

# LEARNING STRATEGIES ON THE ACADEMIC PERFORMANCE OF BUSINESS EDUCATION STUDENTS

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**Abstract:** This study looks at learning strategies on the academic performance of business education students. Four null hypotheses were evaluated at the 0.05 alpha level, and three research questions were developed to direct the investigation. All business education students at Federal College of Education (T), Akoka, make up the study's population. Using a straightforward and purposeful selecting procedure, 150 students were selected from the public to serve as the study's sample. A pretest-posttest control group design was used in the study. The experimental group one was taught using cooperative learning strategies, group two was taught using individualized learning strategies while the control group was taught with traditional lecture method. A 20 items Business Studies Achievement Test (BSAT) was used to collect data for clarity and difficulty level based on the target audience while inferential statistic (ANOVA) was used to test the null hypotheses and validate the pilot test after all errors were corrected and difficulty level. Scheffe's post hoc test was conducted where significant differences existed among more than two groups. The major findings of the study showed that there were significant differences between the groups (cooperative, individualized and the traditional group which serve as the control group)  $F_{cal} 8.791275 > F_{crit} 3.057621$ , there were significant difference between the achievement levels of high, medium and low) in both the experimental and control group. It was recommended that business educators should endeavour to match teaching strategies with the manner in which students receive and process information.

**Keywords:** Academic performance; Business education; Learning strategies; Students

## 1 INTRODUCTION

One of the most important components of success in higher education institutions is learning methodologies. However, not all teachers and students recognize how important it is to comprehend learning strategies. Understanding the challenges of schooling is crucial to raising academic achievement [1]. Learning techniques are a collection of methods that students employ to gain knowledge and understanding, including taking notes, organizing information, summarise and code [2]. Since the learning process will decide the students academic achievement, educators, particularly those in tertiary education, must be extremely sensitive in their teaching ways when transmitting knowledge and information to the students. Therefore, educational philosophies must focus on generating students who can reach their full potential and advance holistically. Teaching philosophies must focus on achieving students' learning outcomes [3]. With this foundation, teachers can determine students' learning strategies, help them with their academic weakness, and recommend better approaches and strategies that fit each students learning style. Students may be able to cope and adjust to their learning requirements in higher education institutions with the use of practical learning methodologies. Additionally, students should take responsibility for their own education in order to reach their maximum potential and improve their academic performance. Students will perform better academically if they use the right method during their learning process [4]. The function of motivation and learning techniques in mediating student engagement may be facilitated by a variety of learning strategies. There may be a number of learning methods that could facilitate students' role of motivation and learning strategies in mediating student engagement and performance. Effective learning strategies refer to techniques and approaches learners use to achieve the acquisition, storage, retention, recall and adoption of knowledge. According to cognitive learning theories, students are the main players in the educational process, and their responsibility extends beyond just absorbing knowledge to include active participation. The cognitive strategies can be further classified into memorization strategies (e.g. repeatedly reading aloud text), elaboration strategies (e.g. integrating new information to learners existing knowledge) and transformation strategies (e.g. transferring information to another mode). As a result, students not only acquire knowledge and information but also engage in mental processes to efficiently process and assimilate it [5]. Several research conducted to investigate the various preferences among students when adopting learning techniques, in addition to defining and categorizing the various learning strategies that students use. How students usage of learning strategies varied by age and gender and discovered that whereas female students employed cognitive and learning control techniques more frequently, male students favored study habits and learning support strategies [6]. Additionally, it was discovered that university students most frequently use group study, graphic expression, and information synthesis. According to a recent study, students showed less interest in reading and solving word and numeric problems in business education since they rarely utilized surface or strategic learning techniques and frequently used deep learning strategies, albeit at a moderate level.



Business education as an aspect of vocational education focusing on the development of the students with skill acquisition satisfying human wants. Business education is that aspect of vocational education focusing on the development of students in acquiring skills to satisfy human wants, cultivate students attitude towards entrepreneurship by business educators in all areas of the world. Business education a branch of education inculcating skills of business. This field of education occurs at multiple levels, including secondary and higher education. Business education as that facet of educational training that helps the individual to acquire relevant skills needed for living. Business education as the transfer of pedagogical and business competencies necessary for teaching business attitudes, concepts, skills and knowledge. Also, business education as that aspect of educational training which an individual receives with the primary motive of enabling him to acquire adequate attitudes, concepts, knowledge, understanding and skills in business activities for vocational usage in careers as an administrator, manager or teacher wherever he may find himself in the business world. Business education programme in Nigeria had a very slow beginning and dated back to the late 1940s. At the NCE level the curriculum for teacher preparation by National Commission for Colleges of Education prepares business teachers for the teaching of pre-vocation subjects at the junior secondary school level. Though, this curriculum did not provide for data processing and computer literacy. However, these subjects have since been included in the NCE business education curriculum. ting, clerical and stenographic personnel in different industries and offices. Business education subjects are made up of skilled and non-skilled subjects and as such should involve practical and theoretical orientation in order to realize the goal of the programme. Business education inculcates certain habits, skills, etiquettes, norms and values for employability and self-reliance purposes in a life of an individual [7]. The theoretical training is received in the classroom while practical training is offered through field training. Business education is an indispensable instrument through which a nation can effectively realize its goals and objectives for national development. It is a means available to equip individuals with the needed skills, attitudes formation and competencies towards making constructive contributions to the economy and to participate effectively in the economic development of the nation. Business education is a facet of education that stresses training of character and skill acquisition with a view to building mutual trust in business transactions [8].

## 2 STATEMENT TO THE PROBLEM

Students performance in Business education courses in the Federal College of Education (Technical), Akoka Lagos State, NCE II level results has revealed a decrease in academics output. The failure rate may be as a result of creation of additional departments (Entrepreneurship and Marketing), inadequate teaching and learning facilities, poor strategies in delivering classes, non completion of course work before examination, instructional strategies employed by lecturers passing instructions regards the course content. This study will be looking at learning strategies (cooperative and individualized learning) on the academic performance of business education students in Federal College of Education (Technical), Akoka, Lagos State.

## 3 AIMS AND OBJECTIVES

The aims and objectives of this study is to:

1. Examine relationship between learning strategies and the academic performance of Business Education students at Federal College of Education (Technical), Akoka, Lagos State.
2. Identify major types of learning strategies influence the academic performance of Business Education students.
3. Determine the challenges students face in adopting effective learning strategies, and how these challenges affect their academic performance.

### 3.1 Research Questions

This research work examines the following research questions as a guide to carry out the study effectively:

1. What is the relationship between learning strategies and the academic performance of Business Education students at the Federal College of Education (Technical), Akoka, Lagos State, Nigeria?
2. How do major types of learning strategies influence the academic performance of Business Education students?
3. What are the challenges students face in adopting effective learning strategies, and how these challenges affect their academic performance.

### 3.2 Research Hypothesis

The following null hypotheses were formulated and tested at 0.05 alpha levels.

HO<sub>1</sub>: There is no significant difference between learning strategies and the academic performance of Business Education students at the Federal College of Education (Technical), Akoka, Lagos Nigeria

HO<sub>2</sub>: There is no significant difference between major types of learning strategies influence the academic performance of Business Education students

HO<sub>3</sub>: There is no significant difference in challenges students face in adopting effective learning strategies, and how these challenges affect their academic performance.

## 4 METHODOLOGY

Quasi experimental research design was adopted for this study. The basis for quantitative research design is that is objective and makes use of numerical data which tends to obtain quantitative information about issue. The population target is business education students which is three hundred and fifty five (355) students in A purposive sampling technique was used for the study. The research instrument used for data collection was Entrepreneurship Education Achievement Test (EEAT) which comprises of 20 multiple choice questions for NCE II students. The validity of the study was test re test which was validated by the supervisor and two experts in Business education. The reliability of the instrument was determined using Spearman Rank Order Correlation, a coefficient of 0.75 was obtained.

Simple random sampling technique was used in choosing the colleges for equal representation of public colleges in the same geopolitical zone. The sample for the study was drawn from Tai Solarin College of Education , Ogun State; Federal College of Education (Special), Oyo, Oyo State and Federal College of Education (Technical), Akoka Lagos State. Hat drawn technique was used to assign the three colleges of education to the experimental groups and control group. Using the procedure, experimental group one was allotted to Tai Solarin College of Education , Ogun State which is (Cooperative learning strategy) experimental group two (individualised learning strategy) was assigned to Federal College of Education (Special), Oyo, Oyo State and control group (traditional learning strategy) was assigned to Federal College of Education (Technical), Akoka, Lagos State respectively. The researchers with the help of two research assistants administered the pre-test The teaching began the second week which lasted for like five to six weeks using both learning strategies. At the end of the treatment, the post-test of Entrepreneurship Education Achievement Test (EEAT) was administered for one hour by the researcher and the research assistants. The data collected for demographic variable were analysed using percentages while descriptive statistics of mean and standard deviation were used to provide answer to the research questions. Hypotheses were tested at 0.05 level of significance using Analysis of Variance (ANOVA). The null hypothesis was not rejected, when the computed significance is greater than the alpha significance and if otherwise rejected.

## 5 DATA ANALYSIS

Data were obtained from one hundred and fifty students through the administration of EEAT. The data analyzed using ANOVA statistics, mean and standard deviation.

**Research Question One:** What is the relationship between learning strategies and the academic performance of Business Education students at the Federal College of Education (Technical), Akoka, Lagos State, Nigeria?

**Table 1** Mean and Standard Deviation of the Posttest Scores of the Experimental and Control Groups

Variable	N	Mean	S.D
Cooperative	50	36.5	9.03
Individualized	50	29.56	11.86
Traditional (Control group)	50	27.5	12.54

Field survey, 2024

The Table 1 above shows the mean and standardization of the post-test scores of the experimental and control groups. It involves the cooperative, individualized and traditional strategy as control group. The mean gotten for cooperative is 36.5 SD is 9.03, while the individualized was 29.6 with SD of 11.86 while the traditional which was the control group.

**Research Question Two:** How do different types of learning strategies influence the academic performance of Business Education students?

**Table 2** Mean of the Post test scores of High, Medium and Low Students

Variable	N	Mean
High	69	41.56
Medium	52	29.14
Low	29	16.54

Field survey, 2024

The Mean of the Post test scores for high is 41.56, for medium is 29.14 while the low is 16.54, see Table 2.

**Research Question Three:** What are the challenges students face in adopting effective learning strategies, and how do these challenges affect their academic performance (See Table 3)?

**Table 3** Mean no More Standard Deviation of Low, Medium and High Academic Performance in Adopting Challenges in Business Education Courses

Variable	N	Mean
High	69	41.56
Medium	52	29.14
Low	29	16.54

Field survey, 2024

**Hypothesis One:** There is no significant difference in the academic performances of students taught Business education courses using cooperative and individualized learning strategies.

**Table 4** ANOVA Result on Cooperative and Individualized Groups

Sources	SS	Df	MS	F	P value	F crit
Between Groups	1204.09	1	1204.09	10.83688	0.001384	3.938111
Within Groups	10888.82	98	111.1104			
Total	12092.91	99	122.1506			

Field survey, 2024

Table 4 revealed that F value =10.83688 while Fcrit. = 3.938111. The F value is greater than Fcrit. This indicates that there was statistically significant difference in the performances of students based on cooperative and individualized learning strategies employed. Therefore hypothesis one was rejected.

**Hypothesis Two:**

There is no significant difference in the academic performances of male students taught Business education courses and their female counterparts using cooperative and individualized learning strategies.

**Table 5** ANOVA Results on Cooperative and Individualized Learning Based on Gender

Sources	SS	Df	MS	F	P value	F crit
Between Groups	51.3504	1	51.3504	0.417914	0.519491	3.938111
Within Groups	12041.56	98	122.8731			
Total	12092.91	99	122.1506			

Field survey, 2024

The ANOVA table 5 shows that F 0.417914 < Fcrit. 3.938111, therefore we accepted the hypothesis 4 that there was no significant differences in the performances of male and female students in both the cooperative and individualized groups. A post hoc test was conducted to find out the direction of the differences. Table 6 shows the result of the post hoc test.

**Hypothesis Three:**

There is no significant difference in the attitudes of high, medium and low achievers students taught Business education using cooperative and individualized learning strategies.

**Table 6** Summary of Scheffe's Post Hoc Results on High, Medium and Low Students

SCHEFFE's CONTRAST			Alpha	0.05
Groups	c	Mean	n	ss
HIGH		41.56	50	926.32
MEDIUM		29.14	50	922.02
LOW		16.54	50	1458.42
	0	0	150	3306.76

Field survey, 2024

The result in table 6 indicates that there was significant difference between the mean value of high (X = 41.56) and medium (X= 29.14) students. It also indicates that there was significant difference between the mean of medium (X = 29.14) and low (X = 16.54) students. Furthermore, there was significant difference in the mean of high (X = 41.56) and low (X = 16.54) students. The analysis was aimed to determine the level of challenges faced by students be it high, medium and low.

## 6 DISCUSSION OF FINDINGS

This study looked into learning strategies on the academic performance of Business Education students in Federal College of Education (T), Akoka, Lagos, Nigeria. Results from this study revealed that there was improvement in students' performances in cooperative and individualized learning which far exceeded their performances in the traditional learning settings.

From the above result it is clear that the cooperative group performed better than the individualized group. This could be as a result of the fact that the cooperative group put their ideas together before answering questions while in the individualized group students gave answer to the questions as they occur to them. The results indicated that students'

performances were greatly improved when they were exposed to cooperative and individualized learning strategies when compared with the traditional method. This finding supports earlier findings which associate improved content learning and attitudes to learner-centred teaching strategy. In the present study, the cooperative and individualized learning strategies made the students more confident, increased their liking and performances of Business education when compared with the traditional learning method. The traditional teaching method has not only been criticized for emphasizing teacher activity at the expense of pupil involvement but it has a negative effect on students' performances in Business education courses. Individualized learning strategies was found to be effective in promoting students' attitudes and performances toward entrepreneurship in this study because the strategy provided learners with opportunity to spend their time more efficiently, increase their attention span and liking of Business education, reduce anxiety, and become more confident following instructions. Research findings have indicated that cooperative strategies can promote students' achievement significantly in subject content thereby increasing their attitudes. This is because the strategy guides learners better in their learning and assists them in recalling important information with less anxiety.

## 7 CONCLUSION

This study highlights learning strategies such as active learning, technology enhanced instruction, blended and traditional learning. Conclusion arising from the findings of this study indicates that instructional methods that teachers employ in teaching Business education have significant effects on students' achievement. If students are exposed to cooperative and individualized learning strategies in which they constructively interact freely, their performances in Business education courses could be enhanced. On the issue of gender which has been a debatable area for some time, the findings of this study seems to confirm earlier findings, that gender and self-concept do contribute in their own regards to the academic achievement in school learning, notably entrepreneurship. Business education learning has a lot to do with entrepreneurship which is strongly advocated to be taught in schools. Male and female students as well as high and low self-concept perceived students differed significantly in their academic performance as regards Business Studies subject.

The adoption of effective learning strategies plays a crucial role in enhancing academic performance of Business education students. It is therefore important that junior secondary students should be taught entrepreneurship using learning strategies that will enhance students' performances against the backdrop that business activity affects daily lives of all citizens as they work, spend, save, invest, travel and play. Such encouragement should come by way of high-quality classroom instruction drawn on students' preexisting knowledge, culture and real-world experiences as well as explicit rewards. The learning strategies adoption needs integrated digital learning platforms which will expose students to industry exposure and well structured readiness to acquire necessary skills for success in the dynamic business world.

## 8 RECOMMENDATIONS

The following are recommendations for the study:

1. All learning strategies should be put to use in the teaching and learning of Business education courses by encouraging learning techniques such as case studies, group discussion and role playing to help students apply theoretical knowledge in real world business scenarios.
2. All endeavour to match teaching strategies with the manner in which students receive and process information with technology enhanced learning.
3. All cooperative and individualized learning strategies could be used to advance learning in entrepreneurship classes, students should connect theory with industry application.
4. These strategies could be used as a basis for individualizing instruction for both male and female students by combining traditional and online approach to enhance flexibility and accessibility.
5. The newly developed basic education and Business education courses curricula are being pilot-tested in a nation-wide experiment with the hope that major stakeholders in the education industry.
6. Business educators other than those who participated in the development process, will articulate their positions based on empirical observations of the missing elements in the curricula; collate and forward them to the NERDC for incorporation during the planned review.
7. Collaborative learning and peer teaching should be introduced to reinforce knowledge retention and public speaking skills.

## COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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