

**Relationship Among Educational Services, Teacher Quality and Student Academic Performance in Public Senior Secondary Schools in Dutsinma Metropolis of Katsina State, Nigeria**

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**Abstract**

*The aim of this study was to investigate the relationship among Educational services, Teacher quality and Student Academic performance in Dutsinma metropolis of Katsina state. Two research hypotheses were formulated and tested in order to guide the study and the design used was correlational in nature. Three research instruments used for the data collection were an adapted version of the Availability of Educational Services Questionnaire (for the teachers), Teachers Quality Assessment Questionnaire (for the principals) and Students Academic Performance Proforma, developed by Arinde, (2010.) Five Public Senior Secondary Schools in Dutsinma metropolis were used as the population of the study and the whole five senior secondary schools were selected as the sample of this study. The data collected were analyzed using Pearson Product Moment Correlation Coefficient. The results showed that there was a significant relationship between Educational Services, Teacher Quality and Student Academic Performance in Public Senior Secondary Schools in Dutsinma Metropolis of Katsina State. Some recommendations were proffered according to the results, especially Old students' associations, philanthropists, and communities should assist schools, Periodic review of remuneration of teachers should be given top priority but it must be based on teachers' and students' Performance, Secondary school teachers should enroll for computer training so as to meet with modern trends in teacher education and Only graduates with teaching qualification should be employed to teach in the senior secondary schools.*

**Keywords:** Educational Services, Teacher Quality and Student Academic Performances

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**Introduction**

Education and its benefits cannot be over emphasized as the root of economic, industrial, political, scientific and technological, and even religious development. All aspects of development are centered on education. Education is one of the vital instruments for development in any nation. Every educational system at every level depends heavily on teachers for the execution of its programmes. Teachers are highly essential for successful operation of the educational system

and important tools for the educational development. Teachers at all levels of education play the decisive role in pivoting the growth and the direction of education. It is an acceptable fact that teacher is the most important cog in the educational machine and that teachers are highly instrumental to the success of any educational programme embarked upon by any government. This is because apart from being at the implementation level of any educational policy, the realization of these programmes also depends greatly on teacher's dedication and commitment to their work (Adeniji, 1999).

Moreover, Education all over the world is accepted as the most viable tool for sustainable human development. It is equally an indispensable tool for enhancing economic growth and national development. Education is seen as the cornerstone of every development, forming the basis for literacy, skill acquisition, technological advancement as well as the ability to harness the natural resources of the state (Arinde, 2010). It helps to ensure a safer, healthier, more prosperous and environmentally-sound world. It is an indispensable key for personal and social improvement. UNESCO, (1990) has however pointed out that the current provision of education is seriously deficient and that it must be made more relevant, qualitatively improved and universally available. In recognition of the inestimable value of education, the Nigerian Government has adopted education as an instrument par excellence for effecting national development. Thus, education is viewed as an instrument for building a free and democratic society, a just and egalitarian society, a united strong and self-reliant nation and a great and dynamic economy (Federal Republic of Nigeria, 2013)

In order to attain these national aspirations, secondary schools are expected to provide quality instructions that will be oriented towards inculcating values of respect for the worth and dignity of individuals; ability to make rational decisions; moral and spiritual values in interpersonal relationship and shared responsibility for the common good of society, among others (FRN, 2013). The quality of education of any nation, to a very large extent, determines the development status of that particular nation. Education can be regarded as the heartbeat of any nation. As a man nourishes his heart to be alive, a nation must also cater for her educational system to keep it alive, technologically, economically, politically, socially and to ensure quality products (Arinde, 2010).

### **Review of Current literature**

The teacher is the crucial driving force for the efficiency and effectiveness of the school system. According to Coombs (1998), aside from students, teachers are the largest most crucial input of an education system. The quality of teachers thus exerts great influence on the quality of educational output. The quality of the

teachers is an essential indicator in the measurement of the efficiency of the school system. Olutola (1989) found out that there is a positive relationship between teachers' qualifications and students' academic achievement. In a related development, the effect of qualifications on group performance was found to be significant at 0.001 levels (Thomas, 1990). Same (2000) observed that the utilization of unqualified and under-qualified educators in South Africa impacts negatively on the quality of teaching with its implications on performance. Perhaps it is in recognition of the positive relationship between teacher quality and academic performance that Obemeata (1995) suggested an improvement in the staffing situation in terms of quality and quantity with a view to improving learning and raising the level of achievement in Nigerian schools.

The importance of teacher quality is also noted by the National Academics (2007) in Web information on its study of Teacher Preparation Programme: Teacher quality is widely recognized by policy-makers, practitioners and researchers alike to be the most powerful school-related influence on a child's academic performance. In the United States, many empirical studies have been conducted to identify the characteristics of teacher quality that are associated with higher student achievement. Several syntheses of these studies have identified teacher certification, subject matter, knowledge, pedagogical knowledge and teaching experience as significantly associated with higher student achievement or greater achievement gains (Darling-Hammond and Young's, 2002).

Studies found that students taught by teachers holding subject specific certification achieve better. Based on a paired-comparison design of 36 secondary teachers and 826 students, Hawks, Ceble & Swanson (1985) found that students taught by teachers certified in Mathematics scored higher in both general Mathematics and Algebra than did students taught by teachers certified in other subjects. Goldhaber & Brewer (1997) analyzed nationally-representative group of secondary school Mathematics teachers in the National Education longitudinal study data set and found that students had higher achievements gains when their teachers were certified in Mathematics as compared with students whose teachers had no certification or certification in other subjects (NEC, 1988). Darling-Hammond (2000) conducted a state-level analysis using the National Assessment of teachers with full certification and the percentage of teachers with a subject major predicted higher state-level achievement in both Mathematics and reading.

Contrary to these studies, Rowan, Correnti & Miller (2002) found that subject-specific certification had no significant impact on elementary school students' achievement growth in Mathematics or reading based on an analysis of survey from prospects. These empirical studies seem to suggest that teacher certification matters in secondary schools but not in elementary schools. Subject-matter

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knowledge and pedagogical knowledge have been measured by various indicators: subject major, number of courses taken and National Teachers Examination (NTE) scores. Goldhaber & Brewer (1997, 2000), using NEL: 88 data, examined the impact of subject major or degree on student achievement gains among 10th and 12th graders and found that those students who were taught Mathematics by teachers with an undergraduate or graduate Mathematics major made greater achievement gains than those who were taught Mathematics by teachers with a non-Math major or degree.

### **Statement of the Problem**

Research studies have shown that many secondary school products in Nigeria are poor in reading, writing, computational and vocational skills. Many of them also perform woefully in various examinations (Foster, 1999; Uzoka, 2000). Two parameters that are commonly used to determine school effectiveness are students' results, especially in standardized tests, and their behavior or performance after school (Ijaiya, 2008). In the 2015 WAEC's Senior Secondary School Examination results, only 38.68%, that is, 616,370 out of 1,605,248 had five credits including Mathematics and English Language (Fapohunda, 2015). For the National Examinations Council which was released in 2015, only 68.56% or 664,683 of the 969,491 candidates had five credits that could qualify them for admission into higher institutions (Odunsi, 2015). If only 50% of the total candidates are qualified to proceed to higher institution, then the remaining 50% or 304,808 WAEC and 31.44% for NECO, candidates would drop out and majority of them would become political thugs, hooligans and fraudsters who terrorise the population.

### **Methodology**

The design of the research is correlational in nature. This is due to the fact that it is a study for investigation of whether relationship exists between or among variables.

### **Population, Sampling and Sampling Procedure**

The study specifically chooses its samples from the public senior secondary schools in Dutsinma metropolitan, taking all the five (5) public senior secondary schools, 91 teachers and 5 principals. However, following the postulation of Krejcie and Morgan (1970) sampling procedure the research subject comprised of 73 teachers drawn from a total population of 90 teachers from public senior secondary schools in Dutsinma metropolitan of Katsina state.

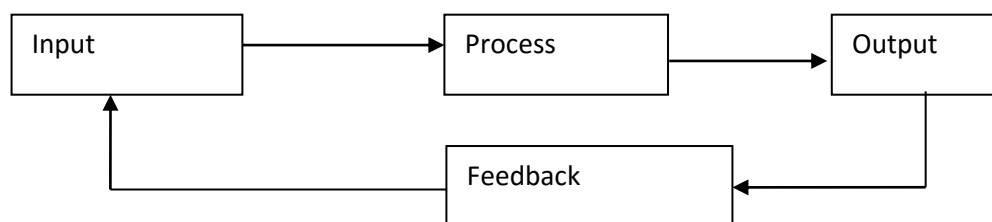
The respondents were drawn from the following public senior secondary schools:  
Government science senior secondary school, Dutsinma  
Government pilot senior secondary school, Dutsinma  
Government senior secondary school Darawa, Dutsinma  
Government Girls Arabic senior secondary school, Dutsinma  
Government Girls Day senior secondary school, Dutsinma

The instruments used in this study were three set of questionnaires namely: Adopted Availability of Educational Service questionnaire (AESQ), Teachers Assessments Questionnaire (TAQ) and Students Academic Performance Proforma by Arinde (2010)

### **Theoretical Framework**

Social system theory: The system theory was propounded by parsons in 1960. He defined the system as the sum total of parts working independently and working together to achieve required results. In that case, a social system is viewed as a collection of people, resources, ideas and procedures intended to perform some identifiable functions or to serve a goal. School can be recognized as a system made up of input, processes and output which are surrounded by an environment. The survival of a school as a social system depends on the schools ability to maintain the relationship within and outside the system in a harmonious balance. This said system is represented below:

### **Input- process-Output Cycle**



**Source:** Parsons, in Manga, 2015: 6

Systems may be categorized as open or closed. An open system is a system which related to and exchanges matters with its environment, while a closed system neither relates to nor exchange of matters with its environment. Schools as open systems have the following characteristics which can serve as a guide on the application of systems theory:

Schools import energy or resources from their environment. They recruit teachers, admit students and secure other resources such as finances and other materials from the environment. The school administrator is to ensure that quality inputs are secured for the school from the Ministry of Education or other sources.

Schools process and transform available inputs to create new products by way of teaching and training students in various professions and occupations for societal service. The school administrator should ensure that the processes of teaching are done thoroughly to ensure quality control and effectiveness by regular supervision.

Schools export outputs or their product in form of trained manpower such as teachers, lawyers, engineers, medical doctors. etc to the environment, or society. The school administrator should ensure that the products of the school system meet up with the challenges of developing the environment in various spheres of life.

Schools as open systems have a cycle of events. Schools have specific periods for their programmes. School administrators should ensure that the school cycle runs smoothly by ensuring that the time for admissions, lectures, examinations, holydays and resumptions are done at the right time and right way. This cycle of events keeps the school in perpetual existence.

Open system have equifinality. This means that schools can reach their destination through various ways. The school administrator should be creative and innovative enough to try various strategies of attaining school objectives.

### **Hypotheses Testing and Result**

H0<sub>1</sub>: There is no significant relationship between provision and utilization of functional libraries for teachers and students academic performance in Dutsinma metropolis of public senior secondary schools of Katsina state.

Variables	No. of cases	SD	df	r	p-value	Decision
Library Services	72	1.78	.616			
Students.	72	3.10	.863	.695	.000	H0 <sub>2</sub> Rejected
Academic Performance						

As indicated in Table 1, the calculated r-value using Pearson Product Moment Correlation at .05 level of significance and for 70 degree of freedom was .695 which is greater than the critical value of .000. Therefore, the null hypothesis, which stated that there is no significant relationship between the provision of

functional library services for teachers and students' academic performance in public senior secondary schools, Dutsinma metropolis Katsina State was rejected.

**H0<sub>2</sub>:** There is no significant relationship between the teachers qualification and students academic performance in Dutsinma metropolis of public senior secondary schools of Katsina state.

Variables	No. of cases	X	SD	df	r	p-value	Decision
Teachers Qualification	72	1.78	.616	70	.748	.000	<b>H0<sub>2</sub></b> Rejected
Students Academic Perform.	72			2.62	.878		

Table 2, gives the result of the test between teachers' academic qualification and students' academic performance. It shows that the calculated r-value of .748 is greater than the critical value of .000 at 0.05 level of significance, for 70 degrees of freedom. The null hypothesis which states that there is no significant relationship between teachers' academic qualifications and students' academic performance is rejected. This means there is a statistically significant relationship between teachers' academic qualification and students' academic performance in public senior secondary schools in Dutsinma metropolis Katsina state Nigeria.

## **Discussion**

This shows that a high positive relationship exists between provision of library services for teachers and students' academic performance. It implies that the availability of good and functioning libraries in schools can assist teachers to seek, discover and prepare adequately for their lessons. This will have a definite impact on students' academic performance. The result is in line with the study conducted by Rufus and Alisan (1993) that the school library is the heart of any institution, supplementing classroom teaching and learning as well as research purposes. In the same vein the Federal Government of Nigeria identified libraries as one of the most important educational services that the government has to provide for her citizens (FRN, 2013). Libraries stimulate research and independent study on the part of teachers by providing a wide variety of materials and supplying information in printed form, in pictures and on films and tapes. This study has established the fact that the provision of functional libraries are grossly inadequate in public senior secondary schools, Dutsinma metropolis Katsina state and hence both teachers and students were denied access to valuable materials that would have assisted in the teaching and learning process.

These findings are explained in the context of the fact that teachers' academic qualifications exert great influence on the quality of educational output (Olutola, 1999). The implication of this is that teachers' mastery of subject-matter, knowledge of teaching methodology and the certification status of teachers have a strong positive relationship with students' academic achievement (Darling-Hammond, 2006). In a study conducted in New York City to find out high school students performance in Mathematics and Science using data from the National Educational Longitudinal Studies of 1998 (NELS), it was discovered that fully certified teachers have a statistically significant positive impact on student test scores relative to teachers who are not certified in their subject area. This shows that schools can make a difference in students' learning and a substantial portion of that difference is attributable to teachers (Sanders & Rivers, 1996).

However, these findings run contrary to what is happening in public senior secondary schools in the Dutsinma Metropolis where students are consistently failing in spite of the standard of their teachers' certification. The problem may be due to lack of appropriate tools for the teachers to work with, inadequate provision of educational services that will improve instructional skills, changes in course taken, curriculum content and textbooks, and above all, the inability of the teachers to know how to use the teaching tools at their Disposal to diagnose their students' learning needs.

Notwithstanding, the findings of this study, in conjunction with a number of other studies in recent years, suggest that states interested in improving students' achievement may be well-advised to attend to, at least in part, the preparation and qualifications of the teachers they hire and retain in the profession. It stands to reason that student learning can be enhanced by the efforts of teachers who are more knowledgeable in their field and are skillful at teaching it to others. The current education reform in the country appears to have taken cognizance of this as curriculum reform targeted at reviewing the course content liable to improve teacher quality.



**Students Academic Performance for the Sampled schools in Dutsinma Metropolis of Katsina state. The checklist from 2011 to 2015 sections**

<b>Years</b>	<b>A<sub>1</sub></b>	<b>B<sub>2</sub>-B<sub>3</sub></b>	<b>C<sub>4</sub>-C<sub>6</sub></b>	<b>D<sub>7</sub>-F<sub>9</sub></b>	<b>Total</b>
2011	24 (1.9)	67(5.3)	460(36.4)	714(56.4)	1265(100)
2012	14(0.83)	47(2.8)	550(32.5)	1079(63.8)	1690(100)
2013	40(2.6)	41(2.7)	541(35.8)	890(58.9)	1512(100)
2014	15(0.9)	50(8.2)	580(36.0)	965(59.9)	1610(100)
2015	22 (1.5)	58(3.9)	507(34.2)	894(60.4)	1481(100)
<b>Total</b>	<b>115 (1.5)</b>	<b>263(3.5)</b>	<b>2638(34.9)</b>	<b>4542(60.1)</b>	<b>7558(100)</b>

The WAEC results of five public senior secondary students in the Dutsinma metropolis of Katsina state Nigeria, from 2011 to 2015 Academic sessions recorded the highest success rate in 2014 when only 45.1% of them were able to pass with 5 credits and above, including Mathematics and English. The poorest level of student performances was recorded in the year 2012 when the average success rate dropped to 36.13%.

These findings establish the fact that the academic performance of senior secondary school students in Dutsinma metropolis within the last half decade has been very poor. These findings agree with the Sani (2006) who noted that it is very common to find students who have graduated in secondary schools exhibiting very poor mastery of reading, writing and computational skills apart from their terrible ignorance in the entire subjects that they have been taught for six years of secondary education. It is very rare to see secondary school students studying very hard to prepare for examination as the overwhelming majority of them are unable to copy their notes correctly from the chalkboard not to talk of reading and understanding them.

### **Conclusion**

The findings of this study and the conceptual framework in figure 1 have clearly shown that the success of an academic programme is largely determined by the relationship between the inputs and the corresponding outputs. Inputs into the education system include library services, in-service training and re-training programmes for teachers; all these will no doubt determine teachers' quality. These positive impacts on the teachers would definitely have a corresponding impact on the students' academic performance.

The ultimate conclusion is that the provision of educational services for teachers in public senior secondary schools, Dutsinma metropolis of Katsina state, Nigeria was grossly inadequate. It is very clear that the teacher quality would have

improved if the situation were different. Lack of these essential services had contributed immensely to teachers' poor performance and hence students' consistent failures in their examinations.

### **Recommendations**

On the basis of the findings of this study, the following recommendations were made:

Old students' associations, philanthropists, communities and well meaning individuals in the society should assist in the provision of essential educational services like libraries and computer laboratories for effective teaching and learning.

Periodic review of remuneration of teachers should be given top priority but it must be based on teachers' and students' performance.

The curriculum of teacher education programme should also be reviewed to include computer theory and practice.

Only graduates with teaching qualification should be employed to teach in the senior secondary schools.

### **References**

- Adeniji, I. A. (1999). A path-analytical study of some teacher characteristics and teachers job performance in secondary schools in Ogun State. Unpublished Ph.D. thesis, University of Ibadan.
- Arinde, M. R. (2010). Educational services, teacher quality and students' academic performance in public senior secondary schools, north central zone, Nigeria. unpublished PhD Thesis. University of Ilorin.
- Coombs, P. H. (1988). The world educational crisis: A systems analysis. New York Oxford University Press.
- Darling-Hammond, L. (2000). Teacher quality and students' achievement. *Education Policy, Analysis Archives*. **10** (36) 16-38.
- Darling-Hammond, L. (2006). Research and rhetoric on teacher certification: a response to teacher certification reconsidered. *Education Policy Analysis Achieves*, **10** (36): 15-3.
- Federal Republic of Nigeria (2013). National Policy in Education, Abuja NERDC

- Foster, B. (1999). Education in selected African countries. Smith, V. Education and survival. London and Gold. functional and qualitative studies and research. *Nigerian Journal of Educational Studies and Research (NJESR)*, **IV**: 71-78.
- Ijaiya, N. Y. S. (2008). Radicalizing educational supervision for sustainable social and political development through universal basic education. A paper presented at the 2008 international conference of Nigerian Association for Educational Administration and Planning (NAEPA) in Abuja.
- Krejcie, R. V. & Morgan, D. W. (1970), Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, **30**: 607 – 610.
- Manga, S. D. (2006). Influence of school plant construction, utilization and maintenance on school effectiveness in Kebbi state secondary schools. Unpublished PhD. thesis. University of Ilorin.
- Manga, S. D. (2015). Introduction to Educational Management. Sokoto: Usmanu Danfodiyo University Press.
- Obemeata, J. O. (1996). Education in the service of humanity. The Education study and Research Group Ibadan.
- Odunsi. W. On September 10, 2015 Daily posting
- Rowan, B.; Correnti, R. & Miller, R. J. (2002). What large-scale, survey research tells us about teacher effects on student achievement: Insights from the Prospects study of elementary schools. *Teachers College Record*, **104**: 1525-1567.
- Rufus, D. & Alisan, T. (1993). Developing the secondary school library resource centre. London: Kogan.
- Sanders, M. & Rivers, C. (1996). Statewide class-size Studies. Prime Time and Star, Tennessee Project Star: Dallas, Texas.
- Thomas, J. A. (1990). The productive school: A systems analysis approach to educational administration. New York: John Wiley & Sons Inc.