

## The Impact of Teaching Methods on Students' Academic Performance in Ekiti State College of Health Sciences and Technology, Ijero-Ekiti, Ekiti State, Nigeria.

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### Abstract

**Introduction:** Teaching methods used by academicians contribute significantly to the academic performance of student. Health Institution like ours utilizes various teaching methods to achieve effective result.

**Objective:** Appraise and assess the impact of the teaching methods on the academic performance of students in the study area. **Methodology:** We adopted a stratified sampling technique in selecting our sample. One hundred questionnaires were distributed to the respondents and retrieved back. The reliability of the instrument was tested using a sample different from actual sample for the study, the reliability test was 0.89. The authors also employed experimental study for easy understanding of the results and its interpretation and they were divided into two groups namely 'Experimental group' and 'Control group'. The results were analyzed statistically using SPSS software (version 17.0 for Windows; SPSS Inc., Chicago, IL, USA), (descriptive and Inferential STAT) using a chi-square test (Pearson) to determine relationship between the variables. A comparative analysis was carried out to determine the significant relationship between the groups. **Result:** It was revealed that teaching method has varied impact on the academic performance of student in the study area. The result showed that the most effective methods identified were demonstration and group study. **Conclusion/Recommendation:** The Authors recommended that practical demonstration and group study among other teaching methods identified should be encouraged. State Government should provide adequate funding to assist the institution to set up an infrastructural facilities that will enhance learning process using the methods identified.

**Keywords:** Learning, Teaching, Methodology, Performance, Impact.

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### I. Introduction

The Academic performance of students is pre-determined by varying factors and it is the state of students' learning achievements at a particular time in a particular course or group of courses. Performance is measured by a grade obtained in a particular course or a set of courses depending on the design of the curriculum<sup>[1]</sup>. Hence, to ensure quality performance of students it is important to put into consideration the critical role played by lecturers and instructors in higher institutions<sup>[2]</sup>. A Lecturer can impact students learning in multi-ways based on the delivery method adopted in the classroom. As such, the method or approach adopted by the lecturer to impact knowledge plays a vital role in students' academic performance<sup>[3,4,5]</sup>.

The main purpose of lecturing at any level is to bring out a significant change in the student. Passage of knowledge and information requires instructors to use the right method and pedagogy that best suits the learner and suit the objectives and desired outcomes<sup>[6,7]</sup>. Most of the known methods were instructor-centered with no activity for the learners hence they are passive and therefore obtaining knowledge from the instructor without building their engagement level with the subject matter, the approach is least practical, more theoretical and memorizing. Student-centered approaches which are more encouraged because they embrace the concept of discovery learning<sup>[8,9]</sup>.

However, most teachers today apply the student centered approach to promote interest, analytical research; critical thinking and enjoyment among students. The effectiveness of teaching methods on students learning has consistently raised considerable interest in the thematic field of education research<sup>[7,8]</sup>. Most of the teaching methods today have embraced modern technology and this has brought tremendous changes in the field of learning<sup>[10,11]</sup>. Poor academic performance by students in tertiary institutions is linked to the application of ineffective teaching methods by teachers to impart knowledge to learners and therefore teachers need to be conversant with numerous teaching strategies<sup>[11]</sup>.

ICT have been proven to play an important role in the teaching-learning process as it provides learners with the understanding, skills and knowledge necessary for scientific research, thus improving their standards of living<sup>[12,13,14]</sup>. They also enable learners to acquire problem-solving and decision-making skills, which provide ways of thinking and inquiry-based learning<sup>[14,15,16]</sup>. They may feel inadequate to use ICT's and if they try and fail they get embarrassed and would shy away from them hence apply old traditional teaching methods they are familiar with<sup>[1,16,17,18]</sup>. These were the research gaps which this study sought to address but focus and emphasis will be laid on the pedagogue methods in use in the study area and its impact on the academic performance of students<sup>[19,20,21]</sup>

## II. Objective

The objective of this study is to evaluate the impact of the teaching methods adopted by lecturers on the academic performance of students in Ekiti State College of Health Sciences and Technology Ijero-Ekiti Nigeria.

## III. Methodology

The study area is Ekiti State College of Health sciences and Technology located in Ijero Ekiti, Nigeria. It is an institution that produces middle health practitioners in the State and diaspora. The College trains student in professional health and allied courses like Public Health, Community Health, Environmental Health, Medical Laboratory Technician, Pharmacy Technician, Dispensing Optician, Dental Health Technician, Health Education, Biomedical Engineering Technician, Computer Science, Health Information and Biostatistics etc. The target population was drawn from six faculties which stands at a total of 3255 students as at the time of this study (hence N = 3255).

The authors employed experimental study for easy understanding of the results and its interpretation and they were divided into two groups namely 'Experimental group' and 'Control group'. Data were collected through a well-structured and designed questionnaire tailored towards the objective of this study. Other methods used were personal interview and performance rating test. The results were analyzed statistically using SPSS software (version 17.0 for Windows; SPSS Inc., Chicago, IL, USA), (descriptive and Inferential STAT) using a chi-square test (Pearson) to determine relationship between the variables. A comparative analysis was carried out to determine the significant relationship between the groups. A pretest and pilot study was carried out to validate the research instrument and it was carried out on a group of respondents different from the actual respondents and the validity of the research instrument was carried out with result at 0.89.

## IV. Result

**Table 1: Age distribution of respondents**

S/N	Variable	Mean	Median
1	Age of respondents	25.12±20.15	21.5

**Table 2: Sex distribution of respondents**

Sex	Frequency	Percentage
Female	65	65%
Male	35	35%
<b>Total</b>	<b>100</b>	<b>100%</b>

Figure 1: showing Sex of respondents

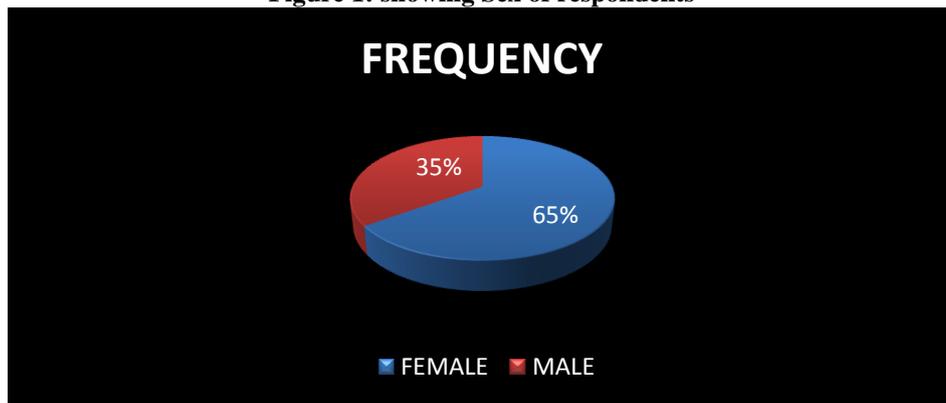


Table 3: Methods identified as effective by students

S/N	TeachingMethod	Frequency	Percentage
1	Teaching	18.0	18
2	Demonstration	27.0	27
3	Group Study	19.0	19
4	Online	15.0	15
5	Role play	4.0	4
6	Lecture	7.0	7
7.	Discussion	10.0	10
		<b>100.0</b>	<b>100%</b>

Figure 2: Method of impacting knowledge identified as effective in the study area

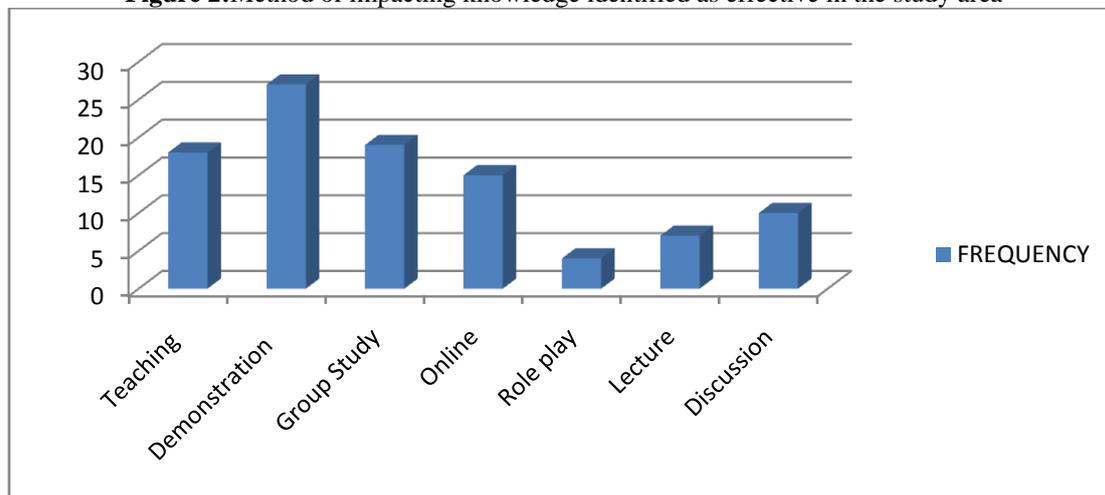


Table 4: Lecturers (HOD) rating of students' academic performance in the study area.

Rating	Frequency	Percentage
Excellent	0	0
Very Good	1	10
Good	3	30
Average	5	50
Below Average	1	10
	<b>10.0</b>	<b>100%</b>

Figure 3: Rating scale for academic performance of students

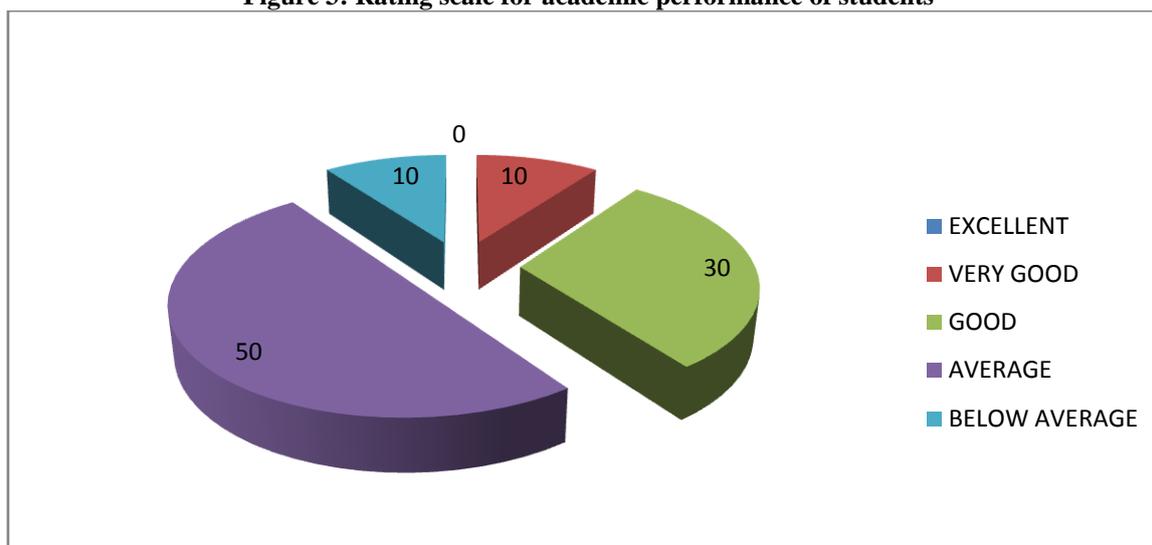


Table 5: Analysis of the performance score of control group

S/N	Group	Sample	Min	Max	Mean	S.D
1	Control Pre-test	50	12.00	50.00	32.0500	10.43252
2	Control Post test	50	13.00	51.00	34.5000	10.53256
3	Experimental Pre test	50	10.00	49.00	28.0010	10.76543
4	Experimental Post test	50	17.00	62.00	38.5463	10.65467

Table 6: Correlation between students 'academic performance and two most effective method of teaching adopted in the study area.

S/N	Methods		Demonstration	Group Study	Student Performance
1	Demonstration	Pearson correlation	0.465	0.223	
		(2tailed)	0.312		1
2	Group Study	Pearson correlation	0.001	1	
		(2tailed)	0.211	0.256	
3	Students' Performance	Pearson correlation	0.101	0.1	
		(2tailed)	0.003		

## V. Discussion

Based on the above analyzed data, 65% of respondents are female while 35% are male. The students affirmed that the most suitable method for them is demonstration indicating 27%, followed by group discussion and teaching method at 19% and 18% respectively. Online lectures and use of ICT was also identified as emerging method that proves effective indicating 15%. Out of the 10 Headof Departments selected for this study, 50% rated student academic performance as average while 40% is above average. The correlation between students' academic performance showed that there is indeed a significant relationship between the choice of teaching method by lecturers and students' academic performance at  $r= 0.256$ . The application of demonstration method showed significant result as  $p \leq 0.05$ . This study further revealed that effective teaching and application of the right pedagogue method has significant impact on students' academic performance in the study area. Hence, the effective methods identified should be adopted in the study area. The use of E-learning facilities was also touted as an emerging teaching method that allows student to explore ICT and online engagements to improve learning and students' academic performance as it allow students to explore and gain unlimited access to learning materials. The study also involved an in-depth comparative analysis of the academic performance of students using the two most effective method in the study area on both G1 (Control Group) and G2 (Experimental Group) through a T-test of independent variables.

## VI. Conclusion

Based on the results, there is evidence of good academic performance of students owing to effective teaching methods in the study area as students are able to perform well in the examination if they are part of the learning process. There is indeed a significant relationship between the choice of teaching method by lecturers and students' academic performance in Ekiti State College of Health sciences and Technology Ijero Ekiti.

## VII. Recommendations

The following recommendations were proffered:

1. Lecturers/Instructors should utilize practical demonstration and group study and which were identified as the most effective method that enhances students' academic performance in the study area.
2. E-learning and the use of ICT-based techniques as identified by the students should be embraced to enable students explore learning materials using the right technology most especially during this COVID-19 lockdown.
3. The Management of the institution should make provision for a more conducive learning facility that will enable the practicality and utilization of various knowledge impacting methods and improve students' academic performance.
4. The Government should assist the Institution through the Ministry of Education and policymakers in the State to harness strategy that is learner-centered to improve quality teaching and students' academic performance in the study area.
5. Establishment and implementation of policies that will equip the institution with various teaching methods and approach.

**Conflict of Interest:** The Authors declares no conflict of interest

**Sponsorship or Grant:** There were no grants or sponsorship received for this study.

### Authors Contribution:

**Shegun Victor Oluwatuyi:** *Setting of objective, Data Analysis and Conclusion*; **Rachael Adedoja Okunade:** *Introduction/Referencing*; **Folakemi Iyabo Oladapo:** *Abstract*; **Oluwafunmilola Mary Adefila:** *Methodology and recommendation*; **Anuoluwapo Deborah Ajijola:** *Distribution of questionnaire and data collection.*

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