



Teaching Strategies and Academic Performance of Students in Basic Science in Oyo State, Nigeria

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ABSTRACT

Purpose of the study: This study looks at the basic science teaching methods and academic achievement among junior secondary school students in Oyo State, Nigeria. It focuses on the different approaches used to teach the subject and how these methods affect students' overall academic performance.

Methodology: A quantitative approach was used to gather detailed understanding of the respondents on the variables of the study. A validated questionnaire was administered on 450 junior secondary school students by research assistants providing necessary guide when needed. For data analysis, simple percentage was used to identify the strategies for teaching basic science and Pearson Product Moment Correlation was used to establish the relationship between teaching strategies and academic performance of Basic Science students in the study area.

Main Findings: The study identified three major strategies that can be used to teach basic science: teacher-centered, interactive, and student-centered. In terms of engagement, teachers engaged the use of teacher-centered and interactive methods due to the prevalent of using these two major strategies but were not using student-centered method to deliver instruction to the students in basic science in the study area.

Novelty/Originality of this study: According to the study, teachers' use of instructional tactics can improve students' academic performance, which is a crucial predictor of educational outcomes. It offers insightful information on how basic science functions as a basis for senior secondary school core science courses. Additionally highlighted were the effects of instructional practices on basic science students' academic performance in Oyo State, Nigeria.

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1. INTRODUCTION

Across the globe, students' academic performance is essential to both society advancement and personal achievement. It is a key measure of learning, affects employment opportunities, and advances economic growth in general. Better employment prospects, greater earning potential, and greater social mobility are frequently the results of strong academic success. Additionally, it develops critical thinking, skills for solving problems, and flexibility—which are all necessary for negotiating the complexity of today's environment. While several other indices could be used to measure educational outcomes revolving around physical, mental, and dietary factors [1] informed that students' academic performance remains a pivotal indicator that determines the worthiness of the education investments. Interestingly, the ideology that academic performance is the value of

educational spending is prominent across all strata of education, including primary, secondary, and higher levels. As a result, parents, teachers, school heads, and society placed a high premium on academic performance. This is evidenced through the accolades expressed by society in celebrating good academic performance, while poor performance is often scorned with displeasure.

Academic performance of students at the junior secondary school Basic Science is essential because the subject exposes students to basic scientific concepts, fosters their ability to solve problems, and gets them ready for more complex science courses at the senior secondary school level and science and technological based courses at the institutions of higher learning. Agogo and Ode [2] posited that in order to help students acquire the kind of thoughtful thinking and positive habits that are essential for the scientific method and a successful future, Basic Science is taught in junior secondary schools. According to Chima [3] the subject encourages critical thinking, curiosity, and experiential learning, ultimately giving students the information and abilities they need to prosper in a technologically advanced world. It is evident that, in Nigeria, academic performance at junior secondary school level has emerged as a key factor in determining the grade of education received at this level and choice of subjects at the senior secondary school level and student career in institutions of higher learning. The performance of Oyo State public junior secondary school students in Basic Science in terminal examination conducted by the West African Examination Council between 2018 – 2022 has been erratic and not in any way encouraging and motivating. Oyedeji and Olatunbosun [4] specifically informed that students of Oyo State performed worse in the Junior Basic Science Examination in 2021.

The recurring erratic in performance in this subject during this technological age in public examinations have become a national issue and a major worry for the parents and other interested parties in education industry. It becomes more worrisome to government in particular because the subject is a foundation for core science subjects like chemistry, physics, biology, and geography at the senior secondary school level. In addition, students who study Basic Science are better in understanding scientific concepts, laws, and principles—all of which are necessary for additional research in these specialised subjects at institutions of higher learning. Important science process abilities including seeing, organising data, generalising, forecasting, and creating experiments are developed through Basic Science [5]. These abilities are essential for carrying out scientific research and comprehending the scientific method that could metamorphose into higher levels of science and technological base of a country for growth and development and make knowledgeable choices regarding their well-being, the environment, and other significant societal issues. To Chima [3] Basic Science act as the cornerstone that offers the scientific instruction needed to satisfy society's expanding demands.

Oti et al [6] defined academic performance as the assessment of students' achievement across a range of academic disciplines. According to Amasuomo [7], academic performance is a multifaceted tasks that include attitudes, abilities, knowledge, and actions of students that support their academic achievement in the classroom. It could also be referred to as a satisfactory and superior level of achievement exhibited by students in accomplishing all the learning experiences designed for them in the school. Narad and Abdullah [8] regarded academic performance as the expression of information that a student has gained and is evaluated by the teacher using grades and/or educational objectives that students and teachers have established to be met during a given time frame. Taking an inclusive position on several definitions presents academic performance as one of the measures of educational outcomes simply because the delivery of academic instruction in schools is directly linked with the attainment of educational goals.

There are a variety of elements that have been adopted by researchers to measure academic performance. Oti et al [6] posited that academic performance is often measured by teachers, utilising test scores, graduation grades, and classroom performance. Other measures that serve as indicators of academic performance include report card grades, grade point averages, standardised test scores, teacher ratings, other cognitive test scores, grade retention and dropout rates [9], [10]. While expounding on the concept of academic performance, Kumar et al [11] developed a model which categorised various indices of academic performance into five different genres, including knowledge-centric, skill and ability-centric, academic achievement-centric, persistence-centric and career-centric.



Figure 1. Genre of Definitions of Academic Performanc (Source: Adopted from [11])

A cursory look at Kumar et al [11] model presented a polymorphic view of academic performance such that it can be thought of in terms of gaining information, developing skills and competences, achieving high academic standing or accomplishments, advancing in one's job, and having the will and perseverance to pursue education. Bearing in mind the magnitude of the description of academic performance, it is important to note that the concept is highly regarded first as scholastic success, followed by knowledge acquisition and the development of skills and talents [12].

As an integral component of the school system, Twum-Ampofo and Osei-Owusu [13] informed that teachers play a significant role in fostering students' academic performance. Teachers could be described as the wheels on which the school curriculum is driven because they are primarily responsible for delivering instructions to students through different strategies [14]. While Onajite [15] perceived teaching strategies as methods, procedures, styles, and techniques identified and selected by the teacher to facilitate teaching and learning to students, Isa et al [16] argued that instructional delivery strategy is a determinant of students' performance. Also, Motseki et al [17] submitted that strategies employed by teachers are powerful and influential than the lesson itself. It can, therefore, be inferred that the strategies used by the teacher in delivering instruction to learners could significantly influence their learning, which is popularly measured by academic performance.

Some previous studies [18]-[21], [15] showed that teachers mostly employed teacher-centered, student-centered, and interactive approaches for teaching in secondary schools. Teacher-centered approaches like lectures, and demonstration methods offer organised knowledge, while student-centered approaches like laboratory and note-taking, encourage active participation and inquiry. However, class discussions and question and answer are examples of interactive teaching strategies that promote cooperation and knowledge acquisition.

Lecture method is a conventional approach in which the instructor serves as the main information source and student only listen, take cognizance of important points and internalize the lecture delivered. The method involves a teacher presenting subject contents to students in a structured and organised way and guiding them through a step by step. In most cases, with the use of instructional materials. The focus of the teacher using this method is to deliver instruction to the students hence, it is a one-way communication, though some interaction might occur in the process. To Sanchita [22], lecture method is when a teacher talks and students pay attention. With this approach, teachers can impart a lot of knowledge in a short amount of time. Typically, the instructor is the primary speaker while the students listen, attentively to the lecture. Ugwu et al [23] affirmed that this method was adopted in teaching Basic Science in Katsina State, Nigeria because it saves time and assist in teaching efficiently. This method provides opportunity for the teacher to go beyond what is written in the textbooks for the students. Teachers provides supplemental knowledge that may not be available through other sources. However, in private secondary schools in Katsina State, Nigeria. Olaseinde and Olatoye [24], concluded that lecture method was mostly used to teach Basic Science due to its scalability. A large number of

students can be addressed with this method at the same time by a single teacher, making it cost effective especially in private schools with limited resources.

Demonstration teaching method is another teacher-centered method where a teacher uses visual aids like flip charts, posters, and PowerPoint presentations to convey a concept. To Abdi [25] it is the process of showing pupils how to create something or carry out an action in a methodical manner. As the teacher shows how, the teacher “tell” what he is doing. Ahmad and Aduarimah [26] defined this method as a specific type of presentation and a technique of teaching by example rather than simply explaining. It is a visual practical demonstration of a concept showing how something works or performs. This method is found mostly used in private secondary schools in Osun State according to a study by Kamarudeen [27]. In a study carried out by Akinsanya et al [28] on teaching method and student output in Basic Science in Ibarapa Local Government Area of Oyo State, it was found that demonstration method was the mostly teacher-centered method used in teaching Basic Science in the study area.

A note taking method according to Richard [29] is a student-centered system where students are allowed to record key information from various sources like lectures, books or online articles in a way that helps the students to understand, remember and organise a topic effectively. This method involves selecting important details, condensing information, and structuring notes for later review. It entails choosing what is truly important to write down by focusing on main ideas and key points, writing down information in student’s own language, short sentences and phrases as against copying verbatim. According to Paul [30] note-taking method is a method that helps the students transform information into a form that is both useful and memorable for self-understanding and future reference. This method according to Richard [29] improved understanding, enhanced memory, provides a structured way to review information and increased students focused. However, in a study conducted by Salame et al [31] it was found that this method was the least adopted at the City College of New York. In a related study carried out by Voyer et al [32], this method was not in use to teach secondary schools in developing countries.

Laboratory teaching method is another student-centered and modern teaching method used in teaching Chemistry, Physics and Biology. This method according to Mbachu [33] allowed the students to carry out laboratory experiments in small groups using their practical laboratory activities. Through firsthand experiences, this approach enables students to familiarise themselves with facts. To Abdi [25] this method emphasizes practical experience and experimentation. Students actively participate in experiments, observations and manipulations of materials, fostering a deeper understanding of scientific concepts and principles. This method did not allow students to be passive observers but actively engage in the learning process. Students gained practical experience through hands-on activities which are more engaging and memorable than the traditional lectures. This method according to Niklas et al [34] increased student’s motivation and interest in science subjects and encourage students to challenge, investigate and make their own conclusions. This method is mostly adopted to teach sciences in secondary schools in England according to the study carried out by Abrahams and Reiss [35].

Class discussions method is an interactive teaching method that entails a cooperative, open-ended discussion between educators and students or amongst students, to enhance thinking, learning, understanding, or literary appreciation and problem solving. This method is also referred to as Socratic Method: named by the ancient Greek Philosopher - Socrates, who would ask his students questions and have conversations with them. To Uzomz and Amadi [36] discussion method can take place in the class where the whole class discussion is led by the teacher and it can be a situation where students engage in smaller groups to share ideas or inform of panel discussion where experts present their perspectives on a topic. It can also be in form of symposium or colloquiums. Ishaku [37] posited that this method fosters critical thinking, encourages active participation, and promotes deeper understanding of course contents. To Cleopas and Igbojinwaekwu [38], class discussion is commonly used in Yenogoa and Ogbia Local Government Areas, Bayelsa State to improve achievement of secondary school students in Biology in the study areas.

Similarly, findings by Isa et al [16] assessed the impact of teaching methods on the academic performance of secondary school students in Nigeria. The study established a strong influence of lecture and teacher-centred approaches on students’ performance; however, discussion and demonstration strategies were found to have a great effect on academic performance. This implies that there is a varying effect or influence of teaching strategies on academic performance.

The erratic performance of junior secondary school students in Basic Science at the terminal examination conducted by the West Africa Examination Council between 2018 – 2022 in Oyo State, Nigeria has become a source of complaints to parents, and educational planners in general and to the government in particular. This is as a result of the importance of this subject to the preparation of students to study science at the senior secondary school level as well as study of science and technological based courses at the institutions of higher learning. These are needed to solve social, economic, political, security and other human-life threatening issues scientifically and for Nigeria to be among the leading nations in the areas of science and technology. However, the teaching method adopted by the teachers at the junior secondary school levels needed

to be interrogated despite the professionalism and competence of the teachers [39], [40]. This worrisome trend has far-reaching consequences, including low enrollment in science-oriented courses at secondary schools and higher education institutions, hindering the goals of science education. Given the complexity of this issue, this study investigates the strategies for teaching Basic Science and relationship between teaching strategies and academic performance in Basic Science among junior secondary students in Oyo State, Nigeria.

2. RESEARCH METHOD

2.1. Research Design

This study adopts descriptive design of the *ex-post facto* approach to investigate the types of teaching strategies and its influence on academic performance of students in basic science. To Manjunatha [41], A descriptive research technique is a type of research that outlines the features of the population or phenomenon under study is known as descriptive research. Descriptive research is that study that examines the relationship between an independent variable and a dependent variable, but the independent variable had happened or was present in nature before the study started. This approach is the most suitable for this study because when it is impractical or unethical to alter variables in a real experiment, descriptive *ex post facto* design is utilized to investigate possible correlations between variables after an event or phenomena has already taken place.

By concentrating on how students understand and interpret the dependent (basic science academic performance) and independent variables (teaching strategies) of this study, the descriptive design enables the researcher to examine the data or current situation and search for patterns or correlations, which in turn allows the researcher to consider potential causes without manipulations. The researcher will gather rich, detailed information from the participants through structured questionnaire using research assistance. Analyzing the students' experiences with the study's variables guarantees that the research findings accurately represent the lived experiences of people who were directly impacted, giving the findings greater significance and a more grounded basis in real-world situations.

In conclusion, descriptive research is best suited for this study since it focuses on comprehending the intricacies of the students' experiences and providing insightful information about how teaching methods affect academic achievement.

2.2. Research Participants and Materials

All junior secondary school students in Oyo State comprised the population of the study. The sample size comprised 450 respondents comprising of 150 respondents selected disproportionately from each of the Oyo North, Oyo South and Oyo Central Senatorial Districts in Oyo State using multi-stage sampling procedure. The sample size was calculated and derived using Research Advisor's Table at 95% degree of confidence with 5% error margin. The first stage is categorization of junior secondary schools in the state into the various Senatorial Districts in the state. Thereafter, the schools are categorized into the various local government in each of the Senatorial Districts. The third stage is the use of purposive sampling technique to select six local governments from each of the three senatorial districts. The local government to be selected are those with minimum of six junior secondary schools. The fourth stage is the use of convenience sampling technique to select five respondents from each of the selected junior secondary schools. This will give a total of 25 respondents from each of the selected local governments to give a total of 150 respondents from each of the senatorial districts and give a total of 450 respondents altogether.

The researcher used research help to administered the questionnaire in order to guarantee the respondents' data's accuracy and dependability. The principals of the chosen schools gave their consent for the instrument to be used for data collection before it was administered to the chosen participants. Participants were reassured by the researcher that their personal data would be kept private and that the study would only use their gender, religion, age, and class.

The questionnaire was administered face-to-face with research assistants; a method chosen for convenience and allow for high return rate of completed questionnaire. The questionnaire consisted of three sections. Sections A, B, and C which elicited information on the variables of the study. This helps the respondents to provide information where necessary and feel comfortable in selecting the best on a four-Likert scale provided as the statement applies to them. The researcher began each section with sub-heading. Section A – Demographic Information, Section B – Various Teaching Methods and Section C – Teaching Strategies and Academic Performance. This method assisted in revealing crucial information on the objectives of the study.

2.3. Research Procedure

In order to better comprehend the experiences of 450 conveniently chosen individuals, a structured questionnaire was administered as part of the data collection procedure. Before the questionnaire was distributed, the participants were informed of the study's goals and asked for their voluntary agreement in order to comply with ethical standards. Responses were obtained from the respondents using a set of structured and open-ended questions that were verified by coworkers and other specialists in item creation, testing, and

measurement. Incomplete questionnaires were eliminated by sorting and coding the items after the instrument was administered and collected from the respondents. Since the respondents were guaranteed the anonymity of the information they supplied, all personally identifiable information they submitted was deleted in order to uphold study ethics and confidentiality.

2.4. Research Instruments and Data Collection Techniques

The main tool used in the study was a collection of open-ended and structured questionnaires that were specifically created to investigate respondents' responses to various teaching strategies and how they affected Oyo State basic science students' performance. To guarantee their dependability, applicability, and clarity, these items underwent a validation process carried out by specialists in both quantitative research and item production. Respondents were able to discuss their experiences with demographic data through the open-ended items. The study made sure that the data gathered was thorough and representative of the respondents' actual experiences by utilizing this validated instrument.

Data was gathered using a questionnaire, a quantitative method that proved ideal for gathering answers to the study's variables. The questionnaire gave participants the chance to freely express their opinions and select from the four options offered for each structured topic, which allowed the researcher to extract comprehensive and practical data. This approach guarantees a deep, contextualized comprehension of the variables being studied.

2.5. Data Analysis

To summarise the findings of the study, the descriptive method was used to identify the strategies for teaching Basic Science in junior secondary schools in Oyo State. In addition, inferential statistics was used to test for the influence of teaching strategies on academic performance of students in Basic Science. The sorting and grouping of respondents' responses based on their expression was noted at the beginning of the sorting, grouping and coding.

Questionnaires containing redundant responses were completely removed after meticulous sorting and grouping. Of the 450 questionnaires administered, 440 (97.78%) are adequately filled and returned while 10 (2.22%) are either not well filled by the respondents and could not be used by the researchers despite support by the research assistants. The sorted and coded items were input into the spreadsheets using simple percentage on Statistical Package for Social Science (SPSS) to get answers to the types of strategies used for teaching basic science in the study area and Pearson Product Moment Correlation of the inferential statistics to test the influence of teaching strategies on academic performance at 0.05 level of significance

3. RESULTS AND DISCUSSION

3.1. Strategies For Teaching Basic Science in Junior Secondary Schools in Oyo State Nigeria

To provide answer to the strategies for teaching basic science in junior secondary schools in Oyo State, students' responses were calculated using frequency, percentage scores and mean (\bar{x}). The results were presented in Table 1.

Table 1. Teaching Strategies of Basic Science Teachers (N=440)

S/N	Items	SD	D	A	SA	Mean	Decision
	Strategies for Teaching Basic Science	f (%)	f (%)	f (%)	f (%)	(\bar{x})	
1	My Basic Science teacher engages in demonstration when teaching in the classroom	30 (6.7)	36 (8.1)	219 (49.7)	155 (35.4)	3.13	Agree
2	My teacher gives lecture to explain every topic he or she teaches me.	4 (1.0)	13 (3.0)	198 (45.0)	225 (51.0)	3.49	Agree
3	Students always have opportunity for discussion with my teacher about every topic during Basic Science class	16 (3.7)	57 (12.8)	223 (50.6)	144 (32.9)	3.14	Agree
4	During the Basic Science period, my teacher always asks questions and calls on the students to give answers	9 (2.0)	59 (13.4)	174 (39.6)	198 (45.0)	3.31	Agree
5	My teacher always write note on the board for the students during Basic Science class	139 (4.7)	221 (13.5)	21 (31.5)	59 (50.3)	1.24	Disagree
6	My teacher takes the students to the laboratory regularly to perform experiments during the Basic Science class when there is need for it	101 (22.9)	168 (38.1)	106 (24.2)	65 (14.8)	2.33	Disagree

Key: SD – Strong Disagree, D – Disagree, A – Agree, SA – Strongly Agree

Table 1 presents the strategies engaged by teachers for teaching Basic Science in junior secondary schools in Oyo State. It shows that use of lecture 423(96.0%; \bar{X} =3.49) was the foremost strategy engaged in teaching Basic Science. Other strategies employed by teachers were question and answer 372(84.6%; \bar{X} =3.31), demonstration 372(84.6%; \bar{X} =3.13), discussion 367(83.5%; \bar{X} =3.14), and note writing 80(81.8%; \bar{X} =1.24). Meanwhile, laboratory experiment 171(39.1%; \bar{X} =2.33) was not used by Basic Science teachers in facilitating learning. Findings from the results indicated that teachers uses teachers-centered (Lecture and demonstration) and interactive (question and answer and discussion) methods to teach Basic Science but were not using student-centered (note-giving and laboratory) method to teach Basic Science in junior secondary schools in Oyo State.

Result on teaching strategies for Basic Science establishes that use of teacher-centered method (lecture, and demonstration) as well as interactive method (discussion and question and answer) are strategies employed by teachers for facilitating Basic Science in junior secondary school in Oyo State. This implies that teacher-centered and interactive teaching strategies are prevalent among Basic Science teachers for delivery of instructions to the students in the classroom. These may be because teacher-centered method has been a traditional method that the teachers are used to and may be some of the teachers are trained with the traditional method without opportunity for upgrading their teaching methods in form of attending seminars and conferences where student-centered methods are well explained. It might also be because the teachers are in possession of instructional materials provided by the school or improvised to make demonstration teaching technique easy for them in the class. It might also be because the teachers intend covering of the subject contents within a short period to have time due to shortage of Basic Science teachers in public secondary schools in Oyo State.

It might also be in connection with the plight of teachers to teach the students beyond what is in the recommended textbooks. It might also be due to the large number of students to teach in the class. It is only teacher-centered method that can be used for large class considering the number of period allocated to teach the subject in a week. The result might also be because the teachers are not vast in the use of student-centered method such as laboratory method and do not have time to supervise when using note giving method. These student-centered method requires more attention for supervision of students' activities when deployed. The method is more demanding on the part of the teachers.

The result agreed with the position of Voyer et al [32] who concluded that note taking method was not popular in developing countries and also agreed with the position of Salame et al [31] who found student centered method to be the least adopted at the City College, New York. However, the result did not align with the findings of Abrahams and Reiss [35] who found laboratory method as the mostly used method to teach sciences in secondary schools in England. In addition, the study aligned with Kamarudeen [27] who found demonstration method as the mostly used one in private secondary schools in Osun State, Nigeria as well as the findings of Akinsanya et al [28] who found this method as the mostly adopted teacher-centered method used to teach Basic Science in Ibarapa Local Government Area, Oyo State, Nigeria.

3.2. Relationship Between Teaching Strategies and Academic Performance of Basic Science Students in Junior Secondary Schools in Oyo State, Nigeria.

To test for the relationship between the variables of the study, the PPMC was employed at 0.05 level of significance to analyse students' responses after the mean and the standard deviation were computed. It should be noted that the differences in the N values (440 and 142) were occasioned by failure of respondents to respond to some items used in measuring the variables. The results were presented in Table 2.

Table 2. Relationship between Teaching Strategies and Academic Performance

Variables	N	\bar{X}	SD	df	r	p-value
Teaching Strategies	440	18.77	2.71	184	0.684	0.000*
Academic Performance	442	19.10	2.93			

$$r(184) = 0.684, p = 0.000$$

* $p < 0.05$ (Significant)

The result in Table 2 showed the correlation coefficient (r) of 0.684 while the p-value (0.00) is less than the significance level (0.05) at 184 degree of freedom. Therefore, the null hypothesis (H_0) was rejected. Hence, there was a strong relationship between teaching strategies and the academic performance of Basic Science students in private junior secondary schools in Oyo State. This implied that teaching strategies influence the academic performance of Basic Science students in the state.

The hypothesis tested showed that teaching strategies influence the academic performance of Basic Science students in the state investigated. This affirms that teaching strategy is a determinant and influence on the academic performance of students in Basic Science in public junior secondary schools in Oyo State. This

may account for why the society keeps emphasizing the critical role of teachers in promoting high academic achievements for students. The result was in alignment with the findings of Isa et al [16] who established a strong influence of lecture and teacher-centered approaches on student performance. However, it was not in agreement with the findings of Tudor [42] who found no relationship between a specific teaching method but influence of combination of methods on student academic performance in external examination.

Academic achievement is greatly impacted by teaching strategies, but there are a number of factors that limit how effective they can be. Student-centered teaching strategies activities may not be able to be implemented due to limited physical facilities in the school. Insufficient resources, such as technology or educational materials, might reduce the efficacy of some teaching strategies that will have positive implications on student academic performance.

4. CONCLUSION

Academic performance is an indispensable indicator of education outcome that can be promoted through the teaching strategies employed by teachers. Unfortunately, poor academic performance is the struggle of Nigerian students at the junior secondary level, particularly in science- oriented subject. This study found that use of relevant examples, question and answer, demonstration, discussion, and note writing were teaching strategies used by Basic Science teachers, permitting direct and interactive delivery of instructions within the classroom. Moreover, it was established that was a strong positive relationship between teaching strategies and the academic performance of Basic Science students in private junior secondary schools of Oyo-East Local Government Area, Oyo State.

In light of the study's findings, the following suggestions were made. If a teacher began utilizing cutting-edge student-centered teaching strategies like the note taking and laboratory methods, Basic Science instruction would be far more effective. The use of interactive and teacher-centered teaching strategies in Oyo State's basic science curriculum is a noteworthy discovery. This implies that in order to increase student involvement, and interest in the teaching and learning of basic science, educational institutions and practitioners should think about using a student-centered approach. This can help students improve their academic performance in Basic Science and other science subjects in the school and at higher levels of education.

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