

CLASSROOM MANAGEMENT AS PREDICTOR ON STUDENTS' LEARNING ACHIEVEMENT IN SECONDARY SCHOOL MATHEMATICS

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Abstract

This study examines classroom management as predictor to senior secondary school students' academic achievement in mathematics, with reference to some selected secondary schools in Ijebu-Ode and Odogbolu Local Government of Ogun-State, Nigeria. Survey research was adopted for the study. Six secondary schools were randomly selected from the eighteen secondary schools in Ijebu Ode and Odogbolu Local Government Area of Ogun state. Also, from the pull of 2034 senior secondary II students and mathematics' teachers in the sampled schools, a sample 420 respondents comprises of 390 students and 30 mathematics' teachers were randomly selected. Four variables (Teaching strategies, learning facilities, classroom discipline and classroom motivation) were considered. The instrument for data collection were Mathematics achievement Test and Questionnaire on Classroom Management (QCM). The reliability of the instrument (Questionnaire on Classroom Management) using Cronbach alpha coefficient was 0.764. The face and content validity of QCM and MAT was determined by the perusal of experts in test and measurement/curriculum studies. It was confirmed that the items were relevant, unambiguous, detailed and capable of eliciting the needed responses from the target population. One research question and five hypotheses were tested. Findings show that teaching strategies, learning facilities, classroom discipline and classroom motivation when taken together will not significantly predict students achievement in mathematics. The study also revealed teaching strategy alone predicts students' achievement in Mathematics. Furthermore, classroom discipline alone will not significantly predict students' performance in Mathematics. Based on the findings, it was recommended among others that teachers should strive to create love and trust for their students and also listen attentively to their complaints, ideas and suggestions.

Keywords: *Teaching strategies, learning facilities, classroom discipline, classroom motivation, achievement, Mathematics.*

Introduction

Qualitative education remains the fulcrum for global development and freedom. Therefore all hands must be on deck worldwide to formulate policies that will enhance qualitative education right from elementary school to tertiary institution, and continuous, effective monitoring must be well established to check all factors that may frustrate this global pursuit (Schneider, 2002). Education is the second item on the Millennium Challenge Goals and a key priority of every

government. It is the most important investment a country can make in its people for socio-economic development. It is seen as one of the greatest tools of social mobility in every society (Paul, Adisah, 1Asamoah & Nasmah, 2016). The importance of mathematics has been hailed by many studies in literature. Woolfolk (2000) also stated that mathematics is not just useful in the day to day skills such as managing money but also in the most popular occupations and countless of jobs that call for some mathematical skill or another. Mathematics is reorganized all over as indispensable tools for national development. The vision of every modern society for social change looks up to science and mathematics, in other words any country that desire to bring about a new social order sees science and mathematics as instruments for such a change. To effect a desired change such a country must undertake modification of its curriculum as a first step followed by classroom instructions which is derived from the affected curriculum and implemented by the teacher in the classroom (Omenka & Otor, 2015).

The decline in performance of senior secondary school students in public examinations in Mathematics in recent years has become quite worrisome. For instance, the examiner’s reports of West African Examination Council (WAEC), 2015 shows that dismal performance is noticed in Mathematics in the senior secondary school examinations. The statistics of entries and results in Mathematics at the Senior Secondary School Certificate Examination (SSCE) level over a period of ten years (from year 2006 to 2015) presented below is a good illustration of students’ poor academic performance in this subject.

Table 1: Students’ performance in senior secondary school certificate examination in Mathematics for a period of ten years

Year	Total Sat	No. of Passes (A ₁ -C ₆)	% of Passes	No. of Failure	% of Failure
2006	1,149,277	472,674	41.13	676,603	58.87
2007	1,275,330	325,754	25.54	949,576	74.46
2008	1,369,142	366,382	26.76	1,002,760	73.24
2009	1,373,009	356,981	26.00	1,016,028	74.00
2010	1,351,557	337,071	24.94	1,014,486	75.06
2011	1,540,250	587,630	38.15	952,620	61.85
2012	1,672,224	649,156	38.81	1,023,068	61.19
2013	1,543,683	564,524	36.57	979,159	63.43
2014	1,692,435	529,425	31.28	1,163,010	68.72
2015	1,605,248	620,910	38.68	984,338	61.32
2016	1,552,758	822,496	52.97	730,262	47.03
2017	1,567,016	927,987	59.22	639,029	40.78
2018	1,578,846	789,107	49.80	789,739	50.20

Source: Public Affairs Section, West African Examination Council Yaba, Lagos.

This observed performance in the external Mathematics examination is presumed to be an offshoot of internal examinations on the subject and call for scrutiny and a proposal for better method of teaching which may yield better performance.

In the contemporary Nigeria, greater emphasis is being placed on Industrial and Technological development. As a result, students are being encouraged to take up science related

subjects. One subject that cut across all the sciences is mathematics. Today, mathematical methods pervade literally every field of human endeavour and play a fundamental role in economic development of a country. As evidenced by the discoveries of the last half of the 20th century, mathematics can enrich not only physics and the other physical sciences, but also medicine and the biomedical sciences and engineering (Hoyningen-Huene, 1999). In our march towards scientific and technological advancement, we need nothing short of good performance in mathematics at all levels of schooling. Unfortunately performance of students in mathematics at the end of secondary education has not improved in the past decade (Baer, Wolf & Risley, T. (2008)). Various factors have been identified for poor performance of students in mathematics. These factors are not limited to the following; interest of students in mathematics, students task orientation and skill acquisition, students personality and self-concept (Lewis, 2008).

The classroom is a shelter for both the learners and teachers to engage in educative activities, thus it can be said to be the immediate management environment for formal knowledge acquisition. It is made up of the teacher, the learners, the learning equipment and the learning environment. Management is a method where a group of people at the highest level of organization plan, organize, communicate, coordinate, control and direct the actions and activities of the people who work for the organization towards the achievement of organizational objectives. It can also be seen as the process of designing and maintaining any setting in which people work in groups for the purpose of accomplishing predetermined goals (Rogers and Freiberg, 2004). The idea of “any setting” equally indicates that management is applicable to all establishments which do not exonerate educational setting. Effective management of the classroom is the most significant strategies to a successful teachers’ delivery of instruction (Ben, 2006).

Classroom management according to Dooloard (2004) is the action a teacher takes to create an environment that supports and facilitates instructions, academic, social and emotional learning. It is the process of creating favourable conditions to facilitate instructions as well as that of regulating social behavior of students. Teachers in the classroom are by the nature of their profession, managers of classroom activities. The classroom teachers’ job unlike that of other professionals is concerned with maintaining order, allocating resources, regulating the sequence of events and directing his own attention towards achieving educational goals.

Classroom management plays an important role in the teaching and learning process. It is veritable tool in the process of passing instructions from the teachers to the students. The success of any educational system is a function of the effectiveness of classroom management. Classroom teachers are managers and so ought to be in control from the beginning of the lesson to the end so as to ensure that the students benefit from the interactive business that transpires in the classroom situation. This, to a greater extent would enhance smooth coordination and responses on the part of both the teacher and the learner. Today, classroom management according to Akpakwu (2003) is the most neglected area in our secondary schools, and the success or failure of any teaching and learning process depends to a large extent on the way classrooms are managed. Failure to effectively manage the classroom can have an overall negative influence on the entire school, most especially in terms of sound academic performance of the school. When educator talks about classroom management, one of the first things that come to mind is maintenance of discipline, control, motivational teaching methods, leadership styles, use of instructional materials and communication (Mehrak and Fatemeh, 2015). Ada (2004) sees classroom discipline as a function of the interaction between teacher and students

that bring about self-control and respect for authority. It entails creating and keeping books based on reciprocal understanding limits that must not be transgressed. Classroom motivation is another management variable that according to Fadipe (2000) is the process of influencing or stimulating a student to take action that will accomplish desired goals. A teacher can reward the students in order to increase the probability of reporting the desired behavior. Recent happening and occurrences at the level of secondary school, and even other levels of education have left many scholars in panic today. The teachers find themselves in the classroom filled with students who are disposed to violence, not only to their fellow students but teachers also. In a bid to control this tendency toward violence, indiscipline and noise making, careful management of the classroom is therefore important.

Effective classroom management decides the effectiveness of teachers teaching quality and students learning. Effective teachers create a sound, supportive and friendly environment in classrooms where students feel safe, respected, cared and secured. For this purpose effective teachers create conditions of cooperation, discipline and responsibility both for themselves and for their students (Robert, 2007). The way teachers conduct the classroom matters has a deep influence upon their own teaching and learning of the students, because classroom is a place where the closest interaction between the students and the teachers takes place. Teachers are the ultimate decider of the classroom atmosphere. Their role is crucial in influencing the behaviors of students (Seyithan, 2015). Teachers who plan practically are able to overcome many classroom problems such as disruptions, deviant behavior or misbehaviors of students. In this regard the nature of teacher plays a vital role, for example, different teachers have different ways of instinctively managing the classroom environment and patterns of setting up classroom that best fits their purpose (Aly, 2007).

Classroom management is a complex exercise in the process of education. It demands talent, skills, energy and ability from teachers to manage classrooms because it directly deals with the behaviors of learners. Human behavior is the most complex phenomenon. Teachers with highly practical vision, strategies, skills and knowledge can manage classroom effectively (Tan, Parsons, Hinson & Sardo-Brown, 2003). The term classroom management refers to all those decisions that teachers take to facilitate the learning process and to provide the students maximum opportunity for learning (Krause, Bochner, and Duchesne, 2003). Classroom management includes all those essential activities which are important to maintain an environment which generates necessary and positive conditions for learning. To achieve this purpose, teachers may plan rationally for their lessons, prepare teaching and learning materials more judiciously, organize the content, decorate classroom and establish daily routines. The basic purpose of classroom management aims to encourage students towards learning and to promote their positive behaviors. These writers further argue that positive classroom management contributes to enhanced academic achievements of students, increased teacher efficacy, improved students behavior and teachers teaching. Classroom management not only related to management of students' behavior but also to lesson planning of teacher, organizing of the materials, controlling of behaviors, goal based learning process, supportive atmosphere and maintaining a highly effective teaching and learning experiences within classrooms (Zuhair, 2013).

According to Ostrosky, Jung, Hemmeter and Thomas (2008) in the development of a positive classroom environment a teacher plays a highly important role. Teachers can create such conditions inside the classrooms where students feel safe and learn how to work together

effectively as individuals. Here, the role of the teachers is to maximize learning and minimize disruptions by fostering among students attitudes of trust, tolerance, acceptance and cooperation. In this regard Canter (2001) argue that there are two goals of classroom management, first, to create and maintain a highly supportive learning environment and second, to promote a safe classroom community so that students' interest, motivation and involvement in the learning process is maintained. And third, is to students are allowed to establish relationships openly and to set targets for themselves. This situation will enable to discuss their needs with teachers without and also feel comfortable to intellectual risks. For this purpose teachers can establish rules and routines. Additionally, Edwards (2003) has found that rules and routines provide students with structure to work in organization and interact with each other fairly. The class rules and routines must be mentioned both verbally and in written form. Examples should be shared wherever necessary by the teachers through modeling during teaching and learning. Secondary school students' academic achievement according to Fadipe (2000) takes into cognizance both quality and quantity of the internal and external results achieved. It implies that it is not just the number of graduates of the system that matters but how relevant and competent the graduates are in meeting the societal needs and aspirations. It is on the basis of the above that the researchers are worried and decided to carry out this study to find out classroom management as a predictor to students' academic performance in mathematics.

Statement of Problem

Despite the importance of Mathematics, poor performance of students in mathematics at the senior secondary school examination in Nigeria has been a major concern to Mathematics educators and other stakeholders. Factors such as students' background students' attitude, peer influence and many others have been worked upon by researchers as those that could affect students' performance but the problem persist. This study therefore seeks to examine how teaching strategies, learning facilities, classroom discipline and classroom motivation will predict the performance of students in mathematics.

Purpose of the Study

The purpose of this study is to examine classroom management as a predictor to senior secondary school students' academic achievement in mathematics. Specifically, the purpose of the study is to:

- (i) Examine the relationship among teaching strategies, learning facilities, and classroom discipline and classroom motivation to students' performance in mathematics.
- (ii) Examine the combine contribution of teaching strategies, learning facilities, and classroom discipline and classroom motivation to students' performance in mathematics.
- (iii) Examine the relative contribution of each of teaching strategies, learning facilities, and classroom discipline and classroom motivation to students' performance in mathematics.

Research Question

What are the relationships among teaching strategies, learning facilities, and classroom discipline and classroom motivation to students' performance in mathematics?

Research Hypotheses

- (i) Teaching strategies, learning facilities, classroom discipline and classroom motivation, when taken together will not significantly predict student's achievement in mathematics.
- (ii) Teaching strategy alone will not significantly predict students' achievement in mathematics.
- (iii) Learning facilities alone will not significantly predict students' achievement in mathematics.
- (iv) Classroom discipline alone will not significantly predict students' achievement in mathematics.
- (v) Classroom motivation alone will not significantly predict students' achievement in mathematics.

Population

The population of the study comprises of all the senior secondary schools students and teachers in Ogun State, Nigeria.

Methodology

The research adopts descriptive research design of survey type. Six secondary schools were randomly selected from the eighteen secondary schools in Ijebu Ode and Odogbolu Local Government Area of Ogun state. Also, from the pull of 2034 senior secondary II students and mathematics' teachers in the sampled schools, a sample 420 respondents comprises of 390 students and 30 mathematics' teachers were randomly selected. Simple random sampling technique was used to select sixty-five (65) students and five (5) mathematics' teachers from each of the sampled schools.

Instrumentation

Two instruments used to collect relevant data for the study. These are:

- (i) Mathematics Achievement Test (MAT)
- (ii) Structured Questionnaire on Classroom Management

Mathematics Achievement Test (MAT): This consist of thirty (30) multiple choice tests item. The items are based generally on students' mathematical knowledge to measure their achievement in mathematics. The questions were from senior secondary certificate examination past questions of both WAEC and NECO from 2000-2015. This MAT multiple choice items have four options lettered A – D. The test items were constructed in such a way to reflect the three categories of cognitive task of knowledge, comprehension and application.

Structured Questionnaire on Classroom Management (QCM): This questionnaire for data collection was titled "Questionnaire on Classroom Management (QCM)", was designed by the researcher for both students and the teachers. QCM was divided into two (2) sections. Section A sought to gather the demographic information of the respondents while section B focus on relevant questions about the study under investigation, with alternative responses for the choice of the respondents in reaction to each items whereby the respondents will be asked to tick the appropriate answers by using four likert scale; Strongly Agree (SA), Agree (A), Strongly Disagree (SD), and Disagree (D).

MAT was considered to be valid and reliable since the items are from a standard examination council. The reliability of QCM was determined using Cronbach alpha reliability with coefficient 0.896. The face and content validity of QCM and MAT was determined by the perusal of experts in test and measurement/curriculum studies. It was confirmed that the items were relevant, unambiguous, detailed and capable of eliciting the needed responses from the target population. The data were analyzed using descriptive statistics, Pearson Product Moment Correlation and Multiple Regression analysis.

Results

The descriptive report of the study with respect to the scores obtained by the respondents in the independent variables (Teaching strategies, learning facilities, classroom discipline and classroom motivation), and the dependent variable (students’ achievement in Mathematics) are presented in Table 2.

Table 2

Variables	Mean	S. D	N	Max	Min
Teaching strategies	1.60	0.433	420	4	1
Classroom Motivation	1.82	0.643	420	4	1
Classroom Disciple	1.59	0.541	420	4	3
Learning facilities	1.32	0.235	420	3	2
Achievement in Mathematics	13.23	3.31	420	22	6

Result in Table 2 shows the mean and the standard deviation of the variables as follows: 1.60 and 0.433 for Teaching strategy, 1.82 and 0.643 for classroom motivation, 1.59 and 0.541 for classroom discipline, 1.32 and 0.235 for learning facility and achievement in Mathematics with mean of 13.23 and standard deviation of 3.31 respectively.

Research question

What are the relationships among teaching strategies, learning facilities, classroom discipline and classroom motivation on students’ performance in mathematics?

Table 3: Correlation Matrix of the Independent Variables and Dependent Variable

Variables	Teaching strategies	Learning facilities	Classroom discipline	Classroom motivation	Performance
Teaching strategies	1				
Learning facilities	0.623	1			
Classroom discipline	0.764	0.789	1		
Classroom motivation	0.023	0.129	0.20	1	
Performance	0.634*	0.792*	-0.032*	0.124	1

*Correlation significant at 0.05 levels.

Table 3 reveals that there is positive significant relationship between teaching strategies and student’ performance in Mathematics ($r = 0.634, p < .05$) this implies that the performance of

Students performance in Mathematics depends on the teachers’ teaching strategies. That is, the relevancy of teaching strategies used by the teacher the better the students’ performance in Mathematics and vice versa. Likewise, there is positive significant relationship between learning facilities and student academic performance ($r = 0.792, p < .05$). this means that the performance of students in Mathematics is affected by the availability of learning in and around the classroom. Also there is a low positive significant relationship between the classroom motivation and students’ performance in Mathematics ($r = 0.124, p < .05$), which implies that if students are well motivated, it will positively affect the output of the students. There is a negative relationship between the classroom discipline and students’ performance in mathematics ($r = -0.032, p < .05$) this implies that discipline when not properly administered may affect students negatively which may lead to poor performance.

Testing of Hypothesis

Hypothesis 1: Teaching strategies, classroom motivation, classroom discipline and learning facilities when taken together significantly predict students’ achievement in mathematics

Table 4.0: Summary of the Regression of teaching strategies, classroom motivation, classroom discipline, learning facilities

Model Summary

Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate
Teaching strategies, classroom motivation, classroom discipline, learning facilities	0.216	0.047	0.044	0.048783

Analysis of Anova

Model	Sum of square	Df	Mean Square	F	Sig
Regression	3.704	1	3.704		
Residual	75.683	318	0.238	15.568	0.000
Total	79.388	319			

The result in Table 4 reveals that the four predictor variable, when combined, significantly predict students’ performance in Mathematic ($R=0.216, F=15.563, p<0.05$). The table further revealed that the R square value of 0.047, adjusted R square of 0.044 I were obtained as multiple regression coefficients. This implies that the independent variables (teaching strategies, classroom motivation, classroom discipline, learning facilities) are jointly accounted for 47 % ($R\ square= 0.047$). Since $0.00 < 0.05$, the null hypothesis is rejected and we conclude that teaching strategies, classroom motivation, classroom discipline, learning facilities , when taken together, will significantly predict students’ performance in mathematics.

Hypothesis 2: Teaching strategies alone will not significantly predict students’ performance in mathematics.

Table 5.0: Summary of regression on Teaching Strategies

Model Summary

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
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Teaching Strategy	0.177	0.031	0.019	0.0553	
Analysis of Anova					
Model	Sum of square	Df	Mean Square	F	Sig
Regression	0.031	4	0.008		
Residual	0.966	315	0.003	12.547	0.039
Total	0.997	319			

The result in Table 5 reveals that teaching Strategies significantly predict students’ performance in Mathematic ($R=0.177$, $F=12.547$, $p<0.05$). The table further revealed that the R square value of 0.031, adjusted R square of 0.019 were obtained as multiple regression coefficients. This implies that the independent variables (teaching Strategies) accounted for 31 % (R square= 0.031). Since $0.039 < 0.05$, the null hypothesis is rejected and we conclude that Teaching Strategies alone will significantly predict students’ performance in mathematics.

Hypothesis 3: Learning facilities alone will not significantly predict performance in mathematics.

Table 6.0: Summary of the Regression of Learning facilities

Model Summary

Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate
Learning facilities	0.148	0.022	0.019	0.0553

Analysis of Anova

Model	Sum of square	Df	Mean Square	F	Sig
Regression	0.031	4	0.008		
Residual	0.966	315	0.003	12.547	0.008
Total	0.997	319			

The result in Table 6 reveals that Learning facilities significantly predict students’ performance in Mathematic ($R=0.148$, $F=7.074$, $p<0.05$). The table further revealed that the R square value of 0.022, adjusted R square of 0.019 were obtained as multiple regression coefficients. This implies that the independent variables (Learning facilities) accounted for 22 % (R square= 0.022). Since $0.008 < 0.05$, the null hypothesis is rejected and we conclude that Learning facilities alone will significantly predict students’ performance in mathematics.

Hypothesis 4: Classroom discipline alone will not significantly predict students’ performance in mathematics.

Table 7.0: summary of the Regression of Classroom discipline

Model Summary

Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate
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Classroom discipline	0.042	0.022	-0.001	0.05594
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Analysis of Anova

Model	Sum of square	Df	Mean Square	F	Sig
Regression	0.002	1	0.002		
Residual	0.995	318	0.003	0.568	0.452
Total	0.997	319			

The result in Table 7 reveals that Self-concept is not significantly predict students' performance in Mathematic ($R=0.042$, $F=0.568$, $p<0.05$). The table further revealed that the R square value of 0.002, adjusted R square of -0.001 were obtained as multiple regression coefficients. This implies that the independent variables (Classroom discipline) accounted for 2% ($R\text{ square} = 0.002$). Since $0.452 > 0.05$, the null hypothesis is accepted and we conclude that Classroom discipline alone will not significantly predict students' performance in mathematics.

Hypothesis 5: Classroom Motivation alone will not significantly predict students' performance in mathematics.

Table 8.0: summary of the Regression of Classroom Motivation

Model Summary

Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate
Classroom Motivation	0.171	0.0229	0.0017	0.05542

Analysis of Anova

Model	Sum of square	Df	Mean Square	F	Sig
Regression	0.029	4	0.007		
Residual	0.968	315	0.003	2.381	0.52
Total	0.997	319			

The result in Table 8 reveals that Classroom Motivation not significantly predict students' performance in Mathematic ($R=0.171$, $F=2.381$, $p<0.05$). The table further revealed that the R square value of 0.029, adjusted R square of 0.0017 were obtained as multiple regression coefficients. This implies that the independent variables (Classroom Motivation) accounted for 2.9 % ($R\text{ square} = 0.0029$). Since $0.52 > 0.05$, the null hypothesis is accepted and we conclude that Classroom Motivation alone will not significantly predict students' performance in mathematics.

Discussion of findings

The finding shows that the four predictor variables (Teaching strategies, classroom motivation, classroom discipline, learning facilities) jointly predicted students' achievement in Mathematics gave credence and empirical support that Teaching strategies, classroom motivation, classroom discipline, learning facilities are important factors when explaining achievement of secondary school Mathematics (Arogundade & Balarinwa 2011). In his opinion (Ben, 2006), the effective management of the classroom is the most significant strategies to a successful teachers' delivery

of instruction. Findings also revealed that teaching strategies alone will significantly predict students' performance in mathematics. This is in agreement with Ali(2000), that the most important factor in improving students' achievement in mathematics is by employing seasoned qualified teachers in all schools with good teaching methods. Zakaria, Chin, & Daud (2010) also found that, using appropriate teaching strategy is related to improvement in students' performance in mathematics. Also, the result of the finding is consonant with the findings by Teo & Wong (2000) of opinion that, to facilitate the process of knowledge transmission, teachers should apply appropriate teaching methods that best suit specific objectives and level to exhibit favourable outcomes. In addition, the finding shows that Learning facilities alone will significantly predict performance in mathematics, which supported the earlier findings of Aly (2007) that instructional materials are designed to promote and encourage effective teaching/learning experiences thereby enhances students' understanding, and also is learning facilities. Also, findings show that classroom discipline alone will not significantly predict students' performance in mathematics. The results showed that teachers' coercive discipline is perceived by students to be one key factor that inhibits the development of responsibility in students and distracts them from their schoolwork, Lewis (2008).

Conclusion

This study examines classroom management as a predictor to senior secondary school students' academic achievement in mathematics. The study revealed that the four predictor variables (Teaching strategies, classroom motivation, classroom discipline, learning facilities) jointly predicted students' achievement in Mathematics. Students' academic performance in Mathematics was directly affected by their representation ability in the subject. Also, each of the predictor variables significantly predicts students' performance in Mathematics.

Recommendations

In line with the findings of this study, it is hereby recommended that:

- (1) Teachers should strive to create love and trust for their students and also listen attentively to their complaints, ideas and suggestions.
- (2) The teachers should arrange the classrooms and manage the few facilities provided for students' usage
- (3) The teachers should treat students cases justly and equally without bias/partiality – set up a positive behavior for rewards and punishment system.
- (4) The teacher should make rules and regulations simple and understandable, and be consistent in enforcing them.
- (5) The teachers should use instructional methods that facilitate optimal learning by responding to students learning needs,
- (6) Teachers should use counseling and behavioral methods that involves students in examining and correcting their inappropriate behaviors.
- (7) It is also imperative that necessary measures be put in place in our educational system in Nigeria to enhance the positive self-concept of learners through the use of varieties of teaching strategies that are capable of making the teaching and learning of Mathematics more practical and relevant to everyday needs of the learners.

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