



Relationship between Teachers' Quality and Students' Academic Achievements in Economics in Senior Secondary Schools in Adamawa State, Nigeria

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ABSTRACT

This study investigated the Relationship between Teachers' Quality and Students' Academic Achievements in Economics in Senior Secondary Schools in Adamawa State, Nigeria. The study was set to achieve four objectives, four research questions and four hypotheses, the design, for the study was a descriptive survey design. The area of the study was Adamawa State. The population of the study consists of 337 principals and 3720 Economics students` in all the public secondary schools within the five education zones of Adamawa State. The sample for the study was 73 principals and 372 SS2 Economics students`. These samples were selected using the Taro Yamane formula. The instruments were questionnaires on teachers' quality and student academic achievement from the selected schools. The instrument was validated by four Senior Lecturers. A reliability coefficient of 0.83 was obtained using Cronbach's Alpha method. The data was collected through the administration of the questionnaires. Mean and the standard deviation was used to answer the research questions. While inferential statistics such as t-test was used to test the null hypothesis at 0.05 level of significance. The results of the finding revealed that teacher's qualifications have a significant predictive ability on students' academic achievement. Therefore, the study recommended that the Government should ensure the adequate recruitment of dedicated, qualified teachers to teach in all secondary schools in the study area in particular and the country in general.

ARTICLE INFO

Article History

Received: January, 2020

Received in revised form: March, 2020

Accepted: July, 2020

Published online: November, 2020

KEYWORDS

Teachers' Quality, Senior Secondary School, Adamawa.

INTRODUCTION

The primary purpose of teaching at any level of education is to bring a fundamental change in the learner (Tebabal & Kahssay, 2011). This is to facilitate the process of knowledge transmission. To achieve this, teachers must appropriately know how to apply teaching methods that best suit specific objectives. Adeyemi (2008), affirms that many methods of teaching exist in

education and these methods are meant to make teachers succeed in their bid to disseminate knowledge. This means the success in the use of any teaching method depends on the intelligent analysis of the teacher on objectives of the lesson, the students in the class, the curriculum content, or the type of subject matter. Because doing so will influence students' learning and subsequently improve students' performance.



However, teaching in secondary school requires a variety of teacher's quality to address different learning levels, styles, and intelligence of students.

Quality of a teacher is a very influential determinant of the classroom environment (Otu, 2009). Teachers without the minimum academic qualifications may need to go for further training to improve their knowledge and effectiveness in teaching. This would enable respective school authorities to identify or observe the importance of minimum academic qualification for teachers. For instance, two studies conducted in Gauteng and North West provinces in South Africa by Kimani, (2009) and Carnoy & Arends, (2012), have revealed a positive relationship between teacher knowledge and learner performance. This is a no doubt, it is a known fact that teacher whose understanding of the topic is thorough, may use clearer language, their discourse is more connected and they provide better explanations than those whose background is weaker. That is why Adediwura & Bada (2007), stated in their study that nobody could teach what he does not understand or know. Therefore, teachers must thoroughly understand the content of what they teach.

Certification is a measure of teachers' qualifications which combine aspects of both knowledge on the subject matter, and about teaching and learning. This made Daso (2013), to claim that "education cannot be provided by just anybody, because it requires a teacher who plans and delivers the lessons or instruction in such a way that objectives can be achieved. An uncertified teacher can hardly prepare students for WASCE/NECO because he does not possess the qualities. However, the introduction of the teacher's registration council (TRC) by the Federal Government is a landmark for the certification of teachers. Teacher certification is a signal of teacher quality (Brossoux, 2008). As such, teachers' quality is a pointer or

essential determinant of the versatility of the principal and his team and the attendant academic powers of the students (Akinsulu, 2012). This indicates that highly qualified teachers are those with full-certification and demonstrates subject mastery competency. This is usually associated with increased elementary and middle school achievement in reading, science, and social studies as well as in mathematics (Behram, 2010).

This is why a nation that wants to achieve rapid technological development, must improve the quality of its education that students receive, which is determined by the quality of teachers. A teacher's qualities include qualification, years of teaching experience, method of teaching, and mastery of a subject matter. According to Mezieobi (2008), who indicated that teacher quality is an important determinant of Students' performance? Meaning, the quality of education hinges on the quality of teaching that goes on in the classroom, reinforcing the idea that quality teachers make up for the deficiencies in the curriculum and educational resources (Yenilmez & Cemrek, 2008). Teacher quality is widely thought of as an essential determinant of academic performance, yet there is little agreement as to what specific characteristics make a good teacher. Tella (2007), also states that the characteristics of teacher quality are: verbal ability, subject – matter knowledge, knowledge of teaching and learning, the ability to use a wide range of teaching strategies adapted to students' needs.

Economics as a subject in secondary school had witnessed a high enrolment rate compare to any other commercial subject in the final year external examination (Yara, 2009). Unfortunately, there has not been a corresponding increase in students' performance in the examinations. Why because the results of the final year students' external examination have



been consistently low. This necessitates several studies to investigate the causes of these appalling states of students' poor performance in Economics. These causes were identified as; high teacher-student ratio, shortage of good teaching staff, poor quality of educational leadership, political instability and politicization of educational programs, automatic promotion, age of the learners, and inadequate essential physical facilities and equipment (Ewetan, 2010; Akinwunmi and Odunsi, 2008).

In addition to that, the recent results released by WAEC for the 2014 May/June Senior Secondary School Examination, showed that only 31.28% (529,425) candidates out of 1,692,435 candidates who sat for the examination had credits in five subjects and above including Mathematics and Economics as against 38.81% and 36.57% in 2012 and 2013 May/June examinations respectively (Ijaiya, 2008). However, various studies such as Rothstein, (2009), Robinson (2010); Cohen (2013), Fakeye and Ogunsiji, (2013) Asikhia (2010); have attributed this poor students performance to unqualified teachers (lack of teachers' quality) in teaching Economics subject at the secondary school level. To further support these findings Ofemu (2008), reported that more than eighty per cent of teachers at the primary and secondary school level were unqualified to teach in most of the States in Nigeria. Thus the high percentage of unqualified teachers in public secondary school is a major factor responsible for the poor students' academic achievement. Therefore, it is against this backdrop that this study sought to investigate the relationship between teacher's quality and economics students' academic achievement in secondary schools in Adamawa State.

Purpose of the Study

The purpose of this study was to investigate the relationship between teacher's quality and economics

student's academic achievement in senior secondary schools in Adamawa State. While the specific objectives were to:

1. Determine the relationship between teachers' qualifications and economics students' academic achievement in senior secondary schools in Adamawa State.
2. Examine the relationship between teacher's years of teaching experience and economics students' academic achievement in a senior secondary school in Adamawa State.
3. Evaluate the relationship between teacher's knowledge of subject matter and economics students' academic achievement in senior secondary schools in Adamawa State.
4. Access the relationship between teacher's pedagogy and economics students' academic achievement in senior secondary schools in Adamawa State.

Research Questions

The following research questions were raised to guide the study:

1. What is the relationship between teacher's qualification and economic student's academic achievement in senior secondary schools in Adamawa State?
2. What is the relationship between teacher's years of experience and economic student's academic achievement in senior secondary schools in Adamawa State?
3. What is the relationship between a teacher's knowledge of the subject matter and economics student's academic achievement in senior secondary schools in Adamawa State?
4. What is the relationship between teacher's pedagogy and economics students' academic achievement in senior secondary schools in Adamawa State?



Null Hypotheses

The following null hypotheses were formulated and tested at a 0.05, level of significance to guide the study;

- HO1:** There is no significant relationship between teachers' qualifications and economics students' academic achievement in senior secondary schools in Adamawa State.
- HO2:** There is no significant relationship between teachers' years of experience and economics students' academic achievement in senior secondary schools in Adamawa State.
- HO3:** There is no significant relationship between teachers' knowledge of subject matter and economics students' academic achievement in senior secondary schools in Adamawa state.
- HO4:** there is no significant relationship between teachers' pedagogy and economics students' academic achievement in senior secondary schools in Adamawa State.

METHODOLOGY

The research design adopted for this study was a descriptive survey. The population for the study consisted of 4057 respondents from government secondary schools within the five educational zones in the State. These zones are Mubi, Gombi, Yola, Numan and Ganye. Out of these total populations, 337 were principals while 3720 were SS2 students (Post Primary School Management, 2017). The sample size of this study consisted of 445 respondents. These samples were drawn from two randomly selected zones out of the five educational zones in the State. Meanwhile, out of these sampled size 73 were Principals while 372 were SS2 commercial students, all from government secondary schools. The selection of these sampled was done using Taro Yamani's formula. This formula is adjudged acceptable for

drawing sample sizes from a large population (Julius, 2010). The sampling technique used for selecting both the Principals and the students was purposive sampling. This is because the study considered only those schools that offered commercial subjects, especially Economics.

Structured questionnaires were used as an instrument for data collection. The instruments were validated by two experts from the Department of Science Education, who were not below the rank of a senior lecturer, from Modibbo Adama University of Technology, Yola. The reliability of the instrument was equally established through a pilot test conducted at Taraba State, using 2 Principals and 20 students respectively. The results obtained were analyzed using the split-half method. This result was further tested using PPMC, which give a reliability coefficient of 0.83 and was adjudged reliable for data collection (Tracy, 2006). The collected data were analyzed using mean and standard deviation to answer the research questions while multiple correlations were used to test the null hypotheses at a 0.05 level of significance. All those hypotheses with a P-value less than the Alpha value at 0.05 level of significance, were rejected and where otherwise the hypotheses were retained.

RESULTS AND DISCUSSION

This aspect presents data analysis, results, and discussion of the findings. The data collected were organized and analyzed to answer the research questions and also test the hypotheses that guided this study.

PRESENTATION OF RESULTS

Research Question One: What is the relationship between teacher's qualification and economic student's academic achievement in senior secondary schools in Adamawa State?



Table 1: Analysis of Mean Respondents between teachers' Qualification and Economics Students Academics Achievement

Items	N	Mean	Std. Deviation	Remark
All teachers' in this school are academically-qualified to teach the students.	445	2.25	1.318	Disagree
Teacher's academic qualifications influenced students' performance in your school.	445	2.34	1.328	Disagree
Teachers with a first degree and above are more effective in the classroom.	445	2.92	1.427	Agree
Teacher quality is determined by their qualification.	445	2.34	1.206	Disagree
Most teachers in this school have a teaching certificate.	445	2.79	1.348	Agree
Teachers with teaching qualifications teach the students better.	445	2.14	1.170	Disagree
Teachers with teaching qualifications keep students records better.	445	3.04	1.071	Agree
GRAND MEAN	445	2.56		Agree

Source: field study, 2019

Table 1 above analyzed the descriptive statistics used to answer research question one. This revealed that questionnaire item 3, 5, and 7 were all in agreement with the research question one. While only questionnaire item 1, 2, 4, and 6 that disagreed with the research question one. Also, the grand mean of the analysis revealed the mean value of (2.56), which is also greater than the benchmark of (2.50). Therefore, this

suggested that the teacher's qualification had an influenced on economics students' academic achievement in senior secondary schools in Adamawa State.

Research Question Two: What is the relationship between teacher's years of experience and economic student's academic achievement in senior secondary schools in Adamawa State?

Table 2: Analysis of Mean Respondents between Teachers' Years' of Teaching Experience and Economics Students Academics Achievement

Items	N	Mean	Std. Deviation	Remark
Most teachers in this school have taught for more than 5 years.	445	3.56	1.099	Agree
Teachers who have taught for more than five years teach better.	445	2.76	1.463	Agree
Teachers who have taught for more than five years are better able to control the students.	445	3.03	1.439	Agree
Older teachers are more understanding in dealing with students than younger ones.	445	2.87	1.593	Agree
Teachers who have taught more than five years to evaluate the students properly.	445	2.26	1.285	Disagree



Items	N	Mean	Std. Deviation	Remark
Students' records are better kept by older teachers than younger ones.	445	2.42	1.192	Disagree
Students taught by older teachers perform better.	445	3.22	1.415	Agree
GRAND MEAN	445	2.89		Agree

Source: field study, 2019

Table 2 above analyzed the descriptive statistics used to answer research question one. This revealed that questionnaire item 1, 2, 3, 4, and 7 were all in agreement with the research question two. While only questionnaire item 5, and 6 that disagreed with the research question one. Besides, the grand mean of the analysis also revealed the mean value of (2.89), which is also greater than the benchmark of (2.50). Therefore, this indicated that teachers'

years of teaching experience had an influenced on economics students' academic achievement in senior secondary schools in Adamawa State.

Research Question Three: What is the relationship between a teacher's knowledge of the subject matter and economics student's academic achievement in senior secondary schools in Adamawa State?

Table 3: Analysis of Mean Respondents between teachers' knowledge of the subject matter and Economics Students Academics Achievement

Items	N	Mean	Std. Deviation	Remark
Teachers' knowledge of the subject matter affects students' achievement in economics.	445	3.39	1.215	Agree
Teacher's presentation of instructional materials influences students' achievements in your school.	445	2.82	1.451	Agree
Teacher's broad knowledge of concepts in economics.	445	3.34	1.510	Agree
Preparation of notes is best for teaching economics.	445	2.64	1.505	Agree
Teacher's manners of presenting lessons could influence students' performance in your school.	445	2.58	1.284	Agree
Frequent use of continuous assessment makes the teacher know the performance of students.	445	2.72	1.419	Agree
Teacher's manners of presenting lesson could influence students' achievement in economics.	445	3.40	1.385	Agree
GRAND MEAN	445	3.00		Agree

Source: field study, 2019

Table 3 above analyzed the descriptive statistics used to answer research question one. This revealed that all the questionnaire items such as 1, 2, 3, 4, 5, 6, and 7 were all in agreement with

the research question three. Besides, the grand mean of the analysis also revealed the mean value of (3.00), which is also greater than the benchmark of (2.50). Therefore, this shows that teachers'



knowledge of the subject matter had an influenced on economics students' academic achievement in senior secondary schools in Adamawa State.

Research Question Four: What is the relationship between a teacher's pedagogy and economics student's academic achievement in senior secondary schools in Adamawa State?

Table 4: Analysis of Mean Respondents between Teachers' Pedagogy and Economics Students Academics Achievement

Items	N	Mean	Std. Deviation	Remark
The teacher's preparation of lesson notes is recommended for good teaching of economics.	445	3.57	1.267	Agree
Teachers' homework to economics students appropriately utilize in your school.	445	3.16	1.391	Agree
Teachers use different illustrations to explain the economics concept in your school.	445	2.68	1.494	Agree
Given notes to students' is not necessary to the teaching of economics.	445	2.73	1.335	Agree
Grouping methods help in teaching and learning economics better.	445	3.25	1.450	Agree
Weekly preparation of lesson plan is the best for the teaching of economics.	445	3.32	1.542	Agree
Use of demonstration method in all aspect of economics improves the learning of the students'.	445	3.11	1.540	Agree
GRAND MEAN	445	3.02		Agree

Source: field study, 2019

Table 4 above analyzed the descriptive statistics used to answer research question one. This revealed that all the questionnaire items such as 1, 2, 3, 4, 5, 6, and 7 were all in agreement with the research question four. In addition, the grand mean of the analysis also revealed the mean value of (3.02), which is also greater than the benchmark of (2.50). Therefore, this suggested that teachers' pedagogy had an influenced on

economics students' academic achievement in senior secondary schools in Adamawa State.

Test of Null Hypotheses

Hypothesis One: There is no significant relationship between teachers' qualifications and economics students' academic achievement in senior secondary schools in Adamawa State.

Table 5: Regression Analysis on the Relationship between Teachers Qualification and Economics Students Academics Achievement

Model	Unstad. Coef.		T	Sig.	R	R ²	Adjusted R ²
	B	Std. Error					
(Qualification)	8.67	14.952	4.90	0.010	.664	.260	.363
Achievement	4.17	14.569	.764	2.05	.033		

Source: Field Survey, 2019



Table 5: The result of regression analysis revealed the R-value of .664, the $R^2 = .260$, and Adjusted R^2 of .363. The results indicated that the independent variable (Qualification) express 36.3% of the variability of the dependent variable (Achievement). The regression model is statistically significant, why because the p-value was .010, which is less than the Alpha value at 0.05, level of significance. Hence, the null hypothesis was rejected. This suggested that relationships exist

between a teacher's qualification and economics student's academic achievement in senior secondary schools in Adamawa State.

Null Hypothesis Two: There is no significant relationship between teachers' years of experience and economics students' academic achievement in senior secondary schools in Adamawa State.

Table 6: Regression Analysis on the Relationship between Teachers' Years' of Teaching Experience and Economics Students Academics Achievement

Model	Unstad. Coef.		Std. Coef.	T	Sig.	R	R ²	Adjusted R ²
	B	Std. Error						
(Experience)	8.750	14.878		4.41	.012	.352 ^a	.442	.467
Achievement	5.750	14.323	.902	3.32	.023			

Source: Field Survey, 2019

Table 6: The result of regression analysis revealed the R-value of .352, the $R^2 = .442$, and Adjusted R^2 of .467. The results indicated that the independent variable (Experience) express 46.7% of the variability of the dependent variable (Achievement). The regression model is statistically significant, why because the p-value was .012, which is less than the Alpha value at 0.05, level of significance. Hence, the null hypothesis was rejected. This suggested that a relationship exists

between teacher's years of teaching experience and economics student's academic achievement in senior secondary schools in Adamawa State.

Null Hypothesis Three: There is no significant relationship between teachers' knowledge of subject matter and economics students' academic achievement in senior secondary schools in Adamawa state

Table 7: Regression Analysis on the Relationship between Teachers' Knowledge of the Subject Matter and Economics Students Academics Achievement

Model	Unstad. Coef.		Std. Coef.	T	Sig.	R	R ²	Adjusted R ²
	B	Std. Error						
(Knowledge)	8.75	15.00		4.60	.009	.331 ^a	.411	.484
Achievement	1.25	15.56	.891	2.24	.111			

Source: Field Survey, 2019

Table 7: The result of regression analysis revealed the R-value of .331, the $R^2 = .441$, and Adjusted R^2 of .484. The results indicated that the independent variable (Knowledge) express 48.4% of the variability of the dependent variable

(Achievement). The regression model is statistically significant, why because the p-value was .009, which is less than the Alpha value at 0.05, level of significance. Hence, the null hypothesis was rejected. This suggested that a relationship exists



between a teacher's knowledge of the subject matter and economics student's academic achievement in senior secondary schools in Adamawa

Null Hypothesis Four: There is no significant relationship between teachers' pedagogy and economics students' academic achievement in senior secondary schools in Adamawa State.

Table 8: Regression Analysis on the Relationship between Teachers' Pedagogy and Economics Students Academics Achievement in Senior Secondary Schools in Adamawa State

Model	Unstad. Coef.		Std. Coef.	T	Sig.	R	R ²	Adjusted R ²
	B	Std. Error						
(Pedagogy)	8.75	14.952		5.60	.024	.251 ^a	.370	.419
Achievement	4.25	14.563	.791	2.24	.111			

Source: Field Survey, 2019

Table 8: The result of regression analysis revealed the R-value of .251, the $R^2 = .370$, and Adjusted R^2 of .419. This indicated that the independent variable (Pedagogy) express 41.9% of the variability of the dependent variable (Achievement). The regression model is statistically significant, why because the p-value was .024, which is less than the Alpha value at 0.05, level of significance. Hence, the null hypothesis was rejected. This suggested that a relationship exists between a teacher's pedagogy and economics student's academic achievement in senior secondary schools in Adamawa State.

DISCUSSION OF THE FINDINGS

Table 1 & 5 of the analysis on the relationship between teacher's qualification and economics student's academic achievement in senior secondary schools in Adamawa State. The result revealed that the teacher's qualifications had a positive influence on economics student's academic achievement in senior secondary schools. This finding is in line with the findings of Akinsolu (2010), who claimed that teachers' academic and professional qualification degrees have influenced teacher productivity. That is to say, the teacher's qualification is crucial for improving students' academic performance. Abere (2014) explained

that "the quality of personnel determines the products and services they render. Meaning, no organization can rise above the quality of its staff; without personnel, all other factors of production will remain in their natural untapped state. That may be why Musau & Abere (2015), asserted that a shortage of qualified teaching personnel is one of the most serious and evident problems in developing countries which greatly and adversely affect their educational system. This means unqualified teachers are the root cause of failure in secondary schools this day and which consequently contributes apparently to the production of the unqualified workforce. Hence, one of the reasons for the unemployment rate in the country.

Table 2 & 6 of the analysis on the relationship between teachers' years of teaching experience and economic students' academic achievement in senior secondary schools in Adamawa State. The result shows that teacher's years of teaching experience had a positive correlation with economic student's academic achievement. This finding corroborated with the findings of Harris and Sass (2011), who reported that teaching experience determines students' academic achievement to a great extent. Meaning that teaching experience is a prelude to good curriculum delivery. This is because teaching experience is



acquired over a long period, therefore is enough for a teacher to internalize all the professional ethics that will allow him/her to discharge his/her responsibilities perfectly. In the vein, Onyekuru and Ibegunam (2013), confirmed that "one way to measure the quality of teachers is to look at their certification, teaching experience, academic responsibility and attitudes towards teaching. Because teaching quality is determined by the teacher's overall performance as well as his teaching experience and practices. That is why the quality of education of any nation to a very large extent determines by the quality of its teaching staff.

Table 3 & 7 of the analysis on the relationship between teacher's knowledge of the subject matter and economic student's academic achievement in senior secondary schools in Adamawa State. The result shows that teacher's knowledge of the subject matter had a positive influence on economic student's academic achievement. This finding is in line with the findings of Behram (2010), who asserted that highly qualified teachers or those with both full certification and the subject matter competency, are associated with increased elementary and middle school achievement in reading, science, and social studies as well as in mathematics. Meaning, mastery of relevant knowledge is one of the most important attributes of the teacher. This claimed is further supported by Odiri (2011), who reported that the teachers today must have a good grasp of the subject matter if he/she is to command the respect of his students. Since the frontiers of knowledge keep expanding every day and the level of the students generally keep rising too. Therefore, a teacher that wants to keep abreast of his/her area of specialization most not ceases to learn.

From Table 4 & 8 of the analysis on the relationship between teacher's pedagogy and economic student's

academic achievement in senior secondary schools in Adamawa State. The result of the analysis shows that teacher's pedagogy had a positive influence on economic student's academic achievement. This finding is in line with the findings of Aguru (2008), who confirmed that teaching is a continuous process that involves bringing about desirable changes in learners through the use of an appropriate method. Again, Akpan & Essien (2008), also reported that to bring further changes in students, teaching methods used by educators should be best for the subject matter. Furthermore, Lougran (2011), sustained that teaching method work effectively if they suit learners' needs since every learner interprets and responds to questions in a unique way. Why because Taylor (2011), found out that improper teaching methods affect students' performance and if a teacher does not know how to communicate properly or use the proper channels of communication, the students are bound to learn the wrong thing. He also found out that improper teaching methods and inadequate language of instruction tend to slow down the academic achievement of the students. Akiri (2013), stated that the teacher is required to give knowledge and train students the basic skills as stipulated in the curriculum and provide guidelines for effective teaching in class. That is to say in the school setting, the teacher and school curriculum are inseparable factors in ensuring success or failure of any intended learning outcome.

CONCLUSION

Based on the finding of this study, it was concluded that teachers' qualification, teaching experience, knowledge of the subject matter, and teaching pedagogy contribute to secondary school students' academic achievement in senior secondary schools in Adamawa state. By implication, unqualified teachers are the root cause of



student's failure in our secondary schools.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. The government should ensure the adequate recruitment of dedicated, qualified teachers to teach in all secondary schools in the study area in particular and the country in general.
2. Teachers with long years of experience should be encouraged and motivated to stay in the teaching profession as the length of service and experience significantly affect the students' performance in Economics.
3. Teachers should be encouraged to know their subject matter very well so that they could help their students/to learn better. This is through training and retraining programs.
4. The government through the ministry of education should encourage teachers to use different teaching methods during teaching. This can further be enhanced by attending seminars and workshops to keep abreast of new teaching approaches.

REFERENCE

- Abe, T. O. (2014). Effective of Teachers' Performance in Mathematics. *Sky Journal Education*, Volume 1, 2 Academic Achievement among EFL Students in Nigeria. *European Journal of scientific research*. 37 490-495
- Adediwura, A. A., and Bada, T. (2007). Perception of Teachers' Knowledge, Attitude, and Teaching Skills as Predictor of Academic Performance in Nigerian Secondary Schools. *ile-ife, Nigeria. Academic Journals*, 165-171
- Adeyemi, T.O. (2010). *Research Methods and Theses Writing in Educational Studies* Lagos New Heaven Pub., 3-4.
- Aguoru, D. (2008). Evolving a New Taxonomy for English Language Teaching in Nigeria: *Lagos Papers in English Studies* 3. 1-13
- Akinsolu, A.O. (2010). Teacher and Students' Academic Performance in Nigerian Secondary Schools: Implications for Planning. *Florida Journal of Educational Administration and Policy*, 86-103.
- Akinwunmi, F.S. & Odunsi, A.O. (2008). Impact of Environmental Management on Students' Quality Output in Nigerian Secondary School. *Journal of International Social Research*, 752-762.
- Akiri, A. A (2013). Effect of Teachers' Effectiveness on Students' Academic Performance in Public Secondary Schools, Delta State. Nigeria. *Journal of Educational and Social research*. 105- 112.
- Akpan, O. E., Essien, E. E. (2011). Teachers' Level of Mastery of Subject Matter and Students' Academic Achievement in Social Studies in Cross Rivers State. *West African Journal of Educational Research*. 11-17.
- Asikhia O. A. (2010). Students' and Teachers' Perception of the Causes of Poor Academic Performance in Ogun State secondary schools [Nigeria]: Implications for counseling for national development. *European Journal of Social Sciences*, 22-29.
- Behrman J.R. (2010). Investment in Education: Inputs and Incentives. In Dani Rodrick, Mark Rosenzweig (eds) *Handbook of Development Economics*, 5. 4883-4975. *Amsterdam: North-Holland*.
- Bressoux, P. Kramarz, F. & Prost, C. (2008). Teachers Training, Class size, and Students' outcomes: Learning from administrative



- forecasting mistakes. *Institute for the study of Labour, Discussion paper No. 3871.*
- Carnoy, M., and Arends, F. (2012). Explaining Mathematics Achievement gains in Botswana and South Africa, Prospects (18 October 2012).1-16, available
- Cohen, M. & Saria, N. (2010). South Africa struggles to fix dysfunctional schools. Market Snapshot. Europe Asia. Available at:
- Daso, P.O. (2013). Teacher Variables and Senior Secondary Students Achievement in Mathematics in Rivers State, Nigeria. *European Scientific Journal*, 9(10), 271-289.
- Ewetan, O. O. (2010). Influence of Teachers Teaching Experience and School Facilities
- Fakeye, D, O. & Ogunsiji, Y. (2009). English Language Proficiency as a Predictor of
- Harris, M O. & Sass, T.R. (2011). Teacher Training, Teacher Quality and Student Achievement." *Journal of Public Economics*. 95.
- Kimani, G. (2009). The Self Concept and Academic Performance of Institutionalized and Non-institutionalized HIV/AIDS orphaned children in Kisumu municipality. *Educational Research and Reviews*. 4, 3, .106-110.
- Mezieobi, K. Fubara, V. & Mezieobi, S. (2008). Social studies in Nigeria: Teaching Methods *Instructional Materials and Resources*. Owerri: Acadapeak Publishers.
- Musau, L. M. and Abere, M. J. (2015). Teacher Qualification and Students' Academic Performance in Science Mathematics and Technology Subject in Kenya. *International Journal of Educational Administration and Policy Studies*, 83-89
- Odiri, O. E. (2011). The Influence of Teachers Attitude on Students' learning of Mathematics in Nigerian Secondary Schools. *Journal of Research in Education*, 2(1), 15-21 on the Academic Performance of Senior Secondary School Students in Ado-Odo/Ota and Ifo Local Government Areas of Ogun State. *International Journal of Humanities Social Sciences and Education (IJHSSE)* 134.
- Onyekuru, B. U. and Ibegbunam, J. O. (2013). Teaching Effectiveness of Secondary School Teachers in Emohua Local Government Area of Rivers State, Nigeria. *European Scientific Journal*, 9(28), 212-226.
- Otu, Essien, Obot & Akpan (2009). Influence of parental Socio-Economic Status and Examination Malpractices Among Undergraduate in tertiary institutions in Cross River State, Nigeria. The international Researcher, *A Multi-Disciplinary Journal of the Graduate School, University of Calabar*. 11 No. 3. 134 – 137.
- Robinson, G. E (2009). Synthesis of Research on Effects of Class Size. *Educational Leadership Journal* .47(7) .80-90.
- Rothstein, J (2010). Teacher Quality in Educational Production: Tracking, decay, and students' achievement. *Quarterly Journal of Economics* 175-214.
- Taylor, S. (2011). Uncovering indicators of effective school management in South Africa Using the National School Effectiveness Study. Stellenbosch University, *Department of Economics Working Paper 10/11*
- Tebabal, A., and Kahssay, G. (2011). The Effects of Student-Centered Approach in Improving Students' Graphical Interpretation Skills



- and Conceptual Understanding of Kinematical Motion," *Lat. Am. J. Phy. Edu*, 5(2).374-381
- Tella, A. (2007).The Impact of Motivation on Student's Academic Achievement and Learning Outcomes in Mathematics Among Secondary School Students in Nigeria. *Eurasia Journal of Mathematics, Science & Technology Education*. 3(2).149-156.
- Yara, P. O. (2009). Relationship between Teachers Attitude and Students Academic Achievement in Mathematics. in some selected senior secondary schools in Southwestern Nigeria. *European Journal of Social Sciences*, 11(3): 364-369.
- Yenilmez, K, & Çemrek, F. (2008). Teaching Motivation of the Students in Secondary Teacher Training Schools in Turkey. *International Journal of Environmental & Science Education*, 3(2).82 – 88.