	4.603	1.061	3	6
INERN	496	3.012	.626	2	4
FIELDVIS	496	2.058	1.215	1	4

Source: Field Data

Table 4.7 demonstrates teaching methods used by instructors in the BBA programmes. There were 7 prominent teaching methods frequently used in instruction. Formal lecture however has the highest mean (6.849), indicating the most popular teaching method for instruction. It is followed by Seminars (5.317), Problem solving (4.603), Group project (4.45), Group discussions (4.198), Role play (3.847), and Case study (3.512) respectively. Guest speakers (1.115) and Simulation (1.292) were rarely used for instruction.

4.6 RQ4. To what extent does pedagogy affect students' entrepreneurial efficacy, innovation, and intentions?

This section analyses the relationship and the impact of pedagogy (Practice-Based and Problem-Based) on students' entrepreneurial efficacy, innovation, and intention. This inferential analysis using the PLS-SEM has two major stages, which are the outer model assessment, and the Inner Model assessment (Hair et al., 2022). The discussion of the procedure is presented below.

4.6.1 Outer Model Assessment

Therefore, the study evaluates the measurement model using three major tests, internal consistency, convergent and discriminant validity as shown on Tables 4.9 to 4.12 in Appendix B.

- **Assessment of internal consistency**

From Table 4.9 in Appendix B, the Composite Reliability and Cronbach test scores are greater than 0.70, this signifies that the measurement model is internally consistent. The Composite Reliability coefficient of research constructs; efficiency, innovations, intentions, practice, and problem-based reported scores of 0.867, 0.838, 0.804, 0.816, and 0.830 respectively are all internally consistent.

Therefore, it is legitimate to conclude that the measurement model has fulfilled assumptions of internal consistency.

- **Assessment of indicator reliability**

From Table 4.10 in Appendix A, all the indicator items that is used in the measurement model had loadings above the minimum required threshold of 0.708, except four; constructs Inno1, Inno5, Intention1 and Prac.Based1, which fall below the threshold and could not satisfy the minimum requirement. These constructs were

maintained because of content validity (Hair et al., 2022). Therefore, the measurement items used to measure the constructs are reliable.

- **Convergent validity**

Table 4.9 in Appendix B shows that all constructs have AVEs greater than 0.50, which demonstrates that the measurement model has accomplished its convergent validity. Constructs encompassing Eff, Inno, Intention, Problem-Based, and practice-Based have AVEs of 0.685, 0.512, 0.579, 0.598, and 0.620 respectively. Therefore, all the AVEs are greater than the threshold of 0.5, it can be concluded that the measurement model has attained convergent validity.

- **Discriminant Validity**

Appendix B, Table 4.11 test results indicate that none of the correlation ratios between the research constructs were too high (not over 0.90). This means that the measurement model is reliable and can be used for further analysis with confidence, according to Hair et al. (2022). Furthermore, the HTMT correlation value of 0.87 (between intention and efficiency) is higher but is still lower than the cutoff point of 0.90. Therefore, this suggest that all the constructs used in the measurement model are measuring well, their respective distinct variables.

Table 4.12 in Appendix B assesses discriminant validity based on Fornell-Larcker criterion. This method compares the square root of the average variance extracted (AVE) with the correlation of latent constructs. A latent construct should explain better the variance of its own indicator rather than the variance of other latent constructs. Therefore, the square root of each construct's AVE should have a greater value than the correlations with other latent constructs. (Hair et al., 2022).

As displayed by Table 4.12 in Appendix B, the Discriminant Validity assumptions have been met. This is a result of the correlation between any two latent variables not being significantly larger than or even equal to the square root of AVEs (the bold texts in the matrix) of the underlying constructs. For example, it is seen that the latent variable "*Effi"* has an AVE square root of **0.828** which is higher than any of its correlations with other latent constructs. This means that the latent construct "**Efficacy**" shares more variance with its underlying indicators than any other construct in the research model (Henseller, 2009; Hair et al., 2022). All the other constructs satisfied this criterion, which indicates that discriminant validity has been achieved in the study.

4.6.2 Structural/inner Model Assessment

The second stage of the PLS-SEM is to evaluate the structural model, after demonstrating that the measurement model is valid and reliable (Hair et al., 2022). The model is assessed for collinearity (using the Variance Inflation Factors), explanatory power (using the coefficient of determination), path significance, and importance-performance.

- **Collinearity Assessment (Using the variance inflation factor)**

From Table 4.13 in Appendix B, it can be inferred that issues of multicollinearity have not biased the model since any of the VIF values for any of the models is not equal to or greater than the cutoff point of 5. Therefore, since all the correlations in the constructs are less than 5, we conclude that the structural model has not been affected by the multicollinearity issues (Hair et al., 2019)

- **Co-efficient of Determination**

The coefficient of determination, also known as R-square, is a measure of the proportion of variance in the dependent variable that is explained by the independent

variables in a regression model. It is calculated as the squared correlation between the predicted values of the dependent variable and the observed values of the dependent variable. A high R-square value indicates a strong relationship between the predictor variables and the dependent variable, while a low R-square value indicates a weak relationship. The coefficient of determination is a useful measure of the strength of the relationship between predictor variables and the dependent variable in a regression model but should not be used in isolation. A rule of thumb by Chin (1998) and Moore (2013) says that the R^2 values within the range of 0-49%, 50-69%, and above 70% are seen to be weak, moderate, and substantial, respectively.

Even though the R^2s for Efficacy and Innovation are weak, the ultimate dependent variable has a moderate value indicating that the model moderately predicts the dependent variable. (Table 4.14, Appendix B).

- **Path Significance, and Effect Sizes**

Table 4.8 below displays the estimated coefficient, standard deviation, the t-statistic, and the p-values. The table shows the results relative to research question four (4) which consists of six (6) hypotheses. The estimated coefficients represent the change in the dependent variables for a unit change in the independent variable, while holding all other independent variables constant. The standard deviation (SD) provides information on the variability of the data. A smaller SD suggests that the data are more precise and reliable, whereas a larger SD indicates more variability in the data. The t-statistic is a measure of the significance of the estimated coefficient in the regression model. The t-statistic is a measure of the statistical significance of the relationships between the latent variables and their indicators. It provides information on whether the estimated path coefficients are significantly different from zero. It enables the researcher to evaluate the strength of the relationships between the latent

variables and their indicators. If the t-statistic is significant (i.e., greater than 1.96), then the relationship between the latent variable and its indicator is likely to be real and not due to chance. A higher t-statistic and a lower p-value suggest stronger evidence against the null hypothesis, while a lower t-value and a higher p-value suggest weaker evidence against the null hypothesis.

Table 4. 8: Results for Research Questions 4

Variables	Unstandadised Coefficient (O)	Standard Error	t-Statistic	P-Values
Practice-based -> Effi	0.389	0.046	8.426	0.000
Practice-based -> Inn	0.342	0.053	7.583	0.000
Prob-based -> Effi	0.197	0.043	4.536	0.000
Prob-based -> Inn	0.031	0.014	2.264	0.024
Practice-based -> Intention	0.115	0.052	7.488	0.000
Prob-based -> Intention	0.107	0.041	5.518	0.000

Source: Field Data 2023

Table 4.9 above shows that Practice-Based, and Problem-Based pedagogies have positive relationship with the three dependent variables (efficacy, innovation, and intention), as well as a significant positive impact.

4.7 Discussions of Results

4.7.1 RQ1. What is the Frequency of Entrepreneurial Content in the BBA Curricula?

From the results, the entrepreneurial content in the curricula is limited and that could harm students' entrepreneurial self-efficacy leading to lack of intention to start a business or continue with a family business, as they may not be able to run such businesses successfully. Using entrepreneurial competencies in daily life helps students learn about business and improve their social and life skills, as well as foster values and skills that are important for today's society. (Kee et al., 2012).

Universities need to take entrepreneurial action, according to Etzkowitz et al. (2000), while Turpin and Garrett-Jones (2001) add that universities' roles in society's knowledge production system are becoming increasingly important. Ferreira et al. (2018) elaborate on this crucial role by highlighting two main ways that universities improve the academic entrepreneurial capability: transferring information from academia to business and producing human capital with practical skills. In line with Ahmad et al. (2018) and Gelaidan and Abdullateef (2017), it is critical to ensure that entrepreneurial content in curricula is both adequate and relevant in order to foster an entrepreneurial attitude.

Entrepreneurial education should emphasize knowledge and skills related to small business ownership and self-employment, as well as traits and abilities that cannot be easily taught through traditional methods (Kee et al., 2012). It has been proposed that to effectively promote entrepreneurship education, it is necessary to not only alter the content being taught, but also to create a school culture that encourages teamwork, creative thinking, and ongoing learning, as well as developing teachers who are themselves entrepreneurial. An entrepreneurship curriculum is responsible for organizing and regulating the entrepreneurial learning opportunities offered by educational institutions. Therefore, the significance of an entrepreneurship curriculum cannot be overstated, as it is the means through which the experiences that shape the life of an entrepreneur are conveyed to students (Ornstein & Hunkin, 2019). Higher education institutions should always seek to deepen and expand efforts to instill entrepreneurship values in students. Indeed, higher education institutions should serve as a catalyst for the long-term development of an entrepreneurial culture and contribute to the creation of a favorable entrepreneurship ecosystem (Rusok et al., 2017).

4.7.2 RQ2. What is the Extent of Vertical and Horizontal Articulation of Entrepreneurial Content in the BBA Curricula?

The two main approaches of entrepreneurial content articulation are vertical and horizontal. The vertical articulation approach entails the addition of a stand-alone course into an existing curriculum (Barrella & Watson, 2016). The horizontal articulation technique is a strategy where entrepreneurship-related concepts are embedded in several courses across a curriculum. With this strategy, entrepreneurship is not treated as a standalone course. It involves having entrepreneurship content embedded in several courses in the curricula. The horizontal approach of articulation from the analysis reveals a small amount of entrepreneurial content factored into a few courses in the curricula. Only a handful of the themes were present in the various programme curricula. In the last two years, where students go into their specialisations, the integration approach is not different. The result is a clear showing that majority of the entrepreneurship content is articulated in curricula largely with the application of vertical approach rather than horizontal.

4.7.3 RQ3. What are the Frequently used Teaching Methods for Instruction in the BBA Programmes?

Entrepreneurial method of teaching is not pervasive in instruction. Most entrepreneurial teaching methods are sometimes or less frequently applied. This is likely to affect the effective development of entrepreneurial self efficacy and intentions.

In conventional pedagogy such as formal lecture, learning participants receive knowledge passively and the setting is dominated by the teacher, who also imposes the learning objectives on the students and programs the sessions. This leads to the

teacher's taking the role of the 'expert' and the students' playing "passengers joining the ride over which they have little control" (Hadar & Hotam, 2012).

Students take the lead in their entrepreneurial learning process while using entrepreneurial pedagogy, as the instructor serves as a facilitator, coach, promoter, mentor, or enabler (Fiet, 2000; Garnett, 2012; Gilje & Erstad, 2017; Haase & Lautenschlager, 2011). According to Cheng et al. (2009), Cooper et al. (2004), and Mwasalwiba (2010), business plans, case studies, visiting lectures, excursions, simulations, internships, talks on topics related to entrepreneurship, and anecdotes about entrepreneurs are the activities and methods most frequently used in entrepreneurship courses.

The finding of the current study is consistent with Cheng et al. (2009) who discovered in their study that more than eighty per cent of educators seem to rely on passive delivery modes such as lectures, with only around ten per cent regularly using simulations, role plays or multimedia exercises, and even fewer using guest speakers and entrepreneur interviews.

The effectiveness of an entrepreneurship education program is heavily influenced by the views of those responsible for creating and implementing the curriculum regarding the entrepreneurial needs of the students (Henry et al., 2003). A study by Ahmad et al., (2014) found that current teaching methods and instructors do not seem suitable and do not have the necessary entrepreneurial skills, knowledge, or training evident in the Malaysian polytechnics and this is applicable in this research.

4.7.4 RQ 4(i) What is the Effect of Practice-based Pedagogy on Efficacy?

As per the observed results in Table 4.15, it is seen that practice-based learning has a coefficient of 0.389 with p-value of 0.000 indicating a significant positive effect of

practice-based pedagogy/teaching on students' efficacy. It implies that a unit increase in practice-based teaching leads to a 38.9 % increase in student efficacy. The empirical literature showed that a practice-based learning module brings real business learning into the classroom and simultaneously attends to the needs of different internal and external stakeholders by producing a more flexible and employable professional graduate. Furthermore, it creates a more meaningful relationship between education institutions (knowledge producers) and industry (knowledge users) (Pihie & Bagheri, 2011), furthermore a study by Hynes et al. (2011) showed that there is the effectiveness of a learning module that incorporates practice-based learning introduced in a classroom setting, as it also allows for a more flexible and adaptable approach for professional development. There is an indication that the research on teaching methods in entrepreneurial education has evolved, moving from a focus on teacher-led instruction to more constructivist approaches. There has also been a shift in the literature, with an increased emphasis on the learner's ability to learn rather than the teachability of the subject. Currently, the focus of research in this area is on the theoretical and philosophical foundations of experiential teaching and learning (Hägg & Gabrielsson, 2019). Finally, a study by Androutsos and Brinia (2019) based on the key finding of their study accentuated that the practice-based teaching method improved students' ability to innovate, collaborate, and co-create. Additionally, the digital and entrepreneurial skills acquired through this approach enabled students to develop new, valuable products and services.

4.7.5 RQ 4(ii) What is the Effect of Practice-based Pedagogy on Innovation?

The study hypothesised to find the effect of practice-based entrepreneurial pedagogy on students' innovation. The model estimated a positive coefficient of 0.342 as the effect size of practice-based pedagogies on innovation. This suggests that

a unit increase in practice-based pedagogies leads to a 34.2% increase in innovation. With the the p-value of 0.000, it can be concluded that the relationship and the effect are significant.

Practice-based teaching brings real-life scenarios into the classroom and students could have the opportunity of all hands-on deck in solving them, this attends to the need of both internal and external stakeholders in producing professional and experienced graduates who are ready for employment or to start their business (Hynes et al., 2011). Furthermore, proposed practice-based pedagogy had a positive impact on the student's skills and abilities. It seems to have helped them develop innovative thinking, collaboration skills, and co-creative skills, as well as digital and entrepreneurial skills (Androutsos, & Brinia, 2019). They further found that skills can be valuable for students as they can help them create new products and services, which can be valuable in a variety of contexts and industries. It's important to note that different pedagogies may have different effects on students, so it's important to carefully consider the goals and objectives of a particular pedagogy and assess its effectiveness.

Practice-based pedagogy is an approach to teaching and learning that emphasizes the importance of experiential learning through practical application. This approach is particularly relevant for teaching entrepreneurship, where students need to develop practical skills and experience to succeed in a real-world business environment. Practice-based pedagogy encourages students to actively engage in learning by doing. This approach helps students to develop practical skills and experience that are essential for entrepreneurial success. By providing opportunities for students to work on real-world projects, they gain experience in problem-solving, critical thinking, and decision-making, which are key skills required for innovation.

Entrepreneurship requires a willingness to take risks and experiment with new ideas. Practice-based pedagogy creates an environment where students can test their ideas and take calculated risks. By doing so, students can learn from their failures and iterate their ideas to improve their chances of success. Entrepreneurship is often a team effort, and practice-based pedagogy encourages students to work collaboratively with others. This approach provides opportunities for students to network with other entrepreneurs, mentors, and investors, which can help to build their professional networks and increase their chances of success. Practice-based pedagogy helps students to develop an entrepreneurial mindset, which is essential for innovation. This mindset involves being proactive, resourceful, and adaptable. By practicing these skills in a real-world setting, students can learn how to identify opportunities and overcome challenges, which are key factors in driving innovation. Overall, practice-based pedagogy is a powerful tool for promoting entrepreneurial innovation by providing students with the practical skills, experience, and mindset required for success in a real-world business environment.

4.7.6 RQ 4(iii) What is the Effect of Problem-based Pedagogies on Efficacy?

Problem-based pedagogies established a significant positive relationship with efficacy with a coefficient of 0.197. This implies that all things being equal, a unit improvement in problem-based teaching leads to a 19.7% increase in the efficiency of students. These findings are supported by Bachmann (2021) whose findings indicate that students who received a semantic, entrepreneurial prime had a higher level of entrepreneurial self-efficacy and a more positive attitude towards starting a business compared to those in the non-primed active control group. These results give us a better understanding of how entrepreneurial cognition can be triggered in students and the effectiveness of teaching methods such as use-case application and storytelling in

promoting entrepreneurship, both within and outside of an entrepreneurial educational setting.

Problem-based pedagogy can have a significant impact on entrepreneurial efficacy by providing students with an opportunity to learn and practice entrepreneurial skills in a realistic, experiential context. Problem-based pedagogy involves presenting students with real-world problems or challenges and guiding them through a process of identifying, researching, and developing solutions. Through problem-based pedagogy, students can develop critical thinking, creativity, collaboration, risk-taking, and adaptability. By analyzing and evaluating problems, students can develop the ability to think critically, which is an essential skill for entrepreneurs. Problem-based pedagogy can encourage students to think creatively and come up with innovative solutions to problems. Working on problems in teams can help students develop collaboration skills, which are essential for entrepreneurship. Through problem-based pedagogy, students can learn to take risks and be comfortable with uncertainty, which is critical for entrepreneurship. By working on different problems, students can learn to adapt to changing circumstances and develop resilience, which is essential for entrepreneurship.

Problem-based pedagogy can help students develop the skills and mindset required to be successful entrepreneurs. By providing opportunities for students to learn and practice entrepreneurial skills in a safe and supportive environment, problem-based pedagogy can increase entrepreneurial efficacy and prepare students for the challenges of starting and running a business.

4.7.7 RQ 4(iv) What is the Effect of Problem-based Pedagogy on Innovation?

The model established a positive significant relationship between problem-based teaching and innovation with an estimated coefficient of 0.031 and a p-value of

0.024. This means that the hypothesis is significant and supported. All things being equal, a unit improvement in problem-based pedagogy would lead to a 3.1% increase in students' innovation.

The traditional educational system does not teach skills that are valuable for entrepreneurship and may even prevent students from developing themselves. The study corroborates with the study of Bock et al. (2020) who found that a problem-based, online approach to learning entrepreneurship is viable and has significant potential for success. Both the faculty and the students struggled to adapt to this new way of learning, with the faculty finding it difficult to shift away from traditional teaching methods and the students struggling to move out of a passive learning mode. Similarly, it was discovered that using problems in the classroom that stimulate entrepreneurial situations helps students develop a greater appreciation and capacity for entrepreneurship (Adeel et al., 2023). These findings support the idea that using problem-based learning (PBL) which involves an active learning approach and encourages finding multiple solutions, shares many similarities with the interdisciplinary and hands-on approach of entrepreneurship education.

Problem-based pedagogy is an approach that emphasizes active, experiential learning through the exploration and resolution of real-world problems. This approach if used in entrepreneurship education will help students develop their entrepreneurial mindset and skills. Extant research suggests that problem-based pedagogy have positive impact on entrepreneurial innovation. By engaging students in solving real-world problems, problem-based pedagogy helps students develop deep understanding of the challenges and opportunities associated with entrepreneurship. This understanding can help students develop innovative solutions that are well-suited to the needs of the market. Furthermore, problem-based pedagogy can help students

develop a range of important skills that are essential for entrepreneurship, such as critical thinking, creativity, collaboration, and communication. These skills can help students become more effective problem-solvers and innovators, which can ultimately contribute to the success of their entrepreneurial ventures. The effect of problem-based pedagogy on entrepreneurial innovation is positive. By providing students with an immersive and engaging learning experience that emphasizes problem-solving and innovation, problem-based pedagogy can help prepare students for the challenges and opportunities associated with entrepreneurship.

4.7.8 RQ 4(v) What is the Effect of Practice-based Pedagogy on Intention?

The study found that practice-based teaching and intention have a positive relationship with a coefficient of 0.115. All things being equal, a unit increase in practice-based teaching leads to an 11.5% increase in students' intention. The study by Liñán et al. (2011) discussed how education and teaching methods especially practice-based can effectively influence and shape attitudes and intentions towards entrepreneurship. Also, a study by Lv et al. (2021) found that entrepreneurship education, especially practice-based helps individuals develop the skills and knowledge needed to start a business and engage in entrepreneurial activities in the future. The entrepreneurial skills and abilities gained through this type of education have a lasting impact on the intention to become an entrepreneur.

4.7.9 RQ 4(vi) What is the Effect of Problem-based Pedagogy on Intention?

In the analysis of whether problem-based pedagogy has a positive effect on entrepreneurial intention, it can be observed from Table 4.14, that there is a positive significant relationship with a coefficient of 0.107. All things being equal, a unit increase in problem-based shall result in 10.7% increase in student entrepreneurial

intentions. From the literature, it is seen that there is an indication of an increase in students' perceived feasibility of self-employment and their willingness to act on it (Saeed et al., 2014). Therefore, teachers who want to encourage entrepreneurial intentions in university students should consider using problem-based teaching and learning methods in their set of pedagogy.

Problem-based pedagogy can have a positive effect on entrepreneurial intention, as it encourages students to develop critical thinking, problem-solving, and creativity skills. Through problem-based learning, students are presented with real-world problems and challenges, and they are encouraged to use their knowledge and skills to come up with innovative solutions. This approach to learning can help students develop an entrepreneurial mindset, which is characterized by a willingness to take risks, the ability to identify opportunities, and a desire to create value. Problem-based learning can also help students develop self-efficacy and confidence in their abilities to tackle complex problems and develop innovative solutions. Research has shown that problem-based learning can have a positive impact on entrepreneurial intention. For example, a study by Kim et al. (2022) found that problem-based learning had a significant effect on entrepreneurial intention among undergraduate students in South Korea. Similarly, a study by Wang et al. (2021) found that problem-based learning had a positive effect on entrepreneurial intention among undergraduate students in Taiwan. Problem-based pedagogy can be an effective way to cultivate an entrepreneurial mindset and promote entrepreneurial intention among students.

Finally, Recommendation by Robson et al. (2009) from the engineering and entrepreneurship context was that to promote growth and development, increase productivity, create jobs, and strengthen the knowledge-based economy. It is important to focus on incorporating innovation and entrepreneurship skills into the

current curriculum. This emphasis on an innovative and entrepreneurial culture is vital.

4.8 Chapter Summary

The chapter commences with analysis for research questions one to three which inquires into the amount of entrepreneurial content in the business programme curricula and the approaches for entrepreneurial content articulation. It also demonstrates the results of the 6 hypotheses of the study. The following are the summaries.

The 18 entrepreneurial themes used for the analysis of the entrepreneurial content in the curricula appeared 27 times in only 6 courses out of 25 general courses. If all the themes had appeared in all the general courses, there would have been 450 appearances. Hence the volume of entrepreneurial content in the general courses of the curriculum is only equivalent to 6%. This is for the first two years of the programmes. With respect to the last to years of the programmes only a maximum of 6 entrepreneurial themes out of 18 were recoreded in various programmes. BBA Marketing was the programme with the highest appearance of 6 entrepreneurial themes made up of marketing, product development, guest lecturers, selling and sales, team building and internship. The entrepreneurial content embedded in the various programmes are 33.33%, 22.22%, 16.67%, 5.56%, and 5.56% for BBA Marketing, BBA Banking and Finance, BBA Accounting, BBA Humean Resource Management and BBA Procurement and Suply Chain Management respectively.

Twenty-seven appearances of entrepreneurial content themes were identified from only 6 courses out of 25 general courses during the first 2 years of the programmes. Twelve (44.44%) of the 27 appeareances were found in just one course

(Entrepreneurial and Small Business Management), 7 (25.93%) was recorded in Principles of Marketing, 5 (18.52%) appeared in Principles of Management with Basic Accounting 1, Basic Accounting 11, and Financial Management recording 1 (3.7%) theme each.

Approximately forty-four percent entrepreneurial content articulation in general courses was identified in a single stand-alone course (Entrepreneurship and Small Business Management) which is an entrepreneurship and business development course. The rest (56%) was identified in other 5 courses. Regarding the specialised programmes, 33.33%, 22.22%, 16.67%, 5.56%, and 5.56% of entrepreneurial content were discovered for Marketing, Banking and Finance, Accounting, Human Resource Management, and Procurement and Supply Chain repectively. This shows a hybrid integration approach of entrepreneurial content. The stand-alone courses (Entrepreneurship and Small Business Management and Internship) confirm vertical articulation approach. Entrepreneurial content appearing in other courses such as Principles of Marketing, Principles of Management, Basic Accounting 1, Basic Accounting 11, and Finaacial Management is also an indication of horizontal articulation of entrepreneurial content.

The entrepreneurial method of teaching is not pervasive in instruction. Most of the entrepreneurial teaching methods are less frequently applied. Former straight lecture is the most frequently used method for instruction. This is likely to affect the effective development of entrepreneurial self efficacy and intentions.

The study extablishes that practiced-based, and problem-based pedagogies play significant role in the development of learners' entrepreneurial efficacy, innovation, and intentions.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The thrust of this study is on pedagogic effect on students' entrepreneurial intention. This chapter summarizes each of the study research objectives, their findings and the corresponding implications of each of the findings in terms of theory, practice and policy. To address the issues raised in the research problem statements, four research objectives were raised to accomplish the purpose. In pursuit of answers to the research questions raised from the research objectives, the results provided the ground on which the three kinds of implications were drawn, namely theoretical, practical and policy backgrounds. Furthermore, this chapter highlighted the study limitations as well as proffered recommendations for future studies.

5.2 Summary of Findings

With respect to research questions one, the findings revealed that the volume of entrepreneurial content in the general courses of the curricula is only equivalent to 6% in the first two years of the programmes. The last two years of the programmes identified only a maximum of 6 entrepreneurial themes out of 18. BBA Marketing recorded the highest of six (6) entrepreneurial themes.

It was also found that twenty-seven appearances of entrepreneurial content themes were identified from only 6 courses out of 25 general courses during the first 2 years of the programmes. Twelve (44.44%) of the 27 appeareances were found in just one course (Entrepreneurial and Small Business Management), 7 (25.93%) was recorded in Principles of Marketing, 5 (18.52%) appeared in Principles of Management, with Basic Accounting 1, Basic Accounting 11, and Financial Management recording 1 (3.7%) theme each.

Research question two (2) ascertained the extent of adoption vertical and horizontal strategy of articulating entrepreneurial content in the curricula. The study revealed that the BBA progrmmes articulate entrepreneurial content using two approaches, which are vertical and horizontal. The findings indicate that a major component of entrepreneurial content is embedded in the curricula using the vertical articulation approach. A stand-alone entrepreneurial course (Entrepreneurship and Small Business Management) in the general courses contains 44.44% of entrepreneurial content in all the 25 courses found. In the last two years of the various programmes, 15 entrepreneurial content themes were identified in all the programmes. Approximately 33.33% of the content identified in all programmes was found in just one course (Industrial Internship). This suggests a hybrid articulation approach with vertical being dominant.

Research question three (3) sought to identify the prominent entrepreneurial teaching methods used for instructions in the BBA programmes. It was discovered that formal lecture is the most dominant teaching method in the business faculty. The learner-centred entrepreneurial teaching methods are seldomly used in instruction.

Research question four (4) sought to establish the effect of pedagogy on efficacy, innovation, and intention. The findings revealed that pedagogy significantly influences entrepreneurial efficacy, innovation, and intentions. Pedagogy (practice and problem based) was found to be crucial element that improves one's intention to start a business.

5.3 Conclusions of the Study

The study concludes that Bachelor of Business Administration (BBA) curricula contains insignificant entrepreneurial content. This may not be adequate to

empower graduates with enough confidence to start their own business in order to reduce the unemployment situation in the country.

The approach of the entrepreneurial integration is a hybrid however, a large proportion of the content is vertically integrated since the stand-alone courses contain a huge percentage of the entrepreneurial content. Balancing of the two approaches of integration may result in a higher benefit to learners.

Another significant conclusion of the study is akin to the pedagogical application for instructions in the Bachelor of Administration curricula. The most popular teaching method applied in the Bachelor of Business Administration curricula is the traditional teacher centered straight lecture. Straight lecture does not really reinforce entrepreneurial aspirations because it does encourage learners to practice and deal with likely entrepreneurial situations to develop positive attitude towards behaviour, assertiveness towards results and positive behavioural control towards entrepreneurship.

The study concludes that there is a correlation between pedagogy, students' efficacy and their overall intention towards entrepreneurship. The study concludes that the teaching method used has a direct impact on students' desire to become entrepreneurs. When students feel confident in the skills and knowledge they have acquired in the classroom, they are more likely to be motivated to pursue entrepreneurship as a career.

5.4 Implications and Recommendations of Study

The implication of the findings of the study has led to the following recommenadations with respect to policy and practice.

As a matter of policy, the School is recommended to take the following steps to address the insignificant entrepreneurial content in the BBA programme curricula:

1. The School should establish a significant minimum threshold of entrepreneurship content that must be factored into the programme curricula by all departments running the BBA programmes as well as the appropriate entrepreneurial pedagogies required to carry out instructions in classrooms. The BBA programmes must have the aim of making graduates entrepreneurial. This shall lead to the inclusion of the right amount of entrepreneurial content to develop entrepreneurial self-efficacy and intention.
2. The School should direct the various department running BBA programmes to adopt a balanced vertical and horizontal integration strategies for integrating entrepreneurial content to provide students with a well-rounded education that covers the various aspects of entrepreneurship.
3. Heads of Departments (HoDs) should include more entrepreneurial content in their respective programme documents when seeking re-accreditation for their programmes.
4. Faculty members of the various departments should seek additional training or take refresher courses in entrepreneurial pedagogies to supplement their existing knowledge and skills.
5. The study showed that people who believe in their ability to start and run a successful business (Entrepreneurial self-efficacy) are more likely to become entrepreneurs. This means that education and training programs that help build this belief are important for promoting entrepreneurship. Faculty members are to focus on providing education and training programs that help individuals build their entrepreneurial self-efficacy. This can involve offering workshops,

courses, and other training programs that help individuals develop the skills, knowledge, and attitudes needed to start and run a successful business. By doing this, practitioners can help aspiring and existing entrepreneurs gain the confidence they need to pursue their entrepreneurial goals and contribute to the growth of a strong entrepreneurial ecosystem.

6. Members of Faculty should lead and support students to attend entrepreneurial events such as startup competitions, hackathons, or pitch events, to stay up to date on the latest trends and innovations in entrepreneurship.
7. Bachelor of Business Administration (BBA) students should make time to read more entrepreneurial literature such as books, articles, and case studies about entrepreneurship to expand their knowledge and gain new insights into the entrepreneurial process. Adequate knowledge about practitioners can improve students understanding of entrepreneurship. Continuous learning and staying informed about new advancements and trends in the entrepreneurial field may engender entrepreneurial intentions.

5.5 Limitation of the Study

The major limitation of the study is that the participants (students), were not interviewed, but only surveyed. Surveys may have limitations in accurately capturing the concept of entrepreneurial intention.

Another limitation relates to the relevance and adequacy of curriculum and course content where the conclusion regarding the demarcation of the associational influence of the relevance and adequacy components was based on descriptive evidence. Future research should therefore aim to address the limitations of this study. It may be prudent for future studies to consider the effect of different or particular didactics on entrepreneurship intention. Second, in this study, entrepreneurial

intention was largely considered to be a function of the student's perception of entrepreneurship education. Other independent variables such as relevance and adequacy of the course content and competency of the lecturing team and mediating factors such as the learning environment and facilities may impact learning outcomes either directly or through any of the relational variables measured in this study. Future research should aim to expand knowledge in these regards. Further in that connection, this study also suggest that cultural background of individuals may influence the extent to which they may be motivated to engage in entrepreneurial activity. More illumination of this influence is pertinent. Further on the influence perspective, more attention should be focused on understanding the demarcation in the influence of the relevance and adequacy components of the curricula. While a demarcation of the relevance and adequacy components of the curricula was not conceptualised, a subtle examination of the descriptive statistics flags insights that should be validated in future studies. Future research that aims to contribute to the understanding of the influence of course and curriculum content, as well as perceived competence of lecturing team, on entrepreneurial intention of students is essential. Furthermore, on the adequacy and relevance components of course and curriculum content, a clear investigation of their individual effects on entrepreneurship intention using improved measurement instruments is pertinent.

Finally, this study explored entrepreneurship education and entrepreneurial intention impact using data from only one Ghanaian university.

5.6 Suggestion for Future Research

One major recommendation for future research is to extend the focus of the study to include all universities in Ghana as well as considering all programmes. This will offer the opportunity for comparative study between and among programmes and

students. One potential field of study is to evaluate the aims and educational objectives of entrepreneurship courses and their consistency with the assessment and teaching methods used for students.

A drawback of the research is that the participants, who were students, were not interviewed, but only surveyed. Surveys may have limitations in accurately capturing the concept of entrepreneurial intention. The issue could be addressed by gathering feedback from the students themselves on how their perceptions and attitudes towards entrepreneurship evolved after attending an entrepreneurship course.

Further investigation is required regarding how students can most effectively learn in entrepreneurial education and the process of entrepreneurial learning. We require further investigation into the diverse learning environments present in universities. This could involve examining how research on entrepreneurial education can enhance our comprehension of entrepreneurship learning and entrepreneurial skills.

Finally, one area of investigation could be the identification of specific entrepreneurial competencies that students develop or improve through entrepreneurship classes or training programs. To further understand the relevance of entrepreneurial competencies in fostering entrepreneurial thinking and action, future research could conduct a more comprehensive and in-depth analysis of these competencies.

5.7 Chapter Summary

Chapter 5 focused on the outcomes and discoveries of the research and provided significant implications for including entrepreneurial content in the curriculum and how teaching methods can affect students' entrepreneurial self-belief

and intentions. The results advance the knowledge of entrepreneurial education in universities in Ghana. Furthermore, this study represents one of the initial efforts to contribute knowledge to the community of entrepreneurship researchers and practitioners in Ghana, with the aim of enhancing the quality of entrepreneurial education research. As far as I am aware, there have been no investigations conducted in Ghana that have examined the impact of entrepreneurial content in curriculum and the effect of pedagogical practices on students' self-efficacy and intentions towards entrepreneurship.

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APPENDIX A

PROGRAMME AND COURSES

Table 3. 3: Core Courses for All Programmme for First Two Years

S/N	Course	Programme	Level	Semester	Type
1	Principles of Micro-economics	All Programmes	100	1	Core
2	Principles of Management				
3	Functional French				
4	Introduction to Human Resource Management				
5	Communication Skills				
6	Introduction to Information and Communication Technology				
7	Business Communication Skills	All Programmes		2	Core
8	Basic Accounting, I				
9	Principles of Macro-economics				
10	Business Mathematics and Statistics				
11	Principles of Marketing				
12	Introduction to Procurement and Supply Chain Management				
13	Entrepreneurship and Small Business Management	All Programmes	200	3	Core
14	Basic Accounting II				
15	Organizational Behaviour				
16	Quantitative Techniques				
17	Business Law				
18	Project Management				
19	Economy of Ghana	All Programmes		4	Core
20	Production and Operations Management				
21	Cost Accounting				
22	Public administration				
23	Financial Management				
24	Partnership and Company Law				
25	Trends in Education and School Management in Ghana				

Source: Programme accreditation documents

Table 3.3 a: BBA Accounting Specialisation Courses

S/N	Courses	Level	Semester	Type
1	Intermediate Accounting	300	5	Elective
2	Financial Reporting, I			Elective
3	Auditing and Internal Review			Elective
4	Taxation			Elective
5	Management Information System			Elective
6	Management Accounting 1			Elective
7	Research Methods			Core
8	Financial Reporting II		6	Elective
9	Auditing and Assurance			Elective
10	Management Accounting II			Elective
11	Managerial Economics			Elective
12	Public Sector Accounting			Elective
13	Application of ICT in Accounting			Elective
14	Business Ethics and Corporate Governance			Core
15	Pre-Industrial Internship Seminar			Core
16	Industrial Internship	400	7	Core
17	Research Project			Core
18	Strategic Management		8	Elective
19	Corporate Reporting			Elective
20	Investment and Portfolio Management			Elective
21	Post-Industrial Internship Seminar			Core

Source: BBA Accounting accreditation document

Table 3.3 b: BBA Human Resource Management Specialisation Courses

S/N	Courses	Level	Semester	Type
1	Human Resource Planning			Elective
2	Industrial Relations and Labour Law			Elective
3	Training and Development			Elective
4	Performance and Reward Management		5	Elective
5	Public Sector Human Resource Management			Eective
6	Occupational Health and Safety Management			Elective
7	Research Methods			Core
8	Managerial Economics	300		Elective
9	Managing Cross Cultural Workforce			Elective
10	Labour Economics			Elective
11	Application of ICT to Human Resource Management			Elective
12	Business Ethics and Corporate Social Responsibility		6	Core
13	Employee Relations and Resourcing			Elective
14	Human Resource Audit			Elective
15	Pre-Industrial Internship Seminar			Core
16	Industrial Internship		7	Core
17	Research Project			Core
18	Strategic Leadership and Influence			Elective
19	Industrial Psychology	400		Elective
20	Strategic Management			Elective
21	Corporate Governance		8	Core
22	Collective Bargaining and Negotiation			Elective
23	Human Relations in Organizations			Elective
24	Post-Internship Seminar			Core

Source: BBA Human Resource Management accreditation document

Table 3.3 c: BBA Banking and Finance Specialisation Courses

1	Courses	Level	Semester	Type
2	Intermediate Accounting	300	5	Elective
3	Financial Institutions and Markets			Elective
4	Principles of Banking			Elective
5	Research Methods			Core
6	Financial Mathematics			Eective
7	Law Relating to Banking			Elective
8	Monetary Theory and Practice			Elective
9	Principles and Practice of Taxation			Elective
10	Bank Financial Reporting and Analysis		6	Elective
11	Introdcution to Corporate Banking and Finance			Elective
12	E-Banking and Networking			Elective
13	Business Ethics and Corporate Social Responsibility			Core
14	Pre- Industrial Internship Seminar			Core
15	Practice and Management of Banking			Elective
16	Managerial Economics			Core
17	Industrial Internship	400	7	Core
18	Research Project			Core
19	Managing Financial Risk		8	Elective
20	Micro Finance and Rural Banking			Elective
21	Corporate Governance			Elective
22	Strategic Management			Elective
23	Post-Internship Seminar			Elective
24	Bank Strategic Information Management			Elective
25	Bank Lending and Treasury Management			Core

Source: BBA Banking and Finance accreditation document

Table 3.3 d: BBA Procurement and Supply Chain Management Specialisation Courses

S/N	Courses	Level	Semester	Type
1	Research Methods	300	5	Core
2	Public Procurement Policy Framework in Ghana			Elective
3	International Procurement and Freight Management			Elective
4	Procurement and Supply Law			Elective
5	Logistics and Transport Management			Eective
6	Management Information System		6	Elective
7	Business Ethics and Corporate Social Responsibility			Core
8	Transportation, Shipping and Port Management			Elective
9	Warehousing and Inventory Management			Elective
10	Procurement Audit and Investigations			Elective
11	E- Procurement and Supply Chain Management			Elective
12	Pre-Industrial Internship Seminar			Core
13	Industrial Internship	400	7	Core
14	Research Project			Core
15	Corporate Governance		8	Core
16	Risk and Insurance in Procurement and Supply Chain			Elective
17	Project Management for Purchasers			Elective
18	Post-Internship Seminar			Core

Source: BBA Procurement and Supply Chain Management accreditation document

Table 3.3 e: BBA Marketing Specialisation Courses

S/N	Courses	Level	Semester	Type
1	Research Methods	300	5	Core
2	Marketing Management			Elective
3	Consumer Behaviour			Elective
4	Product and Brand Management			Elective
5	Sales Management			Eective
6	New Products Development			Elective
7	Business Marketing			Elective
8	Business Ethics and Corporate Social Responsponsibility		6	Core
9	Supply Chain Management			Elective
10	Marketing Research			Elective
11	Integrated Marketing Communication			Elective
12	Pre-Industrial Internship Seminar			Elective
13	Social Marketing			Elective
14	Retailing Marketing			Core
15	Industrial Internship		7	Core
16	Research Project			Core
17	Corporate Governanace			Core
		400	8	
18	Strategic Management			Elective
19	Customer Relationship Management			Elective
20	International Marketing			Elective
21	Service Marketing			Elective
22	Post Internship Seminar			Core
23	Green Marketing			Elective

Source: BBA Marketing accreditation document

APPENDIX B

VALIDITY, RELIABILITY, COLINEARITY, AND MODEL FITNESS

Table 4. 9: Model Validity and Reliability

Indicator variable's	Composite reliability	Cronbach Alpha	(AVE)
Effi	0.867	0.769	0.685
Inno	0.838	0.756	0.512
Intention	0.804	0.740	0.579
Practice-based	0.816	0.722	0.598
Problem-based	0.830	0.733	0.620

Source: Field Data 2022

Table 4. 10: Indicator Loading

	Eff	inno	Intention	Prac.based	Prob.based
Eff1	0.822				
Eff2	0.866				
Eff3	0.777				
nno1		0.588			
Inno2		0.734			
Inno3		0.803			
Inno4		0.796			
Inno5		0.631			
Intention1			0.699		
Intention2			0.807		
Intention3			0.772		
Prac.Based1				0.658	
Prac.Based2				0.833	
Prac.Based3				0.818	
Prob.Based1					0.780
Prob.Based2					0.793
Prob.Based3					0.789

Source: Field Data 2022

Table 4. 11: Discriminant Validity: Heterotrait-monotrait Ratio (HTMT)

	Effi	**Inn**	**Intention**	**practice**	**Prob**
Effi					
Inn	0.39				
Intention	0.87	0.46			
Practice-based	0.56	0.56	0.62		
Problem-based	0.33	0.11	0.40	0.20	

Source: Field data 2022

Table 4. 12: Discriminant Validity: Fornell-Larcker Criterion

	Effi	Inn	Intention	Practice	Prob
Effi	**0.828**				
Inn	0.298	**0.716**			
Intention	0.708	0.327	**0.761**		
Practice	0.413	0.407	0.419	**0.774**	
Prob	0.246	0.046	0.275	0.126	**0.787**

Source: Field data 2022

Table 4. 13: Variamce Inflation Factors (VIF)

	Effi	Inn	Intention
Effi		1.206	1.305
Inn			1.233
Practice-based	1.016	1.206	1.361
Problem-based	1.016		1.067

Source: Field data 2023

Table 4. 14: R-Squard & Adjusted R-squared

	R-squared	R-squared adjusted
Effi	0.209	0.205
Inn	0.186	0.182
Intention	0.538	0.533

Source: Field data 2022

APPENDIX C

RESEARCH INSTRUMENTS

Part A: Teaching Methods, Entrepreneurial Self Efficacy, Innovation, and Entrepreneurial Intentions

Kindly rate the frequency with which lecturers use the following teaching methods in delivering entrepreneurship content (Entrepreneurial Teaching Methods)	**1** Never	**2** Less frequently	**3** Once in a while	**4** sometimes	**5** often	**6** Most of the time
case study						
guest speakers						
group discussion						
formal lectures						
role play						
interviews with entrepreneurs						
individual project						
group project						
Simulations						
development of a new venture creation project						
Seminars						
problem- solving						
training in an enterprise						
scientific visits and field trips						

Kindly rate the extent to which the following statements apply to you (Entrepreneurial Self-Efficacy)	**1** Strongly disagree	**2** Do not agree	**3** Somewhat disagree	**4** Neither agree nor disagree	**5** Generally agree	**6** agree
I am able to control costs						
I am able to define organizational roles						
I am able to define responsibilities						
I am able to develop new ideas						
I am able to develop new products						
I am able to develop new services						
I am able to establish position in product market						
I am able to expand business						
I am able to set and attain profit goals						
I am able to set and attain market share goals						
I am able to set and attain sales goals						

For each item below, please indicate the degree to which you agree with the statement (Entrepreneurial Intentions)	**1** Strongly disagree	**2** Do not agree	**3** Somewhat disagree	**4** Neither agree nor disagree	**5** Generally agree	**6** agree
In the near future, I intend do the following:						
Conduct practical experiments to discover solutions to customer problems						
Develop a business plan						
Develop a prototype of a product/service						
Develop a value proposition						
Test my value proposition in the market						
Quit my current job, or substantially reduce hours so I can focus on a new business						
Invest my own resources into my business						
Open a business bank account						
Purchase major equipment						

For each item below, please indicate the degree to which you agree with the statement (Learning Styles)	**1** Strongly disagree	**2** Do not agree	**3** Somewhat Disagree	**4** Neither agree nor disagree	**5** Generally agree	**6** agree
When I learn I like to watch and listen						
When I learn I like to think about ideas						
I learn best when I trust my hunches and feelings						
I learn best when I listen and watch carefully						
I learn best when I rely on logical thinking						
When I am learning I have strong feelings and reactions						
When I am learning I tend to reason things out						
I learn by feeling						
I learn by watching						
I learn by doing						
When I am learning I am an observing person						
When I am learning I am a logical person						
I learn best from observation						
I learn best from a chance to try out and practice						
I learn best when I can try things out for myself						
When I learn I like to observe						
When I learn I like to be active						

For each item below, please indicate the degree to which	**1**	**2**	**3**	**4**	**5**	**6**

you agree with the statement (Student Innovation)	Strongly disagree	Do not agree	Somewhat disagree	Neither agree nor disagree	Generally agree	agree
I enjoy trying new ideas						
I seek out new ways to do things.						
I frequently improvise methods for solving a problem when an answer is not apparent.						
I consider myself to be creative and original in my thinking and behavior.						
I am an inventive kind of person.						
I find it stimulating to be original in my thinking and behavior						
I am receptive to new ideas.						

Part B: Demographic Data

Gender *[a] Male [b] Female*	**Age**: _____
Program Specialization: _____	**Current level:** ***[a]*** *Level 300* ***[b]*** *Level 400*
Does your Immediate family (parents, siblings) run an entrepreneurial venture/Business	***[a]*** *Yes* ***[b]*** *No*
Do you currently run a business?	***[a]*** *Yes* ***[b]*** *No*

APPENDIX D

INTRODUCTORY LETTER

UNIVERSITY OF EDUCATION, WINNEBA
FACULTY OF EDUCATIONAL STUDIES
DEPARTMENT OF EDUCATIONAL FOUNDATIONS
P. O. Box 25, Winneba, Ghana edufoundations@uew.edu.gh
030 29B 0885

December 5 th 2022

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION

I write to introduce to you, Michael Amoh Asiedu, with index number 20213988, the bearer of this letter who is a student in the Department of Educational Foundations of the University of Education, Winneba. He is reading Master of Philosophy in Curriculum and Pedagogic Studies

He is conducting a research on the topic: "Curriculum and Pedagogic Role in Developing Entrepreneurial Intentions of Undergraduate Business Students"

He is required to conduct interview to help him gather data for the said research and he has chosen to do so in your outfit.

I will be grateful if he is given permission to carry out this exercise.

Thank you.

Yours faithfully,

Prof. Prof. Charles N. Annobil

Head of Department

DEPT. OF EDUCATIONAL FOUNDATIONS
UNIVERSITY OF EDUCATION, WINNEBA

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