MPRI-JAEE | INTERNATIONAL JOURNAL OF ASSESSMENT & EVALUATION IN EDU.
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

TEACHER'S CLASSROOM PRACTICE AND MOTIVATION AS CORRELATES OF ACADEMIC PERFORMANCE OF PRIMARY SCHOOL PUPILS IN BASIC SCIENCE IN IBADAN NORTH WEST LOCAL GOVERNMENT

YEKINNI, LUKUMAN OYEWOLE
Department of Educational Psychology, Federal College of Education (Special), Oyo

Keywords: Classroom practice, Motivation, Basic science, Pupils

Abstract

Academic performance in basic science subject has been a major concern to all and sundry. This is because basic science prepares an individual to be challenged technologically; it prepares students to scientific exploitation in later life. In order to boost the passion of students to be more vast scientifically, there are certain factors that must be put in place among which are teachers classroom practice and motivation. However, the level of academic performance of every student therefore can be challenged through appropriate provision of materials and at most the quality of personnel involved in the teaching and learning process, hence, competent teachers will coordinate aright, the activities of the classrooms. This study provides an examination on the influence of teacher classroom practice and motivation on the academic prowess of pupils in basic science subject. In achieving this, the study involved the use of one hundred (100) primary school pupils. A self-developed questionnaire was used to gather information about the variables under study from the pupils. It was however found out that teacher classroom practice and motivation are important integral in coordinating the academic performance of pupils in basic science subject. Recommendations were appropriately made according to the findings of the study.

Introduction

Education is essential to the mankind; it is the pillar of development and meaningful to human existence. Academic performance of students varied in the educational sector in both the developing and developed countries. It is believed that institutions of learning have greater impact that determines level of intake of knowledge. While many believed it is a composite determinant of academic summary, others believed

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

INTERNATIONAL JOURNAL – AEE
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

it is not. Considering so many variables that could limit academic performance of students in terminal examinations, however, academic performance remain the best criteria to measure the academic progress of students. Understanding the factors influencing academic performance of students in terminal examination, it has always been a great concern for different stakeholders in the educational sector.

Academic performance is a major issue among students, teachers, parents, schools, students and the community at large. Hence, a lot of efforts are put in place to understand the reasons for disparities in the level of academic performances of students in terminal examinations. A lot of attention had therefore been paid to external factors such as school type, school location, teaching methods, instructional equipment, teachers' experiences and qualification notwithstanding. Despite the fact that most parents spend heavily on the education of their wards, sadly it is to note that most students fail on the long run. At terminal examinations, the problem is so much that it has led to the widely acclaimed fallen standard of education in Nigeria. The quality of education depends on the teachers as reflected in the performance of their duties. Overtime, pupils/students' academic performance in both internal and external terminal examinations had been used to determine excellence in teachers and quality of teaching. This therefore, shows the reasons for the need for competent, capable and consistent professionals that would drive the best from students towards higher academic prowess.

One of the strong variables that affect the academic performance of pupils is teacher's classroom practice. Teacher ability to manage classroom and behaviors affect student achievement and behaviors. Student achievement can be regarded as the most important output of education. Expectations and pursuit of different groups such as students, families and educators in terms of achievement have resulted in various studies by researchers focus on factors that explain student achievement. Several studies that focus on student achievement address topics such as the effects of teacher or family expectations on student achievement (Phillipson & Phillipson, 2012), relationship between achievement and the period allocated to learning (Ozer & Anıl, 2011; Savaş & Gurel, 2014) and effects of feelings such as belonging to school and being accepted at school on achievement. However, when it comes to student achievement, the emphasis is on teachers since the teacher is a major important factor compared to other school factors in boosting student achievement and since the proof has been presented about the strong relationship between teacher generated classroom climate and teaching methods, which may be classified as classroom methods, and student achievement by various researchers. The fact that teachers are prominent factor in ensuring student achievement has led many researchers to study the relationship between teachers and student achievement. Studies in the field emphasize issues such as increased achievement in disciplined classrooms (Akyuz, 2016), influence of teachers to ensure academic focus by decreasing undesired behaviors and increasing desired behaviors, existence of the relationship between achievement and teacher qualifications and the need for teachers

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

INTERNATIONAL JOURNAL – AEE
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

to adapt and regulate the environmental variables in order to increase student achievement is evidence (Kunter, Baumert and Koller, 2017). From the foregoing, it is believed that various factors are responsible for students' academic performance especially in terminal examinations.

Teacher behaviors affect student interest towards the lessons and their study habits and therefore their achievement. Student interest and participation can be increased through the use of effective classroom management techniques. It is emphasized by different researchers that the students of teachers who effectively manage their classrooms participate in classes more, student achievement increases via more participation in class work and problem behaviors decrease. Teachers, who effectively manage their classroom such as teaching effectively, reward appropriate behaviors, impose sanctions on inappropriate student behaviors, adapt lessons based on student characteristics and effectively use the lesson period tend to increase students' achievement and desired behaviors (Phillipson & Phillipson, 2012). A study that examined evidence-based practices in classroom management (Simonsen, Fairbanks, Briesch, Myers & Sugai, 2008) emphasized that teachers can increase students' on task study behaviors by using strategies such as identifying and teaching classroom rules, monitoring student behaviors, rewarding appropriate student behaviors, displaying consistent responses to inappropriate student behaviors and ensuring student participation via different teaching methods. Teachers who use classroom management techniques that have been proven to be effective manage their classroom better and positively affect student achievement and behaviors.

A basic component of being an effective teacher is having depth and breadth of knowledge in one's content area(s). However, that alone is not enough adequate preparation for teaching. Good classroom management may as well be the most fundamental factor in student learning. A classroom that can be characterized by disruptive behavior, disrespectful actions, and/or other evidence of an out-of-control learning environment will undermine the effectiveness of the teacher. All classroom management actions and procedures used by teachers must be executed within a school's parameters for appropriate action. Therefore, it is important that teachers must be thoroughly familiar with their schools' policies, rules, and procedures.

Much research on classroom management has focused on student participation in establishing codes of conduct (Marzano, Marzano & Pickering, 2003). It suggests that students should actively participate in the creation of guidelines governing classroom behavior. This belief suggests that students will support rules they establish. Best practices recommend minimizing the number of rules. Children have a tendency to recommend a laundry list of rules. Teachers, however, should provide limited structural input so that rules are direct, clear, and consistent, and encourage positive behavior. In addition, teachers must make sure that rules are designed to support a concept of consequences for inappropriate behavior rather than punishment. Classroom

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

INTERNATIONAL JOURNAL – AEE
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

management is seen as the process by which teachers create, important and maintain an environment in the classroom that allows students the best opportunity to learn. Teachers are faced with classroom issues such as excessive talking during instruction, getting out of seat without permission, throwing objects across the room, sleeping during classroom instruction and disrespect to the teacher. It is important that teachers find creative ways to deal with the issues as well as provide quality instruction in the classroom. Classroom management and classroom instruction are connected.

The ability of teachers to organize classrooms and manage the behavior of their students is critical to achieving positive educational outcomes. Although sound behavior management does not guarantee effective instruction, it establishes the environmental context that makes good instruction possible. Reciprocally, highly effective instruction reduces, but does not eliminate, classroom behavior problems. Disruptive behavior is a particular problem in classrooms of economically disadvantaged students. Thus, the ability of teachers to prevent or address disruptive behavior becomes especially important in the context of the No Child Left Behind (NCLB) Act of 2001 and the Individuals with Disabilities Education Improvement Act (IDEA) of 2004. These federal laws place a high priority on improving results for students with historically low achievement (e.g., economically disadvantaged students) and students with disabilities. In addition, these laws embrace teacher quality as a critical factor affecting student achievement.

Improving the ability of teachers to effectively manage classroom behavior requires a systematic approach to teacher preparation and ongoing professional development. There is no evidence to support the assumption that new teachers will just "pick up" classroom management skills given the experience and time. Although surveys indicate that experienced teachers have fewer concerns regarding classroom management, such surveys may be less an indication that teachers learn over time how to manage classrooms effectively and more a result of the fact that many teachers who did not learn classroom management skills simply have left the profession (Eyles, 2013). Thus, improved teacher preparation and professional development in classroom management are critical parts of the solution.

Another variable of interest in the study is pupils' motivation. Achievement motivation energizes and directs behavior toward achievement and therefore is known to be an important determinant of academic success (Wushishi & Kubo, 2011). For psychologists and teachers alike 'motivation' has been one of the key concepts used to explain different levels of performance. It purports to explain differences in the amount of effort applied to learning tasks and is thus expected to be strongly related to differences in levels of performance. At its simplest, motivation has been related to the amount of intellectual energy typically used in learning activities, and this led to a belief that motivation could been seen as a stable characteristic of the individual, on a par with personality. The early behaviourists saw motivation in terms of the motive power which could explain the effort

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

INTERNATIONAL JOURNAL – AEE
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

applied to learning tasks. They used an analogy from mechanics to suggest that actions were dependent on the combined effects of various forces acting on the individual. These forces could be external or internal. Externally, behaviour could be manipulated by rewarding or reinforcing the desired behaviours, while the reduction in the level of internal drive states could also be used for reinforcement. In animals, hunger and fear were used as internal drives towards required behaviour. It was seen that such drives might also explain human behaviour. The amount of effort put into a task depended on the level of drive, and what was learned could be explained in terms of the combined effects of external rewards or correctives and internal drives rooted ultimately in physiological needs.

The position of Basic Science as the bedrock for all science subjects in the senior secondary school has led to its inclusion in the school curriculum. Basic science formerly known as Integrated Science is the first form of science a child comes across at the secondary school level. Basic science is a core subject in the National curriculum at the upper basic level (Akyuz, 2016). All students from upper basic I-III classes must offer and study the subject. Basic science is considered the bedrock of all science subjects at the senior secondary school (SSS) level. The subject prepares students at the upper basic level for the study of core science subjects (biology, chemistry and physics) at the senior secondary school level (Oludipe (2012).That is why Oludipe (2012) further emphasized that for a student to be able to study single science subjects at the senior secondary level successfully; such a student has to be well grounded in Basic Science at the upper basic level.

According to Trustees of Princeton University (2013), Basic Science is a revolutionary new introductory science curriculum developed at Princeton intended for students considering a career in science. Basic science emphasizes scientific literacy and research oriented learning (Eyles, 2009). The subject encourages exploration of student's immediate environment. As a result, basic science teachers continue to learn along with their students. The teaching of basic science is therefore, based on the philosophy of active learner-participation in the process whereby, students are encouraged to learn by constructing their own knowledge based on what they already understand as they make connections between new information and old information, guided or facilitated by the teacher. Hence, there is need for teacher and pupils participation in order to achieve goals of teaching basic science. It is on this note that this research will dwell on the influence of teachers' classroom practice/management and pupils' motivation as it affect teaching and learning of basic science of pupils.

Statement of the Problem

Classroom practice otherwise referred to as classroom management and control contribute to the building of discipline and behavior of students; it promotes the way pupils perceive teachings of their teachers. Furthermore, pupils' motivation is an integral

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

part of learning process. However, currently, the poor academic performance of pupils in Basic Science in almost every examination in Nigeria is alarming which needs to be looked into. Ever before, some factors were considered cogent to the performance of pupils in schools. However, it is important to note that classroom practice and pupils' motivation take a huge part in the success of pupils in their levels of education which therefore must be encouraged and looked into. Hence, this study is carried out to fill the gap between teachers' classroom practice, motivation and pupils' academic performance in Basic Science in Ibadan Northwest Local Government Area of Oyo State, Nigeria.

Purpose of the Study

The general purpose of the study is to examine the influence of teacher classroom practice and motivation on primary school pupils' academic performance in Basic Science in Ibadan Northwest local government area. Specifically, other purposes of this research work are to:

i. examine pupils' low and high academic performances in Basic Science
ii. examine the impact of teachers classroom practice classroom on pupils' academic performance
iii. examine the implication of teachers motivation on primary school pupils performance in Basic science subject in primary schools in Ibadan North West Local Government area of Oyo state

Research Questions

The following research questions guides the operation of this study and were answered.

i. In what way does teacher classroom practice influence pupils low and high academic performance in Basic science?
ii. To what extent can poor classroom practice affect pupils' academic performance?
iii. In what way can teacher's motivation affect primary school pupils' performance in Basic science?

Research Hypotheses

The following research hypotheses were be tested at 0.05 level of significance

1. There is no significant relationship between teacher's classroom practice and pupils' low and high academic performance in basic science.
2. There no significant difference in the academic performance of pupils and the poor classroom practice.
3. There is no significant relationship between teacher's motivation and primary school pupils' performance in Basic science subject.

Methodology

Research Design

The correlation type of survey research was be used in carrying out the study. This design was used in order to find contribution of the variables of interest to the dependent variable in this study.

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

INTERNATIONAL JOURNAL – AEE
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

Population

The population for this study comprised all pupils in primary schools in Ibadan Northwest Local Government Area of Oyo State, Nigeria.

Sample and Sampling Technique

The sample for this study comprised one hundred (100) pupils randomly selected from Basic One to Basic Five. Five primary schools were purposefully selected from the study. Twenty pupils were randomly selected from each of the five schools. Hence, the sampling technique adopted for this study is of purposeful sampling technique.

Research Instrument

The research instrument adopted for this study was a self-structured instrument titled Self-Designed Questionnaire and the teacher made academic performance test. The questionnaire consisted of two sections; A and B. Section A consist of the bio-data of the respondents and section B consist of twenty five items based on the two research questions. The questionnaire was structured on Likert Rating Scale (Modified) of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD)

Method of Data Analysis

The data collected were analyzed using both descriptive statistics such as Frequency Count and Simple Percentage. Also, inferential statistics of T-test, ANOVA, Pearson Product Moment Correlation were used to analyzed the research questions.

Results

Data Analysis

Demographic Variables

Table 1: Gender of Respondents

Gender	Frequency	Percentage
Male	49	49.0%
Female	51	51.0%

The above table shows that 49.0% of the respondents used for the study were male while 51.0% of the respondents were females. This shows that the number of female students used for the study were more than male students.

Table 2: Age Range of Respondents

Age Range	Frequency	Percentage
5-10 years	33	33.0%
11 above	67	67.0%

The table above shows that 33.0% of the respondents fall between the age range of 5-10 years while 67.0% of the respondents fall between 11 years and above. This shows that most of the respondents used in this study are 16 years and above.

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

Research Hypothesis One: There is no significant relationship between classroom practice and pupils low and high academic performance in Basic Science

Variables	Mean	SD	N	df	r	P	Remark
Classroom Practice	9.77	1.998			0.896	-	-
Academic Performance	10.51	2.225	100	12	.430**	0.000	Sig

*Correlation Significant at 0.05 level

The table above revealed that there were significant relationship between classroom practice and rate of academic performance of pupils in basic science. That is, classroom practice correlates with rate of academic performance of pupils ($r=0.896$, $P<0.05$). It can be concluded that there were significant relationships between independent variable and dependent variables.

Research Hypothesis Two: There is no significant difference in the academic performance of motivated pupils and the unmotivated pupils

Variables	Mean	SD	N	df	r	P	Remark
Motivated Pupils	11.17	1.012			0.922	-	-
Unmotivated Pupils	14.11	3.213	100	12	.430**	0.000	Sig

The table revealed that there was significant difference between motivated and unmotivated pupils. That is, motivation correlates with rate of academic performance of pupils in basic science subject ($r=0.922$, $P<0.05$). Therefore, it can be concluded that there were significant difference between academic performance of motivated and unmotivated pupils.

Discussion of Findings

The results in the study show that classroom practice is an integral part in forming academic performance of pupils in basic science. That is, the level of classroom interaction and function ability of pupils and teachers determine the level at which pupils perform academically. The result of the hypothesis one shows that there is significant relationship between classroom practice and pupils low and high academic performance in basic science. This result however support the outcome of the research carried out by Akyuz (2016) who found that the academic performance of students can be traced to the level of competencies and classroom relationships of teachers and pupils. He however went further to stressed that academic performance of students can be determined by factors related to teachers as the most contact of students. There is no gainsaying therefore that, academic performance of pupils is determined by classroom practice of pupils.

It was hypothesized that there is no significant difference in the academic performance of motivated pupils and the unmotivated pupils. However, the result in the study shows

that there is significant different in the academic performance of motivated pupils and the unmotivated pupils. This present study support the result of Aikomo (2010) who found that there is correlation between motivation and the academic performance of high ability students. However, this study partially negate the outcome of research carried out by Guyana Chronicle Online (2009) that motivation is just a part of contributory factors of the academic performance of students.

Conclusion

Low academic performance is on its verge in the primary education too. Considering numbers of pupils' dropout and wastage rate, it is pertinent to determine basic factors causing this among primary school pupils. There is no gainsaying therefore, from the outcome of the study that classroom practice and motivation contribute to the low academic performance of pupils in basic science subject. From the foregoing, it can be concluded therefore that proper classroom practice adequate motivations will go a long way to remediate low academic performance of pupils in basic science.

Recommendations

From the outcome of the study, the following recommendations is necessary

i. Routine classroom supervision by Head Teachers should be encouraged in order to improve the type of classroom practice of teachers such that the academic performance of pupils will be improved.
ii. Frequent in-service training should be organized by Ministry of Education in order to improve the services of teachers in their call to duty
iii. Motivation should be encouraged by teachers, parents and the society through which the academic performance of pupils will be improved.
iv. There should be classroom interactions between pupils and teachers during lessons.

References

Aikomo, D. O. (2010). Motivation and teaching experience as correlates of academic performance of high ability students. A Master Project submitted to the department of Special Education, University of Ibadan

Akyuz, G. (2016). Investigation of the effect of teacher and class characteristics on Mathematics achievement in Turkey and European Union countries). *İlköğretim Online, 5(2), 61-74*

Eyles, C. (2009). Honours integrated science program. Retrieved from en.wikipedia.org

Guyana Chronicle Online (2009). The vital importance of science education in today's world. Retrieved 2013 April 02

Kunter, M., Baumert, J., & Koller, O. (2017). Effective classroom management and the development of subject-related interest. *Learning and Instruction, 17(5), 494-509.*

Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). Classroom management that works: research-based strategies for every teacher. Virginia: ASCD

Oludipe, D. I. (2012). Gender difference in Nigerian Junior Secondary Students' academic achievement in Basic science. Journal of Educational and Social Research,2 (1), 93-99.

Ozer, Y. & Anıl, D. (2011). Examining the factors affecting students' science and mathematics achievement with structural equation modelling. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 41, 313-324

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

Phillipson, S. & Phillipson, S.N. (2012). Children's cognitive ability and their academic achievement: the mediation effects of parental expectations. *Asia Pacific Education Review, 13(3), 495-508.*

Savaş, B. & Gürel, R. (2014). The variables affecting the success of students. *Educational Research and Reviews, 9(1), 41-50.*

Simonsen, B., Fairbanks, S., Briesch, A., Myers, D. & Sugai, G. (2008). Evidence-based practices in classroom management: considerations for research to practice. *Education and Treatment of Children, 31(3), 351-380.*

Trustees Princeton University (2013). Overview-Princeton University integrated science, Retrieved 2013 September 11, from www.princeton.edu/integratedscience/

Wushishi, D.I. & Kubo, B.G. (2011). Science, technology, engineering and mathematics education: Nigeria in the emerging world order and militating issues for development in O.S. Abonyi (*Ed.*). STAN 52ndAnnual Conference 23-29.

EDITOR-IN-CHIEF

Prof. A.I. Mteiye [MALAWI]