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# Learning Approaches and Students' Academic Performance in Cost Accounting in Federal Universities in South-South, Nigeria

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**Abstract:** *This study investigated the relationship between learning styles and academic achievement in the field of cost accounting among students enrolled in Federal Universities in the South-South region of Nigeria. The study employed a descriptive research design. This study focuses on the examination of a population using a randomly selected sample. The study's population comprises 556 final-year business education students from the departments of business education of the four Federal Universities located in South-South Nigeria, as selected for the research. A study was conducted in the South-South region of Nigeria, focusing on final-year students in the business education departments of four Federal Universities. The sample size consisted of 248 students, selected from a total population of 556 students. The primary data were gathered through the utilisation of a questionnaire. The statistical methodology employed to address the research inquiries and evaluate the hypotheses was the Pearson Product Moment Correlation (PPMC). The present study employed a purposive probability sampling method to select the participants, which enabled the researcher to investigate the association between the learning style preference of senior business education students in cost accounting and their academic performance in the preceding semester's final examination in the same subject. There is a notable correlation between the independent learning approach and students' academic achievement in South-South Nigeria among other things. Based on the findings, the study recommended that lecturers as well as students should give necessary considerations to the different approaches available for learning.*

**Keywords:** *Learning Approach, Students' Performance, Cost Accounting.*



## **1. INTRODUCTION**

Students' performance refers to how well students are doing academically in their studies. This performance can be assessed through various measures, such as grades, test scores, assignments, projects, and overall comprehension of the subject matter. It is a way to evaluate the effectiveness of the educational process and the students' engagement and understanding of the material being taught. Educators and schools often use students' performance data to identify areas where improvement is needed, tailor teaching strategies, and provide additional support to struggling students (Anthony-Okeke, 2020). It's crucial to understand that student performance is a complex outcome that depends on a variety of factors, so any efforts to improve it should be comprehensive and take into account individual differences. Each student has their own unique cognitive abilities, learning styles, and strengths. These factors can impact how well they perform in different subjects (Storer, 2018). The quality of teaching, including the teacher's methods, communication skills, and ability to engage students, plays a crucial role in students' performance. The curriculum and study material should be appropriate for the students' age and level of understanding. If the material is too advanced or too basic, it can affect their performance. The environment in which students study can greatly affect their performance. Yusnaini et al. (2020) posited that physical and mental health can affect students' ability to concentrate, comprehend, and perform well in their studies. Regular assessments and timely feedback help students understand their strengths and areas for improvement, allowing them to adjust their study strategies accordingly. Cultural background and socioeconomic status can influence students' access to resources, educational opportunities, and support systems, impacting their performance.

Education serves as a unique mechanism through which a society initiates its younger members into complete integration and participation. The platform facilitates the acquisition of knowledge, skills, habits, and values necessary for leading a productive life within society. Education has a pivotal role in equipping individuals with the necessary personal capabilities to survive and contribute to social progress (Okoedio et al., 2019). In a similar vein, the National Policy on Education in Nigeria plays a pivotal role in guiding the priorities of universities in the country. These priorities encompass the attainment, enhancement, and internalisation of appropriate value systems that are essential for the well-being of individuals and society at large. Furthermore, the policy emphasises the cultivation of intellectual capabilities among individuals, enabling them to comprehend and value their surroundings. Additionally, it underscores the importance of acquiring both physical and intellectual proficiencies, which empower individuals to contribute meaningfully to their communities. Lastly, the policy underscores the significance of adopting an unbiased perspective in both national and international contexts (Anthony-Okeke, 2020). Consequently, Nigerian universities are established with the primary objective of providing enrolled students with a comprehensive and high-quality education. This education is intended to equip students with the necessary skills and knowledge to effectively navigate various environments and ultimately enhance their productivity, self-fulfilment, and self-actualization. Nigerian universities are designed to fulfil the aforementioned objectives by means of teaching, conducting research, and disseminating both existing and novel information, particularly through publication.



Additionally, these institutions are committed to fostering community service and providing professional training to cultivate intermediate- and high-level human resources. The education systems in Nigeria, particularly the universities, have mostly focused on numeric expansion rather than on the complementing development of educational quality (Okoedio et al., 2019). The term dependent learning approach" is not a widely recognised concept in the field of education. Nonetheless, a dependent learning approach could potentially refer to an approach where students are highly reliant on external sources, such as teachers or resources, for their learning. In this context, students might not be encouraged to develop strong independent learning skills or critical thinking. This approach could have both positive and negative impacts on student performance. If the dependent learning approach emphasises comprehensive and high-quality external resources and support, it might lead to good immediate performance on assessments that draw from these resources.

The independent learning approach is a pedagogical method where students take responsibility for their own learning by actively engaging in the process of acquiring knowledge and skills. It shifts the role of the teacher from a traditional source of information to a facilitator who guides and supports students in their learning journey. The independent learning approach encourages students to become self-directed learners, capable of setting goals, planning their learning path, and evaluating their progress. Independent learning accommodates different learning styles and paces, ensuring that students can tailor their approach to their preferences (Ahmet and Sarder 2018). Many real-world situations require self-directed learning. Engaging in independent learning prepares students for future scenarios where they need to continuously update their knowledge and skills.

However, the challenges here are that some students might struggle without the traditional structure of lectures and guidance from instructors, especially if they're not accustomed to self-directed learning. Independent learning requires strong self-motivation and effective time management skills. According to Anthony-Okeke (2020), students who lack these skills might struggle to keep up with the course content. Learning independently might lead to a sense of isolation as students miss out on collaborative learning experiences with peers. Certain concepts in cost accounting can be intricate, and students might need guidance to navigate through these complexities. In an independent learning approach, ensuring accurate assessment and timely feedback can be challenging, affecting students' ability to gauge their progress accurately. Note that the effectiveness of the independent learning approach depends on the individual students' characteristics, the support provided by the institution, and the specific strategies employed by the instructor.

### **1.1 Statement of the Problem**

Insufficient financial resources and funding often hinder the implementation of strategies to improve higher education, leading to a scarcity of resources and facilities, such as accessible infrastructure, equipped laboratories, and stocked libraries in Nigeria.

More so, students may perform poorly in cost accounting for a variety of reasons. Cost accounting involves intricate concepts related to costing methods, allocation, overhead calculations, and cost behaviour. Some students might find these concepts challenging to grasp,



leading to difficulties in understanding and applying them (Anthony-Okeke, 2020). Okoedio et al. (2019) stated that if students lack a strong foundation in these areas, they might struggle to connect the concepts and principles necessary for understanding cost accounting. The teaching approach used by instructors can greatly impact students' understanding. If the teaching methods are not engaging, clear, or well-structured, students may have difficulty grasping the material. However, it is on this premise that the study sought to determine how students' learning approaches relate to their academic performance in cost accounting.

### **1.2 Objective of the Study**

The main purpose of this study is to determine the relationship between learning approaches and students' academic performance in cost accounting. Specifically, the study was designed to:

1. determine the relationship between the independent learning approach and students' performance in Cost Accounting.
2. determine the relationship between the dependent learning approach and students' performance in Cost Accounting.

### **1.3 Research Questions**

The following research questions were raised to guide the study.

1. What is the relationship between independent learning approach and students' performance in Cost Accounting?
2. What is the relationship between dependent learning approach and students' performance in Cost Accounting?

### **1.4 Hypotheses**

The following null hypotheses were developed and evaluated at a significance level of .05.

H<sub>01</sub>: The independent learning strategy and students' performance in cost accounting do not significantly correlate.

H<sub>02</sub>: The dependent learning strategy and students' performance in cost accounting do not significantly correlate.

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Framework**

#### **Social-interaction Learning Style Theory- Grasha-Riechmann (1996)**

This theory examines the diverse ways individuals employ to adapt to their particular environment and social setting. The idea was formulated by Anthony Grasha, who examined the social and affective aspects related to patterns of preferred interaction styles with both teachers and peers. According to Cassidy (2004), Grasha-Riechmann's approach centres on the extent to which students engage in social interactions with their professors and peers within the classroom setting. The researchers conducted an analysis of the learning styles exhibited by college students in relation to their various approaches to the classroom setting. According to Anthony-Okeke (2020), students' attitudes towards the classroom environment can significantly impact their approach to learning. Three bi-polar dimensions have been found by



Anthony-Okeke (2020), including Avoidant/Participant, Competitive/Collaborative, and Dependent/Independent.

The Dependent/Independent dimension assesses individuals' views towards instructors and their level of preference for autonomy and authority in the educational setting. Dependent students perceive the teacher as the primary provider of knowledge and organisational framework. The individual expresses a preference for receiving guidance from authoritative figures and acquiring knowledge just within the scope of mandatory requirements. Independent learners are typically identified as individuals who possess a sense of self-assurance and exhibit a natural inclination towards curiosity in their pursuit of knowledge. They exhibit a preference for independent thinking and individual work. According to Anthony-Okeke (2018), there is a limited body of research that examines the correlation between social interaction learning style and students' academic accomplishment, as well as the impact of individual factors on this learning style.

## **2.2 Conceptual review**

### **Independent Learning Approach and Students' Performance**

The independent learning approach is a pedagogical method where students take responsibility for their own learning by actively engaging in the process of acquiring knowledge and skills. The concept of independent learning has been interchangeably used with other terms in education and learning. Association of Colleges (AOC) (2019), defined self-regulated learning as 'independent, highly effective approaches to learning that are associated with success in and beyond school'. Aditomo (2018), also suggested that independent learning is a method and educational philosophy in which learners acquire knowledge by themselves and develop the ability to undertake enquiry and critical reflection. Baklashova and Kazakov (2016) also stressed that independent learning is not a new concept, he defined independent learning according to the Open University (Gbadamosi, 2018; Bakadorova & Raufelder, 2017) as: 'working with increasingly less structured teaching materials and with less reliance on traditional kinds of tutor support'. An essential element of independent learning identified in the review was positive relationships between teachers and learners, based on trust. A mutual responsibility for learning, which drew in learners' experiences in their family and local community, was also necessary. Some skills were found to be necessary for successful engagement in independent learning. These skills will be considered next. Studies like Bereczki and Kárpáti (2017), Bonk and Lee (2017) concluded that students with independent learning approach performed better academically than other students who adopted other learning approach. This is why this study will consider the relationship between independent learning approach and accounting students' academic performance in Cost Accounting.

### **Dependent Learning Approach and Students' Performance**

Dependent learning is characterised as a form of learning in which the attainment of learning objectives, the accomplishment of goals, the utilisation of learning strategies, and the evaluation of learning outcomes are entirely reliant on external factors and individuals. Learning is commonly perceived as encompassing more than the mere learning of knowledge and skills. Instead, it is regarded as the acquiring of competences, which encompass not just individual knowledge and reasoning abilities, but also orientations and communication



abilities, namely social and affective dimensions (Burgess and Green, 2018). Gbadamosi (2018), pointed out that when the subject taught by the teacher is not aligned with learner interests or the situation constrains the student's approach to learning, the dependent learner mode will tend to dominate. He noted that dependent learners are usually inclined to relinquish control of the process to the teacher and he or she will demand carefully articulated structure, clear guidance and clearly-defined assessment.

### **2.3 Empirical Review**

Anthony-Okeke (2020), investigated the experience of independent learning of a small group of international students studying in three sixth-form colleges in England. It is an empirical account of independent learning experience at college level and the resulting understanding of this experience. The study conclude that Challenging preconceptions, Extending engagement and Crossing the bridge are key components of the three dimensions outlined above and illustrated in the shifts in students' independent learning, which contributes to a more nuanced understanding of independent learning and of the student as an independent learning 'experiencer'.

The study conducted by Okoedio et al. (2019) identified student, professor, and institutional factors as the primary determinants of academic performance among students in Nigerian universities. The researchers employed a descriptive methodology to investigate these components.

Yusnaini et al. (2020), examined the influence of field independent (FI) and field dependent (FD) cognitive styles and learner aptitudes on accounting student performance. This matter to see whether individuals with higher cognitive skills (FI) have better performance when faced with structured, unstructured, familiar and unfamiliar problem solving. The results show that the performance of independent field students is higher than dependent fields when answering unfamiliar types of questions.

Ahmet and Sarder (2018), conducted an investigation on the impact of internal factors on the academic achievement of students enrolled in accounting courses inside a vocational school that does not primarily focus on accounting education. The present study used a multiple regression model. The findings of the study indicate a significant correlation between high school education and academic performance in accounting courses. The results indicate that the academic inclinations, as assessed by the average grade achieved by students, play a significant role in determining the success of accounting courses

## **3. METHODOLOGY**

### **3.1 Design of the Study**

The research employed a descriptive research approach in order to make generalisations using data obtained from a limited sample of the population.



### **3.2 Area of the Study**

The study explores Nigeria's South-South geopolitical zone, comprising six states and the Niger Delta oil zone, and its four Federal Universities: University of Benin, University of Calabar, Federal University of Otueke, and University of Uyo.

### **3.3 Population of the Study**

The population of the study consists of all the 556 final-year business education students in the four Federal Universities in South-South Nigeria obtained from the Departments of Business education in the four Federal Universities slated for the study.

### **3.4 Sample and Sampling Technique**

Out of the total population of 556 students, a sample of 248 final-year students in the departments of business education in the four Federal Universities in South-South, Nigeria was selected for the study. This is in line with the findings of Appah (2020) who maintained that a response rate of at least 30 percent out of a total population of 600 can be regarded as acceptable for most research studies. The cluster sampling technique was used in selecting the sample for the study. Sources of population and sample are presented in Table 2.

Table 3.1: Distribution of Respondents according to clusters/federal universities

<b>Federal Universities in South-South, Nigeria.</b>	<b>No. of Final Year Business education Students</b>	<b>No. of Students (45%) Sampled</b>
University of Uyo	68	30
Univerisity of Calabar	133	60
University of Portharcourt	166	74
University of Benin	189	84
<b>Total</b>	<b>556</b>	<b>248</b>

### **3.5 Instrumentation**

For the purpose of this study to be achieved, two instruments were used for the study: the Grasha-Riechmann's Student Learning Style Scale (GRSLSS) and Students' previous-semester's final grades in Cost Accounting. The GRSLSS adapted for the study, is a 60-item questionnaire, developed by Anthony-Okeke (2020). According to him, the GRSLSS measures learning styles/approaches vis-à-vis social interaction; it also allows researchers evaluate student's learning style. The questionnaire is divided into two sections by the researcher; section A consists of the respondents' bio-data while section B consists of the 60-item questions used to elicit information about students' learning approaches. On the other hand, Students' previous-semester's final grades in Cost Accounting were used as a variable representing their academic performance in Cost.



### **3.6 Validation of the Instrument**

Shaheen (2016), suggested that GRSLSS should not be used without validity and reliability of the scale. The authors also recommended that the validity and reliability of the scale should be determined before adapting the scale to the conditions of another country. In concordance to the above, the Instrument was subjected to face validity by three experts in research in the Faculty of Education, University of Uyo who carefully went through the items in the instrument to know if the instrument was suitable for the study.

### **3.7 Reliability of the Instrument**

With reference to the suggestions made by Shaheen, (2016), there is a need to ascertain the reliability of the GRSLSS. To achieve this, the test-retest method was used in the study. The instrument was administered twice to students who were not part of the study with a two-week interval between each administration. This was to ensure the consistency over time. To determine the reliability of the instrument, the Pearson Product Moment Correlation was used. This yielded a reliability coefficient of 0.77.

### **3.8 Administration of the Instrument**

The questionnaire was administered by the researcher and some research assistants from the various institutions selected for the study. The instrument was administered to the respondents and collected immediately upon completion to avoid loss.

### **3.9 Data Analysis Technique**

The statistical methodology employed to address the research inquiries and evaluate the hypotheses was the Pearson Product Moment Correlation (PPMC). The present study employed the PPMC (Pearson Product-Moment Correlation) method to investigate the association between the learning style preferences of senior Accounting students in Cost Accounting and their academic performance in the preceding semester's final grade in the same subject.

## **4. DATA ANALYSIS AND DISCUSSION**

The analysis of data results and discussion of findings are presented in this chapter. The findings are presented and discussed based on the variables of the study. The results of the analysis are presented below.

### **4.1 Answering of Research Questions**

This section answered all the research questions that were raised earlier in the study using the Pearson Product Moment Correlation coefficient (PPMC).

#### **4.1.1 Research Question One**

What is the correlation between the independent learning strategy and students' academic success in the field of Cost Accounting?



Table 4.1 presents the correlation between the autonomous learning strategy and students' academic performance in the field of cost accounting.

<b>Variables</b>	<b>N</b>	<b>R</b>	<b>Decision</b>
Independent Learning Approach	248		
		.296	Weak positive
Students' Performance	248		

The findings presented in Table 4.1 indicate that the utilisation of an independent learning technique is associated with a correlation coefficient (r-value) of .296. This suggests that there is a modest positive correlation between the independent learning strategy and the academic achievement of students in cost accounting within the Federal Universities located in the South-South region of Nigeria.

#### **4.1.2 Research Question Two**

What is the correlation between the dependent learning strategy and students' academic success in the field of cost accounting?

Table 4.2 presents the correlation between the dependent learning strategy and students' academic success in the field of cost accounting.

<b>Variables</b>	<b>N</b>	<b>r</b>	<b>Decision</b>
Dependent Learning Approach	248		
		.131	Weak positive
Students' Performance	248		

The statistics presented in Table 4.2 indicate that the dependent learning strategy is associated with an r-value of .131. This suggests the presence of a modest positive correlation between the dependent learning strategy and students' academic performance in Cost Accounting across the Federal Universities located in the South-South region of Nigeria.

#### **4.2 Testing of Hypotheses**

This section presents analysis of the data obtained and its interpretation. Six hypotheses were postulated for the study and they were tested as follows.

##### **4.2.1 Hypothesis One**

There exists no statistically significant correlation between the independent learning strategy and students' academic success in the field of cost accounting.

Table 4.3 presents the results of a Pearson Product Moment Correlation Analysis, examining the association between the independent learning strategy and students' performance in the field of cost accounting.

<b>Variables</b>	<b>N</b>	<b>r-calc.</b>	<b>r-critical</b>	<b>Decision</b>
Independent Learning Approach	248			
		.296	.113	Significant
Students' Performance	248			



Significant at .05 level;  $df = 246$

The hypothesis testing reported in Table 4.3 indicates that the calculated r-value of .296 is found to be greater than the crucial r-value of .113. As a result, the null hypothesis is rejected. This suggests that there exists a notable correlation between the independent learning strategy and the academic achievement of students in the field of Cost Accounting within Federal Universities located in the South-South region of Nigeria.

#### **4.2.2 Hypothesis Two**

There is a lack of substantial correlation between the dependent learning strategy and the academic achievement of students in the field of cost accounting.

Table 4.4 presents the results of a Pearson Product Moment Correlation Analysis, which examines the association between the dependent learning technique and students' performance in the field of cost accounting.

<b>Variables</b>	<b>N</b>	<b>r-calc.</b>	<b>r-critical</b>	<b>Decision</b>
Dependent Learning Approach	248			
		.131	.113	Significant
Students' Performance	248			

Significant at .05 level;  $df = 246$

The hypothesis testing results shown in Table 4.4 indicate that the computed r-value of .131 is found to be greater than the crucial r-value of .113. Consequently, the null hypothesis is deemed to be rejected. This suggests that there exists a notable correlation between the dependent learning strategy and the academic achievement of students in the field of Cost Accounting within Federal Universities located in the South-South region of Nigeria.

### **4.3 Discussion of Findings**

#### **4.3.1 Independent Learning Approach and Students' Performance**

Analysis of the relationship between independent learning approach and students' performance in cost accounting in Federal Universities in South-South Nigeria reveals that there is a positive relationship between independent learning approach and students' performance in cost accounting. Independent learning approach being positively related with students' academic performance in cost accounting implies that the more accounting students adopt the independent learning approach the better their academic performance will be. Students with this learning approach usually like to think for themselves, they are usually confident in their learning abilities and they prefer to study alone. The findings of this study in this aspect tally with the works done by Van Anthony-Okeke (2020) and Okoedio et al. (2019), on the positive effect of independent learning on students' test scores. Their works maintained that there is a causal link between independent learning and success claimed. According to their suggestion, individuals who exhibit independent learning tendencies tend to demonstrate elevated expectations, increased motivation, and enhanced self-esteem in comparison to their peers.



#### **4.3.2. Dependent Learning Approach and Students' Academic Performance**

The present study examined the correlation between the dependent learning strategy and students' performance in the field of cost accounting among Federal Universities located in the South-South region of Nigeria. The findings revealed a noteworthy association between the dependent learning approach and students' performance in cost accounting. Our result agreed with Sheldrake et al. (2017), who noted that dependent learners are usually inclined to relinquish control of the process to the teacher and he or she will demand carefully articulated structure, clear guidance and clearly-defined assessment. Yusnaini et al. (2020), Ahmet and Sarder (2018), pointed out that in a dependent learning situation; students are also dependent on one another. The relationship is direct in the sense that the more dependent a student is in accounting, the better his academic performance in the course.

### **5. CONCLUSION AND RECOMMENDATIONS**

This study was undertaken in view of the fact that students' learning approaches to some courses offered in Universities have not been given due consideration by students and this has led to their poor performance in these courses. Also, some students perform poorly in a course, not because they were not properly taught by their instructors but because of the learning approaches they adopt in learning the course. However, for students to perform better academically, they ought to be aware of the various learning approaches so that they could know which learning approach suits a particular course the most, as this will help improve on their performance in the course. From the analysis of the result of the research questions and hypotheses, the following were the major findings of the study. There exists a significant positive relationship between independent learning approach and students' performance in cost accounting in Federal Universities in South-South Nigeria; there exists a significant positive relationship between dependent learning approach and students' performance in cost accounting in Federal Universities in South-South Nigeria. Based on the findings of the study, the following recommendations are made:

1. Lecturers as well as students should give necessary considerations to the different approaches available for learning. This is because an awareness of these learning approaches by both the lecturers and students can help students improve in their performance.
2. Effort should be made by lecturers to ensure that students' absenteeism from classes is avoided because of the negative effect it has on their performance and that students should be encouraged to take active participation and be present in the class as this will help them improve in their academic performance.

#### **5.1 Educational Implications**

The first finding indicates that when a student applies the independent learning approach in the study of cost accounting, he/she is likely to improve in his/her performance in the course. This is because the study shows a significantly positive relationship between independent learning approach and students' academic performance in cost accounting. The second finding implies that accounting students who developed dependent learning approach will also improve in their performance in a course like cost accounting.



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