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Egbe, Cajethan I. PhD; Offorma, Grace C. Prof; and Kadiri, Goodluck PhD, "Library and Information Science Integrated Language Teaching Approach and Students' Achievement in English Grammar" (2021). *Library Philosophy and Practice (e-journal)*. 6330.

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Library and Information Science Integrated Language Teaching Approach and Students' Achievement in English Grammar

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Abstract

Different studies have shown that students perform poorly in English grammar. Thus, the study investigated the effect of Library and Information Science Integrated Language Teaching Approach on students' achievement in English grammar. The achievement of students taught with ILTA were compared with those of students taught with the Form Based Approach (FAB). A quasi-experimental design was adopted. A total of 296 senior secondary school two students (83 males and 73 females) constituted the sample. They were assigned into experimental and control groups using a multi-stage sampling technique. The English Grammar Achievement Test (EGAT) was used for data collection. Treatment lasted for six weeks. The research question was answered using mean scores, while Analysis of Covariance (ANCOVA) was used to test the null hypothesis at 0.05 level of significance. The result showed that Library and Information Science Integrated Language Teaching Approach significantly improved students' achievement in English grammar, but gender did not significantly influence students' achievement and interest in English grammar. There was also no significant interaction influence of instructional approaches and gender on students' achievement in English grammar. It was recommended that education stakeholders should organize workshops to educate teachers on the efficacy of Library and Information Science Integrated Language Teaching Approach as well as the procedures for using it in teaching English grammar, especially to learners of English as a second language.

Keywords: English grammar, Students' achievement, Library and Information Science Integrated Language Teaching Approach, Form Based Approach, English as a second language.

Introduction

The English language is a global language and is spoken by a cross section of the world. It is a first language to many nations like the United States of America and the United Kingdom, and a second or foreign language in many countries of the world, including Nigeria. To speak English intelligibly and to be understood well without intermittent breakdown in communication, the second language learner has to have working knowledge of the grammar of the language. Oji (2002) agrees that a learner of English as a second language must be abreast with the grammar of the language before he or she can make pretensions to the mastery of it. This assertion is validated by Ogenyi (2002) who states that grammar is the backbone of any language, the mastery of which impacts on the learners' overall performance in the language. Murthy (2007) categorically states that unless a second or foreign language user has mastery of the grammar of the language, he or she cannot speak or write English language correctly.

Grammar, also called structure or grammatical structure, (Opega, 2005) is the set of patterns in which the words of a language are arranged in order to convey meanings. It is also the proper arrangement of words in sentences (NERDC, 2006). Lester (2001) sees it as the rules of the language that have been acquired and are used unconsciously by a speaker. Thus, it can be inferred from the foregoing expositions that grammar is the principles and rules that allow the organization of words and sentences into coherent, meaningful language acceptable to the native speakers of the language.

Not minding the central position that grammar occupies in spoken and written language, many students studying English as a second language find it difficult to speak and write grammatically correct English. As a result of this they fail to achieve communicative competence

which is the goal of all language teaching and learning. The aspects of grammar that pose one of the greatest problems to students studying English as a foreign language are concord and tense.

Concord or agreement shows the relationship between the subject and the verb on the one hand, and a pronoun and its antecedent on the other. For Nzerem (2008), concord shows the cordial relationship in gender, case, number or person between different words that share a reference. Oji (2002) sees concord as the matching of the verb with its subject, that is, the agreement of the verb in number with its subject. In other words, if the subject is singular, the verb must be singular; if the subject is plural, its verb must be plural. Thus, Nzerem (2008) asserts that the intelligibility of an utterance is to a large extent hinged on the agreement of words in the sentence. Studies have shown that even among educated speakers, the problem of concord occurs repeatedly in their speech and writing, not to talk of students at primary, secondary or tertiary levels of education where the deficiencies in the use of noun-verb agreements are more pronounced. Notable misuse of subject verb agreement can let one down in the public and lead to embarrassment. Some listeners have one form of psychological reaction when a speaker derails in the use of concord.

On the other hand, tense is defined as the form that a verb takes to show the time of an action (Oji, 2002). Based on this definition, Oji argues that there are only two tenses in English, present tense and past tense. However, traditionally, other inflections corresponding to the continuity or perfection of an action are possible, which allows for the inclusion of the present continuous, present perfect, past continuous or past perfect tenses (Ike, 2000). Many students have poor control of their tenses, especially in the sequence of tenses, resulting in incorrect utterances like: “When I went to his house, he is not there”.

Tense and concord overlap such that the teaching of one involves the teaching of the other. They are also important aspects of grammar and English language as they seem to underly all spoken utterances since all sentences must have a subject and verb which must agree, while every verb in the sentence must take a tense.

It seems worrisome that in spite of concerted efforts at teaching English language and grammar in particular to second language learners, they do not seem to do well. Ossai, Eze and Obayi (2020) observe that many learners of English as a second language cannot communicate in English due to poor knowledge of grammar. In Nigeria, for example, many candidates who sit for the West African Senior School Certificate Examination in English language fail to pass the paper at credit level because of many factors including poor grammar of the English language. This is the case because knowledge of grammar is an integrated skill and it is tested in the essay-based questions. For instance, in grading essays, letters, comprehension questions and summaries, grammar, especially concord and tense, are examined and poor performance in these areas can deny a candidate a credit pass in the subject.

Students' poor achievements in English language, and grammar in particular, may not be unconnected with the approaches and methods used in teaching grammar. For first language speakers the grammar of the language is effortlessly acquired within the critical or optimum period of language learning with the result that they can speak grammatically without being even able to account for the rules or principles behind the grammar. Contrastively, many second language speakers come to the classroom with little or no understanding of the English language and the grammar of the language. Teachers introduce them to English by teaching them the rules of the language as a way of leading them to speak English fluently later in life. However, some

scholars (like Krashen, 1982) have shown that there is a dividing line between the acquired system and the learned system and that learning cannot turn into acquisition.

Krashen's acquisition learning hypothesis explains the two polar approaches that are used in teaching grammar. The first approach is the form-based approach, while the other is the meaning-based approach. These two approaches are non-integrative in nature. The form-based or structural approach focuses on definitions and analysis of structures. This approach is characterized by grammatical explanation, memorization of rules, use of isolated examples, non-authentic language materials in teaching and abstract and non-motivating parsing of structures. Less emphasis is placed on authentic language use, dialogues, literature and real life tasks that promote communication. The result is that the overt and conscious learning of language rules and structures does not translate fully into actual communicative competence.

Contrastively, the meaning based approach, or the communicative approach, places emphasis on communication and deemphasizes explicit teaching of grammar. It makes communicative tasks the essence of language teaching. Grammar is taught implicitly, not explicitly. Grammar is learnt accidentally as communicative activities go on. However, this tends to favour first language speakers who, at the age of six, use the grammar of the English language well. They bring to the school covert knowledge of the rules and overt competence in the spoken language. Shulz (2006) reports that students who are taught using this approach can speak fluently, but have more problems with the accurate use of the language. Again, many examination bodies in the second language setting ask the candidates to state the grammatical names and functions of some structures. Thus, total dependence on the meaning based approach may be deficient in its ability to inculcate this knowledge.

It becomes imperative to integrate the form-based approach and the meaning-based approach in the teaching of grammar to second language students for the effective navigation of grammar. The integrative (sometimes called integrated) Language Teaching Approach is in tandem with the nature of grammar itself which is an integrated sub-skill. This is because grammar does not appear in isolation naturally but is used as one speaks and engages in all forms of writing.

The Library and Information Science Integrated Language Teaching Approach connotes the idea of bringing together, infusing elements from different concepts into a whole. According to Kenya Institute of Education (2002) the integrative approach involves merging two distinct but related activities in order to strengthen and enrich both. In this approach, students are taught explicit grammar rules not in isolation, but in the context of communicative tasks. The students are first exposed to passages that demonstrate a grammatical rule before they are now taught the rules based on the authentic texts they have been exposed to. In this study, both structure and meaning are delicately combined and handled. Authentic texts in form of exploration passages drawn from literature books, newspapers, stories, and other sources are carefully selected. Students read them over and over again before a certain grammatical rule is taught. Students are then tasked to find out sentences and expressions that illustrate the grammatical rule and model their sentences and create novel ones in line with the rules and the authentic texts. Thus, ILTA balances the need of second and foreign language students of English language for accuracy and fluency in the use of English language grammar.

The theoretical basis of the Library and Information Science Integrated Language Teaching Approach is hinged on the monitor theory of Krashen. Krashen (1982) postulates that adults approach second language learning by either acquiring it or learning it. They can acquire a

language by engaging in meaningful interaction in just the same way as children acquire their mother tongue. Learning, on the other hand, involves conscious study of the form of the language and the grammatical rules guiding them as is typical in the Form Based Approach to language learning. Krashen contends that the acquired system is responsible for fluency and intuitive judgment about correctness, while the learned system acts as the monitor or editor, making minor changes and polishing the output of the acquired system. In line with Krashen's theory, the Library and Information Science Integrated Language Teaching Approach exposes students both to the rules of the language as well as opportunities for natural and spontaneous communication. Thus, it satisfies the need of second language learners for knowledge of the rules of grammar (form based approach) and fluency in communication (meaning-based approach). This, unlike the conventional approach that focuses only on the form of the language, makes for the holistic teaching and learning of grammar.

Previous studies have shown that Library and Information Science Integrated Language Teaching Approach is effective in language teaching. For example, the study by Sysoyev (1999) was on the use of Library and Information Science Integrated Language Teaching Approach in teaching grammar to ESL students in Russia, with focus on form and meaning. The subjects were 10 undergraduate international students from Russia, Ukraine, Taiwan, and China, whose TOEFL scores were lower than 500 points. The experiment consisted of three stages: exploration, explanation and expression (EEE). At the exploration stage, learners looked at certain sentences and discovered a grammatical pattern under the instructor's supervision. In the explanation stage, the teacher explained explicit rules, while in the expression stage the students used new structures in interaction and in producing meaningful utterances. Finally, an evaluative questionnaire was administered at the end of the lessons to determine the attitudes of

the students towards the new method of grammar teaching. The results showed that the students preferred to learn L₂ grammar using the EEE method as opposed to the form based or meaning based approach only. The study by Sysoyev (1999) is different from the present study in design. Sysoyev used an evaluative questionnaire to obtain its data, but this study used a quasi-experiment.

In a similar vein, Dakhmouche (2008) investigated the use of integrative grammar in teaching academic writing. The sample for the study consisted of 90 students and 16 teachers in the Department of English, Mentouri University, Algeria. The data for the study was collected through teachers' and students' questionnaire. The analysis of the data revealed that both students and teachers considered grammar as an important aspect to develop in learning to write and that relating grammar instruction to the teaching of writing would be particularly helpful not only in achieving accuracy and clarity in expressing an idea, but also in giving learners access to different structural variants to formulate this idea. The study by Dakhmouche (2008) used a survey but this study used a quasi-experimental design.

Also, the study by Ongong'a, Okwara and Nyangara (2010) investigated the use of integrated approach in teaching and learning at the secondary school level in Kenya. The result of the study showed that the integrative approach was underutilized and that there were minimal levels of integration in English lessons. The study, however, did not establish the effect of this approach on students' achievement and interest in English grammar. It is, therefore, based on the need for a teaching approach that bridges the gap between the form and the meaning based approaches and the need to close the existing lacunae that this study was envisioned.

In the same vein, the teaching approaches used in teaching grammar can be influenced by the gender of the students. Zoghi, Kazemi and Kalan (2013) are of the view that gender is an

important factor that influences second language acquisition. Matoti and Lekhu (2016) define gender as a psychological term that describes the characteristics and behaviour expected of males and females. Fischer, Schult and Hell (2013) assert that females are smarter than males and therefore perform better than males. A study carried out by Bichi and Sule (2015) found that females performed above average better than males in both rural and urban schools, who performed below average. However, the study by Attah and Ita (2017) revealed that gender has no significant influence on students' academic performance in English language. It seems therefore that the exact influence of gender on language achievement is not clear. The influence of gender may depend on the methods or approaches used in teaching the students, hence this study was poised to determine the effect of Library and Information Science Integrated Language Teaching Approach on male and female students' achievement in English grammar.

Research Questions

1. What are the mean achievement scores of students taught English grammar using the Library and Information Science Integrated Language Teaching Approach and those taught using the Form-Based Approach (FBA)?
2. What is the influence of gender on the mean achievement scores of students taught English grammar using the Library and Information Science Integrated Language Teaching Approach ?
3. What is the interaction influence of instructional approach and gender on students' mean achievement scores in English grammar?

Hypotheses

- Ho₁: There is no significant difference in the mean achievement scores of students taught English grammar using the Library and Information Science Integrated Language Teaching Approach and those taught with the Form Based Approach (FBA).
- Ho₂: Gender has no significant influence on the mean achievement scores of students in English grammar when taught with ILTA.
- Ho₃: There is no significant interaction influence of instructional approaches and gender on students' mean achievement scores in English grammar.

Method

This study employed the quasi-experimental design. Specifically, it used the non-randomized control group design. The design was adopted because the students that were used for the experiment were already in intact classes. Ali (2006) recommends this design where intact classes are used. In similar studies, Adene et al (2021), Ejimonye et al. (2020a, b), Njoku et al. (2020), Offordile et al. (2021), Adonu et al. (2021) have adopted the design successfully.

The study was carried out in Nsukka Local Government Area of Enugu State, Nigeria. The Local government houses the University of Nigeria, Nsukka. The population of the study consisted of all the 3,424 senior secondary school class two (SSS III) students in all the 30 public senior secondary schools in Nsukka Local Government Area. SSS II students were used for the study because agreement and sequence of tenses are in their curriculum and scheme of work. Also, they had been taught English grammar in junior and part of senior secondary school and were expected to use grammar very effectively in speech and writing. So, using SSS II students gave a true picture of the state of the art with regard to students' achievement in English grammar.

The sample for the study consisted of all the 296 students (147 males and 149 females) in eight intact classes which were drawn from four co-educational schools in Nsukka Local Government Area, Enugu State, Nigeria using multi-stage sampling technique. The following are the stages of the sampling. Firstly, the 30 public secondary schools in the local government area were stratified into single sex and co-educational schools. Secondly, the co-educational schools were purposively sampled because of the variable of gender in the study. Thirdly four schools were sampled from the co-educational schools using simple random sampling technique. Lastly, two intact classes were drawn from each of the schools that were used for the study through balloting.

One instrument was used to collect data for the study. This was the English Grammar Achievement Test (EGAT). This is a 50-item dichotomously scored instrument constructed by the researchers, which tests students in various ways questions on agreement and sequence of tenses can appear. The test has two parts. Part A provides for the bio-data of the research subjects, while part B is the actual test. The actual test has four sections and they are based on the Table of Specification/Test Blue Print drawn for the purpose. The table of specification/test blue print has both the content dimension and the ability process dimension. The content dimension is made up of four units that were taught during the quasi-experiment. They were drawn from the senior secondary education curriculum on English language for SSS II and the Enugu State, Nigeria Uniform scheme of work on English language for SSS II. On the other hand, the ability process dimension is sub-divided into knowledge and comprehension (lower order) and application (higher order) levels of Bloom's taxonomy of educational objectives. Section A has 10 questions and it deals with the identification of singular and plural subjects that agree in number with the underlined singular or plural verbs. Section B also has ten questions. It

tests students' ability to correct a grammatically wrong sentence by choosing the correct number or tense form of the verb that would make the sentence grammatically correct. Section C has twenty questions and it tests students' ability to apply their knowledge of grammar in choosing the verb that is most appropriate in number and tense to complete each of the sentences. Section D has 10 numbers. Students are to read a passage and fill the numbered gaps in the passage with the most appropriate form of the verb from the options given.

The instrument was subjected to both face and content validation. The instrument was presented to four specialists, two from English language education and two from measurement and evaluation. All the specialists are lecturers not below the rank of senior lecturer in the Faculty of Education, University of Nigeria, Nsukka. Their suggestions led to the final version of the instrument.

The instrument was also subjected to reliability test by determining its internal consistency using Kuder-Richardson's Formula (K-R 20). This formula is mostly applicable to tests that are dichotomously scored (Ezeh, 2003). The instrument yielded a reliability coefficient of 0.95, indicating that it is reliable.

The researchers used the following procedure to carry out the quasi-experiment. First, four research assistants from the selected schools were selected to assist in the experiment. These are the regular English language teachers in the schools that were used for the study. The researchers trained them extensively on the skills involved in the use of the Library and Information Science Integrated Language Teaching Approach as well as the Form Based Approach in teaching English grammar. During the training the research assistants were given the lesson plans already prepared for the study as well as the exploration passages for the experimental group. The exploration passages were designed to demonstrate in a communicative

way the four topics carried out for the study. The grammatical structures to be learnt were integrated in the passages. The students were asked to read them over and over again. Through them the students were expected to state the rules guiding the agreement of subject and verb and sequence of tenses and thereafter apply the knowledge in making grammatically correct sentences.

After the training of the research assistants they administered the English Grammar Achievement Test (EGAT) on the subjects in order to get the baseline data. Thereafter, the experiment commenced. The experimental group was taught using the Library and Information Science Integrated Language Teaching Approach while the control group was taught with FBA. The experiment lasted for six weeks. After the experiment, the research assistants re-administered the instrument as post-test but the questions were reshuffled. At the end of the post-test, the students' scripts were collected, marked and recorded by the research assistants before they were handed over to the researcher for data analysis.

Several extraneous variables that could constitute threats to the experiment were checked. These include experimenters' bias. This was controlled by ensuring that the researchers were not personally involved in administering the research conditions, rather the students were taught by their regular teachers. To avert contamination, the experimental and control groups were not selected from the same school. To curb the teacher variable from posing threat to the experiment, the teachers involved in the experiment were rigorously trained. In order to control the error that might arise from the use of intact classes, Analysis of Covariance (ANCOVA) was used to test the hypothesis. According to Ali (1996), ANCOVA serves as a procedure to partial out the initial differences in the groups by reducing the variations due to some extraneous variables. The

questions used as pretest were reshuffled in the administration of the post-test in order to control the effect of the pre-test on the post-test.

The data got from the instrument were analyzed using mean and standard deviation to answer the research questions, while Analysis of Covariance (ANCOVA) was used to test the hypothesis at 0.05 level of significance. According to Ali (1996) ANCOVA is the appropriate statistical tool for analyzing data based on the pre-test post-test, quasi-experimental design, as it helps to partial out the initial differences of the research subjects because of the use of intact classes. The null hypothesis was rejected if its level of significance was less than 0.05, otherwise the null hypothesis was not rejected.

Results

The results are presented in line with the research questions and hypotheses that guided the study.

Research Question 1: What are the mean achievement scores of students taught English grammar using the Library and Information Science Integrated Language Teaching Approach and those taught using the Form-Based Approach?

Table 1: Pre/Post-test Mean Achievement Scores of the Experimental and Control Groups in English Grammar

| Group | N | Pre-test | SD | Post-test | SD | Gain |
|---------------------|-----|----------|------|-----------|------|-------|
| Experimental (ILTA) | 156 | 18.02 | 7.29 | 29.12 | 5.90 | 11.10 |
| Control (FBA) | 140 | 20.42 | 7.53 | 21.47 | 8.50 | 1.05 |

Table 1 shows that the experimental group (those taught with the Library and Information Science Integrated Language Teaching Approach) had a pre-test mean achievement score of 18.02 with standard deviation of 7.29 and a post-test mean achievement score of 29.12 with standard deviation of 5.90. On the other hand, the pre-test mean achievement score of the control

group (those taught with the Form-Based Approach) was 21.47 with standard deviation of 8.50, while their post-test mean achievement score was 21.47 with standard deviation of 8.50. The experimental group had a mean gain score of 11.10 as against the mean gain score of 1.05 recorded by the control group. The result reveals that the students taught with Library and Information Science Integrated Language Teaching Approach achieved higher in English grammar than those taught with the FBA.

Research Question 2: What is the influence of gender on the mean achievement scores of students taught English grammar using the Library and Information Science Integrated Language Teaching Approach?

Table 2: Pre/Posttest Mean Achievement Scores of Male and Female Students Taught English Grammar Using the ILTA

| Group | N | Pre-test | SD | Post-test | SD | Gain Score |
|--------|----|----------|------|-----------|------|------------|
| Male | 83 | 18.00 | 7.64 | 29.39 | 5.91 | 11.39 |
| Female | 72 | 18.04 | 6.93 | 28.81 | 5.94 | 10.77 |

Table 2 indicates that the male students had a pre-test mean achievement score of 18.00 with 7.64 as the standard deviation. They also obtained a posttest mean achievement score of 29.39 with 5.91 as the standard deviation. However, the female students had a mean achievement score of 18.04 with 6.93 as the standard deviation. The table also shows that the male and female students had gain score of 11.39 and 10.77 respectively. Thus, the males achieved higher than the females in English grammar.

Research Question 3: What is the interaction influence of instructional approach and gender on students' mean achievement scores in English grammar?

Table 3: Interaction influence of Instructional Approaches and Gender on Students' Mean Post Achievement Scores in English Grammar

| Group | Gender | N | Mean | SD |
|---------------------|--------|----|-------|------|
| Experimental (ILTA) | Male | 83 | 29.39 | 5.91 |
| Control (FBA) | Male | 64 | 21.93 | 8.07 |
| Experimental (ILTA) | Female | 73 | 28.81 | 5.94 |
| Control (FBA) | Female | 76 | 21.07 | 8.89 |

Table 3 presents the data on the interaction effect of instructional approaches and gender on students' mean achievement scores in English grammar. The table indicates that the males in the experimental group had a mean score of 29.39 with 5.91 as standard deviation. This is against the mean score of 21.93 and standard deviation of 8.07 recorded by their counterparts in the control group. The females in the experimental group had a mean score of 28.81 and standard deviation of 5.94 ahead of their counterparts in the control group, who had 21.07 and standard deviation of 8.89. The results reveal that the males in the experimental group achieved higher than the males in the control group, while the females in the experimental group achieved higher than the females in the control group. The superiority of the scores of the males and females in the experimental group over those of the males and females in the control group could be attributed to the effect of treatment alone and not from the interaction effect of instructional approaches and gender.

H₀₁: There is no significant difference in the mean achievement scores of students taught English grammar using the Library and Information Science Integrated Language Teaching Approach and those taught with the Form-Based Approach

Table 4: Summary of Analysis of Covariance (ANCOVA) of Students' Post Achievement Scores in English Grammar by Approach

| Source | Type III sum of squares | Df | Mean square | F | Sig | Decision |
|-----------------|-------------------------|-----|-------------|---------|------|----------|
| Corrected model | 14120.138 ^a | 8 | 1765.017 | 89.311 | .000 | |
| Intercept | 4591.981 | 1 | 4591.981 | 232.357 | .000 | |
| Pre-test scores | 5845.022 | 1 | 5845.022 | 295.762 | .000 | |
| Group | 6061.988 | 1 | 6061.988 | 306.741 | .00 | S* |
| Gender | 18.931 | 1 | 18.931 | .958 | .329 | NS |
| Group *Gender | .569 | 1 | .569 | .029 | .865 | NS |
| Error | 5671.858 | 287 | 19.763 | | | |
| Total | 212317.000 | 296 | | | | |
| Corrected Total | 19791.997 | 295 | | | | |

^aR squared = .713 (Adjusted R squared = .705)

*S = Significant at 0.05 level

NS = Not significant at 0.05 level

The result shown on Table 4 indicates that treatment as a main factor has a significant effect on students' achievement in English grammar. This is because the F value of 306.74 in respect of treatment is shown to be significant at 0.00 level. This means that at 0.05 level, the F value of 306.74 is significant. The result shows that the Library and Information Science Integrated Language Teaching Approach significantly improved students' achievement in English grammar more than the form-based approach. Thus, the null hypothesis that there is no significant difference in the mean achievement scores of students taught English grammar using the Library and Information Science Integrated Language Teaching Approach and those taught with the form Based Approach (FBA) is rejected.

H₀₂: Gender has no significant influence on the mean achievement scores of students in English grammar when taught with Library and Information Science Integrated Language Teaching Approach.

The result presented on Table 4 shows that the calculated F value of 0.958 with respect to gender is significant at 0.329. This indicates that 0.05 level, the F value of 0.95 is not significant. This means that the difference in the mean achievement scores of males and females in English

grammar is not statistically significant. Thus, the null hypothesis that gender has no significant influence on the mean achievement scores of students taught English grammar using Library and Information Science Integrated Language Teaching Approach is not rejected.

H₀₃: There is no significant interaction influence of instructional approaches and gender on students' mean achievement scores in English grammar

The interaction influence of instructional approach and gender as shown on Table 4 is not significant. This is because the F value of 0.029 in respect of interaction between instructional approaches and gender is shown to be significant at 0.865 level but not significant at 0.05 level. Therefore, the null hypothesis that there is no significant interaction influence of instructional approaches and gender on students' mean achievement scores in English grammar is not rejected.

Discussion of Results

Evidence from this study shows that students in the experimental group who were taught English grammar using the Library and Information Science Integrated Language Teaching Approach obtained a higher post-test mean achievement score than those in the control group who were taught the same English grammar using the Form-Based Approach.

The result of this study is in tandem with the finding of Sysoyev (1999), Dakhmouche (2008), Ongong'a, Okwara and Nyangara (2010), and Dabaghi and Goharimehr (2011) on the effectiveness of ILTA in teaching English grammar and other areas of the English language. The efficacy of Library and Information Science Integrated Language Teaching Approach over the FBA is not surprising because Library and Information Science Integrated Language Teaching Approach does not encourage abstract statement and memorization of grammatical rules. Rather, students are presented with familiar exploration passages where structures illustrating

grammatical rules are integrated and demonstrated. Students, in the course of reading those passages, explore in detail the grammatical structures. They see them in context and have the chance of acquiring them. Thus, they unconsciously acquire the grammatical rules as well as the syntax of the language in authentic discourse. When the rules are finally presented to them, they seize to be abstract but are directly related to the structures already acquired.

The result of this study goes to corroborate the Monitor Theory as propounded by Krashen (1982) which states that adult second language learners approach second language learning by either acquiring it or learning it, but that acquisition is superior to learning. The Library and Information Science Integrated Language Teaching Approach creates a variety of learning experiences for the learners to explore the language and acquire it just as children do. However, it also provides the learners with the rules which complement and polish what they had been exposed to through the acquired system. But learning of rules is never given first priority. This approach has been found to be superior to the FBA which focuses chiefly on rote memorization of rules that are easily forgotten, with less emphasis on language in context.

The result of this study also reveals that even though students find grammar a difficult aspect of English as shown by the works of Udosen (2005), Agada (2008) and Olibe (2010), much can be achieved in it with the right approach. Evidence from the results of this study shows that on the average all the students taught English grammar with Library and Information Science Integrated Language Teaching Approach comfortably passed the post achievement test, having got a mean score of 29.12 marks over 50 marks, while those taught with the FBA narrowly passed the test having scored 21.47 marks over 50 marks. Turned into percentage, students taught with Library and Information Science Integrated Language Teaching Approach got 58%, while those taught with FBA got 42%. It is probably because of the fact that the Form-

Based Approach, which is the popular approach used by English language teachers in teaching grammar, could not produce good results among students that the WAEC Chief Examiners' Report (2008) saw the need for a change of approach to address the anomaly. This result confirms the need for a change of approach from the conventional Form-Based Approach to the Library and Information Science Integrated Language Teaching Approach.

Besides, the findings of this study regarding the differences in achievement of male and female students taught English grammar using Library and Information Science Integrated Language Teaching Approach indicate that the males achieved slightly higher than the females, but this was not found to be statistically significant in the test of hypothesis. The result of this study disagrees with the findings of Fisher, Schult and Hell (2013) and Bichi and Sule (2015) which indicated that females performed better than males. However, it is in agreement with the finding of Attah and Ita (2017) which showed that gender has no significant influence on students' academic performance in English Language.

Results regarding the interaction influence of instructional approaches and gender on students' achievement in English grammar established that there was no significant interaction influence of instructional approaches and gender on students' achievement in English grammar. In other words, the superior scores in students' achievement by the experimental group is attributable to the effect of treatment alone and not as a result of any interaction influence of treatment and gender. This goes a long way to solidify the findings of Sysoyev (1999) and Dabaghi and Goharimehr (2011) on the potency of the Library and Information Science Integrated Language Teaching Approach in Improving students' achievement in English grammar.

Recommendations

Based on the discussion in the foregoing, this study recommends as follows:

1. Teachers of English grammar in secondary schools, where English is taught as a second or foreign language, should embrace the Library and Information Science Integrated Language Teaching Approach in teaching English grammar by integrating authentic sources in the teaching of grammar so that students can acquire English language grammar as they are naturally used in communication alongside the teaching of the rules of grammar.
2. Workshops, seminars and conferences should be regularly organized for English language Teachers by education authorities such as universities, colleges of education, Ministries of Education and school boards on the use of Library and Information Science Integrated Language Teaching Approach in teaching English grammar.
3. English teacher preparation programmes in Colleges of Education and Universities should include in their relevant courses on methodology (like special methods) the use of Library and Information Science Integrated Language Teaching Approach in teaching English grammar so that pre-service teachers will be trained on how to use this approach in teaching English grammar on employment.
4. Curriculum developers for secondary schools such as the Nigerian Educational Research and Development Council (NERDC) should incorporate Library and Information Science Integrated Language Teaching Approach as an effective approach in teaching English grammar in the next review of the curriculum as well as carry out further research on other areas of the English language where Library and Information Science Integrated Language Teaching Approach could be applied.

Conclusion

This study has succeeded in providing empirical basis for the use of the Library and Information Science Integrated Language Teaching Approach in teaching English language grammar to second language learners of English. Over the years, the conventional approach adopted by teachers in teaching English grammar is the Form-Based Approach. This has not been effective in satisfying the needs of second language learners for accuracy and fluency in the use of language. Its focus on form has led to students' perception of grammar as an abstract area of English, leading to disinterest and subsequent poor achievement in the sub-skill. The Library and Information Science Integrated Language Teaching Approach comes to bridge this gap, as it satisfies the need of the students to be exposed to authentic texts where English grammar can be demonstrated, alongside giving them the rules.

The results have shown that Library and Information Science Integrated Language Teaching Approach is more beneficial to the students, as both male and female students exposed to it significantly achieved better in English grammar than their colleagues who were not exposed to it. It is therefore hoped that with the implementation of the recommendations, students will be better equipped with the grammatical skills necessary for them to speak and write good English grammar.

References

- Adene, F.M., Umeano, E.C., Adimora, D.E., Ugwuanyi, C.S., Okeke, C.I.O., Offordile, E.E., Amaeze, F.E., Uzodinma, U.E., Abdullahi, Y., Ejiofor, J.N. & Ishiwu, E.N. (2021). Effectiveness of Peer Collaborative Learning Strategy on Self-Esteem of Pupils with Behaviour Problems in Nsukka Education Authority. *Journal of Critical Reviews*, 8(1), 1055-1069. <http://www.jcreview.com/fulltext/197-1615692041.pdf?1615708380>
- Adonu, C.J., Nwagbo, C.R., Ugwuanyi, C.S., & Okeke, C.I.O. (2021). Improving Students' Achievement and Retention in Biology using Flipped Classroom and Powerpoint Instructional Approaches: Implication for Physics Teaching. *International Journal of Psychosocial Rehabilitation*, 25(2), 234-247. <https://www.psychosocial.com/article/PR320026/37829/>

- Agada, J.M. (2008). Effect of cloze procedure on secondary school students' achievement in English grammar (Unpublished Ph.D Thesis), Department of Arts Education, University of Nigeria, Nsukka.
- Ali, A. (1996). *Fundamentals of research in education*. Awka: Meks Publishers.
- Ali, A. (2006). *Conducting research in education and the social sciences*. Enugu: Tashiwa Networks.
- Attah, R.F. & Ita, P.M. (2017). Gender as a predictor of academic achievement in English among senior secondary school two students in Calabar metropolis, Cross River State. *Global Journal of Educational Research*, 16, 149-153. Retrieved from <http://dx.doi.org/10.4314/gjedr.v16i2.9>
- Bichi, A.A. & Sule, Y.M. (2015). Gender issue in students' academic achievement in English language. Retrieved from <https://www.researchgate.net/publication/281590724-GENDER-ISSUE-IN-STUDENTS'-ACADEMIC-ACHIEVEMENT-IN-ENGLISH-LANGUAGE>
- Dabaghi, A. & Goharimehr, N. (2011). The relationship between learning styles of field-dependence/independence and integrative/discrete point methods of grammar teaching. *World Journal of English Language*, 1(2), 80-89. Retrieved from www.sciedu.ca/journal/index.php/wjel/article/download/450/218
- Dakhmouche, L. (2008). Integrative grammar in teaching academic writing. Retrieved from bu.umc.edu.dz/theses/anglais/DAK1012.pdf.
- Ejimonye, J.C., Onuoha, J.C., Ugwuanyi, C.S., Eneogu, N.D., Ugwuanyi, B.E & Ogbuehu, S.N (2020a). Effectiveness of Two-Dimensional Animation Technique in Enhancing Students' Motivation in Quantitative Economics Concepts. *International Journal of Future Generation Communication and Networking (IJFGCN)*, 13(1):27-38.
- Ejimonye, J.C., Ugwuanyi, C.S., Okeke, C.I.O., & Nwoye, M.N. (2020b). Two-Dimensional Animation and Students' Achievement in Mathematical Economics: Implications for Science Teaching. *International Journal of Engineering Research and Technology*, 13(6), 1220-1230
- Ezeh, D.N. (2003). Validity and reliability of tests. In B.G. Nworgu (ed). *Educational measurement and evaluation: Theory and practice* (Rev. ed.). Nsukka: University Trust Publishers.
- Fischer, F., Schult, J. & Hell, B. (2013). Sex differences in secondary school success: Why female students perform better? *European Journal of Psychology of Education*, 4(28), 529-543.
- Ike, N.J. (2000). *Functional grammar and usage*. Nigeria: Wilbest Educational Publishers.
- Kenya Institute of Education (2002). *Secondary education syllabus, volume one*. Nairobi: Government Printers.

- Krashen, S. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon Press.
- Lester, M. (2001). *Grammar in the classroom*. New York: Macmillan Publishing Company.
- Matoti, S.N. & Lekhu, M.A. (2016). Sources of anxiety among pre-service teachers on field placement experience. *Journal of Psychology in Africa*, 26(3), 304-307.
- Murthy, J.D. (2007). *Contemporary English grammar*. Lagos: Book Master.
- Nigerian Educational Research and Development Council (2006). *9-year basic education curriculum English studies for junior secondary 1-3*. Abuja: NERDC.
- Njoku, M.I.A., Nwagbo, C.R., & Ugwuanyi, C.S. (2020). Effect of Peer Tutoring and Peer-Led Team Learning on Students' Achievement in Biology. *International Journal of Database Theory and Application (IJDTA)*, 13(1),1-10. <https://doi.org/10.33832/ijta.2020.13.1.01>.
- Nzerem, J.K. (2008). Rules of concord in English language. *Journal of Nigerian Language and Culture*, 10(11), 256-266.
- Offordile, E.E., Umeano, E.C., Adene, F.M., Obi, M.C., Ugwuanyi, C.S., Okeke, C.I.O., Adimora, D.E. (2021). Improving the academic achievement of low achieving secondary school students in physics using peer tutoring learning strategy: Implications for Engineering Career. *International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)*, 11(3), 201–212. <http://www.tjprc.org/publishpapers/2-67-1618048208-15IJMPERDJUN202115.pdf>
- Ogenyi, L.C. (2002). The teaching of grammar as a tool for learning English as a second language. In E.J. Otagburuagu & P.A. Anyanwu (eds.). *Concepts and issues in language studies*. Owerri: Springfield Publishers, 208-223.
- Oji, N. (2002). *English grammar for advanced students*. Uruowulu-Obosi, Anambra State: Pacific Publishers.
- Olibe, E.I. (2010). Using computer-assisted language learning to improve students' English language achievement in Universal Basic Education. *International Journal of Educational Research and Technology*, 1(1), June, 66-71.
- Ongong'a, J.O., Okwara, M.O. & Nyangara, K.N. (2010). Using integrated approach in teaching and learning at the secondary school level in Kenya. *Educational Research*, 1(11), 618-623. Retrieved from <http://www.interesjournals.org.ER>
- Opega, R.Y. (2005). *English grammar and usage* (2nd ed). Makurdi: Aboki Printers.
- Ossai, R.C., Eze, R.I. & Obayi, J.I. (2020). Promoting classroom interactivity through CALL in the teaching and learning of English grammar in Nigerian federal universities. *International Journal of Arts and Technology Education*, 11(2), 80-94.

- Schulz, R.A. (2006). Re-evaluating communicative competence as a major goal in post secondary language requirement courses. *Modern Language Journal*, 90(2), 252-263.
- Sysoyev, P.V. (1999). Integrative L₂ grammar teaching: Exploration, explanation and expression. Retrieved from <http://itesly.org/http://iteslj.org/Articles/Sysoyev-integrative.html>.
- Udosen, A.E. (2005). Rethinking classroom evaluation: A case study of English language teachers' assessment practices in Uyo senatorial district of Akwa Ibom State. *Journal of World Council for Curriculum and Instruction*, 5(1), 94-104.
- West African Examinations Council (2008). *West African Senior school certificate examination May/June 2008 Chief Examiners' Report (Nigeria)*. Yaba, Lagos: WAEC.
- Zoghi, M., Kazemi, S. & Kalani, A. (2013). The effect of gender on language learning. *Journal of Novel Applied Sciences*, 2(54), 1124-1128.