

Differential Effects of Small-group and Whole-Class Instructions on Primary Pupils' Academic Achievement in English Language

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Abstract

Achievement is taken as the major goal for which classroom is set up. This is because society frowns at any classroom effort that does not lead to pupils' high achievement. Hence, the reason society may hold both home and school factors responsible in this regard among others. In order to improve pupils' academic achievement, educationists continue to encourage teachers to change their methods to bring about quality learning and achievement. This study therefore investigated effects of two different teaching strategies among primary school pupils. The research design employed was the pre-test, post-test control group quasi-experimental design. Two research hypotheses were formulated and tested at 0.05 level of significance. The participants (58 males and 42 females) were drawn from randomly selected primary five classes in public schools in Ibadan North Local Government Area of Oyo State. The instrument used to collect the data was English Language Achievement Test (ELAT). The data collected were analysed using descriptive statistics which includes mean, standard deviation while inferential statistics includes use of t-test. The result revealed significant main effect on pupils' performance on English Language achievement test. However, there was no significant difference in the performance of male and female pupils. Based on the findings, it was recommended that the use of small group instruction should be adopted in primary school to enhance the teaching and learning of English Language among others.

Keywords: Small group, Whole class instruction, Performance

Introduction

The need to help learners acquire information, ideas, skills, values, ways of thinking, means of expressing themselves and to enhance learners increased capabilities to learn more easily and effectively in the classroom has been the concern of most teachers and instructors (Boruvková and Emanovský 2016) This is because an achievement is seen as the major goal for which classroom is set up (Gull and Shehzad, 2015, Akinsola, 1999, and Babarinde, 1986). Unfortunately, achievement in English language has not been encouraging. Therefore, researchers have been searching for method, device or learning strategy that will bring about high achievement in pupils' learning. This had led to a shift of focus from the traditional teaching method such as whole class instruction to individualized instruction and cooperative learning (Backer, Miller, and Timmer, 2018, Oduolowu, 1988)

Oladunjoye (2003) asserted that the emphasis in modern research is changing by the day from teacher to learner-centred approach. Small-group instruction, one of the methods of cooperative learning is one of the modern methods of learning. Oladunjoye (2003) described cooperative learning as a variety of concepts and techniques for enhancing the value of pupils-pupils interaction. Slavin (1996) listed positive interdependence, individual accountability, social skill, group processing, progress group integration and heterogeneous grouping as the key concepts of cooperative learning. Thus, it can be inferred that small-group class instruction has the potentials of enhancing and facilitating learners high performance in given task or class work because of its interactive and cooperative nature.

Furthermore, small group instruction is described as instruction given to two-five or more group of pupils with similar or mixed abilities, interest, and needs grouped together for many reasons which could be academic (Boruvková and Emaňovský 2016, Slavin, 1984). Whereas, Behringer, 2018 Guskey, 1990) explained that whole class instruction is a situation where the teacher and the pupils are on opposites sides with the teacher serving primarily as an information dispenser and later as an evaluator at the same time in the same room.

Research findings by Lama, Tamang, Kulkarmi, and Sinha (2015), Slain (1987) have indicated that whole class instruction and individual seatwork are widely used and appear to be suitable for teaching computation and large classes. He argued further that working in groups, pupils can solve more difficult problems that they would be able to solve individually. Also, Stevens and Slavin (1995) reported that academically handicapped pupils in cooperative primary schools obtained significantly higher achievement scores in reading when compared with similar pupils in traditional primary schools using whole class instruction. Furthermore in his evidence report, Oladunjoye (2003) found that the cooperative language learning strategy is more effective at promoting pupils' achievement in English language than the conventional study.

In addition to the above, Bennet and Dune (1992) while establishing a correlation between gender and achievement of the learner, opined that whether or not the grouping is cooperative, the gender effect is pronounced in the classroom groups. They discovered that there was little difference between boys and girls in their type of and frequency of talk and those boys have the dominance on group leadership. Also, Oladunjoye (2003) found significant difference in the performance of gender. He actually found that female students performed better than their male counterparts, whereas Aremu (1999) did not found significant difference in the performance of both male and female. Since there are divergent findings by many researchers on male and female performance it is necessary therefore to complement their findings with this study.

Pupil academic achievement is the major goal for which classrooms are established. But this goal is not fully realised as researcher continues to report low academic achievement in pupils' performance in English language. In order to achieve this goal, researchers are shifting their focus from the traditional teaching method to and emphasizing learning strategies that can enhance high academic achievement. The present study's major concern is to investigate the effects of small-group and whole-class instruction on primary five pupils' performance in English Language and to ascertain if there would be any difference in the performance of male and female pupils in English language.

Hypotheses

Based on the stated problem, the following null hypotheses were tested.

H₀₁: There is no significant main effect of instruction on the performance of pupil who belongs to different instruction conditions.

H₀₂: There is no significant main effect of gender on the pupils' performance in English Language.

Design

The research design employed in this study was the pre-text, post-test control group quasi experimental design.

Participants

The participants of this study consisted of all primary five pupils in Ibadan North Local Government Area of Oyo State. One hundred (100) 58 male and 42 female pupils from five randomly selected primary schools were used for the study. There were two groups involved, one treated with the small-group-based instruction strategy and the other treated with the conventional whole class instruction method. The two groups were intact groups comprising both male and female pupils.

Instrumentation

The instrument used in this study was English Language Achievement Test (ELAT) which was designed and validated by the investigator. The researcher was guided by Bloom's taxonomy of educational objectives in constructing the instrument which tested remembering, understanding and thinking. The English Language Achievement Test (ELAT) was a 20 items multiple-choice test which covered four aspects in English Language. They are a comparison of adjectives, relative clauses, tense and comprehension. The instrument was validated after which Kuder-Richardson formula (KR₂₁) was used to test for its reliability. It yielded a reliability co-efficient of 0.96.

Procedure

The investigator with the help of the class teacher administered the English Language Achievement Test (ELAT) on the pupils to determine their level of performance prior to the commencement of the experiment. The following day, the experimental group was exposed to the medium of instruction over a period for two weeks. The control group was also taught the same topics in the conventional way, which is different from that of the experimental group for two weeks. At the end of the two weeks, the instrument administered as pre-test was again administered as post- test to the subjects with the help of the class teachers who assisted in the reading of the instrument and supervision of the pupils.

Method of Analysis

Descriptive and inferential statistics were used to analyse the data collected. Descriptive statistics used includes mean, standard deviation while inferential statistics include use of t-test.

Results

Hypothesis 1

There is no significant main effect of instruction on the performance of pupils who belong to different instruction conditions.

Table 1: Means, Standard Deviation and T-test Comparison of Achievement Mean Scores in the Small-group and Whole-Class Instruction

Variables	N	\bar{X}	SD	T	P
Small- Group	60	7.37	5.46	10.409	.000
Whole-class	40	2.1	1.21		

x- significant at P<0.05

From table 1, it could be seen that treatment was found to have contributed significantly to the variation in groups achievement score (P is less than 0.05). Therefore, the null hypothesis is rejected.

Hypothesis 2

There is no significant main effect of gender on the pupils' performance in English Language.

Table 2: Means, Standard Deviations and T-test Comparison of Achievement Mean Scores of Male and Female

Variables	N	\bar{X}	SD	T	P
Small Group	58	11.93	4.59	2.600	.110
Whole-class	42	12.60	4.42		

n.s = Not significant at P<0.05)

Table 2 shows that there is no significant difference in the performance of male and female pupils exposed to both strategies P= .110 and it is not significant. The null hypothesis was not rejected.

Discussing of Findings

The first hypothesis tested in this study was whether or not pupils exposed to two teaching instructional strategies could differ in performance in English Language test given to them. The result indicated a significant difference in the experimental and control group. Thus, the table

indicated the apparent superiority of small-group instruction over whole-class instruction. From the result of this study, it could be argued that classroom practice based on small-group instruction is more facilitative of learning to the performance in English language than traditional whole class instruction. It may be those supportive and collaborative efforts inherent in small group instruction accounted for the significance of the result. This finding is similar to the one obtained by Oladunjoye (2003) and Slavin (1995) who reported significant difference in the use of cooperative learning strategies with conventional, traditional whole-class instruction.

The second hypothesis was to discover whether or not there could be any difference in the performance of boys and girls in the different groups. The result from table two above showed that there was no significant difference between boys and girls. Veenman, Kenter and Post (2000) supported this finding. It was reported that girls' performance was at par with that of boys in both treatment. The explanation for this result may be that individual accountability as one of the key features of small group instruction assisted both male and female pupils to perform at the same level.

Conclusion

This study found a significant difference in the performance of pupils who belonged to different instructional groups in hypothesis one. The apparent superiority of small group over whole class instruction was established. The second hypothesis, however, did not find significant differences between male and females. On the whole, it was confirmed in the study, that small group was more facilitative of learning than conventional whole-class instruction which is now giving way to the co-operative learning strategy in some classroom practices.

Recommendations

In this study, small-group instruction was found effective and facilitative of pupils' performance. It is recommended therefore that focus be shifted from teacher-centred methods to cooperative small group instructional strategy where pupils will be empowered to take charge of learning activities by participating actively in learning. Hence, the use of small group instruction should be adopted in primary school to enhance the teaching and learning of English Language. Also, government should equip schools with adequate materials that will enhance better methods of teaching and learning that will promote the use of co-operative learning strategy in Arts and Humanities particularly English Language. The classroom teacher should be encouraged trained and educated in the use of and handling of modern methods of teaching that can lead to greater learning and achievement rather than overused traditional whole class instruction method.

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