CORRELATION BETWEEN THE ACADEMIC PERFORMANCE OF STUDENTS FROM SOUTHEAST NIGERIA IN ECONOMICS AND THE INSTRUCTIONAL STRATEGIES EMPLOYED BY THEIR ECONOMICS INSTRUCTORS

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ABSTRACT

This study evaluated the methods used by South East Nigerian economics teachers about their students' academic achievement in the subject. Descriptive statistics of the correlational type were used in the research methodology; the sample size for the study was chosen using purposive and proportionate sampling techniques; the mean and standard deviation were used to answer the research questions; Pearson product-moment correlation and the One-Way ANOVA F-test were used to test the hypotheses. The study demonstrated a strong correlation between students' academic success in Economics and the teaching strategies used by Economics instructors. The study recommended amongst several others that educational administrators should assign professionally trained Economics instructors with a foundation in Economics pedagogies to teach Economics and that seminars, workshops, and other capacity building programs be organized to help build Economics teachers' professional competencies in instructional delivery.

Keyword: - *Academic, Correlation, Economics, Instructional Strategies & Performance.*

1. INTRODUCTION

Education is a vital human endeavor that aids in shaping and modeling people's ability to adapt to their surroundings in any given society. The goal of education is to provide citizens with the tools they need to transform their society and end inequality [1]. Secondary education in particular is a crucial component of the educational system that supports the growth of the nation as well as the person. It is essential for developing a nation's human resource base beyond primary education.

As a result, secondary schools instruct students in a variety of areas. According to [2] and [3], each subject taught in secondary school has a special significance and is vital to the learning process. Economics is one of these topics. In Nigerian senior secondary schools, pupils can choose from a variety of social science courses, including Economics. It analyzes real-world economic issues using mathematical and statistical models [4] Economics is a

social science that investigates how people use restricted resources to fulfill seemingly endless desires. Additionally, it examines how supply and demand affect both the nation [5].

The study of Economics has a significant role in both society and human existence. In Nigerian senior secondary schools, it is one of the subjects taught. According to Lionel Robbins, referenced in [6] Economics is the study that examines how human behavior is influenced by limited resources and their potential uses. It is impossible to overstate the value of Economics Education for any country.

The goals of teaching Economics are to:

i. produce graduates with the critical skills and abilities to undertake a synthesis of Economics with other subject areas like Geography, Sociology, Psychology, Anthropology, Politics, History, and Law;
ii. give students the ability to recognize models that underlie a problem;
iii. train students in the principles of Economics and their application appropriate to the degree type concerned: studies that are combined and single joint;
iv. provide students with a solid foundation of knowledge about how economies function and help them develop the necessary skills for applying that knowledge constructively in a variety of settings;
v. develop in students the ability to apply the analytical tools, knowledge, and skills acquired to the solution of societies' economic problems;
vi. equip students with the necessary tools of analysis to tackle issues and problems of economic policy;
vii. develop in students, through the study of Economics, a range of transferable skills that will be valuable in employment and self-employment;
viii. give pupils the analytical abilities and capacity to create streamlined frameworks for researching real-world topics;
ix. give students the information and abilities to create condensed frameworks for studying the real world; xi. give students the foundational knowledge and abilities to pursue additional studies in Economics, related fields, or cross-disciplinary areas involving Economics; and
x. instill in pupils an understanding of the economic aspect of broader social and political issues [6].

In the meantime, instructors must be suitably qualified and trained in order for the topic to be taught at the senior level. Using professionally qualified individuals with knowledge of Economics pedagogies, contents, resources, philosophies, and aims is one way that Economics is taught in schools. This aids in the implementation of Economics curricula at the secondary school level [7]. It is expected of the economics teacher to impart in the students the proper values, attitudes, abilities, and knowledge.

Pedagogical Content Knowledge (PCK), teaching techniques, and instructors' actual experience organizing, planning, and delivering lessons in the classroom are all factors in their instructional performance. In order to improve students' performance in Economics, their interest in the topic should be taken into account independently of the issue of teaching methods. The term "student achievement" describes how well a student performs in a subject as measured by the grade they receive on an achievement exam. A student's academic status in comparison to other pupils his age is used to quantify their achievement [8].

Therefore, it is important to maintain students' attention in order to raise their level of academic accomplishment and to teach and improve students' achievement in Economics. Based on this premise, the researcher looked at how South East Nigerian teachers' methods of instruction correlated with students' interest in economics. This study's main goal was to investigate how South East Nigerian instructors' methods of instruction connect to their students' interest in and performance in economics. In particular, the study's goals were to ascertain: The;

i. connection between instructors' strategies for lesson planning and students' performance in economics,
ii. connection between students' success in economics and the ways in which professors present their material,
iii. connection between students' success in Economics and teachers' pedagogical content understanding practices,
iv. correlation between instructors' methods of applying lessons and students' performance in Economics, and
v. predictive association between instructors' methods of instruction (lesson design, delivery, pedagogical content knowledge, and application) and students' performance in Economics.

1.1 Research Questions

The following research questions guided the study:

1. What is the coefficient of relationship between teachers' lesson planning practices and students' achievement in Economics?

2. What is the coefficient of relationship between teachers' presentation practices and students' achievement in Economics?
3. What is the coefficient of relationship between teachers' pedagogical content knowledge practices and students' achievement in Economics?
4. What is the coefficient of relationship between teachers' lesson application practices and students' achievement in Economics?
5. To what extent do teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) predict students' achievement in Economics?

1.2 Hypothesis

The following null hypotheses were developed and put to the test at the significance level of.05.

HO_1: There is no discernible correlation between the way instructors prepare their lessons and the academic success of their pupils in the subject of economics.

HO_2: There is no discernible correlation between students' achievement in economics and the ways in which professors present their material.

HO_3: There is no statistically significant correlation between the pedagogical content knowledge practices of teachers and the economics achievement of their students.

HO_4: There is no statistically significant correlation between the application of lessons by teachers and the economics achievement of their students.

HO_5: Students' achievement in Economics is not significantly predicted by the dimensions of teachers' instructional practices (lesson design, presentation, pedagogical content understanding, and application).

2. METHODS

This study adopted a correlational survey research design that also involved simple linear method. Purposive and proportionate random sampling techniques were used to sampled 399 Senior Secondary School II students. The research instruments used for data collection was achievement test was titled: "Economics Achievement Test (EAT)". It was a multiple-choice test which has 45 items in four options of A-D. It was used to elicit information on the academic achievement of the students. The academic achievement of the students focused on some topics in Economics such as; money/wages, inflation, population and labour market/unemployment. The content validity of EAT was ascertained using the test-blue print/table of specification. The EAT was subjected to internal consistency using Kuder Richardson 20 formular. The internal consistency coefficient indice obtained was 0.81. Personal Direct Administration Technique (PDAT) was employed for the collection of data in this study. The instruments were administered to the respondents directly with the help of four trained research assistants who were briefed on how to administer the instruments. Pearson Product Moment Correlation Coefficient was used to answer research questions that guided the study. While for the hypotheses, One-way ANOVA F-test associated with linear regression was used to test hypotheses. The hypotheses were tested at $p<0.05$ level of significance,

Decision Rule for the Research Questions: The decision either positive or negative for the extent/magnitude of relationship was based on the fact that if the coefficient was:

0.00, the conclusion was no relationship;
0.01-0.20, the conclusion was very low relationship;
0.21-0.40 was low relationship
0.41-0.60 was moderate relationship;
0.61-0.80 was high relationship;
0.81-0.99 was very high relationship; and
1.00 was perfect positive relationship [9].

3. RESULTS AND DISCUSSION

Research Question 1

What is the coefficient of relationship between teachers' lesson planning practices and students' achievement in Economics?

Table 1: Correlation Matrix of Relationship between Teachers' lesson planning practices and students' achievement in Economics

		Teachers' lesson planning Practices	Students' Achievement in Economics
Teachers' lesson planning practices	Pearson Correlation	1	.702*
	N	399	399
Students' Achievement in Economics	Pearson Correlation	.702*	1
	N	399	399

*. Correlation is significant at the 0.05 level (2-tailed

Table 1 show a correlation index of .70 which is positive and within.±.0.61-0.80. This indicates a high positive coefficient of relationship between teachers' lesson planning practices and students' achievement in Economics.

Hypothesis 1

The coefficient of relationship between teachers' lesson planning practices and students' achievement in Economics is not significant.

Table 2: Regression Analysis of Significant of Relationship between Teachers' lesson planning practices and students' interest in Economics

Model		Sum of Squares	df	Mean Square	F	P-value
1	Regression	205.15	1	205.15	52.549	.000
	Residual	1553.742	398	3.904		
	Total	1758.892	399			

df= degree of freedom, F = F-calculated, Correlation is significant at the 0.05 level (2-tailed)

Data in Table 2 show P-value of .000 which is less than the alpha value of .05. This means that the coefficient of relationship between teachers' lesson planning practices and students' achievement in Economics is significant. Therefore, the hypothesis that the coefficient of relationship between teachers' lesson planning practices and students' achievement in Economics is not significant was rejected.

Research Question 2

What is the coefficient of relationship between teachers' presentation practices and students' achievement in Economics?

Table 3: Correlation Matrix of Relationship between Teachers' Presentation practices and students' achievement in Economics

		Teachers' presentation practices	Students' achievement in Economics
Teachers' Presentation practices	Pearson Correlation	1	.81*
	N	399	399
Students' achievement in Economics	Pearson Correlation	.81*	1
	N	399	399

*. Correlation is significant at the 0.05 level (2-tailed).

Data in Table 3 indicate a correlation coefficient (r) of .81 which is positive and within the coefficient limit of 0.81-0.99. This indicates that the coefficient of relationship between teachers' presentation practices and students' achievement in Economics. is positive and very highly correlated.

Hypothesis 2

The coefficient of relationship between teachers' presentation practices and students' achievement in Economics is not significant.

Table 4: Regression Analysis of significant of relationship between Teachers' presentation practices and students' achievement in Economics

Model		Sum of Squares	df	Mean Square	F	P-value
	Regression	197.490	1	197.490	49.922	.000
	Residual	1574.601	398	3.956		
	Total	1772.091	399			

df= degree of freedom, F = F-calculated, Correlation is significant at the 0.05 level (2-tailed)

Data in Table 4 show a p-value of .000 which is less than the alpha value of .05. This means that teachers' presentation practices significantly relate to students' achievement in Economics. Therefore, the hypothesis that coefficient of relationship between teachers' presentation practices and students 'achievement in Economics is not significant was rejected

Research Question 3

What is the coefficient of relationship between teachers' pedagogical content knowledge practices and students' achievement in Economics?

Table 5: Correlation Matrix of Relationship between Teachers' Pedagogical content knowledge practices and students' achievement in Economics

		Teachers' pedagogical content knowledge	Students' achievement in Economics
Teachers' pedagogical content knowledge	Pearson Correlation	1	.815*
	N	399	399
Students' achievement in Economics	Pearson Correlation	.815*	1
	N	399	399

*. Correlation is significant at the 0.05 level (2-tailed).

Data in Table 5 indicate a correlation coefficient (r) of .82 which is positive and within the coefficient limit of ±.81 and .99. This indicates that the coefficient of relationship between teachers' pedagogical content knowledge and students' achievement in Economics is very high and positively correlated.

Hypothesis 3

The coefficient of relationship between teachers' pedagogical content knowledge practices and students' achievement in Economics is not significant.

Table 6: Regression Analysis Significant of Relationship between Teachers' pedagogical content knowledge practices and students' achievement in Economics

Model		Sum of Squares	df	Mean Square	F	P-value
	Regression	118.094	1	118.094	31.102	.001
1	Residual	1511.304	398	3.797		
	Total	1629.394	399			

df= degree of freedom, F = F-calculated, Correlation is significant at the 0.05 level (2-tailed)

Data in Table 6 show a P-value of .001 which is less than the alpha value of .05. This means that the coefficient of relationship between teachers' pedagogical content knowledge practices and students' achievement in Economics is significant. Therefore, the hypothesis that the coefficient of relationship between teachers' pedagogical content knowledge practices and students' achievement in Economics is not significant was rejected.

Research Question 4

What is the coefficient of relationship between teachers' lesson application practices and students' achievement in Economics?

Table 7: Correlation Matrix of Relationship between Teachers' lesson application practice sand students' achievement in Economics

	Teachers' lesson application Practices	Students' achievement in Economics

Teachers' lesson application practices	Pearson Correlation	1	.77*
	N	399	399
Students' achievement in Economics	Pearson Correlation	.77*	1
	N	399	399

*. Correlation is significant at the 0.05 level (2-tailed).

Data in Table 7 indicate a correlation coefficient (r) of .77 which is positive and within the coefficient limit of ±.0.61-0.80. This indicates that the coefficient of relationship between teachers' lesson application and students' achievement in Economics is positive and highly correlated.

Hypothesis 4

The coefficient of relationship between teachers' lesson application practices and students' achievement in Economics is not significant.

Table 8: Regression Analysis of Significant of Relationship between Teachers' lesson application practices and students' achievement in Economics

Model		Sum of Squares	df	Mean Square	F	P-value
1	Regression	189.190	1	189.190	51.077	.000
	Residual	1474.052	398	3.704		
	Total	1663.242	399			

df= degree of freedom, F = F-calculated, Correlation is significant at the 0.05 level (2-tailed)

Data in Table 8 show P-value of .000 which is less than the alpha value of .05. This means that the coefficient of relationship between teachers' lesson application practices and students' achievement in Economics is significant. Therefore, the hypothesis that the coefficient of relationship between teachers' lesson application practices and students' achievement in Economics is not significant was rejected.

Research Question 5

To what extent do teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) predict students' achievement in Economics?

Table 9: Multiple correlation coefficient of extent teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) predict students' achievement in Economics

N	R	R^2	Remarks
399	**0.741**	0.549(55%)	High Relationship

Sample Size (n), Multiple Correlation Coefficient (R), coefficient of determination (R^2) and Remarks

Table 9, a Multiple Correlation Coefficient was computed to describe extent teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) predict students' achievement in Economics. The result shows that the coefficient of 0.74 which fall within the coefficient limit of ±.0.61-0.80 indicating a positive high relationship between teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) and students' achievement in Economics. The coefficient of determination (R^2) 0.55 indicates that 55% of the variance observed in students' achievement in Economics was attributed to teachers' instructional practices

Hypothesis 5

Ho_8: Dimension of teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) do not significantly predict students' achievement in Economics.

Table 10: One Way ANOVA F-test for the coefficient of relationship among the dimension of teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) do not significantly predict students' achievement in Economics.

Model	Sum of Squares	Degree of Freedom	Mean Squares	F_{cal}	P-value	Decision

Regression	191.412	4	47.853			
Residual	1442.112	398	3.623	**13.208**	**.000**	**Reject Ho**
Total	7644.561	399				

F-test of Significance of Multiple Linear Correlation/Regression among the variables

The data in Table 10, show a One-Way ANOVA F-test of significance of multiple linear correlation statistic computed to display the dimension of teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) significantly predict students' achievement in Economics. Based on the data in the Table, given the calculated F-ratio value 13.208, and a p-value of .000 which is less than .05 level of significance. Hence, the researcher rejected the null hypothesis; thus, concluding that the dimension of teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) significantly predict students' achievement in Economics.

The outcome of the study revealed that there is high positive and significant coefficient of relationship between teachers' lesson planning practices and students' achievement in Economics. The finding collaborates that of [10] which revealed that there is a significant relationship among teachers' lesson planning, presentations performances and students' academic achievement in Economics. This implies that what the teacher does at the planning and presentation stage of instruction directly affect students in their academic endeavours and achievement. In addition, [11] agreed that there is a link between teachers' lesson preparation and students' achievement. He further affirmed that wrong selection of lesson procedure can lead to non-attainment of lesson objectives.

The findings from the study revealed that the coefficient of relationship between teachers' presentation practices and students' achievement in Economics was positive and very highly correlated while the corresponding hypothesis indicated a significant coefficient of relationship between teachers' presentation practices and students' achievement in Economics. The finding is in consonance with [12] who reiterated that of teachers' presentation practices help to guide their actions, to be curious, imaginative, interesting, friendly and hard working in order to be effective in the classroom, thereby creating a learning environment that results in enhancing learners' disposition and achievement. Furthermore, [13] affirmed that teachers' presentation practices provide the framework for students as they learn in a diverse way, responding to multiples of learning styles in classroom, in addition provide the classroom teacher the usage of remediation and enhancement strategies responding to students need and getting students actively engaged in the lesson will increase rate of achievement, retention and reproduction.

The outcome of the findings showed that the coefficient of relationship between teachers' pedagogical content knowledge and students' achievement in Economics is very high and positively correlated. More so, the corresponding hypothesis indicated that the coefficient of relationship between teachers' pedagogical content knowledge practices and students' achievement in Economics was significant. This finding agreed with that of [14] who asserted that teachers' pedagogical content knowledge guides the teachers' actions when dealing with subject matter in the classroom. The authors further deduced that teachers' pedagogical content knowledge equips with an esoteric body of knowledge required of the teacher to perform successful teaching within complex and varied context better attainment of stated goal. Notably, the findings of the study collaborate that of [12] who found that pedagogical content knowledge is an important resource for teachers engaging in formative assessment and adoption of appropriate teaching strategies for attainment of better and enhanced performance of learners. Therefore, to bring about learning, the teacher engages in certain activities such as talking, demonstration, and gives instruction and so on, all these are the various strategies to bring about learning.

The study revealed that the coefficient of relationship between teachers' lesson application and students' achievement in Economics is positive and highly correlated. In addition, the corresponding hypothesis indicated that there was a significant relationship between teachers' lesson application and students' achievement in Economics. This finding was in line with the findings of [12] who revealed that teachers' lesson application in their classroom especially teaching skills have twice impact on students' achievement in any subject, Economics not left out. Furthermore, [15] affirmed that teachers' lesson application requires the active participations of learners in the teaching process and emphasis on process rather than products of learning. In addition, the findings of the study concurred with that of [16] who asserted that teachers' lesson application re-emphasizing the quality of learner experiences, reorganizing subjects into key learning areas so as to develop broad knowledge base, and developing in the leaner the ability to think critically and be innovative.

Finally, the findings revealed that a positive and high significant relationship between teachers' instructional practices (lesson planning, presentation, pedagogical content knowledge and application) and students' achievement in Economics. The finding is in line with that of [17] who averred that instructional practices encapsulate the

arrangement of contents, determination of set objectives, organizing learners' activities and materials, evaluating and providing satisfactory learning experiences to stimulating learning and teaching processes for the realization of desirable changes in learners' behavior (learning outcome). More so, the findings agreed with that of [18] who revealed that when a teacher teaches his pupils/students in the (Economics) classroom without involving them in the activity, it encourages the pupils/student to be less attentive to their studies. Thus, instructional practices involve conscious efforts of pupils/students to answer questions or participate in class discussion, endorses the extent of learning experiences the students have received.

4. CONCLUSIONS

The results from the findings revealed that instructional practices by Economics teachers have high positive relationship with students' academic achievement in Economics. Therefore, seminars, workshop and other capacity building programmes should be organized to help build Economics teachers professional competencies in instructional delivery and educational administrators should assign professionally trained Economics teachers who are rooted in Economics pedagogies to teach Economics. This will lead to effective instructional delivery.

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