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Impact of the use of the Lesson Plan Manual on the Academic Performance of JSS Pupils in Language Arts in Southern Sierra Leone



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Abstract

The Lesson Plan Manual was introduced in 2017 into the Sierra Leonean classroom for the teaching of Language Arts, as a result of the appalling performance of Junior Secondary School pupils in the BECE examination. The Lesson Plan Manual was introduced following the outbreak of the Ebola Virus Disease which had a negative impact on the educational delivery at all levels of the education system. This study was conducted to investigate whether the use of the LPM had any impact on the performance of JSS pupils. The design used in this study was the quasi-experimental design of the Non-equivalent control group design (NEGD) type with a pre-test and post-test. This design allows for measurement of both quasi-experimental and comparison before and after the intervention. All 63 Junior Secondary School in Bo City served as the population for the study. From this population, 12 schools were selected using the fish bowl method with 16 groups: 8 experimental and 8 control groups. Only JSS 1 pupils participated in the experiment, because at the time of the experiment, they had not been exposed to the LPM at the Junior Secondary School level as they had just been enrolled in JSS 1. Pre-tests and post-tests were administered to the participants from which data were collected. Data were analyzed using inferential statistics – paired sample t-test statistics. The research results show that

there is no significant difference in the pre-test scores between the experimental group and the control group, but more importantly, there is no statistically significant difference in the post-test scores between the experimental group and the control group. This means that the use of the LPM has no effect on the academic performance of JSS pupils in Southern Sierra Leone.

Keywords: Lesson plan manual; Child-centred teaching technique; Accelerated teaching syllabus.

1. Introduction

Lesson planning is an inherent part of the teacher's job; it is the teachers' responsibility for creating lesson plans for teaching in his classroom. To be an effective teacher, you must have positive expectation of your students, and a lesson plan helps you to achieve that (Cicek and Tok, 2014). Also, effective teaching involves good classroom management which can also be achieved by the effective implementation of a good lesson plan (Cicek and Tok, 2014; Wabwoba, 2018). Thus, effective use lesson planning improves instruction and guides the teacher in the classroom. It is one of the ways to promote quality education.

In Sierra Leone, teachers followed the didactic method of lesson planning where the teacher plays a role as a supreme spokesperson providing the student with all information, while the students remained as merely passive listeners. Because of its teacher centeredness, this traditional lesson plan practice later gave way to the Child-Centered Teaching Technique (CCTT). The implementation of the CCTT, which was mainly at the primary school level, was supported by United Nations Children's Education Fund (UNICEF). Several workshops were held to train primary school teachers throughout the country on how to use this new lesson plan format. But the traditional lesson plan practice remained in force at the secondary school level. Such was the situation up to 2014 when the country was hit by the Ebola Virus Disease (EVD). The Accelerated Teaching Syllabus was set in motion for the radio teaching programmes. This was implemented by the Ministry of Education Science and Technology to cater for students who at that time stayed at home due to EVD (Boisvert, 2017). Due to the Ebola scourge in March 2014, the government of Sierra Leone through the Ministry of Education Science and Technology launched a new lesson plan for the teaching of Language Arts and Mathematics in 2017; this became known as the Lesson Plan Manual (LPM.) which was to be implemented after the declaration of the end of Ebola, which was rephrased in Krio as (Ebola don go le wi make Salone grow, 2017). The development and implementation of the lesson plan manual was one of 'the president's recovery priorities' which came in the wake of the Ebola Epidemic in Sierra Leone (Education Sector Plan, ESP (2017).

The teachers' manuals are meant to serve as guides for the teacher in the preparation of their lesson plans. According to Ding (2021), Teachers' Guides support teachers to raise the quality of teaching. It simplified the task of the teacher by focusing on how to teach rather than what to teach. She continues to say that the teachers' guide provides the teacher with knowledge which can be easily transferred into action. Those who wrote the LPM have a similar view about its use.

Students' academic achievement in Sierra Leone, particularly in English has been appalling. According to World Bank (2019):

learning assessment showed that pupils learning fall way behind curriculum expectation -- 60 percent of Junior Secondary School grade 2 student (JSS 2) and 40 percent of Senior Secondary School grade 2 (SSS2) demonstrated English skills no higher than expected at primary grade 6 (World Bank, 2019).

The World Bank Document continues to assert that more than 10% of students make it through school to their final Mathematics and English exam, and of those, 90% fail.' More appalling is the fact that the academic achievement of rural schools is even worse than that of urban schools.

The poor academic achievement of students in Language Arts is reflected in the BECE 2020 result. The report made an analysis of the 2018, 2019 and 2020 BECE results in terms pass rates in the core subjects as follows:

Year	Subject	% pass
2018	Integrated Science	78.65
2018	Language Arts	60.48
2018	Mathematics	80.04
2018	Social Studies	77.52
2019	Integrated Science	42.12
2019	Language Arts	49.26
2019	Mathematics	31.32
2019	Social Studies	60.00
2020	Integrate Science	86.40
2020	Language Arts	53.46
2020	Mathematics	59.45
2020	Social Studies	83.08

Source: West African Examinations Council, Freetown Office

From the above analysis, the average pass rate in Language Arts fell behind the other core subjects. The [World Bank \(2019\)](#) further stated that about 50% of candidates in the BECE receive a pass in Language Arts and Mathematics and only 3.59 % of candidates in the West African Senior School Certificate Examination (WASSCE) obtain a credit in five subjects including English Language and Mathematics.

2. Statement of the Problem

The above statistics indicate that the performance rate of students in Language Arts and English Language at BECE and WASSCE respectively is poor. Teachers' effective use of the LPM is expected to lead to an increase in the performance level pupils in junior secondary schools in Sierra Leone. Since the LPM was introduced in Language Arts and Mathematics classrooms in Sierra Leone in 2017, there has been no tangible report on its effectiveness. It is therefore necessary to determine whether the use of the LPM has had any positive impact on the pupils' academic achievement in Language Arts. Existing Literature has shown that little or no empirical research has been conducted on the use of the LPM or any other lesson planning practice in Sierra Leone. How has the use of the LPM impacted students' academic achievement in Language Arts and to what extent is the focus of this research. Junior secondary school pupils are the perceived beneficiaries from the introduction of the LPM in Language Arts classrooms in Sierra Leone. It is against this backdrop that this study is conducted to assess the impact of the introduction or the use of the Lesson Plan Manual in improving the academic achievement of these students in the Southern Region of Sierra Leone.

3. Research Question

To what extent has the use of the LPM impacted students' academic achievement in Language Arts in Junior Secondary Schools in the Bo city?

4. Research Hypothesis

The hypothesis of the research can be stated as follows:

The use of the LPM in Junior Secondary Schools in Southern Region of Sierra Leone has a statistically significant impact on the student's academic performance in Language Arts – H_1

5. Literature Review

The use of lesson plans stands at the centre of teaching methodology. Every teacher must make a conscious effort to develop a lesson plan for every lesson he or she teaching. Evidence from research shows that an effective and efficient teacher is one who prepares lesson plans to enhance the delivery of lessons. The lesson plan is seen a roadmap for the teacher in the classroom.

Using descriptive and correlational design, [Samad et al. \(2023\)](#) studied the association between lesson plan implementation in the classroom and students' performance in English. From a population of 18,867 all Male students enrolled in 160 schools; 1,750 students were selected as sample which was about 10% of the population. The result showed that there was an association between lesson plan implementation and students' academic performance. This means that students' performance increased with lesson plan implementation.

In another study done by [Ahmad and Sultana \(2021\)](#), they undertook a descriptive and survey design when they looked at the impact of the teachers' guide lesson plan on students' results of Punjab Examination Commission (PEC). This study sampled nine districts out of the 36 of Punjab region, which were purposively selected because they were the most populated districts. Male and female teachers were selected from elementary school in the nine districts, although the samples of teachers selected were not mentioned. The researchers used the examination results of grade 5 pupils in English from the PEC. The results indicated that in all the nine districts, the examination results showed an increase in performance of pupils after the issuance of teachers' guide lesson plan. That is, the performance of the pupils increased with the use of the teachers' guide lesson plan.

There was another study recorded in [Landas and Alovera \(2022\)](#). In their research, they were interested in the effect of localized lesson plan to the interest and the performance of pupils in Mathematics. Using the pre-test post-test control group type of experimental design, the researchers worked with two groups of students of 32 students in each group – one experimental group and one control group. The students used as participant were in grade 6 and the subject for which performance was sought was Mathematics. The localized lesson plan was used to teach the experimental group and the ready-made lesson plan was used to teach the control group. From the findings of the study, it was realized that the pupils who were taught using the localized lesson plan performed better in Mathematics than those who were taught using the ready-made lesson plan.

In a study conducted in Turkey, [Yüksel et al. \(2023\)](#) studied the effect of lesson plan based on the International Baccalaureate (IB) Education philosophy and the Understanding by Design (UbD) model of lesson planning and students' achievements. A nested mixed method design was used. From the experimental study, quantitative data were obtained from the experimental group and the control group of 320 3rd grade students in each group. Students in the experimental group receive the treatment i.e., they were taught with lesson plan based on the IB Education philosophy and the UbD model of lesson planning; while those in the control group did not receive such treatment. Qualitative data were obtained from interviews with 36 teachers who were the implementers of the lesson planning model. Research result revealed that students who were taught with lesson plan based on the IB education philosophy and Ubd model of lesson planning performed better than their counterparts who did not receive any treatment.

Khan *et al.* (2024), in a study involving an experimental pre-test post-test control group design wanted to find out the effect of lesson planning on the academic performance elementary school students. There were 20 students in the experimental group and 20 students in the control group. The intervention involved the implementation of lesson planning techniques for the experimental group; while there was the absence of a lesson plan for the control group. The result indicated that students who were taught with a lesson plan performed better than those that were taught without a formal lesson plan.

All the studies above were done in contexts different from the present study. For example, these studies were conducted in countries different from the country of the present study. The studies dealt with students at different levels of education. Although Samad *et al.* (2023) used English as the subject from which performance was sought, the researchers used only male students as the sample, but they did not give reasons for their decision. Ahmad and Sultana (2021), did their study in India. Although they also used English as the subject from which performance was sought, the samples were drawn from primary school level and the researchers sampled from the nine districts from Punjab province. They did not state the number of teachers selected for the samples. In Landas and Alova (2022), the study was set in the Philippines and the study dealt with elementary school students. They also dealt with localized lesson plan and school subject from which performance was sought was Mathematics. Yüksel *et al.* (2023), was done in Turkey and they dealt with lesson plans based on IB education philosophy and the UbD model of lesson planning. The researchers dealt with primary school students and the school subject from which performance was sought was Social Studies. Khan *et al.* (2024), has its setting in the Pakistani context and they dealt with elementary school students, but the subject from which performance was sought was not mentioned. The present study was done in the Sierra Leonean context and looked at the impact of the use of the Lesson Plan Manual on the performance of Junior Secondary School pupils in Language Arts.

6. Methodology

6.1. Research Design

To test the hypothesis, the quasi-experimental design of the Non-equivalent control group design (NEGD) type with a pre-test and post-test was adopted. A quasi-experimental design of the non-equivalent control group type with a pre-test and a post test is a design that is very similar to the true experimental design, but lacking in one key ingredient: the random assignment of participants to groups. In quasi-experiments, the researchers deal with pre-existing groups. The lack of non-randomization potentially results in the groups being non-equivalent. Citing Cook and Campbell (1979), Flannelly *et al.* (2018) said that this research design is frequently used in the Social Sciences. Also citing Campbell and Stanley (1966), Flannelly *et al.* (2018) reported that this was a frequently used research design in educational research. According to them it is easy to implement this design in educational settings because in educational research, entire classes of students are assigned to groups rather than assigning individual students to groups (Flannelly *et al.*, 2018). Since the research subjects involved school pupils, and most school principals resisted the researcher's attempt to assign the pupils to experimental groups and control groups, the researcher adopted the quasi-experimental design. Because of the non-equivalent nature of the groups, the control groups are better called the comparison groups. This quasi-experimental research was non-equivalent in the sense that the participants that were involved in the quasi-experiment particularly the pupils were not assigned randomly to the comparison groups and quasi-experimental groups as the principals of the schools did not allow such assignment because, they said they had already assigned their pupils to classes. So, the researcher had to work with those groups. However, the decision as to which classes belonged to the quasi-experimental groups and the comparison groups were decided by ballot. Also, teacher assignment to both quasi-experimental groups and comparison groups was decided by ballot.

6.2. Research Population

From a school census the researcher conducted, there are sixty-three government and government assisted Junior Secondary Schools in Bo city, and twelve school were selected for the quasi-experiment using the fish bowl method. The schools were, schools

- a) – Bo Commercial Junior Secondary School
- b) – St. Andrews Junior Secondary School
- c) – Centenary Junior Secondary School
- d) – St. Pius Junior Secondary School
- e) – Experimental Junior Secondary School
- f) – Young Men Christian Association Junior Secondary School
- g) – Sierra Leone Muslim Brotherhood Junior Secondary School
- h) – Tina Memorial Junior Secondary School
- i) – Milton's Comprehensive Junior Secondary School
- j) – Ansarul Junior Secondary School
- k) – Kakua Government Junior Secondary School
- l) – Panorama Community Junior Secondary School

The quasi-experimental groups and the comparison groups were stationed in four schools; while four schools held solely the quasi-experimental groups and the other four schools held solely the comparison groups as illustrated below:

Table-1. Distribution of Quasi-Experimental Groups and Comparison Among Schools

Quasi-experimental Groups and Comparison Groups		
Schools	Quasi-experimental Group	Comparison Group
A,B,C and D	4	4
E, F, G and H	4	
I, J, K and L		4
12	8	8

The equivalence of the schools, teachers and pupils was ensured. For example, all the schools selected for the experiment were Government Assisted schools as they received the same facilities from government in terms of school governance and policy. The teachers that were involved in the experiment were a minimum of Higher Teachers Certificate (Secondary) holders in Language Arts with a minimum of five years of teaching experience. A teaching methodology was agreed upon that was used by all teachers on the programme. JSS 1 pupils were used to participate in the study because they had not been exposed to the Lesson Plan Manual at the Junior Secondary School level. The participants in the quasi-experimental groups were taught by teachers making use of the Lesson Plan Manual; while the participants in the comparison groups were taught by teachers without using the Lesson Plan Manual.

6.3. Sample Size

The researcher used all the J.SS.1 pupils who took part in the quasi-experiment for the pre-test and the post-test, but sampled participants using (Mugenda and Mugenda, 2013) for the collection of data on pupils' study habit and whether they take extra classes after school (the covariates). According to Migosi and Mwaura (2020), Mugenda and Mugenda (2013) said that in a descriptive study, a sample size of 10% to 50% of the population could be acceptable. Thus, for the collection of data on students' study habit as well as whether they take extra classes after school, the researcher used 50% of the population of each group (i.e., quasi-experimental and comparison) per school. For the collection of data on the covariates' simple random sampling method was used using the fish bowl method for each group that participated in the experiment.

6.4. Data Collection Instrument

For data collection, a form was developed by the researcher where the teachers recorded the following information about the pupils: pupils' age, gender, number of times present in school during the course of the exercise, N.P.S.E. scores, pre-test scores and post-test scores. Another form was developed by the researcher where teachers recorded information on the covariates i.e., the pupils' study habits and whether the pupils took extra classes after school during the course of the quasi-experiment. These forms were distributed to all teachers who participated in the quasi-experiment.

6.5. Methods of Data Analysis

For the Quasi-experimental design, in order to test the hypothesis, the researcher used inferential statistics to determine whether there has been an impact of the use of the LPM on pupils' academic performance. The researchers used the Paired Sample T-test statistics to compare means of the Pre- test scores of the quasi-experimental groups and the comparison groups on one hand; and compare the means of the post test scores of the quasi-experimental groups and the comparison groups on the other hand. A paired sample T-test was used because it has the ability to assess changes over time within the same group. To test for the effect of the covariates on the dependent variable (the post-test scores), the researchers performed the Analysis of Covariance (ANCOVA) test. The ANCOVA test was performed to control for the influence of the confounding variables (the covariates) on the dependent variable (the post test scores), so that we have a clearer picture of the relationship between the independent variable – the use of the LPM and the dependent variable – the post test scores. This was also complemented by removing some of the unwanted variability that may be caused by the covariates, which can lead to more accurate and reliable conclusions about the relationship between the independent variable and the dependent variable.

7. Results and Discussions

7.1 Results

In this section, data were presented on the quasi-experiment that was conducted to assess the impact of the use of the LPM on students' academic achievement in Junior Secondary School in Southern Region of Sierra Leone. The hypothesis that was tested is as follows:

The use of the LPM in Junior Secondary Schools in Southern Region of Sierra Leone has a statistically significant impact on the student's academic achievement in Language Arts – H₁

In order to test the hypothesis, the researchers compared the means of the pre-test scores for the quasi-experimental groups and the comparison groups on the one hand, and the post-test scores of the quasi-experimental groups and the comparison groups on the other hand, to know if there is any significant difference between them.

Table-2a. Descriptive Statistics of Pre-test Scores for Experimental and Comparison Groups

Paired Samples Statistics					
		Mean	n	Std. Deviation	Std. Error Mean
Pair 1	Pre-test Scores (Experimental Groups) -	53.78	304	18.336	1.052
	Pre-test Scores (Control Group)	54.12	304	14.616	.838

Table 2 (a), gives a paired sample descriptive statistic of the pre-test scores of both the experimental group and the comparison group. Out of 304 observations, the mean of the pre-test scores for the experimental group = 53.78, with a Standard Deviation = 18.336; and the mean of the pre-test scores for the comparison group = 54.12 with a Standard Deviation = 14.616.

Table-2b. Differences in the Mean Scores of the Pre-test for experimental and Comparison Groups

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test Scores Experimental Group – Pre-test Scores Comparison Group	-.336	22.098	1.267	-2.830	2.159	-.265	303	.791

P = 0.79 Where **P value** ≤ 0.05.

Table 2 (b) shows a difference in the means and Standard Deviations of pre-test scores of the quasi-experimental groups and that of the comparison groups. Pre-test scores of Quasi-Experimental Group – Pre-test scores of Comparison Group = **-.336**. With 95% confidence interval ranging from -2.830 to 2.159, t (303) = **-.265**, P = **.791** (two tailed). Therefore, there is no significant difference in pre-test scores of the Quasi-experimental group and the Comparison group because the P value is more than 0.05. The pre-test scores of both groups were almost identical.

Table-3(a). A Descriptive Statistics of Post Test Scores for the Quasi- Experimental Groups and Comparison Groups

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Post Test Scores (Control Group) -	50.82	304	20.872	1.197
	Post Test Scores (Experimental Group)	53.71	304	19.060	1.093

Table 3 (a) shows paired-sample descriptive statistics on the post-test scores of the quasi-experimental groups and the comparison groups. Out of **304** observations, the mean scores for the post-test (Comparison Group) = **50.82**, and the Standard Deviation = **20.872**; and the mean scores for the post test (Quasi-experimental Group) = **53.71**, and Standard Deviation = **19.060**.

Table-3(b). Differences in the Mean Scores of the Post-test for the Quasi-Experimental Group and Comparison Group

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post Test Scores (Control Group) - Post Test Scores (Experimental Group)	-2.888	26.932	1.545	-5.928	.151	-1.870	303	.062

P = .062 Where **P** ≤ 0.05

Table 3(b) shows the differences in the mean scores of the post-test scores of the Quasi-experimental group and the Comparison group. Post-test scores (Comparison Group) – Post-test scores (Quasi-experimental Group) = **-2.888**. With 95% confidence interval ranging from **-5.928** to **.151**, t (303) = **-1.870**, P = **.062** (two tailed). This shows there is no significant difference in the post-test scores of the Quasi-experimental group and the Comparison group. This means that the LPM has had no impact on academic performance of pupils in Language Arts. So the alternate hypothesis is rejected.

Analysis of Covariance: Effects of the Covariates (Students' extra classes and students' Study Habits) on the Students' Post-test Scores in the Quasi-experiment

In this quasi-experimental study, students' extra classes and their study habits were identified as covariates. In this section, Analysis of Covariance (ANCOVA) is presented between the covariates and the post-test scores of the comparison group and the quasi-experimental group. This is done to see whether the covariates have any influence on the students' post-test scores of both the quasi-experimental groups and the comparison groups.

Analysis of Covariance: Effects of Students' Extra Classes on their Post Test Scores for the Comparison Group and Quasi-Experimental Group.

This section presents the analysis of covariance between students' extra classes and the results of the post-test they took. This test was conducted to see whether the student' extra classes affect the students' post-test scores for both the comparison group and quasi-experimental group

Table-4. The effect of Students' Extra Classes after School, on the Post-Test Scores for the Comparison Group

Tests of Between-Subjects Effects						
Dependent Variable: Post-test Scores (Control Group)						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1294.547 ^a	2	647.274	2.970	.055	.047
Intercept	41117.513	1	41117.513	188.648	.000	.611
Post Test scores 2	401.032	1	401.032	1.840	.178	.015
Student Extra classes 2	1018.715	1	1018.715	4.674	.033	.037
Error	26155.111	120	217.959			
Total	446108.000	123				
Corrected Total	27449.659	122				
a. R Squared = .047 (Adjusted R Squared = .031)						

Table 4 presents the effect of Students' extra classes after school, as a covariate on the students' post test scores. The result of the model in the table indicates that the students' extra classes after school explained 3.7% of variance in the post-test scores and the post-test itself explained 1.5% of variance in the post-test scores. There is a statistically significant difference between students' post-test scores $F(1,120) = 4.674, P = .033$ and Students' extra classes after school. For example, 'I don't take extra classes in Language Arts after school' had a significant difference in comparison to 'I take extra classes in Language Arts after school' ($p = .033$), where $P \leq 0.05$. From the model, it can be observed that although there is a significant difference between students' extra classes after school and their post-test scores, yet the effect the students' extra classes have on the students' post-test scores for the comparison group is very small (3.7%). This shows that the students' extra classes after school have little effect on their post-test scores.

Table-5. The Effect of Pupils' Extra Classes after School on their Post-test Scores for the Quasi-Experimental Groups Tests of Between-Subjects Effects

Dependent Variable: Students' Post-test Scores (Experimental Group)						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1227.530 ^a	2	613.765	1.317	.272	.024
Intercept	33383.503	1	33383.503	71.624	.000	.401
Post Test scores	969.418	1	969.418	2.080	.152	.019
Student extra classes	127.973	1	127.973	.275	.601	.003
Error	49871.889	107	466.092			
Total	377500.000	110				
Corrected Total	51099.418	109				
a. R Squared = .024 (Adjusted R Squared = .006)						

Table 5 also presents the effect of students' extra classes after school as a covariate, and how it affects the students' post test scores of the quasi-experimental group. The result in the above model shows that there is only 0.3% of variance in the post-test scores, and can be explained in terms of students' extra classes after school while the post-test itself can be explained by 1.9% of variance in the post-test scores. There was no significant difference in post-test scores $F(1, 107) = .275, p = .601$ (where $P \leq 0.05$) and Students' extra classes after school. For example, 'I don't take extra classes in Language Arts after school' and 'I take extra classes in Language Arts after school' had no significant differences between each other. This shows that students' extra classes have no influence on the post-test scores of the quasi-experimental group.

Analysis of Covariance: Effects of Students' Study Habits on Post Test Scores for the Comparison Group and the Quasi-Experimental Group

This is a presentation of the analysis of covariance between students' study habits and their post-test scores. This test was conducted to see whether the students' study habit as a covariate, affect their post-test scores for both the comparison group and the quasi-experimental group.

Table-6. The Effect of Pupils' Study Habit on their Post-test scores for the Comparison Groups Tests of Between-Subjects Effects

Dependent Variable: Students' post-test scores (Comparison Group)						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	391.328 ^a	3	130.443	.574	.633	.014
Intercept	38566.056	1	38566.056	169.610	.000	.588
Post_Test_Scores2	256.239	1	256.239	1.127	.291	.009
Pupils_Study_Habits2	115.496	2	57.748	.254	.776	.004
Error	27058.330	119	227.381			
Total	446108.000	123				
Corrected Total	27449.659	122				

a. R Squared = .014 (Adjusted R Squared = -.011)

Table 6 presents the effect of students' study habits as a covariate and how it affects the students' post test scores. The result in the model indicates that students' study habits can be explained by .04% of variance in the post-test scores while the post-test itself accounts for .09% of variance in the post-test scores. The result of the model shows that while there is a very small relationship between the two variables, this relationship is not very strong. This means that the effect of the students' study habits on the students' post-test scores is very small. There was no significant difference in post-test scores $F(2, 119) = .254, p = .776$ and the students' study habits. For example, 'I don't have the chance to study at home at all', 'I study at home without help' and 'I study at home with help' had no significant differences among one another. Thus, one can conclude that students' study habits have no influence on the students' post-test scores of the comparison group.

Table-7. Effect of Students' Study Habit on their Post-test Scores for the Quasi-Experimental Group Tests of Between-Subjects Effects

Dependent Variable: Students' Post-test Scores (Quasi-experimental Group)						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1415.671 ^a	3	471.890	1.007	.393	.028
Intercept	31762.989	1	31762.989	67.766	.000	.390
Post Test Scores	997.317	1	997.317	2.128	.148	.020
Students' study habit	316.114	2	158.057	.337	.715	.006
Error	49683.747	106	468.715			
Total	377500.000	110				
Corrected Total	51099.418	109				

a. R Squared = .028 (Adjusted R Squared = .000)

In Table 7, a presentation is made to know the effect of students' study habits as a covariate, and how it affects the post test scores of students. The result in the model shows that there is 0.06% of variance in the post-test scores explained by students' study habits while the post-test itself can be explained by 2.0% of variance in the students' post-test scores. There was no significant difference in the post-test scores $F(2, 106) = .337, p = .715$ and students' study habits. For example, 'I don't have the chance to study at home at all', 'I study at home without help' and 'I study at home with help' had no significant differences among one another. Thus, it is clear that all categories had no significant differences, which means students' study habits have no effect on the post-test scores of the quasi-experimental group.

7.2 Discussion

From the results, it is clear that the use of the Lesson Plan Manual has no impact on students' academic achievement in Language Arts. This research results ran contrary to studies done by Samad *et al.* (2023); Ahmad and Sultana (2021); Landas and Alova (2022); Yüksel *et al.* (2023) and Khan *et al.* (2024). It may well be that the LPM may be used inappropriately by Language Arts teachers. The LPM teachers' guide must be used alongside the pupils' handbook, also the LPM is only to be used as a guide for teachers, which means that teachers need to prepare lesson plans using the LPM alongside other textbooks to ensure its effectiveness as prescribed by the LPM itself.

In addition to this, it could be deduced that however well-structured a Lesson Plan Manual could be, it is essential for teachers to complement it with their initiatives by adapting it to suit the context in which they find themselves. It is important to note that the Lesson Plan Manual by itself could not create any impact if the teacher is not adequately prepared to use it in the classroom.

It is also worthy to note that the Lesson Plan Manual is highly prescriptive, and teachers had the temptation that without strictly following it, pupils will not understand the lesson taught. In most cases, what the Lesson Plan prescribes for some specific topics is not enough to adequately cater for the content that the teacher is supposed to cover. This could be a possible area that might have led to the little or no impact of the Lesson Plan Manual in this study.

8. Conclusion

The study found no significant difference in the pre-test scores between the experimental group and the comparison group. Also, there is no statistically significant difference in the post-test scores between the experimental group and the comparison group. This explains that the use of the LPM has had no positive effect on pupils' performance. The implication is that the LPM doesn't seem to be working. One possible factor that might be responsible for this is that the Language Arts teachers might be using the LPM inappropriately. The LPM is to be used only as a guide. For example, teachers might not be preparing lesson plans because of their overreliance on the LPM. The LPM itself recommended the use of other textbooks alongside the LPM, which suggest that the language content materials in the LPM are inadequate; therefore, teachers should prepare lesson plans using the LPM and other textbooks to make those inadequacies.

9. Recommendations

The Sierra Leone government had spent huge amount of money in the designing and rolling out the LPM project to schools throughout the country, and so the LPM should be made to work. To this end the following recommendations are made:

- That the Ministry of Basic and Senior Secondary Education to be conducting refresher training for teachers regularly in the use of the Lesson Plan Manual, so that teachers can always be abreast with knowledge of how to use the Lesson Plan Manual effectively.
- That teachers should be encouraged to prepare lesson plans using other materials in conjunction with the LPM to make for the inadequacy of the language content materials not included in the LPM, yet considered relevant. School heads/Heads of Language Arts Departments to monitor their teachers to ensure that this is done.

References

- Ahmad, S., and Sultana, N. (2021). Impact of Teachers' Guide Lesson Plans on Students' Results of Punjab Examination Commission. *Webology (ISSN: 1735-188X)*, 18(4).
- Boisvert, Kayla, "Case Study Report: Save the Children Sierra Leone" (2017). *Education in Crisis and Conflict Network*.1.Retrieved from https://scholarworks.umass.edu/cie_eccn/1
- Campbell, D. T., and Stanly, J. C. (1963). Experimental and quasi-experimental designs for reseach. Chicago: Rand McNally & Company
- Cicek, V., and Tok, H. (2014). Effective use of lesson plans to enhance education in US and Turkish kindergarten thru 12th grade public school system: A comparative study. *International Journal of Teaching and Education*, 2(2), 10-20.
- Cook, T.D. and Campbell, D.T. (1979). Quasi-Experimentation: Design and Analysis Issues for Field Settings. Houghton Mifflin, Boston.
- Ding E. (2021). Raising the Foundation without Lowering the Ceiling: How to Utilize Teachers' Guides to Facilitate High Quality Instruction. Education for Global Development. World Bank.
- E.S.P. (2017). Education Sector Plan 2018 – 2020. Ministry of Education Science and Technology. Government of Sierra Leone.
- Flannelly, K. J., Flannelly, L. T., and Jankowski, K. R. (2018). Threats to the internal validity of experimental and quasi-experimental research in healthcare. *Journal of health care chaplaincy*, 24(3), 107-130.
- Khan, S., Siraj, D., and Ilyas, Z. (2024). Effect of lesson planning on academic performance: Evidence from the elementary level classroom. *Pakistan Social Sciences Review*, 8(1), 169-177.
- Landas, E. C., and Alova, C. A. R. (2022). Effect of Localized Lesson Plans to the Interest and Performance of Pupils in Mathematics. *Online Submission*, 2(2).
- Mugenda, O. M. and Mugenda, A. G. (2013). Research Methods, Quantitative and Qualitative Approaches. Nairobi: Acts Press
- Migosi, J., and Mwaura, D. M. (2020). Influence of Guidance on HIV/AIDS Awareness among Secondary School Learners in Kabete Sub-County, Kiambu County, Kenya. *African Multidisciplinary Journal of Research*, 5(1).

- Samad, A., Mustafa, J., and Ullah, S. (2023). A Study on the Association between Lesson Plan Implementation in the Classroom and Students' Achievement. *Al-Qirtas*, 2(4), 77-84.
- Wabwoba, C. N. (2018). The Relationships Between the Use of Lesson Plans and Pupils' Performance in English Language at Kenya Certificate of Primary Education in Non Formal Schools in Korogocho, Nairobi, Kenya.
- World Bank, (2019). Project Information Document (PID) Sierra Leone Free Education Project (P167897). Report No: PIDA 26770.
- Yüksel, Z., Çeliköz, N., Akın, H. B., and Bozkurt, S. H. (2023). The Effect of Lesson Plans Based on IB Education Philosophy and UbD Model on Student Achievement. *International Journal of Educational Research Review*, 8(3), 671-681.
- Ahmad, S. and Sultana, N. (2021). Impact of teachers' guide lesson plans on students' results of punjab examination commission. *Webology*, 18(4):
- Boisvert, K. (2017). case study report: save the children sierra leone" Education in crisis and conflict network.1. Available: https://scholarworks.umass.edu/cie_eccn/1
- Campbell, D. T. and Stanley, J. C. (1966). *Experimental and Quasi-Experimental Designs for Research*. Rand McNally: Chicago.
- Cicek, V. and Tok, H. (2014). Effective use of lesson plans to enhance education in US and Turkish kindergarten thru 12th grade public school system: A comparative study. *International Journal of Teaching and Education*, 2(2): 10-20.
- Cook, T. D. and Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Houghton Mifflin: Boston.
- Ding, E. (2021). *Raising the foundation without lowering the ceiling: How to utilize teachers' guides to facilitate high quality instruction*. Education for Global Development. World Bank.
- Ebola don go le wi make Salone grow (2017). This is not a reference; it is a statement in Krio which means, 'Ebola has ended, let us make Sierra leone grow.
- ESP (2017). *Education sector plan 2018 – 2020*. Ministry of education science and technology. Government of Sierra Leone.
- Flannelly, K. J., Flannelly, L. T. and Jankowski, K. R. (2018). Threats to the internal validity of experimental and quasi-experimental research in healthcare. *Journal of Health Care Chaplaincy*, 24(3): 107-30.
- Khan, S., Siraj, D. and Ilyas, Z. (2024). Effect of lesson planning on academic performance: Evidence from the elementary level classroom. *Pakistan Social Sciences Review*, 8(1): 169-77.
- Landas, E. C. and Alova, C. A. R. (2022). Effect of localized lesson plans to the interest and performance of pupils in mathematics. *Online Submission*, 2(2): 27-36.
- Migosi, J. and Mwaura, D. M. (2020). Influence of guidance on hiv/aids awareness among secondary school learners in kabete sub-county, kiambu county, Kenya. *African Multidisciplinary Journal of Research*, 5(1): 189-214.
- Mugenda, O. M. and Mugenda, A. G. (2013). *Research methods: Quantitative and qualitative approaches*. Acts Press.
- Samad, A., Mustafa, J. and Ullah, S. (2023). A study on the association between lesson plan implementation in the classroom and students' achievement. *Al-Qirtas*, 4(2): 77-84.
- Wabwoba, C. N. (2018). *The relationships between the use of lesson plans and pupils' performance in english language at Kenya certificate of primary education in non formal schools in korogocho*. Nairobi, Kenya.
- World Bank (2019). Project information document (pid) sierra leone free education project (p167897). report no: pida 26770.
- Yüksel, Z., Çeliköz, N., Akın, H. B. and Bozkurt, S. H. (2023). The effect of lesson plans based on ib education philosophy and ubd model on student achievement. *International Journal of Educational Research Review*, 8(3): 671-81.