



## IMPACT OF DEMONSTRATION WITH DISCUSSION AND QUESTIONING TEACHING METHODS ON SECONDARY SCHOOL STUDENTS' ACADEMIC PERFORMANCE IN CULTURAL AND CREATIVE ARTS

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### AUTHORS' CONTRIBUTIONS

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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### ABSTRACT

The aim of this study was to determine the influence of teaching methods on students' performance in cultural and creative arts. The research design for this study was quasi-experimental. The target population comprised of 90 Junior Secondary three (JS3) students from two public coeducational secondary schools in Idemili North Local Government Area (LGA) of Anambra State as on 2020/2021 academic session. A sample of 40 JS3 students was randomly drawn from the two schools and was used in the study. The instrument for data collection was Test of Achievement in Cultural and Creative Arts for Junior Secondary (TACCAJS) developed by the researchers. The collected data were analyzed with t-test using Statistical Package for Social Sciences version 25.0 (SPSS Inc., Chicago, IL, USA) tested at 0.05 level of significance. The result revealed that there was a significant variation between students' achievement in cultural and creative arts ( $p = 0.000$ ) in favour of students exposed to the teaching methods. But, there was no significant variation between students' achievement in cultural and creative arts, based on gender ( $p = 0.086, 0.405$ ). Hence, it was concluded that demonstration with discussion and questioning teaching methods are more effective in inculcating knowledge to students especially, in the field of cultural and creative arts.

**Keywords:** Teaching methods; junior secondary; academic performance; cultural and creative arts; students.

### 1. INTRODUCTION

Teaching is one of the most respected professions in the world. According to Damodharan and Rengarajan [1] teaching involves the progressive development of learning materials, organizing them and consequently

transferring the information contained in them to others. This is carried out with the purpose of imparting skills, attitudes, new paradigms and generally transforming lives. Transferring knowledge require teachers to use the appropriate teaching method and pedagogy that best suits the learner and

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which also suit the objectives and the desired outcomes. Furthermore, Cooper and Cohn [2] observed that teaching methods are the vital medium for effective teaching. According to Isa et al. [3] without the right teaching methods, the aims and objectives of the teaching endeavour will not be actualized.

For the method used in teaching to be effective, Adunola [4] encouraged teachers to be acquainted to the various teaching stratagems which take into cognizance the extent of the density of the topics to be covered. However, the olden times saw various instructors extensively apply teacher-centered methods instead of the student-centered methods in teaching and learning. Recently, the quests for the effectiveness of teaching methods on learners' attainment have been of concern to the educational researchers (Hightower, 2011).

Consequently, educational researchers have continuously investigated the extent these teaching methods improves student learning and academic performance. Researchers like Adunola [4], Cox [5], Eleje et al. [6], Esomonu and Eleje [7], Ganyaupfu [8], and Hassidov [9] Isa et al. [3] have conducted studies showcasing how teaching methods affect academic performance. The findings revealed that a decisive factor in student achievement is the teaching method. Quite remarkably, these researchers basically connected consistent low academic performance by many learners to the poor teaching methods used by the teachers during teaching and learning. That is why the teacher receives the first inquisition when it comes to the success or failure of the student. It is not enough for cultural and creative arts educators to know the subject matter they teach but it is also important for them to know the appropriate methods to use in order to transfer and impart the knowledge in their student. It will aid to enhance maximum academic performance among students.

In recent times, teachers utilize various teaching methods including demonstration, discussion and questioning methods to teach. Demonstration involves the dramatization of the concept being taught, the discussion method involves conversation on the subject matter while the questioning method involves the use of questions to open up the subject under study and directly involve the students in the learning process. The effects of these methods are yet to be empirically evaluated as regards cultural creative arts.

As a subject, cultural and creative arts, is a combination of fine arts, music, drama and craft [10]. According to Ojukwu and Onyiuke [11], cultural and

creative art is a general term that denotes the three arts subject areas- music, fine and applied arts, and drama/theatre combined. Thus, the main purpose of teaching and learning of cultural and creative arts is to promote aesthetic education. That is to improve students' extent of artistic indebtedness; capacities to reconnoitre, employ, enhance and experiment with colours, design, sound, space, and movements of the body [12].

Despite the import and importance of cultural and creative arts as indicated above, students' performance in the subject over the years has not been that encouraging. This is proved by the report of Basic Education Certificate Examination (BECE) Chief Examiner [13] that students rarely attempt questions from the three major components of the subject, that is, drama/theatre, fine and applied arts, and music as they are either submerged in one area of it or the other. To this end, they rarely read the prescribed texts because of their negative attitudes to the subject and poor accommodating ability. As a result of the above, shallow answers and responses were given to examination questions in cultural and creative arts.

The National Policy on Education [14] and the United Nations Education, Social and Cultural Organization [15] had cited certain problems affecting the teaching and learning of cultural and creative arts to revolve around the meaningfulness of the content, the sustainability of the teaching methods and the teacher who handle both the content and method. It is undeniable that the usage of ineffective teaching methods can result in poor academic performance of the students. This necessitates the need for a more effective and result-oriented teaching method. Given the creativity value and importance attached to cultural and creative arts in the Nigerian Junior Secondary (JS) curriculum, the need to teach it effectively through an effective method becomes sine qua non. Since good teaching among other factors play significant role in enhancing performance [6] there is a need to evaluate the different methods of teaching and how they affect learning with reference to the subject of cultural and creative arts. In addition, the researchers observed that there is paucity of research works on how demonstration, discussion and questioning methods could influence students' performance in cultural and creative arts. Hence, it became imperative to carry out this study to determine the influence of teaching methods (demonstration with discussion and questioning) on Junior Secondary (JS) students' performance in cultural and creative arts. The probable impact of gender on JS students' performance in cultural and creative arts was also investigated.

## 1.1 Hypotheses

1. There is no significant difference between the mean achievement test scores in cultural and creative arts of students exposed to teaching and learning of drama in cultural and creative arts using the discussion with demonstration and questioning teaching methods and those exposed to the lecture teaching method.
2. There is no significant effect of gender on students' achievement in cultural and creative arts.

## 2. METHODS

### 2.1 Study Area

The study area is Idemili North Local Government Area (LGA) of Anambra State.

### 2.2 Study Design

The research design for this study was quasi-experimental. The design was considered appropriate for this study because students in their preexisting classroom were used in this study.

### 2.3 Study Population

This comprised of all 1015 Junior Secondary three (JS3) students in the 13 public coeducational secondary schools in the LGA as at 2020/2021 academic session.

### 2.4 Sample and Sampling Technique

The sample of the study comprised of forty (40) JS3 students from 2 selected coeducational secondary schools in the study area. The two secondary schools were selected using purposive sample technique while all the JS3 students in the two schools selected were used in the study. That is, the intact class of JS3 for each of the two schools.

Of the 43 JS3 students that were assessed for eligibility for the study, 1 declined to participate in while 2 did not meet the inclusion criteria. Therefore, 40 students from 2 selected coeducational secondary schools were used. Out of these forty (40) students, 17 were males and 23 were females. Allocation of the two schools to experimental groups was done using simple random sampling technique. The experimental group I (Treatment group) was exposed to teaching and learning of drama in cultural and creative arts using the discussion with demonstration and

questioning teaching methods, while the experimental group II (control group) was taught using the conventional teaching method -lecture method.

### 2.5 Instrument for Data Collection

The instrument used for data collection in this study was titled "Test of Achievement in Cultural and Creative Arts for Junior Secondary" (TACCAJS). The instrument was developed and validated by the researchers. TACCAJS consisted of 20 multiple choice questions in the subject content of Cultural and Creative Arts for JS3. It was used as a post-test in this study, to measure students' achievement in Cultural and Creative Arts.

### 2.6 Inclusion Criteria

The first 20 JS3 students in each of the two selected schools that participated/completed the experimental procedure were included.

### 2.7 Exclusion Criteria

Inability of a student to participate and complete in the experimental procedures.

### 2.8 Procedure

The entire experiment lasted for three weeks; out of which two (2) weeks was spent in teaching and learning of drama in Cultural and Creative Arts and the last one (1) week for conducting the achievement test (post-test). The experimental process involve teaching of drama in cultural and creative arts to the experimental groups, and administration of an achievement test to check the effect of the teaching methods on the students' achievement in cultural and creative arts.

The teaching of drama in cultural and creative arts to the groups was done during the school normal periods by the trained research assistants (cultural and creative arts class teachers) in each of the selected schools with the researchers monitoring and supervising. The experimental group I (Treatment group) was taught using the discussion with demonstration and questioning teaching methods; while the experimental group II (control group) was taught using the conventional teaching method (lecture method). A week after the completion of the teaching and learning of drama in cultural and creative arts, achievement test was administered to each group. The answer sheets were collected from the students at completion of the achievement test for statistical data analysis.

**2.9 Statistical data Analysis**

The collected data were analyzed with t-test using Statistical Package for Social Sciences version 25.0 (SPSS Inc., Chicago, IL, USA) and the rejection or acceptance of the stated hypotheses was at p-value.

**3. RESULTS**

The collected data in-line with the stated hypotheses were analysed and the results presented. The stated hypotheses were tested at 0.05 level of significance using t-test statistics.

Hypothesis 1 aimed to determine how the teaching methods (demonstration with discussion and questioning methods) affect students’ achievement in cultural and creative arts.

Table 1 presents the mean scores in cultural and creative arts of students taught/ exposed to the teaching methods - demonstration with discussion and questioning methods – (Treatment group) and those in control group. The summary result of t-test is seen in Table 2.

In Table 1, is shown the mean achievement test scores of students for the experimental groups. Mean score of students in the treatment group were greater than mean score of the students in control group. The t-test of independent sample was carried out to determine the level of significance of the difference between the two mean scores. The experimental group I (Treatment group) was exposed to teaching and learning of drama in cultural and creative arts using the discussion with demonstration and questioning teaching methods, while the experimental group II (control group) was taught using the conventional teaching method -lecture method.

As seen in Table 2, there was a significant variation between students’ performance in cultural and creative arts since the p value was less than 0.05 (p = 0.000). Thus, the mean achievement test score of students exposed to the teaching and learning of drama in cultural and creative arts using the

discussion with demonstration and questioning teaching methods was significantly greater than those exposed to teaching and learning of drama in cultural and creative arts using the conventional method.

Hypothesis 2 aimed to determine whether there is a significant effect of gender on students’ achievement in cultural and creative arts.

The Table 3 presents the mean scores in cultural and creative arts of male and female students in treatment group and control group. The summary result of t-test is seen in Table 4.

As seen in Table 3, the mean achievement test score of male students in the treatment group was higher than that of the females, while in the control group, the mean achievement test score of female students was greater than that of the male students. The t-test of independent sample was carried out to determine the level of significance of the difference between the mean scores.

In Table 4, it was observed that there is no significant variation between students’ achievement in cultural and creative arts based on gender, since the p values were greater than 0.05 (p = 0.086, 0.405). Thus, both male and female students in treatment group had equal benefit from the teaching and learning of drama in cultural and creative arts using the discussion with demonstration method. Equally, both male and female students in control group had equal benefit from the teaching and learning of drama in cultural and creative arts using the conventional method.

**4. DISCUSSION**

The result of this study revealed that the teaching and learning of drama in cultural and creative arts using the discussion with demonstration method made significant greater positive influence on junior secondary students’ achievement in cultural and creative arts than the lecture method. This finding further provides empirical support to earlier findings by Ofodu and Raheem [16] who asserted that there was greater impact of cooperative instructional

**Table 1. The mean scores in cultural and creative arts for the two groups**

		Group Statistics			
		N	Mean	Std. Deviation	Std. Error Mean
Test Scores	Treatment Group	20	92.40	7.708	1.724
	Control Group	20	49.35	13.785	3.082

**Table 2. The t-test of independent samples for comparing students of experimental groups i and ii on their mean test scores**

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Test Scores	Equal variances assumed	10.181	0.003	12.190	38	0.000	43.050	3.532	35.901	50.199	
	Equal variances not assumed			12.190	29.822	0.000	43.050	3.532	35.836	50.264	

**Table 3. The mean scores in cultural and creative arts for the students in the two groups based on gender**

		Group Statistics				
Experimental Groups	Gender	N	Mean	Std. Deviation	Std. Error Mean	
Treatment Group	Male	7	96.43	3.780	1.429	
	Female	13	90.23	8.506	2.359	
Control Group	Male	10	46.70	13.375	4.230	
	Female	10	52.00	14.376	4.546	

**Table 4. The t-Test of independent samples for comparing male and female students of treatment group and control group on their mean test scores**

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Treatment Group	Equal variances assumed	9.358	0.007	1.816	18	0.086	6.198	3.413	-0.973	13.368	
	Equal variances not assumed			2.247	17.664	0.038	6.198	2.758	0.395	12.000	
Control Group	Equal variances assumed	0.051	0.824	-0.854	18	0.405	-5.300	6.209	-18.345	7.745	
	Equal variances not assumed			-0.854	17.907	0.405	-5.300	6.209	-18.350	7.750	

teaching strategies on the performance levels of students in reading comprehension in secondary schools. It also corroborates the findings by Esomonu and Eleje [7], and Isa et al. [3] that diagnostic testing method improved students' achievement during teaching and learning, and that most of the teachers' methods of teaching have a great effect on students' academic performance. The findings of the study further exposed that the use of the conventional teaching method (lecture) on junior secondary students made no impact on students' achievement in cultural and creative arts. The findings of the study concurred with that of Olukayode [17] who inspected the relativity of inquiry method and teacher-guided discussion method to the traditional teaching methods in educational outcome of secondary school students.

The non-significant effect of gender on students' performance in cultural and creative arts gotten in this study was in line with the result of Eleje et al. [6] which revealed that gender made no significant difference in students' educational attainment. Likewise, Esomonu and Eleje [7] in their study observed mean differences in favor of the female students, although there is a non-significant dissimilarity between males and females student achievement in economics. However, the present result was in discrepancy with that of Amuda, Ali, and Durkwa [18] who noted that male students consistently outperformed the female students in the examinations conducted by WAEC Also Ezeugo [19] found a significant gender differences in students' achievement in Nigeria. Thus, the researchers note that gender had no significant influence on junior secondary students' performance in cultural and creative arts.

## 5. CONCLUSION

Centered on the result of this study, the researchers concluded that demonstration with discussion and questioning teaching methods are more effective in inculcating knowledge to students, especially drama in the field of cultural and creative arts. This assertion is based on the fact that demonstration with discussion and questioning teaching methods enabled the students exposed to it to achieve an average score of 92.40 which is significantly higher than the lecture teaching method which the students exposed to it could achieve an average score of 49.35. Moreover, gender could not significantly affect students' performance in cultural and creative arts.

## 6. RECOMMENDATIONS

Centred on this study results, the following recommendations were made:

1. Teachers should endeavour to apply teaching methods (demonstration with discussion and questioning method) during teaching in order to encourage students to become aware of and to appreciate subject details. This will foster creativity and critical thinking in students, and the application of skills.
2. The researchers recommend a supplementary investigation on the application of demonstration with discussion and questioning method by future researchers on different subjects.

## IMPLICATIONS OF THE FINDINGS

In view of the above findings and conclusions, the study has provided further empirical evidence that the demonstration with discussion and questioning method of teaching is more effective in enhancing students' performance in cultural and creative arts among junior secondary students. This implies that teachers can use demonstration coupled with discussion and questioning teaching method to facilitate students' achievement in cultural and creative arts than the lecture teaching method.

## CONSENT AND ETHICAL APPROVAL

Consent to carry out this study was acquired from the Post Primary School Service Commission, Awka (approval number AN/21/010; Authorization date: 4th September, 2021). The Principals of each of the schools that participated in the study also gave consent. For students between 11 and less than 18 years, the authorization was gotten. On paper consent was obtained for those 18 years and above.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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