INFLUENCE OF ASSESSMENT-SUPPORTED INSTRUCTIONAL MODEL ON STUDENTS ACHIEVEMENT AND ABILITY IN ENGLISH LANGUAGE IN OKE-ERO LOCAL GOVERNMENT AREA OF KWARA STATE, NIGERIA

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Abstract: *This study sought to find out effectiveness of Assessment-Supported Instructional Model (ASIM) on achievement and ability of English language students in Oke Ero Local Government Area of Kwara State. Quasi-experimental design was adopted in the study. Two research questions and two null hypotheses were formulated to guide the study. Two hundred students constituted the sample for the study. The experimental and control groups were taught topics in English language using ASIM and conventional methods respectively. English Language Achievement Test (ELAT) of 24 items was used for data collection. Mean and Standard Deviation were used to answer the research questions while ANCOVA was used to test null hypotheses at $p < 0.05$. The findings showed, among others, that ASIM was more effective in enhancing students' achievement in English language than the conventional methods of teaching. The high ability students also achieved more than the low ability students in the achievement. There was significant interaction effect between instructions and ability group in achievement as shown by the study. Consequently, recommendations such as adoption of the model and sensitization and training of the teachers on its importance and usage were forwarded.*

Keywords: *Assessment-supported instructional model, conventional method, achievement, ability*

1. INTRODUCTION

Teaching is a unique and dynamic profession. This is because education is a tool and the cornerstone that can be used to build and sustain any nation. The advancement and development of any nation depends on the type and quality of education provided for her citizenry since there is no nation that can grow above her education system. Since the school is the society social mirror and changing agent (Ukeje, 1997), teaching is therefore a process of nation building of which the teacher is the architect. It therefore means that the future of any nation depends on the quality of the classroom teacher, because there is strong relationship between his/her instructional activities, the outcome of his/her instruction and nation development. Hence, the responsibility of a teacher is made more pronounced by the fact that his/her performance is determined in terms of how much the learners will gain from his/her professional expertise or be led astray by those activities of him/her that jeopardize professionalism.

The ability to teach effectively and effect positive changes is of great concern to teachers and educational administrators. The instructional method used for effective instruction consist of different and complex sets of skills and activities. One way for explaining the qualities of effective instruction is to classify behaviors identified as effective in instructional delivery into five broad categories: teaching ability; professional competence; evaluation/assessment of students; interpersonal relationship: and personality traits. In fact, these five identified broad categories of behavior are all concerning the major actor of teaching (the teacher) (Burns et al, 2010).

Fajemidagba (2001) pointed out that effective teaching has three components: preparation, execution and assessment. Preparation phase deal with the planning stage in which the objective of the instruction and suitable materials for the instructional are selected. The prepared lesson is then delivered using appropriate instructional strategies at the execution stage. At the level of assessment, the teacher find out the whether the intended objectives have attained or not. From the above explanation, it can be deduced that effective teaching or instruction cannot be separated from assessment. Therefore, assessment and instructional strategies are components of teaching and learning process. This is because there is no effective teaching without assessment or vice versa.

Research has revealed that teachers has great influence on students' achievement, interest and attitudes. Obodo (2004) pointed out that teachers tend to show very queer characteristic which send many students away from studying English language. Some English language teachers develop an attitude in students that English language is difficult and not meant for everybody to study except for those with exceptional gift like themselves who teach the subject. Alio (2000) and Ozofor (2001) have also revealed that attainment level of students is influenced by factors like ability and interest. Achievement is the level of knowledge, skill or accomplishment in the area of endeavor (Aiken, 1985). In his opinion Lawal (2001) stressed that achievement tends to mirror the principles, rules, facts and formulae which learners have mastered comprehend as a result of the teachers' instructional delivery activities in different subjects. Schunk (2004) also defined ability as the quality or skill required to do or act mentally or physically. In a nut shell ability is the efficacy and competency of an individual to perform some tasks successfully using his/her skills. Academically, ability has to do with what a person has gained through specific study/teaching in a giving instructional activities and sequence in the classroom and what individual can do if exposed to certain educational or academic programmers. He stressed further that ability can be classified into high and low ability group.

In view of the foregoing, there is an urgent need to look for ways of improving students' performance in English language through effective teaching and learning process. Effort could be focused on developing new strategies and total reformation of the English language education programmes. These efforts can include the integration of assessment and instructional strategies and other necessary activities as component of teaching and learning of English language.

Stevens (1972) in Ogunniyi (2000) defined assessment as a process of giving numbers, letter grades, or words to characteristics or attributes of objects, person and events with regard to certain formulation or rules. Assessment and instructional strategies are component of teaching and learning in English language. Assessment in education is deal majorly with looking for whether the intended bevioural changes in students have taking place or not. If not then then find out why and how can it take place? Instructional assessment is majorly about how well an instructional programme was designed, developed, and implemented and how well it is being used and managed. It therefore means that instructional assessment is majorly about finding the strengths and weaknesses of particular instructional programme, looking for whether or not learners have gained certain skills and whether or not a specific instructional method adopted was effective.

In the late 70s, students were wrongly assessed by their teachers for the purpose of selection, promotion and certification of learners (NTI, 2008). Tests were administered to students terminally. Such tests are usually used for judgmental purposes and determining the progress the learner has made towards the goal in the given period (Ogunniyi 2000). As a result of the criticism against the old method of assessing learners, a new method of assessment called "Continuous Assessment" emerged. The principal aim of this program is to adequately assess

learners, to discover their latent skills, knowledge and abilities through administration of tests at various times with a view of collecting information with respect to the three domains.

In its present state, continuous assessment demands extra involvement from the classroom teacher than ever before. It is pertinent to note that some of the classroom teachers, due to their ignorance of the meaning and purpose of continuous assessment, see it as a programme capable of wasting their time, energy and materials. In an attempt to satisfy the demand of head teachers and inspectors of education, a good number of the classroom teachers do administer tests to their students just to impress the school heads.

Assessment-Supported Instructional Model (ASIM) is a system of instruction which is a total deviation from the conventional system of instruction. According to Fakomogbon (2001), conventional system of instruction engages the teacher as "Mr. or Mrs. Know All" with regards to the learning of students. This system of instruction is teacher-centered. This is because it makes the teacher to: (a) act as essential link between a student and what is to be learned, (b) select what a student should learn, and (c) select the method(s) by regarding students in a class as more or less uniform group of learners.

The inference therefore is that presently, English language teachers in the secondary school system do conduct assessment in English language terminally for the purpose of selection, promotion and certification of learners. It is therefore paramount that English language teachers should adopt new strategies which integrate assessment and instruction for English language lessons. And so this work sets out to develop and use a model known as Assessment-Supported Instructional Model (ASIM) that can improve the teaching and learning English language.

1.1 Statement of the Problem

In spite of the relative importance of English language to national development, the students` performance in the subject in both internal examinations has remained consistently poor (WAEC, 2015-2018). Records have shown that mass failure in English language in these examinations is real and the trend of learners` achievement in the subject has been on the decline (Adelabu, 2013). Others have however blamed the situation on the methods employed by teachers, which have been described as dull, uninteresting and ineffective (Ali, 1986, Nworgu 1997).

Alio (2000) and Ozofor (2001) pointed out that achievement level of students is affected by factors like ability and attitude and student interest. This, therefore, calls for the need to explore many other techniques, which will not only be easy in usage but will be very effective in the realization of the goals of Arts education in general. Hence, a study of this nature aiming at finding out the effects of an assessment oriented instructional model on student`s performance has an immense promise for the improvement of the status of English language teaching in Nigeria. The work of Harlem (2003) on enhancing inquiry through formative assessment revealed that formative assessment during teaching enhances better achievement in sciences. The problem of the study put in a question form is thus: What would be the effect of an ASIM on academic achievement of low and high ability students in secondary school English language?

1.2 Purpose of the Study

The main purpose of this study is to determine the effects of an Assessment-Supported Instructional Model (ASIM) on student`s achievement in secondary school English language in Oke-Ero Local Government Area (LGA) of Kwara state of Nigeria. The study south to accomplish the following objectives:

1. Ascertain the effects of ASIM on students` English language achievement.

2. Determine the mean achievement scores of students of high and low ability groups taught English language using assessment supported instructional model (ASIM).
3. Examine the interaction effect between the instructions and students mental ability groups on achievement in English language.

1.3 Research Questions

To successfully investigate the effects of an Assessment-Supported Instructional Model (ASIM) on students` academic achievement in school English language, the following research questions were raised:

1. What are the differences in the mean achievement scores as measured by English language Achievement Test between students taught using Assessment- Supported Instructional Model (ASIM) and students taught with conventional method?
2. What is the mean English language achievement scores of high and low ability students taught English language using the ASIM?

1.4 Hypotheses

The following hypotheses were formulated for the study and would be tested at .05 level of significance:

1. There is no significant difference in the mean achievement scores of students taught using Assessment Supported Instructional Model (ASIM) and those taught with conventional methods as measured by English language Achievement Test
2. There no significant difference in the mean achievement scores of students of high and low ability groups taught English language using ASIM as determined by English language Achievement Test.

2. METHODOLOGY

The study adopted quasi-experimental design. In specific terms, the study is non-equivalent control group design. Quasi-experiment is an experiment where randomization of subjects to experimental and control groups is not possible (Nworgu, 2006). Intact classes were randomly assigned to experimental and control groups respectively. The use of intact classes was necessary in order not to obstruct the usual class periods. The study was specifically pretest posttest nonequivalent control group design. The design is diagrammatically presented as shown below:

Group	Pretest	Treatment	Post test
E	O1	X	O2
C	O1	~X	O2

Key: E = represent the experimental group, C = represent control group, O1 = Pretest, O2 = posttest, X = Treatment administered to experimental group, ~X = Treatment administered to control group

This study was conducted in Oke Ero Local Government Area (LGA) of Kwara State, Nigeria. The population includes all the senior secondary schools in the LGA comprising of 337 male and 268 female making a total number of 605 senior secondary two (SS 2) students. The sample of 200 students comprised of two senior secondary schools and four intact classes randomly selected from the 17 schools.

Instrument used for this study was English language Achievement Test (ELAT) developed by the researcher. This instrument consisted of 24 multiple choice items with five options. The

items in the instrument were constructed in accordance with SS 2 English language curriculum. The blue print was subdivided into constant dimension and ability process dimension of the test items. Content dimension contained units to be taught in the study while the ability process dimension consists of both the pre- ELAT and Post- ELAT.

The ELAT was both face and content validated. A trial testing of the research instrument was conducted using 45 SS 2 students from a school in a different local government but within the same state. The reliability coefficient of the instrument was calculated using the scores of the students obtained after the trial testing. The temporal stability of ELAT was determined using the test retest approach, while the internal consistency of the same instrument was determined using Kuder-Richardson formula 20 (K-R 20). The test instrument was administered twice to the subject at the interval of three weeks. The scores obtained were later subjected to Pearson product moment correlation coefficient, where the coefficient value of 0.65 was obtained.

Since the study involved a natural setting, the study was carried out during normal school periods, using normal school time-table. The first thing done was to administer a pre-test. This involved the administration of ELAT before the commencement of the days` lessons. Thereafter the research assistants (regular English language class teachers) used the prepared lesson plan and the model. The researcher had prepared lesson plans for teaching the topics set out for the study. The plan was prepared in accordance with the test blue print. The first set of the lesson plans were for the control group. It contained 15 lesson plans which lasted for three weeks. The other set of the lesson plans were for the experimental group. It was prepared in such a way as to address the theme of this study (ASIM). In addition to the lesson plans for the experimental group, the researcher also designed a model known as assessment supported instructional model (ASIM) which was used for the experimental group. To avoid deviation on the part of the research assistants from the prepared lesson procedure, the researcher from time to time visited the schools during the processes of the experiment. At the end of three weeks the teachers were given the ELAT to administer the post-test of both instruments. This was to enable the researcher evaluate the effectiveness of the model. ELAT consists of 24 items as such the scripts were first marked based on 24 marks and later converted to hundred percent for better and easier computation of the mean and standard deviation. The data was collected and used for further analysis. The data collected for this study were analyzed as follows: Mean and standard deviation were used to answer all the research questions raised. Null hypotheses formulated for this study were tested using analysis of covariance (ANCOVA) at $p< 0.05$ level of significance using pre-test as covariate.

3. RESULTS

3.1 Research Question One

What are the differences in the mean achievement scores as measured by English language Achievement Test between students taught using Assessment supported Instructional Model (ASM) and students taught with the conventional method?

This research question was answered by computing the mean and the standard deviation of the experimental and control respondents in the pretest and post-test. The results are shown in Table 1.

Table 1: Mean Achievement scores and Standard Deviation of Experimental and Control groups in pretest and posttest ELAT

Group	Types of Test	N	Mean	Std. Dev	Mean Diff
Experimental	Pretest	100	37.8100	1.22801	

	Posttest	100	63.6800	6.76103	26.0500
Control	Pretest	100	39.1100	1.17567	
	Posttest	100	39.8300	9.76704	0.7200
Total	Pretest	200	38.4500	1.20087	
	Posttest	200	51.7550	1.43837	13.3050

From table 1, the mean for pretest (ELAT) in the experimental group is 37.8100 with standard deviation of 1.22801, while those of the control group are 39.1100 with standard deviation of 1.17567. This implies that at the commencement of this study, the subjects were at the same level in the knowledge of English language.

However in the post-test (ELAT) as seen in table one, the mean scores for experimental group is 63.6800 with a standard deviation of 5.76103, while that of the control group is 39.8300 with standard deviation of 9.76704. The mean scores of students taught using ASIM (experimental group) is 63.6800 which is higher than those taught using conventional method (control group) which is 39.8300. This is an indication that the use of assessment supported instructional model have more impact on students` achievement positively than their counterparts.

Research Question Two

What is the mean English language achievement scores of high and low ability students taught English language using the ASIM?

Table 2: Mean Achievement scores and standard deviation of both High and Low ability groups of the experimental group.

Group	Type of test	Ability Group	N	Mean	Std. Dev.	Mean Diff.
Experimental	Pretest	High	50	47.9400	5.04029	
		Low	50	27.6800	8.35791	20.2600
		Total	100	37.8100	1.22801	
	Posttest	High	50	67.0800	4.28495	
		Low	50	60.2800	5.01036	6.800
		Total	100	63.6800	5.76103	

Table 2 shows that the pretest mean scores of the high ability group is 47.9400 as against 27.6800 for the low ability group in the experimental group. The table shows that in the posttest, the high ability and low ability students recorded means scores of 67.0800 and 60.2800 respectively in the experimental group. This shows that high ability group perform better than the low ability group. With the results obtained above, it can be deduced that the low ability groups have performed wonderfully well in the posttest. This implies that ASIM is highly effective in enhancing performance of both ability groups (high and low), with difference in favor of the high ability students.

3.2 Hypotheses:

Ho_1: There is no significant difference in the mean achievement scores of students taught using Assessment supported Instructional Model (ASIM) and those taught with conventional methods. ($P<0.05$)

Null Hypothesis one was tested using two-way analysis of covariance (ANCOVA). The results are shown in Table 3.

Table 3: Analysis of Covariance (ANCOVA) Result on Students Post-test in ELAT

Source of variation	Sum of Squares	DF	Mean Squares	F	Sig.	Decision at P < 0.05
Corrected Model	37485.977	4	9371.494	495.911	.000	S
Intercept	9361.116	1	9361.116	495.362	.000	S
Pre-test	1213.962	1	1213.962	64.239	.000	S
Instructions	29290.427	1	29290.427	1.550	.000	S
Ability	386.298	1	386.298	20.442	.000	S
Instruction*Ability	1285.137	1	1285.137	68.006	.000	S
Error	3685.018	195	18.898			
Total	576887.000	200				
Corrected Total	41170.995	199				

For the null hypothesis one, table 3 revealed that the difference between the mean scores of the experimental and control groups is significant at 0.05 level for this study. This is an indication that there is a significant difference between those taught using Assessment supported Instructional Model (ASIM) and those taught using conventional approach in favour of the ASIM. Therefore the null hypothesis is rejected at $p<0.05$.

Null Hypothesis Two and Three:

Ho_2: There is no significant difference in the mean achievement scores of students of high and low ability groups as measured by ELAT.

Null hypothesis two and three were tested using two-way analysis of covariance (ANOVA). Table 4 contains the result

Table 4: Analysis of Covariance (ANCOVA) Result on High and Low Ability Students Post-test in ELAT for Experimental group.

Scores of Variation	Sum of Squares	Df	Mean Squares	F	Sig	Decision at p< 0.05
Corrected Model	1378.832a	2	689.416	37.579	.000	S
Intercept	9273.990	1	9273.990	505.514	.000	S
Pretest	289.832	1	289.832	15.798	.000	S
Ability	18.815	1	18.815	1.026	.314	NS
Error	1779.528	97	18.34618.346			
Total	407400.000	100				
Corrected Total	3158.360	99				

In Table 4, it was observed that there exist no significant difference in the mean achievement between students of high and low ability when taught using ASIM. This is because ability

group is shown in the table to be not significant at p<0.05 as stipulated for the study. Hence the difference between the mean achievements scores of high and low ability students shown in the study may be as a result of sampling error. Therefore the null hypothesis two is thereby not rejected at P<0.05 level. This implies that as a result of the ASIM, the high and low ability students performed significantly very well at the end. The results presented in table 4 also shows that there is significant interaction effect between the instructions and the students' ability. In other words, it is observed that the interaction effect of ability groups has significant difference on students` achievement in English language when taught using ASIM. This is because instructions and ability group (Instructions*Ability) is shown in the table to be significant at P<0,05 stipulated for the study. Hence the null hypothesis of no significant interaction effect between the instruction and ability group is rejected at P<0.05 level.

4. DISCUSSION OF FINDINGS

The finding of this study has shown that Assessment Supported Instruction Model (ASIM) had significant influence on students` achievement in English language as shown in the research questions and hypotheses. The experimental group had higher a mean achievement score (63. 6800). This implies that the use of ASIM was more positive and effective in promoting and increasing students` achievement in English language than the use of the conventional method. The finding of this study is in agreement with the work of Harlem (2003) on enhancing inquiry through formative assessment, which revealed that formative assessment during teaching enhance better achievement in students. In the same vein, the study conducted by Butter (1988) using formative assessment showed that the post-test performance on a given tasks increased significantly among the three sets of students. Many researches have also shown formative assessment to have a positive effect on student performance (Burns et al, 2010; Black & William, 1998; Fuchs & Fuchs, 1986; White & Frederiksen, 1998), although it can be a time-intensive endeavour. The result of this study is in total support of the work of White and Frederiksen (1998), where the experimental groups that engaged in the formative assessment process achieved better than the control group. Even the low ability students in the experimental group showed the greatest improvement in performance when compared to their counterparts in the control group.

Looking at the difference in achievement of the subjects in the topics with the mean scores of the experimental groups greater than those of the control group, this could be attributed to the constant assessment given to the experimental group. It is not surprising because the anxiety of test writing has been reduced if not completely eliminated on the part of the experimental groups. The assessment process leads the students to develop self-confidence, self-esteem and enthusiasm in solving problems in English language which might have resulted from the fact that the students get access to the results of the assessment.

The result of the use of Assessment Supported Instruction Model which brings about a tremendous improvement in the achievement of the experiment group has supported Skinner (1954) which states that 'The whole process of becoming competent in any field must be divided into smaller steps, and each step must be reinforced when it is accomplished'.

The study revealed that students of the high ability group obtained mean achievement scores of 67.0800 which is greater than those in the low ability group which is 60.2800. The analysed result also revealed that interaction effect between instruction and ability group (Instruction * Ability) was significant, in the achievement. This implies that the use of assessment-supported instructional model is effective and efficient in facilitating and fostering achievement in students in English language.

5. CONCLUSION

The finding of this study served the bases for forwarding the following conclusion:

1. Use of assessment supported instructional model (ASIM) affected students` achievement positively more than the use of conventional methods in the teaching English language.
2. Assessment-Supported Instructional Model (ASIM) has showed significant difference in achievement among the high and the low ability group. The high ability students score higher than the low ability students. Also, there was significant differential achievement among the low ability group from the experimental and the control groups.

5.1 Recommendations

Based on the findings of this study, the researcher made the following recommendations.

1. Assessment supported instructional model should be adopted in our school system. The use of ASIM will result in making English language less difficult, motivating to learners and challenge the learners' intellect. Its usage will reduce the fear students have and hatred for English language as well as reduce examination anxiety and examination malpractices among students.
2. Since assessment supported instructional model have proven to be effective in teaching and learning, there is the need to sensitize teachers on its usefulness and importance.
3. Federal and state government should endeavour to organize workshops on innovation in teaching and learning of English language using ASIM as one of the new innovations.

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