ASSESSMENT OF THE LEVEL OF CLASSROOM MANAGERIAL SKILLS BASIC SCIENCE TEACHERS IN UPPER BASIC SCHOOLS IN ANAMBRA STATE POSSESSED

Oguejiofor Chiamaka Nneka

Department of Science Education, University of Lagos
coguejiofor@unilag.edu.ng

Abstract

This study investigates the classroom managerial skills of Basic Science teachers in Anambra State, Nigeria, and their impact on teaching effectiveness. Using a descriptive survey research design, data were collected from 178 Basic Science teachers across 266 public secondary schools. The Classroom Managerial Skills Questionnaire (CMSQ) was employed to assess various dimensions of classroom management, including discipline, organization, lesson planning, communication, psychological environment, and time management. The findings reveal that teachers generally exhibit high levels of effectiveness in managing student behavior, organizing learning activities, planning lessons, and communicating with students. However, the psychological and social classroom environment, along with physical resources, received a lower rating, indicating areas needing improvement. The study highlights the importance of effective classroom management in enhancing student engagement and academic outcomes. Based on these findings, the study recommends investing in a supportive classroom environment, providing professional development for teachers, encouraging strong teacher-student communication, and regularly assessing classroom management strategies. These measures aim to improve the overall teaching and learning experience in Basic Science education.
Keywords: Classroom Management, Effectiveness, Engagement and Professional Development

Introduction

The teaching and learning of basic science in upper basic schools is crucial for the academic achievement of students in science, technology, engineering, and mathematics (STEM) fields (Adeyemi, 2017). Effective teaching and learning of basic science require teachers who possess not only content knowledge but also the necessary classroom managerial skills to create a conducive learning environment (Okoro, 2015). Classroom managerial skills refer to the ability of teachers to plan, organize, and deliver instruction in a way that promotes student engagement, motivation, and learning (Marzano, 2007). Research has shown that teachers' classroom managerial skills play a critical role in determining their teaching effectiveness (Wiggins & McTighe, 2005). Teachers who possess strong classroom managerial skills are better able to create a positive learning environment, manage student behavior, and promote student learning (Emmer & Stough, 2001). On the other hand, teachers who lack effective classroom managerial skills may struggle to engage students, manage classroom behavior, and promote student learning (Evertson & Weinstein, 2006).

Classroom management is a critical component of effective teaching and learning, especially in science education, where hands-on activities, experiments, and student interactions play a significant role. The ability of teachers to create an environment conducive to learning, maintain discipline, and ensure smooth instructional delivery significantly influences students' academic performance and overall engagement. For Basic Science teachers in Upper Basic Schools, classroom managerial skills are essential in handling the dynamic and interactive nature of science instruction. In Anambra State, like in many other parts of Nigeria, Basic Science is a core subject in the Upper Basic Education curriculum, designed to provide foundational knowledge in scientific concepts, critical thinking, and problem-solving skills. However, effective delivery of the subject depends not only on the teacher's content knowledge but also on their ability to manage the classroom effectively. Classroom management involves a combination of skills, including lesson planning, behavior management, time management, instructional organization, and student motivation. A well-managed classroom promotes student engagement, reduces disruptions, and enhances the teaching-learning process.

Studies have shown that teachers' managerial skills significantly affect students' participation and academic outcomes (Marzano, Marzano & Pickering, 2003). Effective classroom managers employ strategies such as clear communication of expectations, use of positive reinforcement, and structured lesson plans to keep students actively involved. Conversely, teachers with poor classroom management skills often struggle with disruptions, lack of student engagement, and reduced instructional time, leading to poor learning outcomes. Despite the importance of classroom managerial skills in teaching and learning, there is limited empirical evidence on the level of classroom management competencies possessed by Basic Science teachers in Anambra State. Factors such as teacher training, years of experience, professional development opportunities, and school type (public or private) may influence the level of managerial skills exhibited by teachers. Identifying these skills and their effectiveness in classroom management will provide useful insights for teacher training programs, policy formulation, and professional development initiatives.
This study, therefore, seeks to evaluate the classroom managerial skills possessed by Basic Science teachers in Upper Basic Schools in Anambra State. The findings of this research will contribute to improving science education by highlighting areas where teachers excel and areas where further training and support are needed to enhance effective classroom management.

Statement of the Problem

The effectiveness of basic science teachers in upper basic schools is crucial for the academic achievement of students in science, technology, engineering, and mathematics (STEM) fields. However, research has shown that many basic science teachers in Nigeria lack the necessary classroom managerial skills to effectively teach and manage their classrooms (Okoro, 2015; Okeke, 2018). This has resulted in poor academic performance, indiscipline, and lack of interest in science subjects among students (Adeyemi, 2017; Nwosu, 2019). Despite the importance of classroom managerial skills in promoting teaching effectiveness, research has shown that many basic science teachers in Nigeria lack the necessary skills to effectively manage their classrooms (Okeke, 2018). This has resulted in poor academic performance, indiscipline, and lack of interest in science subjects among students (Nwosu, 2019). In Anambra State, specifically, there is a dearth of research on the relationship between classroom managerial skills and teaching effectiveness of basic science teachers in upper basic schools. In Anambra State, specifically, there is a dearth of research on the relationship between classroom managerial skills and teaching effectiveness of basic science teachers in upper basic schools. This knowledge gap has made it difficult for educators and policymakers to develop effective strategies for improving the teaching and learning of basic science in upper basic schools. Therefore, this study aims to investigate the relationship between classroom managerial skills and teaching effectiveness of basic science teachers in upper basic schools in Anambra State.

Purpose of the Study

The purpose of the study was to assess the science process skills and classroom managerial skills possessed by Basic science teachers in Anambra State, Nigeria.
Specifically, the study sought to assess the:
1. Classroom Managerial Skills (CMS) Basic science teachers in Anambra State possessed.

Research Question

The study was guided by the following research questions:

1. What are the Classroom Managerial Skills possessed by Basic Science teachers in upper basic schools in Anambra state?

Research Methodology

This study adopted a descriptive survey research design. This design is appropriate as it allows for the collection of data from a sample population to describe and analyze the classroom managerial skills possessed by Basic Science teachers in upper basic schools in Anambra State. The study was carried out in public secondary schools in Anambra State. Anambra state has six education zones, namely: Aguata, Awka, Nnewi, Ogidi, Onitsha and Otuocha. There are 21 Local Government Areas (3,5,4,3,3,3) respectively across the zones mentioned. There are 266 public secondary schools spread across the six education zones (52,64,50,40,32,28) of the state in the order mentioned above. The urban areas of the state are mostly known for commercial businesses in addition to having civil and public servants, while the rural areas of the state are known for commercial and peasant farming. Anambra state was chosen because it is an educationally advantaged state and as such, they would be good test at assess basic science teachers' possession of SPS. It would be benchmark for assessing other states. The population of the study consisted 178 Basic Science

Teachers in all the 266 public secondary schools in the six education zones of Anambra State (Post Primary Schools Services Commission, PPSSC, Awka 2022). Sampling was not done because the entire population of Basic Science Teachers is not too large and it is manageable. Therefore, all the 178 Basic science teachers in the 266 public secondary schools in the six education zones formed the sample for the study. The primary instrument for data collection was a **structured questionnaire** titled Classroom Managerial Skills Questionnaire (CMSQ). The classroom managerial skills questionnaire (CMSQ) was made up of two sections, A and B. Section A seeks information on the three demographic variables (gender, teaching experience and educational qualification) of Basic science teachers. Section B consists of 60 items on a five-point response questionnaire items ranging from "Rarely" to "Usually," and items were distributed equally within 6 dimensions (Discipline inside classroom and Managing Students' behavior, Organization of Learning, Lesson Planning and interaction during classroom activities, Teacher-Student communication, Psychological and Social Classroom Environment/ Physical resources and Time Management). Each dimension is made up of 10 items. The items were mainly adapted from different sources on questionnaires addressed to teachers who teach young learners and classroom management books. They are; Validation of Classroom Management Questionnaire for pre service and in service Teachers of English by Diaz, Gonzalez, Jara-Ramerez and Munoz-Parra (2018), Questionnaire on Teacher's Use of Classroom Management Strategies by Nisar, Aajiz and Khan (2021) and Time management inventory on Teacher's possession of Time Management skills and Teacher's Classroom Managerial Effectiveness by Attah (2021). The researcher with the help of six research assistants (Biology Teachers) picked at random, with their permission granted, from the six education zones, helped in distributing and retrieving the questionnaires. The researcher briefed the research assistants on the purpose of the research as well as the modality for distribution and collection of instruments. 178 copies of the instruments were distributed, and 178 copies were retrieved. Participants were not timed for either data collection session in order to obtain the best responses from the group. The collected data was analyzed using descriptive statistics of mean and standard deviation.

Results

What are the classroom managerial skill possessed by Basic science teachers in upper Basic schools in Anambra State?

Table 1: Mean Ratings of Classroom Managerial Skills of Basic Science Teachers in Upper Basic Schools.

S/N	Classroom Managerial Skills	Mean	S.D	Remark
1	Discipline inside the classroom and management of students' behavior	2.89	0.91	High
2	Organization of learning	2.68	0.82	High
3	Lesson planning and interaction during classroom activities	2.78	0.81	High
4	Teacher-student communication	3.26	0.67	High
5	Psychological and social classroom environment/physical resources	2.29	0.77	Low
6	Time management	3.22	0.67	High
	Grand mean	2.85	0.78	High

The table provides an analysis of various classroom managerial skills, highlighting their mean scores and standard deviations, along with remarks on their effectiveness. The skill of maintaining discipline inside the classroom and managing students' behavior has a mean score of 2.89 and a standard deviation of 0.91, indicating a high level of effectiveness. This suggests that teachers are generally successful in managing student behavior. The organization of learning activities is also rated highly, with a mean score of 2.68 and a standard deviation of 0.82. This implies that teachers are effective in organizing learning activities, ensuring that lessons are well-structured and conducive to learning. Lesson planning and interaction during classroom activities have a mean score of 2.78 and a standard deviation of 0.81, which is also considered high. This indicates that teachers are proficient in planning their lessons and engaging with students during classroom activities. Teacher-student communication stands out with the highest mean score of 3.26 and a standard deviation of 0.67. This reflects strong communication skills between teachers and students, which is crucial for effective teaching and learning. However, the psychological and social classroom environment, along with physical resources, is rated low, with a mean score of 2.29 and a standard deviation of 0.77. This suggests that there may be challenges in creating a positive classroom environment or providing adequate physical resources, which could impact the overall learning experience. Time management is rated highly, with a mean score of 3.22 and a standard deviation of 0.67. This indicates that teachers are effective in managing classroom time, ensuring that lessons are conducted efficiently.

A grand mean score of 2.85 with a standard deviation of 0.78 suggests that classroom managerial skills are generally rated high. However, the low rating for the psychological and social classroom environment/physical resources highlights an area that may need improvement.

Discussion of Finding

The skill of maintaining discipline inside the classroom and managing students' behavior has a mean score of 2.89 and a standard deviation of 0.91, indicating a high level of effectiveness. This aligns with findings by Zainuddin and Hardiansyah (2022), who emphasized the importance of teachers displaying a warm and enthusiastic attitude while managing classroom discipline. Effective behavior management is crucial for creating a conducive learning environment, as it helps minimize disruptions and maximizes instructional time. The organization of learning activities is also rated highly, with a mean score of 2.68 and a standard deviation of 0.82. This suggests that teachers are effective in organizing learning activities, ensuring that lessons are well-structured and conducive to learning. According to Demir and Nihat (2021), well-organized learning activities contribute significantly to student engagement and academic achievement.

Lesson planning and interaction during classroom activities have a mean score of 2.78 and a standard deviation of 0.81, which is also considered high. This indicates that teachers are proficient in planning their lessons and engaging with students during classroom activities. Aslan (2022) highlighted that effective lesson planning and interactive teaching methods are essential for fostering a positive learning environment and enhancing student participation. Teacher-student communication stands out with the highest mean score of 3.26 and a standard deviation of 0.67. This reflects strong communication skills between teachers and students, which is crucial for effective teaching and learning. Keshavarz and Ghoneim (2021) noted that clear and open communication between teachers and students is vital for building trust and promoting a collaborative classroom atmosphere (Keshavarz, & Ghoneim, 2021).

However, the psychological and social classroom environment, along with physical resources, is rated low, with a mean score of 2.29 and a standard deviation of 0.77. This suggests that there may be challenges in creating a positive classroom environment or providing adequate physical resources. According to research by Iskakova et al. (2021), a supportive psychological and social environment is essential for student well-being and academic success (Zainuddin, & Hardiansyah, 2022). The low rating in this area indicates a need for improvement to ensure that students feel safe, supported, and motivated. Lastly, time management is rated highly, with a mean score of 3.22 and a standard deviation of 0.67. This indicates that teachers are effective in managing classroom time, ensuring that lessons are conducted efficiently. Effective time management is crucial for maximizing instructional time and ensuring that learning objectives are met. Tulyakul (2019) emphasized that teachers who manage their time well are better able to cover the curriculum and address students' needs (Zainuddin, & Hardiansyah, 2022).

Conclusion

the analysis of classroom managerial skills reveals that most skills are rated highly, indicating effective teaching practices. However, the low rating for the psychological and social classroom environment/physical resources suggests a need for improvement in this area. Addressing these challenges can enhance the overall learning experience. Continued focus on effective communication, organization, and time management will further support student success.

Recommendation

Based on the findings, the following recommendations were made:

1. Invest in creating a supportive psychological and social classroom environment by providing adequate physical resources and fostering a positive atmosphere.
2. Offer professional development opportunities for teachers to improve their skills in managing classroom behavior and organizing learning activities effectively.
3. Encourage and train teachers to maintain strong communication with students, as this has shown to be highly effective in promoting a collaborative and engaging learning environment.
4. Regularly assess and adjust classroom management strategies to ensure they meet the evolving needs of students and the educational environment.

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