



A study of the Effects of Wall Charts on Junior Secondary Students' Performance in the Use of English Adjectives in Bwari Metropolis

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Abstract— This study examined the effects of wall charts on junior secondary students' performance in the use of English adjectives in Bwari Metropolis. The researcher employed a quasi-experimental design. Intact classes were used for the study. The population of the study was three thousand, one hundred and seventeen students drawn from five junior secondary schools in Bwari Metropolis. The samples for the study were drawn from two secondary schools in Bwari Metropolis. These schools were selected through simple random sampling without replacement. The sample was made up of one hundred and sixty-four junior secondary two (JSS 2) students. A self-designed instrument, English Adjective Performance Test (EAPT) was used for data collection. The data were analysed using an Independent sample t-test, conducted at 0.05 levels of significance. The result showed that there are statistically significant differences in the mean scores of the students of the experimental group who were taught English adjectives with the use of wall charts and the control group who learnt English adjectives without the use of wall charts. It was also observed that gender has no effect in the mean performance scores of students who learnt English adjectives with the use of wall charts. On the average, the male and female students performed equally. Based on the findings, it was recommended that the government should assist the school management to organise in-service training for the teachers to enrich their knowledge on the importance and the handling of instructional materials, the school management should endeavour to make provision for wall charts to all teachers especially to the language teachers among others.

Keywords— Wall charts, junior secondary students' performance, use of English adjectives, wall charts, junior secondary students' performance, use of English adjectives.

INTRODUCTION: *Background to the Study*

Language is a means of communication by which human beings interact and share thoughts, ideas, feelings and desires through complex vocal or written symbols. Effective language is characterised by the use of

adjectives, adverbs and others to create additional communicative effects. Language is therefore an indispensable tool in any given human society. Anagbogu, Mba and Ene (2002) defined language as a means by which human beings share ideas, feelings, and emotions. Nwaozuzu (2008) referred to it as the most fundamental aspect of human behaviour. Though language is universal in human society, every society is associated with one or more languages.

The colonial masters introduced English language to the Nigerian. The amalgamation of the Northern and Southern protectorates of Nigeria in 1914 forged the union of multiple languages, thereby creating a problem as to which particular language could unite all the tongues and tribes in the territory effectively. Therefore, English language was chosen to facilitate the cultural and linguistic unity in the country. English performs the function of a second and official language of Nigeria. It is the language of business, government or administration.

English language is also one of the core subjects prescribed in Nigeria by the National Policy on Education. It is an essential pre-requisite for further education in Nigeria as a credit in English is a major requirement for admission into Nigerian institutions of higher learning. Besides, English is a passport to prestigious employment. In addition, it is the language of instruction from middle basic school where it is both a subject and a service language for other subjects of the curriculum. However, as important as English Language is in teaching and learning, the performance of students in it at the junior and senior secondary school certificate levels is not encouraging. Poor academic achievement in English Language could be attributed to many factors among which teacher's strategy itself was considered by the researcher as an important factor. The importance and technicality of this subject makes it necessary that relevant instructional materials be used by the teacher in teaching English language to the learners. These instructional materials should not only be made available but be properly and adequately used by the teachers.

Instructional materials are essential tools in teaching and learning in the English language classroom. Omoniyi and Arotiba (2003) elucidated the fact that instructional materials play a central role in the process of lesson planning. When the teachers plan, usually the first concern is with the instructional materials and the resources they have available and accessible. For intended learning to take place, the teacher must communicate effectively to the learners. Essentially, the best way of assisting learners to learn is to bring them face to face with the reality which education intends to initiate them into. This is can be realized by using real objects or instructional materials in the classroom. Where real life situations are not possible, the alternative is for the teacher to use representations through improvisation which demands the teachers' creativity, adventure and perseverance.

In Nigeria and other countries of the world, teachers are exposed to instructional technology during their training years. The importance of the use of these instructional materials in teaching and learning is usually emphasised. However, more often than not, when these become certified professionals, they have been

observed to be guilty of ignoring the use of instructional materials. They avoid the utilization of instructional materials in the classroom. This situation is more compounded by the fact that every year, more sophisticated instructional materials are being produced for classroom use. As a matter of fact, some of these materials are very complex to use or to manipulate. Instructional materials make lessons come alive and help students to learn better. They provide successes for students who find it hard to learn through formal face to face approach or reading a textbook.

The junior secondary school students in Bwari Metropolis come from different cultural and linguistic backgrounds having many indigenous Nigerian languages. The students' English language is most often affected by their mother tongue when not properly guided or taught. That is, their first language differs systematically from English in the employment of adjectives for communication. Using the three major languages as an example, to achieve comparison in Hausa, 'my food is bigger than yours' becomes 'Abinchinayafinaki' literally translated as 'food me it big it you'. To achieve comparison in Igbo, it becomes 'nri m kankegi' literally translated as 'food me bigger yours', and to achieve the same comparison in Yoruba, it becomes 'onje mi tobijuti e lo' literally translated as 'food me bigger you'. In the examples above, one discovers that the word order in Nigerian indigenous languages is not the same as it is in English language. In English, a noun is never followed by a pronoun; rather a pronoun can be used in place of a noun. But in the examples above, there are instances where one or two pronouns appeared immediately after the noun. Therefore, to achieve success in teaching English, the use of wall charts becomes important as it is one effective medium of the many ways to teach English, especially English adjectives. This was affirmed by Fernandes (2013) as cited in Nwanyanwu (2017) when he mentioned that teachers of English need to be provided with pedagogical tools that will make the English learning process a memorable experience. This is what will help the students to have a better chance of achieving success in the use of English adjectives.

Furthermore, the use of instructional materials in the classroom provides a non-threatening, realistic, and concrete approach in learning English adjectives. In other words, instructional materials are helpful in dealing with individual differences in order to facilitate learning of adjectives and in preventing possible drop-outs as a result of frustration. Therefore, the only way to breakdown students' hostility towards the learning of English adjectives is to provide a pleasant and enjoyable experience by using instructional materials such as wall charts.

Teachers ought to choose from the variety of today's possible aids as a way of promoting diversity and variety in the classroom. Thus the larger the numbers of diverse materials learners are provided with, the higher the possibilities all learners will find materials suitable to their learning objectives, cognitive styles and capacities. Hence wall charts and posters provide the learners more multifaceted visual stimuli. Haycraft (1997) as cited in Azizah (2016) stated that wall charts can be one effective medium of the many ways to teach English. Its main purpose is to catch the attention of the people seeing it and to communicate

a message. This implied that the mastery of English concepts might not be fully achieved without the use of instructional materials.

The wall chart is a type of large poster often displaying information for educational use or entertainment. Wall charts can be used to introduce a new concept, a process, a course, a programme, a product or a service. The wall chart is an effective tool for teaching English adjectives because students can understand the words better through the visual image on the wall charts. Duminy (1992) as cited in Azizah (2016) stated that wall charts are not designed for decoration only, but primarily to assist with the study of one topic or the other. Wall charts help reinforce information that students are learning or have already learnt.

This therefore, suggests that wall charts be made clearly visible for all students. Moreover, Alkhuli (2006) was of the view that such reinforcement is attained through the fixing of those charts on the classroom walls for the duration of time ranging between a week and a whole year. Wall charts are not only used as reinforcement, but they are equally useful in several other ways as well. Wall charts serve a useful purpose if students use them in purposeful drills and review of the accurate understanding they have gained. Wall charts can also be used as a reference by students instead of having to ask the teacher, and can be referred to regularly during lessons. Words linked to images and illustrations on a wall chart help students grasp new concepts. By using wall charts, students can become more enthusiastic to learning English adjectives as the charts enhance their motivation and will lead to the students performing well.

According to Kitchenham (2002) as cited in Rodriguez and Slate (2017), an increased interest in gender differences occurred between 1992 and 2002, particularly related to academic achievement, motivation, and knowledge development. Brown (2000) stated that "one of the major pragmatic factors affecting the acquisition of communicative competence in virtually every language, and one that has received considerable attention recently is the effect of one's sex in both production and reception of language.

Differences between the way males and females speak have been noted for some time now". This means that gender differences in communicative competence have been a global concern. There is a general belief that female students tend to perform better compared to their male counterparts in English language since females are more outspoken than males. Brown (2000) affirmed this when he noted that "among the American English speakers, girls have been found to produce more 'standard' language than the boys, a pattern that continues on through adulthood". Many explanations have been put forward for the existence of a gender gap in achievement. Dayıolu and Türüt-Aık (2004)) were of the view that women receive higher grades than men because they work harder and attend class more frequently. Young and Fisler (2000) have explained the gap by adhering to such factors as differences in course taking behavior, classroom experiences and cognitive processing. Therefore, whether junior secondary two students learning English adjectives with wall charts will gain or counteract the learning efficiency due to their gender difference is a significant issue in this study.

Statement of the Problem

One of the major challenges facing the education sector in Nigeria is the low level of the performance of junior secondary school students in both local and standardized examinations. It has become a great concern for researchers, educators and all stake-holders over the years. Afolabi, (2009) observed that students' failure to pass examinations could be attributed to improper teaching methods and lack of essential teaching aids for instructional delivery. Again, based on personal observation, teaching and learning in schools (especially the government schools) is done without the use of instructional materials. Today, teachers are found giving abstract explanation on what necessarily should have been made easier with the employment of instructional materials. Besides, the fact that English is not a mother tongue to Nigerians makes it difficult for the subject to be taught effectively without instructional materials as these add elements of reality by providing concrete examples to learning. The problem of this study therefore is: what could be the effect of wall charts media on junior secondary students' performance in the use of English adjectives in Bwari Metropolis?

Objectives of the Study

The purpose of this study is to examine the effect of wall charts on junior secondary two students' performance in the use of English adjectives in Bwari Metropolis. The objectives of the study are;

1. To find out the difference in the mean scores of students taught English adjectives using wall charts and those taught English adjectives without wall charts in junior secondary schools in Bwari Metropolis.
2. To find out the difference in the mean scores of male and female students taught English adjectives using wall charts.

Research Questions

In order to achieve the objectives of this study, the following research questions were raised to guide the investigation.

1. Is there any difference in the mean scores of students taught English adjectives with wall charts and those taught without wall charts?
2. Is there any difference in the mean scores of male and female students taught English adjectives with the use of wall charts?

Research Hypotheses

HO₁: There is no significant difference between the mean performance scores of students taught English adjectives with wall charts and those taught without wall charts.

HO₂: There is no significant difference between the mean performance scores of male and female students taught English adjectives with the use of wall charts.

Significance of the Study

The study is considered important because the findings will be beneficial to stake holders of the education sector. Specifically, students, teachers, researchers, material producers, school proprietors and the general public will benefit from the findings.

Effective use of wall charts will enable the students to effectively learn and retain what they have learnt and thereby improving their performance in the subject. Moreover, it is seen and believed that the use of wall charts will immensely help in creating picture interaction in the mind of learners or among the learners that are slow.

This study will assist the teachers to adopt the consistent use of instructional materials in the classrooms to make learning interesting and enhance better delivery of lessons and understanding by the students.

Future researchers and scholars will benefit from this work because it will serve as a reference point to them and vital source of information to scholars in English Education.

The findings of this study will enable instructional materials producers to improve on instructional materials that will help the teachers to actualize their instructional objectives and thereby make profit.

The government will find this work very useful when it comes to the procurement of requisite instructional media for English lessons. The findings will also help government to cultivate the culture of emphasis on regular and effective use of instructional materials in schools.

This study will serve as a source of enlightenment and information to any member of the public interested in knowing more about the effect of wall charts in teaching English adjectives.

Scope of the Study

This study was focused on examining the effect of wall charts on junior secondary students' performance in the use of English adjective in Bwari Metropolis schools. The researcher restricted the study to only junior secondary two students (J. S.2). Only English adjectives were treated while other word classes played supportive roles during treatment.

Operational Definition of Terms

The following terms are defined as used in this study:

Instructional Materials – All materials including objects that aid the teacher in realizing his/her instructional objectives for teaching adjectives. These include textbooks, charts, improvised workbook, print materials, audio-visual aids and many more.



Students Performance – This are the educational achievements of students in tests on the use of English adjectives.

Wall chart – This is as a card with writing, picture or diagrams that is used in the class for the presentation of adjectives.

METHOD

Research Design

This study employed quasi-experimental, pre-test, post-test, non-equivalent, and control group design. This design was chosen because the researcher will not have control over certain variables. Intact classes were used for the study. There was no randomization of subjects as randomization would disorganize the school during the period of the application of treatment. The independent variable in this study was the use of wall charts in the teaching of English adjectives, while the dependent variable was the performance of junior secondary students in the use of English adjectives.

Population of the Study

The population for the study consisted of students of all the government junior secondary schools in Bwari Metropolis (a total of 3,117 students). There are five secondary schools in Bwari Metropolis. Their respective enrolment as at 2018 is shown below:

Table 3.1: Population table

S/N	NAMES OF SCHOOL	MALE	FEMALE	TOTAL
1	Federal Government Girls College, Bwari		508	508
2	GUTO Secondary School, Bwari	507	512	1019
3	Junior Secondary School Bwari 1	299	282	581
4	Junior Secondary School, Bwari Central	430	387	817
5	Vocation Training School, Bwari	102	90	192
	Total	1,338	1,779	3,117

SOURCE: School Principals

Sample/ Sample Techniques

The sample of this study was drawn from two secondary schools in Bwari Metropolis. The sample size for this study was one hundred and sixty-four and that was the total number of students in the intact classes of two JSS 11 students in Bwari Metropolis. An intact class was used in each of the selected schools in order not to distort the normal school arrangement and JSS 11 class was used because the class is not an examination class. The Schools were selected through simple random sampling without replacement. An arm of JSII class in the selected sampled schools was used for the study. One school out of the two schools was assigned to the experimental group while the other was assigned to the control group. Assignment of

schools to experimental and control groups was achieved through simple balloting. The two schools selected are listed below:

Table 3.2: School (A) Experimental Group

NAMES OF SCHOOL	MALE	FEMALE	TOTAL
Junior Secondary School, Bwari 1	47	37	84

Source: The Researcher

Table 3: School (B) Control Group

NAMES OF SCHOOL	MALE	FEMALE	TOTAL
Junior Secondary School, Bwari Central	38	42	80

Source: The Researcher

Instruments for Data Collection

The instrument that was used for data collection was a 20 item multiple choice English Adjective Performance Test (EAPT). The instrument was developed by the researcher based on the topics taught during the treatment. These topics were selected from JS 11 English studies scheme of work. The test was administered on the students as pre-test and post-test to measure their performance in the use of English adjectives.

Validity of the Instrument

The face and content validity of the instrument was ascertained by three experts– one from the Department of English and Literary Studies, the second person was from the Department of Arts and Social Science Education, and the last person was from the Department of Science Education. These experts were from Veritas University, Abuja. The main reason for this was to ascertain whether the instruments were logical and clear. It was also to ascertain that the instrument is measuring what it was supposed to measure. Those items in the instrument that were found to be unclear or had distorted meanings were rectified. The lesson grid was also vetted by the supervisor after which necessary corrections were made.

Reliability of the Instrument

A test-re-test reliability was used to determine the reliability of the test items. The developed English Adjective Performance Test (EAPT) was administered to thirty students within the population, but outside the sample. This was to help the researcher know whether the questions in the instruments were clear. It was also to know how generalisable the results of the test would be to the population. The same instrument was administered to the same group of students after an interval of a week. The two sets of data collected were analysed using Pearson Product Movement Correlation Coefficient. The result obtained was 0.76 correlation coefficient. This confirmed the reliability of the test items.



Procedure

Before the commencement of the experiment, the researcher sought approval from the school management and explained the purpose of the study and treatment implementation. Based on this need, lesson periods were approved for the researcher in the schools for the treatment. The English Adjectives Performance Test (EAPT) was administered to the research sample in both the experimental and control groups as pre-test. The purpose was to test the previous knowledge of the students. The experimental group was taught using wall charts, while the control group was taught the same topics without wall charts. The treatment lasted for a month. At the end of the four weeks, the researcher administered the same instrument as post-test to both experimental and control groups to measure their level of achievement.

Method of Data Analysis

To answer the research questions and test the hypotheses raised in this study, an Independent sample t-test was conducted at 0.05 levels of significance. The level of significance adopted formed the basis or criterion for accepting or rejecting each of the null hypotheses. Prior to the application of treatment, a test of homogeneity was conducted to ascertain whether or not the two groups randomly selected for the study were homogeneous in terms of their mean performance. The test was carried out using the students' pre-test scores. It was necessary to conduct this test to ensure that the compared groups are homogeneous before the application of treatment and to also remove any form of researcher selection bias when selecting which group should be the control or the experimental group. If the groups were homogeneous before treatment application, then any observed variation in the mean performance between the two groups after the application of treatment would be the true effect of the treatment.

Assumptions

In this study, two basic assumptions necessary for the use of Independent sample t-test were tested. They include: the test of normality and the test of equality of variances.

Assumption of Normality of the Dependent Variable

The Independent t-test requires that the dependent variable is approximately normally distributed within each group. However, the t-test is described as a robust test with respect to the assumption of normality. This means that some deviation away from normality does not have a large influence on Type I error rates. Where the assumption of normality is violated, the scores of the dependent variable must be transformed. In this study, the Q-Q (Quantile-Quantile) Plot graphical method was used to ascertain the normality of the post-test scores.

Assumption of Homogeneity (Equality) of Variances

The Independent t-test assumed the variances of the two groups been compared are equal in the population. This assumption states that the variances of the scores in the two compared groups have to be same for and Independent t-test to be carried out. If the variances are unequal, then this can affect the Type

I error rates. In statistical hypothesis testing, a type I error is the rejection of a true null hypothesis (also known as a "false positive" finding), while a type II error is failing to reject a false null hypothesis (also known as a "false negative" finding). In this study, the assumption of homogeneity of variance was tested using Levene's Test of Equality of Variances and the test was expected to be non-significant. If this test is statistically significant, indicating that the groups' variances are unequal in the population, a violation of the assumption has been made. This violation can be corrected by not using the pooled estimate for the error term for the t-statistics (that is, the usual t-statistics estimates), but instead an adjustment to the degrees of freedom is computed using the Welch-Satterthwaite method (Satterthwaite, 1946; Welch, 1947; Allwood, 2008) to overcome the violation. In this case, the t-statistics is adjusted and reduced in value as was done to with the degrees of freedom.

RESULTS

Pre-Treatment Test of Homogeneity of Means for the Compared Groups

The Levene's test for the equality of variances was conducted and the results indicated that the compared groups variances were statistically the same (homogeneous), $F(1, 161) = 0.557 > 0.05$. Therefore, the t-statistics for equal variances assumed was used. The result of the t-test that followed showed that prior to the application of treatment, the control and experimental groups did not differ significantly in terms the students' mean performance, implying that the mean performance of the students in the two groups were significantly the same (homogeneous), $t(162) = -1.827, p = 0.70 > 0.05, 95\% \text{ CI } [-5.04, 0.19]$. The mean difference of -2.42 could be attributable to chance. This result implied that none of the two groups would have any performance edge over the other as their mean performance was the same before the treatment was applied.

Assumption of Normality

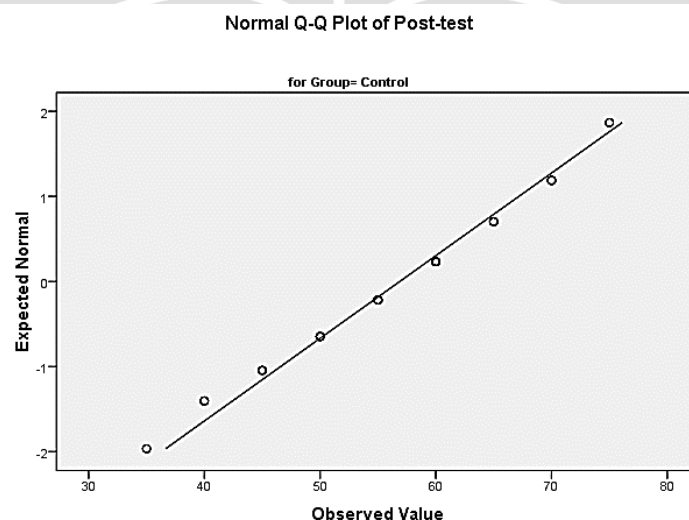


Figure 1: Normality Plot for the Control Group

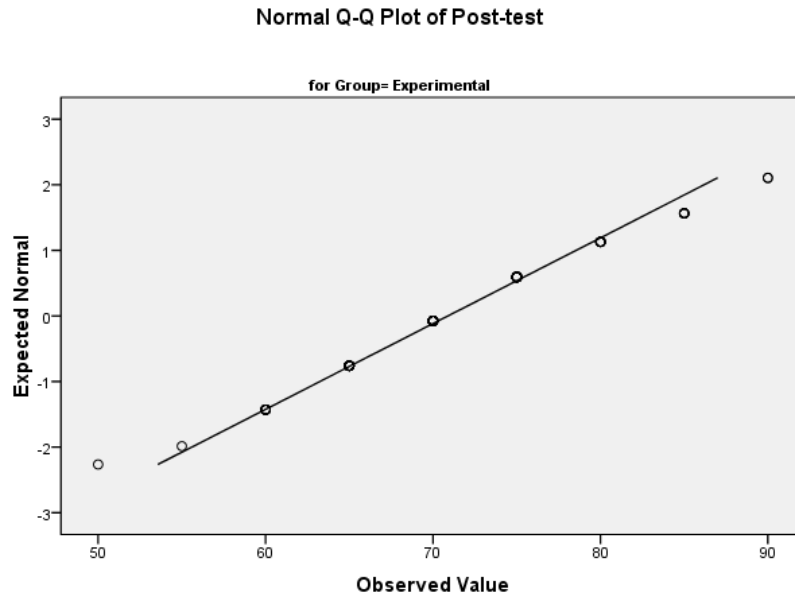


Figure 2: Normality Plot for the Experimental Group

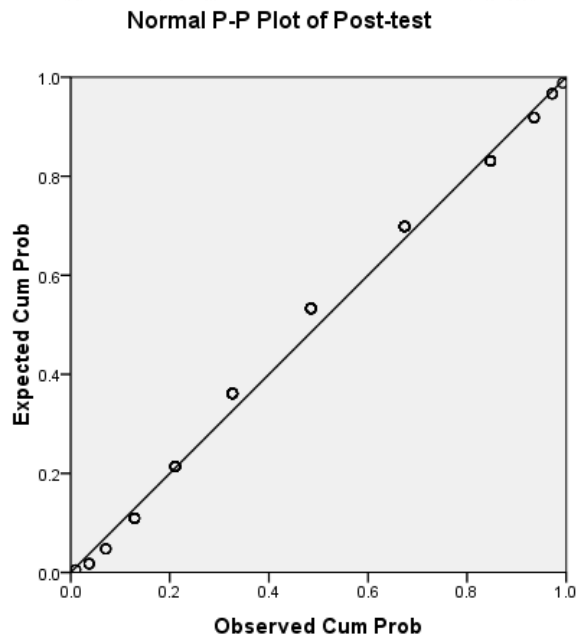


Figure 3: Normality Plot for Post-test Scores

The figures above showed the normality of the dependent variable (post-test scores). As can be seen, the scores were clustered around the graph line; this depicts a normally distributed data. The linearity of the points in the figures suggested that the data were normally distributed. Figure 1 showed the normally distributed plot for the Control group; Figure 2 showed the normally distributed plot for the Experimental group, while Figure 3 showed the normal plot for the post-test data. Since, the plots indicated normality;

the dependent variable does not violate the normality assumption and therefore was suitable for the Independent sample t-test.

Hypotheses Testing

Assumption Check: Equality of Variance

The Levene test for the equality of variances was conducted to test if the variances of the two groups were equal or homogeneous. The post-test scores were used. The test revealed that there was a significant difference in variances in the two sample groups, $F(1, 146) = 0.023$, $p = 0.002 < 0.05$, implying a violation of the assumption of equality of variances. Since this assumption was violated, the t-statistics for unequal variances was used employing the Welch-Satterthwaite adjustment method as provided by SPSS (Statistic Package for Social Sciences).

Hypothesis One

This hypothesis states that there is no significant difference between the mean performance scores of students taught English adjectives using wall charts and those taught without wall charts.

To test this hypothesis, 0.05 was set as the criterion as the level of significance as presented in the table.

Table 4.1 t-tests for difference in the performance of experimental (students taught English adjectives using wall charts) and control (those taught without wall charts).

Teaching Method	N	Mean	Mean Diff.	SD	T	df	Lev. Sig	p-value	Remark
Experimental	84	70.89	-14.02	7.65	-9.86	146	0.05	000	Significant
Control	80	56.88		10.29					

Significant, $df = 146$; $p < 0.05$; 95% CI [-16.83, -11.21]

Since the Levene's test of equality of variances was violated, the t-statistics based on the adjusted degrees of freedom was used. The t-test indicated that there is significant difference in the mean performance of students of the experimental group who were taught English adjectives with the use of wall charts and those in the control group who were taught English adjectives without the use of the wall charts, $t(146) = -9.86$; $p = 0.00 < 0.05$; 95% CI [-16.83, -11.21]. Furthermore, the performance scores of students exposed to the treatment ($M = 70.89$, $SD = 7.65$) was significantly better than of those not exposed to the treatment ($M = 56.87$, $SD = 10.29$). Therefore, the observed mean difference of -14.02 cannot be by chance and it showed that the applied treatment had effect on the mean performance of the students. The hypothesis which states that there is no significant difference between the mean performance scores of students taught English adjectives using wall charts and those taught without wall charts is rejected.



Hypothesis Two

Assumption Check: Equality of Variance

The Levene test for the equality of variances was conducted to test if the variances of the two groups (male and female groups) were equal or homogeneous. The post-test scores were used. The test revealed that there was a significant difference in variances in the two groups, $F(1, 146) = 5.36, p = 0.023 < 0.05$. Since this assumption was violated, the t-test for unequal variances was used employing the Welch-Satterthwaite adjustment method as provided by SPSS.

Hypothesis Two; this hypothesis is state there is no significant difference between the mean performance scores of male and female students taught English adjectives using wall charts.

To test this hypothesis, 0.05 was set as the criterion as the level of significance as presented in the table.

Table 4.2: t-test for difference in the performance of male and female students taught English adjectives with the use of wall charts.

Gender	N	Mean	Mean Diff.	SD	T	Df	Lev. Sig	p-value	Remark
Male	48	70.10	-1.84	6.48	-1.04	61	0.05	0.30	Non-significant
Female	36	71.94		8.97					

Not significant, $df = 61; p > 0.05; 95\% CI [-5.37, 1.69]$

Since the Levene’s test of equality of variances was violated, the t-statistics based on the adjusted degrees of freedom was used. The test showed that there was no significant difference in the mean performance of male students taught English adjectives with the use of wall charts and their female counterpart, $t(61) = -1.04; p = 0.30 > 0.05; 95\% CI [-5.37, 1.69]$. Hence, the performance scores of male students exposed to the treatment ($M = 70.10, SD = 6.48$) was statistically the same as that of the female students ($M = 71.94, SD = 8.97$). Therefore, the observed mean difference of -1.84 can be attributed to chance variation and it showed that there was no gender effect or gender differential in the mean performance of the students. The hypothesis which states that there is no significant difference between the mean performance scores of male and female students taught English adjectives using wall charts is not rejected but retained.

Discussions of Findings

Findings from this research work revealed that there was significant effect of treatment on students’ performance in terms of the use of English adjectives. The researcher found out that there was statistically significant differences in the mean performance scores of the students of the experimental group who were taught English adjectives with the use of wall charts and the control group who were taught English adjectives without the use of wall charts. This finding corroborates with Ibe-Bassey (2000) who asserted that instructional charts appeal to the sensory organs and also enable learners



to draw relationship between the various concepts taught. Also, this study is in agreement with the finding of Aziza (2016) who observed that the students taught with wall charts performed better than those taught without wall charts. This implied that wall charts make students to achieve better and higher scores in test on English adjectives.

In addition, the result from hypothesis two showed a difference in the mean performance scores of male and female students. But further analysis revealed that the observed difference was by chance, as there was no significant difference between the performance of male and female students. On the average, the male and female students performed equally. The finding is contrary to that of Masoud, Seyyed, and Ali (2013) who noted that female students outperform male students at the levels of RUN2 and RUN3. It also contradicts the traditionally held belief and reports from Western countries that females perform significantly better than males in English language, but is in conformity with the findings of Ogbeba (2011) that there is no significant gender difference in students' performance. This implied that gender is not an issue in the performance of students taught English adjectives using wall charts.

CONCLUSION AND RECOMMENDATIONS

Summary

This study was conducted to examine the effects of wall charts on junior secondary students' performance in the use of English adjectives in Bwari. In order to achieve the objectives of this study, some related works of literature were reviewed. A pre-test, post-test, non-equivalent, and control group quasi-experimental design was adopted for this study. During the treatment, the experimental group was exposed to the use of wall chart, while the control group was taught using the lecture method. The result of the findings revealed that students in the experimental group performed better than those in the control group as a result of the treatment given to the students. This implied that teaching English adjectives using wall charts had positive effect on students' performance. In addition, there was no significant difference in the performance of male and female students. This implied that gender was not an issue in the performance of students taught English adjectives using wall charts.

Furthermore, the study was anchored on the Dual-Coding Theory developed by Allan Paivio. This cognitive theory explained how the human brain processes and represents verbal and non-verbal information in separate related systems (symbolic codes and analogue codes). The symbolic codes are mental representation of words. They help learners to process information being presented by the teacher, while the analogue codes are primarily used to store mental images of objects. The application of dual coding theory to classroom teaching makes teaching and learning easier for the students to learn new information. When information is presented in two different ways (for example verbally and visually), students will have opportunity to encode the information twice (once for the verbal version, and once for the visual version) which means that they have two representations of this one piece of information in their memory, implying that they are more likely to be able to recall that information in the future.

CONCLUSION

The effects of wall charts in teaching and learning cannot be ignored. For any meaningful educational programme to be achieved, the aspect of instructional materials must be given attention. Wall charts perform such function as the extension of the range of experience available to learners, supplement and complement the teacher's verbal explanations thereby making learning experience richer and providing the learner with interest into a wide variety of learning activities. The use of the wall charts helps the students in the process of learning English adjectives. This can be an alternative way of teaching English language, particularly the use of English adjectives. The treatment is effective to give the students better understanding of the subject matter.

The findings of this study have shown that to maintain the desired quality education and good performance of students, the use of wall charts is very necessary. Wall charts have the capacity of stimulating the students' interest, therefore making teaching and learning fun. Wall charts help the students to establish a relationship between what they already know and what they are learning. Based on the findings, it is therefore important to state that the use of wall charts is vital. It has positive effect on the mean performance scores of students and it is a concrete approach in learning English adjectives. Proper presentation of wall charts and the methodology employed by the teacher leads to a better understanding of English adjectives.

RECOMMENDATIONS

Considering the findings of the study, the following recommendations are hereby made:

1. The government should assist the school management to organise in-service training for the teachers to enrich their knowledge on the use of instructional materials.
2. The school management should endeavour to provide wall charts and ensure teachers compliance with the use of wall charts in the classrooms to make learning interesting and enhance better delivery of lessons and understanding by the students.
3. Local producers of instructional materials should be encouraged to produce instructional materials that will help the teachers to actualize their instructional objectives and thereby make profit.
4. Instructional materials producers should be encouraged to improve on quality of instructional materials to make it more attractive. This is because well designed instructional materials help in creating picture interaction in the mind of learners or among the learners that are slow.

Limitations of the Study

Although this research was carefully prepared, the researcher is still aware of its limitations and shortcomings. First of all, time constraint was a challenge that the researcher faced in the cause of carrying out this research work. This limited the coverage of English adjectives. Second, the school management

were reluctant in allowing the researcher use the school for research study. Their fear was that the periods of treatment will distort normal school arrangement. Finally, due to shortage of time and the vastness of the area, the number of secondary schools in Bwari and financial constraints, the study was limited to the teaching of English adjectives in two schools in Bwari Metropolis.

Contribution to Knowledge

The primary aim of this research was to examine the difference in the mean performance scores of students taught English adjectives with wall charts and those taught without wall charts from a new perspective. So far the few studies on the concept of wall charts focused on improving students mastering of vocabulary through the use of wall charts. Those studies did not investigate the effects of wall charts on student's performance in the use of English adjectives in Bwari Metropolis. Therefore, in this study the researcher has tried to shift the focus to the use of wall chart in teaching English adjectives and this has led to the discovery that application of wall charts to teaching and learning English adjectives facilitates learning among students and leads to better performance.

Conflict of interests

The authors declare that they have no financial or personal relationship(s) that may have inappropriately affected their report of the findings of this research.

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