PAPER

ACTIVITY-BASED TEACHING VERSUS TRADITIONAL METHOD OF TEACHING AND LEARNING GEOGRAPHY AT FCT COLLEGE OF EDUCATION ZUBA-ABUJA, NIGERIA

Amina Mohammed Tijjani, Ph.D

Abstract

The study presents the effectiveness of Activity-based method of teaching geography against the traditional lecture methods in FCT College of Education, Zuba - Abuja, Nigeria. The population of the study comprised of all the students of the department of Geography and the staff. Sample of 94 students each was drawn from level one and level two of the department respectively. A quasi-experimental design was used that utilized pre-test and post-test groups. The control group comprised of the level 1 students who took lectures through the traditional method while level 11 students formed the experimental group that did the course as practical. Scores of their performance were used as research data. Data was analysed using t-test, mean scores and standard deviation: The t-test of independent sample was used to test the formulated hypothesis at 95% confidence level. The results of analysis rejected the null hypothesis and accepted the alternative hypothesis which indicated significant difference in the mean scores of the two methods of teaching Geography. This implies that the activity-based method of teaching is more effective than the lecture method because the experimental group performed better than the control group. Therefore, the activity-based method is recommended in the teaching and learning of Geography.

Keywords: Activity - based, Experimental, Pre-test, Post-test, Traditional Method.

Amina Mohammed Tijjani, Ph.D Department of Geography FCT College of Education Zuba – Abuja, Nigeria

INTRODUCTION

Geography as a school subject plays an important role in enhancing the comprehension and understanding of the world around students. Geography seeks to illuminate the interconnectedness of naturel and human phenomena, fostering spatial literacy and critical thinking skills in students. The demand for modern education has compelled lecturers in FCT College of Education Zuba to take critical decision regarding the instructional method that can best be used in teaching and learning geography.

Correspondence to Amina Mohammed Tijjani, Ph.D Email: hammanamina@yahoo.com

The traditional method has been for years the dominant teaching method of geography

which only resulted in rote learning and true understanding of concepts does not occur. The choice of instructional methods in geography significantly impacts the effectiveness of teaching and learning process. In the case of FCT College of Education Zuba, Lecturers are confronted with the decision to adopt either traditional teaching method or embrace innovative approaches such as activity—based teaching.

The traditional method of teaching geography is characterised by passive learning experiences, and with instructors predominantly relying on lecture and textbooks to disseminate knowledge (Smith, and Wilson,2020). Obviously, this method fails to engage students actively in the subject matter but fosters rote memorization (Yangin and Dindar, 2007). The instructor normally uses the conventional methods because of inadequate resources, insufficient – time and limited background. Conversely, activity – based teaching methods is based on variety of activities in passing knowledge to the learners; because once learners are given opportunities to think and solve problems on their own, learning becomes permanent and long lasting. The activity – based method aims, at fostering active participation and critical thinking among students by incorporating hands - on activities, field trips and interactive multimedia resources (Laleye, 2010). The important features of activity-based teaching are that, it is learners – centred and encourages self-learning (Sharma, 2010).

The choice between these two teaching methods has significant implication for students' engagement and comprehension in geography education at FCT College of Education Zuba. Brown and Williams (2019) research indicated that the activity – based teaching enhances students understanding and retention of geographic concepts and nurtures their problem-solving skills and spatial thinking abilities. However, the conventional approach may only leave students passive and less inclined to explore the subject matter beyond the classroom.

The paper aims at analysing and comparing the two different teaching methods in the context of geography instruction. It will also help to shed light on the most effective approach to the teaching and learning of geography at FCT College of Education Zuba. The analysis of this research will help inform lecturers, administrators and policymakers in making informed decision to enhance the quality of teaching and learning in the institution:

STATEMENT OF THE PROBLEM

The teaching and learning of geography have been characterised by the traditional method (lecture method) for a long period of time. The approach has hindered students' engagement and application of geographical knowledge beyond the classroom (Smith and Wilson 2020). Whereas little or no emphasis was placed on the activity – based method which encompasses experiential learning and hands on activities procedures in impacting knowledge (Sharma, 2010). Recently, the activity – based methods have gained recognition for their ability to enhance active students' participation and stimulate deeper understanding of geographical concepts (Superfine, 2012).

As lecturers of FCT College of Education Zuba, strive for a paradigm shift especially in the teaching and learning of Geography, it becomes imperative to evaluation the impact of the pedagogical approaches on geography instruction. The central issue addressed in this paper is the effectiveness of the two methods of teaching i.e traditional and activity- based methods in promoting meaningful learning outcomes in Geography Education in the College.

OBJECTIVES OF THE STUDY

The objectives of this research are as follows:

- To compare and contrast activity-based teaching and traditional teaching methods in geography education.
- To assess the impact of activity-based teaching and traditional teaching methods on student engagement and comprehension.
- To gather insights into the perceptions of lecturers and students regarding the effectiveness of these teaching methods in geography instruction FCT College of Education, Zuba.

SIGNIFICANCE OF THE STUDY

This research holds substantial significance for FCT College of Education, Zuba, and the broader field of geography education. By shedding light on the comparative effectiveness of activity-based teaching and traditional teaching methods, this study has provided valuable insights for lecturers, curriculum developers, and policymakers. It has the potential to inform pedagogical decisions and enhance the quality of geography education, ultimately benefiting both lecturers and students at the College, Additionally, the findings of this research may contribute to the growing body of literature on innovative teaching methods in geography education.

RESEARCH QUESTIONS

To guide this investigation, this paper posed the following research questions:

What are the key differences between activity-based teaching and traditional teaching methods in geography education?

How do activity-based teaching and traditional teaching methods affect students' engagement and comprehension in geography at FCT College of Education, Zuba?

What are the perceptions of lecturers and students regarding the use of these teaching methods in geography instruction?

HYPOTHESIS

The following hypotheses were proposed for this study:

Ho: There is no significant difference in the effectiveness of activity-based teaching and traditional teaching methods in geography education at FCT College of Education, Zuba.

Hi: Activity-based teaching is more effective than traditional teaching in geography education at FCT College of Education, Zuba.

LITERATURE REVIEW

The dominant method of teaching and learning has been the traditional methods where teachers relied on didactic approach that is centred on the teacher. Information is transmitted through lectures and textbooks (David,2007). However, the field of education has witnessed a paradigm shift in teaching and learning methodologies over the years, with the emergence of innovative approaches. Such pedagogical approaches like the activity-based teaching, excursion and field-trips have challenge the traditional methods especially in the field of Geography. Hence, these innovative methods brought forth a new era of student-centred education. (Utim,2015).

Researchers have noted that the traditional method emphasizes content coverage over deep comprehension and application of knowledge (David; 2007, Utim; 2015). This can result in students acquiring surface-level knowledge which may not be effectively applied beyond the classroom context. Contrarily, the activity-based method prioritises experiential learning and students' engagement. The activity – based method promotes active students' participation by engaging with the subject matter through hands – on activities, discussion problem – solving observations and real-world applications. The use of technology, including multimedia and online resources have further expanded the possibilities of activity-based instruction, making it more accessible and appealing to modern learners. The activity – based approach is aligned with the *constructivists* learning theories, which place emphasize on the importance of students constructing their knowledge through active engagement with the content (Piaget, 1950).

Studies have explored the comparative effectiveness of activity - based teaching and traditional methods across various disciplines. In the field of Geography Education, numerous researches suggest that the activity - based approach can enhance students special thinking abilities and promote a more holistic understanding of Geographic concepts (Brown and Williams, 2019). A recent study by Mailoushi and Busa (2022) on the effects of activity-based method of teaching on students' performance in the concept of reading in Geography in Mangu, Local Government Nigeria, discovered that students taught using activity - based performed better than those thought using the traditional lecture method.

Despite the potential benefits of activity – based teaching, challenges exist in its implementation. Issues of resource availability, time constraints and adapting activities to diverse learning styles may arise. Additionally, some content of the curriculum may require a blend of both traditional and activity – based methods to effectively achieve learning objectives. Therefore, the traditional methods still hold a special place in educational contexts and in subject areas.

The comparison between the two pedagogical approaches continues as lecturers strive to strike a balance between content delivery and meaningful learning experiences. Both approaches have their drawbacks and merits and the choice between them depends on the specific goals, subject matter and students' demographics. This paper aims to contribute to the growing academic discourse by assessing the efficacy of these two teaching methods in teaching geography at FCT College of Education Zuba—Abuja.

METHODOLOGY

To investigate the comparative effectiveness of Activity-based teaching and traditional teaching methods in Geography Education at FCT College of Education Zuba, a quasi-experimental research design was employed. This design allows for a controlled comparison of two groups: one exposed to activity-based teaching and the other to traditional teaching methods.

The entire population of the study comprised of all students of level 1 and level 11 and all staff of the department of Geography FCT College of Education Zuba. The sample however, comprised of 94 students from each of the levels (i.e level 1 and level 11). This number was randomly selected to form the two control groups for pre-test and post-test. The selection of the students considered their gender in which both male and female students were involved. The level 1 students formed the control group consisting of 94 students taking Geo 122. While the second group, that is the experimental group consisted of the students of level 11 (94 student) who took Geo 221 (Practicum of Geography). The groups were formulated on the basis of marks achieved in the course of teaching and conducting continuous assessments in the semester for this research experiment.

The lecture method of teaching was adopted on the control group (level 1 student) for treatment purposes. The schedule of lectures was for the whole of a semester (16 weeks) in which students were being assessed within the course of teaching in areas of knowledge, comprehension and skill development of the course. On the other hand, the level II students formed the experimental group and the activity-based method of teaching was used as a treatment for the whole of a semester (16 weeks). In this group, students were allowed to discover their talents through practical works they were engaged. At the end of every practicum, their scores were recorded based on their performance of tasks. After the end of the semester, the post-test was administered on the two groups (i.e both controlled and experimental groups). Subsequently, the research data was obtained through the scores of the students' performance on both pre-test and post-test. Data from lecturers were collected through structured interviews on issues pertaining to their perceptions of teaching methods, utilization of innovative pedagogy in teaching geography and students 'performance.

RESULTS AND DISCUSSION

The data collected after the pre-test and post-test treatments were subjected to analysis using the t-test, mean scores and standard deviation to establish the efficacy of the methods of teaching geography at FCT College of Education Zuba-Abuja. The summary of the paired sample Test is shown on Table I.I

Paired Sample Test

	Paired Differences				Paired			
				95%	95%			
			Std. Error	Confidence	Confidence			
	Mean	Std.						
		Deviation	Mean	Lower	Upper	t	df	
								Sig.(2-
								tailed)
Pair	-12.4842105	17.2274294	1.7674970	-15.9936172	-8.9748039	-7.063	94	.000
LECTURE								
PRACTICAL								

SPSS Version 20

The hypotheses were stated thus:

Ho: There is no significant difference in the mean score of the students taught using traditional methods and those taught with practical method.

Hi. There is significant difference in the mean score of the students taught using

The traditional lecture method and the practical method.

A Sample of 94 students were collected and paired sample mean test was done using the Statistical Package for Social Sciences (SPSS 20) at 95% confidence level. The result shows t value of -7.063, A standard deviation of 17.2274 and a correlation value of 0.053. The p value of 7.063 is statically < 0.05 which strongly suggests a non-existence of difference in the mean value of the scores of the two cases. Thereby showing a significant difference in the mean scores of the two cases. Therefore, the Null hypothesis (Ho) is consequently rejected while the Alternative hypothesis (Hi) is accepted that there is a significant difference in the mean score of

students using the two different methods of teaching.

The results on the table shows significant difference between the control group and experimental group when their mean scores were tested. It should be borne in mind that the analyses were drawn in view of the objectives of the study and the hypothesis formulated. Major findings indicated that the null hypothesis was rejected and the alternative hypothesis was accepted. This implies that Activity-based teaching is more effective than traditional teaching methods in Geography Education. Because students taught using Activity-based methods in this study performed better than those taught by lecture method.

Equally, the lecturers interviewed confessed that their students usually perform better in hands on activities and practical works. However, they enumerated reasons why they use the traditional lecture methods because of lack of enough resources, inadequate lecture hours and limited background to explore the active-based methods of teaching. The findings of this study therefore correspond with several other authors (Mailoushi and Busa 2022, superfine 2012) work that established the effectiveness of Activity-based method over the traditional method of teaching.

CONCLUSION

The emphasis on teaching and learning in this century is 'learners' centred, therefore the activity-based method of teaching has been put to test in several disciplines of education and has proved to be very effective and ideal for teaching. The geography education with its wide scope can best adopt this method of teaching the subject. It can also be blend with the traditional method to enable Geography teachers deliver their contents effectively; because activities help students in the application of knowledge and comprehension.

REFERENCES

- Brown, J. and Williams, C. (2019). Effects of -Based Teaching in Sciences International Journal of Humanities and Management Activity Sciences Vol 2 (1) PP 2240-2632
- David, S. O. (2007). Effects of Activity-Based Teaching Methods on the Academic Achievement of Slow Learners in Chemistry at the Secondary School Level. Unpublished M.ED Thesis. Dept. of Education Fieldwork in Faculty of Education ABU, Zaria.
- Laleye, D. (2010). The Role of Journal of Geography Education: Reflections on Opportunities and Challenges of Geography, Vol 109 (2)P 55 64
- Mailoushi, J.T. and Busa; I.A (2022). Effect of Activity-Based Method of Teaching on Students' Performance in the Concept of Map Reading in Geography in Mangu LGA of Plateau State. International Journal of Humanities and Management Sciences ((IJHMS) Vol 2 (2) PP 4045 4255
- Sharma, O.P (2010) Activity-Based Teaching of Sciences at Schools. Retrieved from http://www. World of science. In/ct. aspx
- Smith, J and Wilson, R (2020). Enhancing Students Learning Through Fieldwork in Geography. A Review of Innovative Approaches and Best Practices. Journal of Geography Vol 11 6 (1) 45 -54
- Superfine, W. (2012). Why Use Activity-Based Learning in the Young Learner's Classroom' Retrieved from https://iconline.ipleiria.pt
- Utim, S. (2015). Effects of Activity-Based Method of Teaching on Students' Performance in the concepts of Map Reading in Geography in Awe LGA Nassarawa State. Unpublished Research Project to the Department of Science Education University of Jos.