



## Relationship between Teachers Teaching Method and Students' Academic Performance in Senior Secondary Schools in Maiduguri Metropolis, Borno State

\*Mustapha Ali, Bashehu Saleh, Ikandirwa Paul  
Department of Business Education,  
School of Vocational and Technical Education,  
Ramat Polytechnic Maiduguri, Nigeria

### ABSTRACT

*This study was conducted with aim of examining the relationship between teacher teaching method and students' academic performance in senior secondary schools, Maiduguri. Correlational and Survey design were used. The total population of the study was 1,236 teachers and 10,349 students out of which 371 teachers and 3,105 students were sampled using simple random sampling. SSCE results for five consecutive years of the 2014-2018 academic sessions were obtained for the study. Observation and Pro-forma were used for data collection. Data collected were analyzed and presented using a pie chart, frequency count, percentage, and Pearson Product Moment Correlation coefficient at 0.05 level of significance. The study revealed a significant relationship between teachers teaching methods and students' academic performance in senior secondary schools in Maiduguri. Based on the findings, it was recommended that the Borno state government should provide a conducive working environment for teachers in the state to ease teaching and Teachers should endeavor to be learner-centered when teaching*

### ARTICLE INFO

#### Article History

Received: April, 2020

Received in revised form: May, 2020

Accepted: July, 2020

Published online: September, 2020

### KEYWORDS

Methodology, Academic Performance,  
Senior Secondary Schools.

### INTRODUCTION

Education in Nigeria is an instrument for effective national development. Teachers are generally discontented with their teaching jobs and this invariably affects the entire educational system especially secondary schools that provide inputs to higher institutions. The low standard of education in the country is, therefore, not unconnected with this problem especially in Maiduguri Metropolis that is already characterized by educational backwardness.

Borno State secondary schools from 2009 to 2015 have been confronted by insurgency, both teachers and students were discouraged from going to schools as a matter of necessity. It was

reported that over 360 teachers have been murdered in Borno (NUT, 2015). All efforts by the state government were geared towards improving the quality of education in the state, it was at this crucial time that teachers, were desperately needed, this simply means that teachers' education and teaching profession were under tremendous stress and strain. Borno State had registered a remarkable decrease in the number of teachers in schools due to the insurgency. Notwithstanding teaching is no longer regarded as a profession but as a parking lot for other professions an all-comer trade, with teachers of multifarious background training and qualifications. All the secondary schools within the metropolis from 2014-to date, are



overpopulated and congested classrooms, students are more than 90 in a class, broken homes that led to lack of parental care, lateness to schools, truancy, students roaming about the street during school hours, students skipping lessons and there were serious inadequate resources necessary for teaching and learning.

Because of this, the state government has been allocating a sizeable percent of its budget to the ministry of education. Maiduguri metropolis recorded above 1:66 teacher/student ratio, as against UNSECO (1998) recommendation of 1:40 as maximum and 1:25 as a minimum. the Maiduguri metropolis is above the state average of 1:35.

Teachers at all levels of education play decisive roles in pivoting the growth and the direction of education in the state. It is an accepted fact that the teacher is the most important person in the educational sector and that teachers are highly instrumental to the success of any educational program embarked upon by any government. This is because apart from being at the implementation level of any educational policy, the realization of these programs also depends greatly on the teacher's dedication and commitment to their work (Mustapha, 2020).

The primary purpose of the teaching and learning process is to bring about in the learner desirable change in behavior through critical thinking. This process, however, does not take place in a vacuum but in an environment structured to facilitate learning. The learning environment is a physical space that supports multiple and diverse teaching-learning programs including current technologies, one that demonstrates optimal, promotes effective performance and operation over time; one that respects and is in harmony with the environment; and one that encourages social participation, provides a healthy, comfortable, safe, secure and

stimulating setting for its occupants. An effective teacher is perhaps the most common and least precise of all terms (Mustapha, 2020).

In good teaching, students are responsible for their learning; they are accountable for their understanding. Good teaching is passionate, and it induces an emotional response in students, good teaching starts with inducing habits of mind, but doesn't stop there. Good teaching engages practical thinking and problem-solving skills that can be applied in a variety of settings. And good teaching affects students' values, commitments, and identities. Thus, the learning environment has also been emphasized as an essential requirement for the smooth teaching and learning process to take place (National Teachers' Institute, NTI 2008). This is because students' study habits are to a large extent tied to it. A good learning environment presents learning as a lifelong enterprise and enables students to discover an appropriate value system that can be their compass for self-awareness and national consciousness.

However, the societal expectation of quality outputs from the training institution makes students the primary focus of attention in any instructional program, and the better the learning environment (school), the better it can meet the goals of education and the society in general. Such goals include equipping students with desirable skills, knowledge, and attitudes that will enable them to work and live in the society of knowledge (National Policy on Education, 2014). Teachers are expected to make teaching the learners' centered and create an enabling environment for students to interact with learning materials to concretize their knowledge and skills so that they can become self-confident and self-reliant, and contribute meaningfully to the socio-economic development of the society.



Teaching methods in the classroom influence students' learning, the most important teaching method of qualitative teachers is the ability to individualize instruction effectively, which would be good knowledge of pedagogy. Some of the most important teaching methods or secondary schools include proper classroom management, motivation, and a welcoming classroom environment plus a curriculum and activities that address a multitude of learning styles. The effectiveness of teaching is lesson clarity, instructional variety, teachers' task orientation, and engagement in the learning process, and students' success rate (Borich, 2000). The effective teacher in inductive classroom processes such characteristics as efficient use of time; a good relationship with students; provides positive feedback has a high student success rate and in general provides support for the students with and without disabilities (Larrivee, 2005).

Mohammed (2013), stated that play is pleasurable activity embarked upon in the classroom by the teacher with his students to promote learning. The play-way method can be placed in a realm of games, dramatization, drawing, modeling, mimicking among others. Play is an organized activity that is performed for educative enlightenment, amusement, growth in mental and physical capacity, and preservation of our cultural heritage. Roleplay involves acting in a structured activity which provides an opportunity for students to be problem solvers. Role-playing helps students to develop their attitude, values, and interaction skills. In role-playing, the teacher selects one or more students as role players, while the rest of the class plays the part of the audience and observers (Mohammed, 2005).

James, (2008) states that Field trips may be planned to suitable places where fundamental concepts or events treated in the class would become clearer to the students with a greater appeal. In

the Cultural and Creative Arts program, a teacher can plan a field trip to craft centers like pottery center, traditional weaving center, cloth dying center, wood carving center among others. The theatre department can be visited to watch a performance which will give the students' knowledge in their drama/theatre lesson. Mbahi, (2008) opined that many activities can follow a story. Through storytelling, students can be lead to express themselves in words, on paper, through acting and mime, singing, and dancing. The teacher should choose a story that the children do not know too well, which will interest and excite them and will give ways to many activities during and after the storytelling. Mohammed (2013), states that the discovery method of teaching provides the learners with the necessary opportunities to discover new facts, new methods, new rules, or techniques of getting solutions to problems. The Discovery method is a problem-solving activity that requires the ability to engage in creative thinking. It involves active observation, measurement, manipulation of things (tools, materials, equipment among others). The Discovery method develops reflective thinking, creative expression, or thoughts. This method is employed by a qualified art teacher will develop children mentally and physically.

The project method is an organized activity that an individual or group of students carry out under the guidance of a teacher within a specific period. It requires good planning, adequate research, competence, and materials to execute the chosen project. For instance, the teacher and the student should cooperatively choose the theme or problem for investigation, plan the procedures for data collection and analysis, and evaluate the quality of the project work. Project work demands student's intellectual capacity, organizational ability, perseverance, and ability to analyse. This method is derived



from the educational work of John Dewey (1963). Dewey in Hurwitz and Day (2007) argued that education should not prepare a child for the future that is not known, but rather it should prepare him to fit into his society (Mohammed, 2013).

Students' academic performance can be determined in any of the subjects offered in senior secondary schools, by conducting a performance test. Singer (2001) describes the performance test as the type of mental test in which the subject is asked to do something rather than to say something. Similarly, Drever, (2002) states that performance test is the type of test which throws light on the ability to deal with things rather than symbols. Then, for the academic performance of students, it can be regarded as the observable and measurable behavior of a student in a particular situation. For example, the academic performance of a student in civic education includes observable and measurable behavior of students at any point in time during a course. In social studies, the academic performance consists of individual scores at any particular time obtained from either a teacher-made test or a standardized test. Academic performance measures the aspect of behavior that can be observed at a specific period, this can be obtained with the use of either teacher-made tests or standardized achievement tests developed for school subjects.

Teaching secondary school requires a variety of teaching methods to address different learning levels, styles, and intelligence of students. It was against this background that this study sought to determine the relationship between teachers' teaching method and students' academic performance in senior secondary schools Maiduguri Metropolis, Borno State.

#### **Purpose of the Study**

The purpose of this study is to determine the relationship between

teacher's teaching method and students' academic performance in senior secondary schools in Maiduguri Metropolis, Borno state. It was hypothesized that there is no significant relationship between teacher's teaching method and students' academic performance in senior secondary schools in Maiduguri Metropolis, Borno state.

#### **RESEARCH METHODOLOGY**

Correlational and Survey design were used for this study. Correlational design determined the relationship between teachers' teaching methods and students' academic performance. Kerlinger and Lee (2000) maintained that the correlational design is interested in the relationship between two variables or among variables.

Survey design describes the attitudes, opinions, behavior, or characteristics of a population by finding out the teaching methods used by teachers. Owens, (2002) survey research design has the advantage of uniqueness since information gathered is not available from other sources, having unbiased representation of the population of interest and standardization of measurement as the same information is collected from every respondent. The population for this study comprised all the 1,236 teachers, and all WAEC results of SS3 students who graduated from 2014-2018 which comprises 10,349 students, in the 16 public senior secondary schools, Maiduguri Metropolis, Borno State. Simple random sampling was used in the drawing sample for the study. 371 teachers and 3105 SS3 students representing 30% of the population were systematically selected for the study. This is in line with the principles of simple random selection. Johnson and Christensen, (2008) thought that a sample is drawn by a procedure in which every member of the population has an equal chance to be selected in the study.

Observation and Pro-forma were used in this study. Observation was used to observe the activities of teachers on teaching methods. Pro forma was used to collect information from academic records; about students' academic performance in the senior secondary schools of the sixteen (16) selected senior secondary schools for five years (2014-2018). The subjects to be measured were Mathematics, English, (Biology, Chemistry, and Physics). These subjects were chosen for the study on the ground of being core subjects which all offer in senior secondary schools.

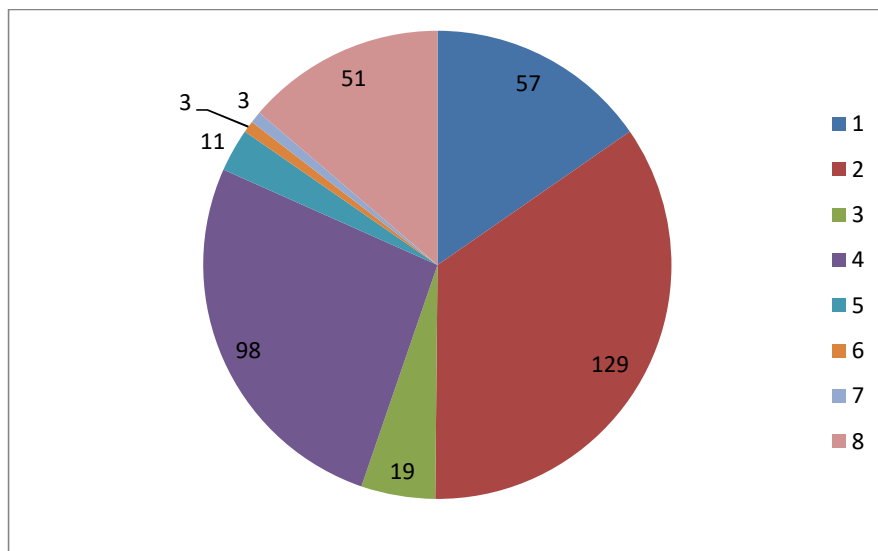
The researcher obtains an introductory letter from the Borno state Ministry of Education to the Director Education Resource Centre (ERC) and principals of the selected schools for formal introduction and permission to conduct the study. The researcher observes the teacher of the selected subject while teaching in various classrooms. Pro forma was used to collect information from academic records at the ERC. The exercise was done in six weeks. Pearson Product Moment Correlation coefficient (PPMC) was used to test the hypotheses at the  $P < 0.05$  level of significance.

## RESULTS

**Table 1:** Frequency and Percentage of Teaching Methods

S/N	Methods	Frequency	Percentage %
1	Assignment method	57	15.4
2	Demonstration method	129	34.8
3	Discussion method	19	5.1
4	Experimental method	98	26.4
5	Inquiry method	11	3.0
6	Lecture method	3	0.8
7	Play/simulation method	3	0.8
8	Storytelling method	51	13.7
<b>TOTAL</b>		<b>371</b>	<b>100</b>

Source: Field survey, 2020



**Figure 1:** Frequency distribution of the teaching method used by the teachers

Corresponding author: Ali, M. ✉ [mustaphaqoni1057@gmail.com](mailto:mustaphaqoni1057@gmail.com) ✉ Department of Business Education, Sch. of Voc. and Tech. Educ., Ramat Polytechnic, Maiduguri. © 2020. Faculty of Tech. Education, ATBU Bauchi. All rights reserved



**Hypothesis 1 (H<sub>01</sub>):** There is no significant relationship between teachers teaching methods and students' academic performance in senior secondary schools in Maiduguri metropolis.

**Table 2:** Pearson Product Moment Correlation Coefficient on the Relationship between Teachers Teaching Methods and Students' Academic Performance in Senior Secondary Schools in Maiduguri metropolis

Variable	N	$\bar{x}$	SD	DF	r	P-value
Teaching methods	371	55.9	1.18	740	0.742	0.000
Performance	371	62.4	2.83			

**Source:** Field survey, 2020

Table 1 and Figure 1 show that 15% of the teachers used assignment method, 34.8% demonstration method, 5.1% discussion method, 26.4% experimental method, 3.0% inquiry method, lecture method, and play/simulation methods 0.8% each and 13.7% storytelling method respectively.

Analysis in table 2 shows a significant relationship between teachers teaching methods and students' academic performance in senior secondary schools in Maiduguri metropolis. This is because the probability value ( $P = 0.000$ ) is less than alpha ( $\alpha = 0.05$ ) level of significance at correlation index (0.742), degree of freedom (740) and mean (55.9, 62.4) and standard deviation (1.18, 2.83) respectively. Hence, the null hypothesis which stated that there is no significant relationship between teachers teaching methods and students' academic performance in senior secondary schools in Maiduguri metropolis is hereby rejected at 0.05 level of significance. It can be deduced that teachers' teaching methods also determine students' academic performance in senior secondary schools in Maiduguri metropolis.

## DISCUSSION

It was found that there is significant relationship between teachers teaching methods and students' academic performance in senior secondary schools in Maiduguri metropolis. This finding is in

line with a study conducted by Omotere, (2011). The study categorically investigated two teaching methods (story-telling and play-way method). The study revealed that telling stories from culturally diverse sources supports the creation of multicultural awareness in the classroom and encourages the development of healthy self-concepts. The play-way method contributes effectively to the productivity of the teacher and makes learning more permanent in the learner. The study recommended that primary school teachers should endeavor to put into consideration factors that needed to be considered before selecting any teaching method. This finding also agrees with a study conducted by Mathew, (2002) on the influence of teaching methods on students' achievements on Virginia's end of course students learning test for Algebra 1. The study found out that teachers used a different method, more than half with the mean usage frequency ranging from 2.56 to 3.75; it was recommended that teachers should emphasize direct instruction, technology-aided instruction, and problem-based learning. Similarly, Ganyaupfu, (2013) conducted a study on teaching methods and students' academic performance. The study revealed that the teacher-student interactive method, followed by the student-centered method while the teacher-centered approach was the least effective teaching method.

Corresponding author: Ali, M. ✉ [mustaphaoni1057@gmail.com](mailto:mustaphaoni1057@gmail.com) ✉ Department of Business Education, Sch. of Voc. and Tech. Educ., Ramat Polytechnic, Maiduguri. © 2020. Faculty of Tech. Education, ATBU Bauchi. All rights reserved





## CONCLUSION

Based on the result of the study it is concluded that Teachers' teaching method is a predictor of students' academic performance; this implied that a good teaching method adapted to students' needs results in better academic performance in senior secondary schools in Maiduguri Metropolis, Borno State.

## RECOMMENDATIONS

Based on the finding, I was recommended that;

1. Teachers should endeavor to be learner-centered when teaching and use learner-centered methods in teaching.
2. Borno state government should provide a conducive working environment for teachers in the state to ease teaching.

## REFERENCES

- Borich, P. (2000). Educational policy and practice from the perspective of institutional theory: Crafting a wider lens. *Educational Researcher*. 36(2), 84-95.  
Retrieved from <http://www.jstor.org.proxy.bsu.edu/stable/4621078>.
- Drever, A.T. (2002). Influence of trained English teachers, on students' academic performance in mathematics: *Washington DC. Journal*. 112(3), 12-11.
- Federal Government of Nigeria (2014). *National Policy on Education*: NERDC Press 3, jibowu Street, Yaba, Lagos
- Ganyaufu, E. M. (2013). Teaching method and students' academic performance, *International Journal of Humanities and Social Science Invention*. 1(9), 29-35.
- Hurwitz, D. & Day, M. (2007). *Children and their art: Methods for the elementary school*. California: Thomson Wadsworth.
- James, G. (2008). Influence of teaching method on the academic achievement of senior secondary school students in Adamawa state. M.Ed. dissertation. Federal University of Technology, Yola.
- Johnson, M. & Christensen, A. (2008). *Educational Research: Quantitative, Qualitative and Mixed Approaches, 3<sup>rd</sup> edition*, Sage Publisher Inc.
- Kerlinger, F. N. & Lee, H. B. (2000). *Foundation of Behaviour Research*: New York: Harcourt College Publishers.
- Larrivee, H. A. (2005). Vaughn elementary's innovative teacher evaluation system: Are teacher evaluation scores related to growth in student achievement? *Peabody Journal of Education*, 79 (4), 79-107.
- Mathew, S. H. (2002). The influence of teaching method on students' achievement on the Virginian end of course standard learning test for Algebra 1; Ph.D. thesis, Virginia polytechnic institute, and state university.
- Mbahi, A.A (2008) *Principles of art education*; LENAIIJ Publishers Ltd. Maiduguri.
- Mitchell, S. (2008). "Study Habits & Test Anxiety". Mental Health, Wellness, and Safety Promotion. Resources. Retrieved on 3/11/2018, from <http://urb-counseling.buffal/edu.sh/tml>.
- Mohammed, A. (2013). The role of core subject teachers in the academic performance of visual art students in Ghanaian senior secondary schools. Masters dissertation. Department of general art studies, Kwame Nkrumah University of science and technology, Kumasi Ghana.
- National Teachers Institute (2008). *The Learning Environment in Psychology of Education*.



- Omotere, A. (2011). *The impact of teaching methods on the academic performance of primary school pupils in Ijebu-Ode local government area of Ogun state*. Published by Egobooster books, Ogun state, Nigeria.
- Singer, J. (2001). Opinion Gap: Measuring Public School Academic Performance. Retrieved from <http://www.meuro/edu.org.ng/poblicaion/interaction.htm>.
- The Nation. (2015). National Union of Teachers. Retrieved on 15/11/2018 website: <http://www.eric.ed.gov.proxy.bs.u.edu/contentdelivery/servlet/ERICServlet?accno=ED513819>.
- World Education Report (1998). Paris, UNESCO.