

Effects of Generative Instructional Strategy on Senior Secondary School Students' Achievement and Attitude to Summary Writing

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Abstract: - Success in English language is one of the prerequisites for academic advancement and admission into tertiary institutions in Nigeria. Students' performance in English language examinations has been very poor and ineffective strategy in teaching summary writing is one of the causative factors. Most of the instructional approaches have been teacher-centred rather than learner-centred. This study determined the effects of Generative Instructional Strategy on students' achievement in and attitude to summary writing in Ibadan. Moderating effect of gender was also examined. Four intact randomly selected classes were assigned to experimental and control groups. Data were analysed using analysis of covariance, and Scheffe post-hoc test. Generative instructional strategy was effective in enhancing students' achievement and attitude to summary writing.

Keywords: Generative Instruction, Summary Writing, Achievement, Gender, Attitude

I. INTRODUCTION

Instruction in English studies in Nigeria cuts across the four language skills which form part of English language curriculum in Nigerian schools and a success in the different skills is generally perceived to be a success in the language. Success in the subject is very important to any student that wishes to gain admission into and succeed in the different levels of education, especially the higher institutions of learning in Nigeria. This is because a minimum of a credit pass in English language is compulsory and considered a strong requirement for admission into Nigerian higher institutions (UTME Syllabus and Brochure, 2012). Despite the importance of the English language to students' academic advancement and success in the other school subjects, it is sad to note that students' performance in the subject especially in external examinations has been very poor.

Alaneme (2005) lamented the mass failure recorded annually by students in both the English language and Mathematics examinations and concluded that the poor performance of students in these subjects at West African Examinations Council and National Examinations Council's conducted examinations is actually a true reflection of the low standard of education in Nigeria. Also, Fakeye (2010) averred that anyone who is familiar with English Language examination scripts in the secondary school today will not

disagree with the view that the students' performance in English language especially in secondary school has fallen. Kolawole (2000) submitted that any candidate that wishes to do well in the subject must do well in the English language Paper 1 which covers the aspect of the examination that tests the writing skills – essay or letter writing, comprehension passage(s) and summary writing. Similarly, the WAEC Chief Examiners' Report (2018) stated that students have problem in the aspects of English language examinations that deal with writing.

To ameliorate the problem of mass failure in English language, research and pedagogical-related efforts have largely been focused on aspects of the English language examination that deal with the writing skill. For example, Kolawole, Adepoju and Adelore (2000), Olagbaju (2005), Komolafe and Yara (2010) and Ogunyemi (2014) worked on composition writing. Although, these studies were able to come up with remarkable insights which have impacted classroom practices in English composition writing, students' achievement and attitude to writing in the subject especially in public examinations has remained poor. This is perhaps because most of these studies have largely focused on composition writing thereby leaving summary writing unattended to whereas students' inability to perform well in the aspect of summary writing has been identified as one of the reasons candidates do not perform well in English language in public examinations (Ojedokun, 2010; Aragoni, 2011). Also, WAEC Chief Examiners' Report (2010:9) states:

Candidates still find summary writing difficult. Many of them performed poorly in this section. Teachers should pay attention to this aspect of English. If the students are not adequately exposed to the skills of summary writing; they will continue to have problems with summary questions.

Although summary writing is closely related to comprehension because it requires the ability to extract or construct the gist of a text (which is the goal of comprehension), summary writing is more complex because it is a technique that enhances comprehension and retention of a written discourse (Kolawole, 2000; Ashade, 2008; Aniga and Ellah, 2010). Therefore, summary writing requires a deeper

processing of the text and presentation of the answers in students' own words and these constitute some of the problem areas for students in English language examinations. It is in view of this that efforts need to be intensified to ensure that summary writing, as an aspect of English language, is properly taught in our schools.

Furthermore, Ojedokun (2010) averred that summary skills are needed by students to confirm that the different information gathered from books, lectures, seminars, laboratories, discussions etc. forms part of their knowledge and can be recalled when needed. Aragoni (2011) observed that knowing how to write a summary is essential if students are going to be active listeners, good readers, responsible researchers and efficient writers. Similarly, summary is a part of daily life as one cannot give a verbatim report of everything that one has seen, read, experienced or heard. Therefore, human beings constantly and unconsciously employ summary skills in everyday activities without the slightest knowledge of it. All these point to the fact that summary skills are important for interactional and transactional use of the English language.

Considering the importance of summary skills to students' success in examinations, independent study and everyday use of the English language, it is disturbing that a good number of students still do not perform well in this aspect of English language examination. This trend has been attributed to factors such as the inability of students to read or comprehend the passage well, the nature or genre of the text, poor vocabulary and sentence structure, mindless lifting, text length, poor attitude to summary writing, inability of students to write the answers in their own words and in grammatically correct sentences, among others.

Ojedokun (2010) stressed the importance of pre-teaching key vocabularies, grammatical structures, phrases, idioms, and/or cultural information in the passage in order to aid the comprehension of the text. Cho (2012) reported that reading and writing influence each other and when writing is used as a follow-up to reading, the relations between the two skills will create a synergy. Also, Olagbaju (2015) posited that the teaching and learning of summary writing should be done to establish the connection between language skills, especially the reading and writing skills.

Several tasks are involved in the teaching and learning of summary writing and these include effective reading of the passage, identification of the topic sentence or thesis statement from the different sentences in the paragraph, differentiation between the topic sentence and other supporting sentences which are usually in form of illustrations and examples, identification and replacement of the key vocabularies in the topic sentences and rewriting the summary answer in the students' own words (Aniga & Ellah, 2010; Olagbaju, 2015). It is important that English language teachers pay attention to the tasks discussed above when teaching summary writing as an aspect of English language in schools. Aragoni (2011) argued that students would not learn how to summarise without receiving help — and lots of it.

In addition, Roberts (2009) averred that summary writing has become a dreadful aspect of the English language examinations to many candidates because they are not properly prepared or taught by teachers who rely heavily on teacher-centred instructional strategies. The use of teacher-centred instructional strategies has been found to render learners passive in the process of instruction; this is unlike the learner-centred instruction (Olagbaju, 2005; Ogunleye and Babajide, 2011). Therefore, there is a need for a paradigm shift in English language pedagogy to learner-centred instruction so as to incorporate the internal processes of learning that are stimulated by students' schema and prior experience. The generative instructional strategy has been found to allow learners construct their own learning by relating their prior knowledge with the new body of information and students work in groups to practise during the lesson while the teacher offers prompt corrective feedbacks.

Generative Instructional Strategy (GIS) encourages students' self-efforts, activities or abilities through cognitive processing during instruction. Generative Instructional Strategy is built on theoretical and empirical evidence about cognitive functioning, processes, and the structure of the human memory. Ogunleye and Babajide (2011) described the generative instructional strategy as an instructional approach whereby pieces of information retrieved from learners' memories on a particular concept are explained and modified by learners themselves in actual classroom situations while the teacher offers corrective feedbacks. The use of corrective feedbacks in learner-centred instruction has been found to be of immense benefits when introduced during practice sessions, especially in the course of the lesson (Chaudron, 1998). The strategy allows individualized form of learning and fosters classroom interaction.

The effects of generative instructional strategy on students' achievement have been investigated in a number of studies. Esfandiari (2003) examined its effect on achievement in applied statistics, and Lee, Lim and Grabowski (2007) on achievement in reading comprehension and Ogunleye and Babajide (2011) on learning outcomes in physics. All these studies found that the strategy had a significant effect on students' learning outcomes in these subject areas. However, these studies did not examine the effects of generative instructional strategy on students' achievement and attitude to summary writing. In view of this, this study examined the effects of Generative Instructional Strategy (GIS) on students' achievement and attitude to summary writing.

Apart from the choice of instructional strategy, another important contributory factor to students' achievement and attitude in school is gender. Therefore, this study considered gender as a moderator variable. Tatarinceva (2009) described gender as social and psychological experiences which determine the differences that emerge and are developed in individuals. These differences have serious implications for students' achievement in and attitude to language learning. However, the debate on the effects of

gender on students' learning outcomes seems to be inconclusive. For example, Dijkstra (2006) reported that females are intellectually inferior while Gadwa and Griggs (1995) have come up with scientific evidence that suggests that females and males are equally intellectually capable. Therefore, this study examined the moderating effect of gender on students' achievement in and attitude to summary writing when students are exposed to Generative Instructional Strategy.

1.1 Hypothesis

The following null hypotheses were tested at 0.05 level of significance

HO₁: There is no significant main effect of treatment on students'

- a. achievement in summary writing
- b. attitude to summary writing

HO₂: There is no significant main effect of gender on students'

- a. achievement in summary writing
- b. attitude to summary writing

HO₃: There is no significant interaction effect of treatment and gender on students'

- a. achievement in summary writing
- b. attitude to summary writing

1.2 Theoretical Framework :Schema Theory

Schema theory as developed in the 1970s by Richard Anderson describes how knowledge is acquired, processed and organised. The term schema refers to a mental framework humans use to represent and organise information which makes it easy for recall. This theory states that schemata influence attention and the absorption of new knowledge: people are more likely to notice things that fit into their schema. People use schemata to organise current knowledge and provide a framework for future understanding. Schema theorists suggest that people can quickly organise new perceptions into schemata and act without effort through an elaborate mental activity which involves cognitive processing and memory recall.

Similarly, the generative Instructional strategy is learner-centred and it involves students' active participation in the learning process through cognitive processing and memory recall with the aid of the learners' prior knowledge. The strategy allows the teacher to play the role of a facilitator in the teaching and learning process. In generative instruction, the learners work actively under the teacher's guidance to construct or generate their learning by relying on their schema or prior knowledge through memory recall. The main role of the teacher in generative instruction is to activate the learners' schema or prior knowledge through cognitive processing. The

teacher leads the learners to relate the new body of knowledge to their prior knowledge or schema and actively generate their own learning.

II. REVIEW OF RELATED LITERATURE

2.1.1 The Nature of Summary Writing

Summary writing is simply an attempt to rewrite or produce an abridged version of a lengthy passage in the writer's own words in a way that the important points in the original passage are retained in the newly composed version. The objective is to test a students' ability to read, comprehend and retain the gist of the written text (Obasa, Alamu and Giwa, 2002). It is the creation of a condensed version of an original passage which must be brief, precise (exact) and in the writer's own words. According to Banjo, Elugbe, Onaga, and Akano (2005), summary writing is an advanced form of comprehension. However, summary writing goes beyond mere comprehension because it involves stating in as few words as possible what has been said in many words. Aniga and Ellah (2010) posited that summary is not limited to written texts because it reduced version of any given speech or written text, by retaining its main points.

The main objective of teaching summary writing skills is to demonstrate the comprehension of a text by giving the basic ideas or gist of a passage, it must however be done in the writer's own words. The teaching of summary writing requires that teachers should guide the students to effectively capture an author's main ideas in a few well-chosen words to form a representative detail of the original passage. When students do not understand the passage given, it becomes hard for them to distinguish between main ideas and supporting details, and this confusion hinders quality summary writing. Writing a summary entails the ability to recognise the main ideas of a passage and being able to retell those ideas in a few sentences.

Also, Roberts (2009) advocated that teachers need to reinforce strong comprehension skills in the teaching of summary writing; without a thorough comprehension of the text, writing a summary becomes a difficult task. Olatunbosun (2000) stressed the importance of text comprehension in effective summary writing because without a thorough understanding of a passage or a piece of writing, it will be impossible to summarise or put in brief what is said in the passage and yet retain the essential ideas or points being discussed there. Pennington (2010) opined that learning how to teach what is and what is not a summary may be even more valuable. Thus, the teaching of summary writing should focus equally on what should be included and what should not be included in the summary answers.

2.1.2 Generative Instructional Strategy and students' learning outcomes

Generative Instructional Strategy (GIS) assumes that learners are not passive recipient of information. Rather, they are active participants in the learning process, working to

construct meaningful understanding of information found in the environment. The strategy is influenced by research in several areas of cognitive psychology, including cognitive development, human learning, human abilities, information processing, and aptitude treatment interactions. Generative instruction is an approach to teaching that attempts to help students become active and responsible for constructing meaning from class activities by building relations across subject-matter concepts and students' existing knowledge (Wittrock, 1991). Esfandiari (2003) described the objective of the Generative Instructional Strategy as an approach aimed at minimizing the roles of the students as passive recipients of information and to maximizing their roles in the learning process by helping them to: understand the relationships and generate links between the different parts of the subject or topic and their prior knowledge or experience.

It is a learner-centred instructional procedure with specified activities meant to encourage active cognitive processing during the course of instruction. Steps or activities in generative instruction should not assume dominance of the role of the learner, instructor or instruction but rather a partnership in the process. Also, Osborn and Wittrock cited in Ogunleye and Babajide (2011) presented a 5-phase approach to implementing the Generative Instructional Strategy in actual classroom interaction and these are the introductory, focusing, activity, discussion and application phases. The Generative Instructional Strategy is an active approach to teaching and its focus is to engage learners actively in the process of learning. This will be achieved only if learners can actively generate their own ideas and relate them together. To generate meaning, learners actually create links or relationships between their memory and the new information. Learners need to be alert, mentally active and make use of various learning strategies in the knowledge generation process.

Lee, Lim and Grabowski (2007) stated that the outcome of knowledge generation was originally investigated in reading comprehension, but other studies have since employed this model to investigate a variety of generative learning strategies that were expected to promote different levels of learning in a variety of domains such as recall, comprehension, higher order thinking and self-regulated learning skills. Generative instruction is a form of inductive reasoning, which is reasoning from observation to generalization. One of the core areas of Generative Instructional model is that the strategy is learner-centred and learners perform activities by themselves. Emily and Zee (2000) found that the generative instructional strategy has a significant effect on achievement in teaching of Physics concepts and other science related topics. Also, Chularut and DeBacker (2004) found that generative instruction had significant greater achievement gains at post-test compared to pre-test of English as a Second Language learners. There was increase in the students' self-regulation and self-efficacy when compared with that of the control group. However, there is little or no study on the effects of generative instruction on

students' achievement and attitude to summary writing; therefore this study examined the effects of Generative Instruction on students' learning outcomes in summary writing.

2.1.3 Gender and students' learning outcomes

The influence of gender on students' achievement in teaching/learning situations has been the focus of many studies (Olagbaju, 2005; Ojedokun, 2010). Deaux (1995) averred that the distinction between sex and gender is that the common use of the former restricted to the biological distinctions between males and females, while the latter refers to the psychological features or attributes associated with such categories as feminine or masculine. The relationship between gender and reading achievement is complex and influenced by many factors such as cultural and societal expectations, biological and psychological make-up and commonly held myths about gender. For example, Connell and Gunzelmann (2004) described brain-based gender differences as a data-based and empirical explanation for these differences. Additional research suggests that boys and girls effectively use different parts of their brain, with each group exhibiting stronger left-hemisphere in different capacities. The left-hemisphere strength of females gives them an advantage in language skills such as speaking, listening, reading and writing while the left-hemisphere strength of the males allows them to outperform girls in categorizing and information recall.

Jacobs (2002) submitted that most studies on gender and students' achievement show that, on average, girls do better in school than boys. Also, girls get higher grades and complete high school at a higher rate compared to boys. Also, Tatarinceva (2009) suggested that teachers should know their students' needs, goals, cognitive style, and the implications of their gender differences as this is capable of improving students' achievement in and attitude to learning. Cavanaugh (2002) averred that males and females learn differently from each other. For instance, males tend to be more kinesthetic, tactual, and visual, and they need more mobility in a more informal environment than females. Males are more nonconforming and peer motivated than female.

Also, males tend to learn less by listening. Thus, Tatarinceva (2009) stated that gender differences have serious implications for students' achievement and attitude to language learning, especially in the teaching and learning of the reading skill which plays a significant role in improving language learning and promoting an individual's ability to function in a modern society. However, Dijkstra (2006)'s study on cognitive abilities or intelligence have shown the assumption that females are intellectually inferior while Gadwa and Griggs (1995) have come up with scientific evidence that suggests that females and males are equally intellectually capable. Further still, Zembar and Blume (2009) argued that the influence of gender on students' achievement can be traced to gender differences in the cognitive abilities of middle-school students.

Similarly, Olatunji and Etuk (2011) investigated some variables that influence junior secondary school students' attitude to agricultural science - implications for youths' participation in agricultural development and found that gender differences influence students' attitude to Agricultural science. The result further revealed that females exhibited a more positive attitude to Agriculture than males. Azubuike (2011) examined the influential factors affecting the attitude of students towards the study of vocational/technical subjects in secondary schools in Abia Educational Zone and found that gender among other variables such as interest and socio-economic status of parents, was one of the factors that influence the study of vocational/ technical subjects. In view of the conflicting submissions on the effects of gender on students' achievement and attitude, this paper investigated the effects of gender on students' achievement and attitude to summary writing.

III. METHODOLOGY

3.1 Research Design

The pre-test, post-test, control group, quasi-experimental research design was adopted for this study. The study made use of two instructional groups comprising one experimental groups and one control group; the experimental group was exposed to treatment in Generative Instructional Strategy while the control group was exposed to the Conventional method of teaching summary writing.

3.2 Variables in the study

The independent variable is the instructional strategy which was manipulated at two levels namely: generative instructional strategy and conventional method.

The moderator variable is gender at two levels: (a) Male
(b) Female

The dependent variables are achievement in and attitude to summary writing

3.3 Selection of Participants

Two local government areas were randomly selected from the five local government areas in Ibadan Metropolis. The participants were made up of Senior Secondary School Two (SSS II) students in intact classes from four purposively selected senior secondary schools in the randomly selected local government areas. Two senior secondary schools were purposively selected from each of the two randomly selected local government areas based on the following criteria:

- i. The school must have at least one graduate teacher of English language with a minimum of five years experience who has been a WAEC or NECO examiner,
- ii. The school must be a co-educational institution,
- iii. The school must have been presenting candidates for public examinations for at least five years.

Each local government area selected was randomly assigned to treatment such that the two schools in the same local government area were used for the same treatment group.

3.4 Selection of Content

The content of the instructional package for this study comprised passages taken from the participants' recommended textbooks, magazines and newspapers excerpts. It covered eight summary passages on different topics. Teachers' instruction manuals were prepared on these passages for Generative Instructional Strategy and the Conventional method.

3.5 Research Instruments

Five instruments were used for this study, they include:

- i. Summary Writing Achievement Test (**SWAT**)
- ii. Attitude to Summary Writing Questionnaire (**ASWQ**)
- iii. Instructional Guide on Generative Instructional Strategy (**IGGIS**)
- iv. Instructional Guide on Conventional method (**IGMLM**)
- v. Teachers' Evaluation Sheet (**TES**)

3.5.1 Summary Writing Achievement Test (SWAT)

The instrument was a passage adopted from the students' recommended textbook. It was a summary passage titled: The features of poverty. SWAT was used as both the pretest and posttest to measure students' achievement in summary writing. Questions set on the passage were made parallel to those obtained in WASSCE examinations. The reliability of the instrument was determined by using test-retest method, and a reliability co-efficient of 0.81 was obtained. SWAT was scored using the criteria suggested in the WASSCE marking guides for May/June 2012. That is:

1. Five (5) marks were awarded for every correct answer.
2. Zero was awarded for a mindless lifting.
3. Half (½) mark was deducted for every spelling mistake.
4. Half of the marks allotted for a correct answer was awarded for answers that were not written as sentences.

3.5.2 Attitude to Summary Writing Questionnaire (ASWQ).

The Attitude to Summary Writing Questionnaire was made up of two sections, A and B. Section A is meant to elicit demographic data of the respondents like school, sex, class, age; and section B consisted of 15 items adapted from Fakeye (2001) who worked on composition writing and so, the instrument was adapted to measure attitude to summary writing. Participants' response to the items was a closed response modes of four point scale of strongly agree (**SA**), Agree (**A**), Disagree (**D**) and Strongly Disagree (**SD**). The

scoring for the positive items was based on 4, 3, 2, and 1 for strongly agree, agree, disagree and strongly disagree respectively and reversed for the negatively worded items. The first nine items were positively stated while items 10 to 15 were negatively stated. ASWQ was administered to 80 SS Two students from two schools that were not part of the main study to determine the reliability and internal consistency of the scores. Using Cronbach alpha formula, the standardised alpha value of 0.78 was obtained.

3.5.3 *Instructional Guide on Generative Instructional Strategy*

This instructional guide was adapted from Ogunleye and Babajide (2011) who worked on Physics and it was used to teach the experimental group one. The content of the guide covered a period of eight weeks and its main features included general information which consisted of subject, aspect, topic, objectives and duration. It is learner-centred and students were to work in groups of five. It was made up of five procedural steps, which included: introductory, focusing, activity, discussion and application Phases.

3.5.4 *Instructional Guide on Conventional method (IGMLM)*

This Conventional method was used to teach the control group and it consists of eight periods of lesson based on commonly used or normal classroom teaching. The main feature of the guide are general information which consists of subject, topic, procedure, general objectives, duration and content with specific treatment package for each week. It is a teacher-centred approach because it focuses more on the teacher and his activities in the classroom. The steps involved

include: introduction, entry behaviour, explanation, exercises, and note copying and marking. It was validated to ensure suitability of content, and language of presentation.

3.5.5 *Teachers' Evaluation Sheet (TES)*

The TES was self-designed to assess the research assistants' competence at using the Explicit and Generative Instructional Strategies. It was used to grade or score the research assistants during the practice sessions in preparation for the treatment stage. Two teachers with the highest score in the TES were selected to participate in the study. The reliability of TES was determined through inter-rater reliability and using Scott Pie, reliability co-efficient of .81 was obtained.

3.6 *Methods of Data Analysis*

The data collected were analysed using inferential statistics of Analysis of Covariance (ANCOVA) with the pre-test scores as covariates. The Multiple Classification Analysis (MCA) was computed to show how the groups performed, while Scheffe Post Hoc analysis was used to detect the source of significant difference between the two groups where such existed. All the hypotheses were tested at 0.05 level of significance.

IV. RESULTS AND DISCUSSION

4.1 *Testing of Hypotheses*

HO_{1a}: There is no significant main effect of treatment on students' achievement in summary writing.

To test hypothesis 1a, Tables 4.1, 4.2 and 4.3 are presented in succession.

Table 4.1: Summary of ANCOVA table showing the significant main and interaction effects of Treatment groups and Gender on Students' Achievement to Summary Writing.

Source of variance	Sum of Squares	DF	Mean Square	F	Sig.	Eta Squared
Corrected Model	4671.809	12	389.317			
Pre Achievement	13.352	1	13.352	26.634	.000	.631
<u>Main Effect:</u>				.913	.340	.005
Treatment Group	357.186	1	178.593	12.218	.000*	.116
Gender	9.231	1	9.231	.632	.428	.003
<u>2-way Interactions:</u>						
Treatment x Gender	11.288	2	5.644	.386	.680	.004
Error	2733.471	187				
Total	7405.280	199	14.617	.819	.442	.009

*Significant at p<.05

From Table 4.1, the result shows that treatment has significant effect on variation in students' achievement in Summary Writing ($F_{(2,187)} = 12.21$; $p < .05$). The implication of this is that there is a significant difference in achievement in Summary Writing of students exposed to Generative

Instructional Strategy and those in the Control group. Hypothesis 1a is therefore rejected. Table 4.2 shows information on the relative performance of the various groups in post-test achievement.

Table 4.2: Multiple Classification Analysis (MCA) showing the direction of the difference in Students' Achievement to Summary Writing between Treatment groups and Gender.

Variable + Category	N	Unadjusted variation	Eta	Adjusted for independent + covariates deviation	Beta
Grand Mean = 14.94					
Treatment Group:					
Generative	65	-1.37		-.29	
Control	60	-4.32		-2.03	
Gender:			.62		.26
Male	66	-1.32		-.21	
Female	59	1.75		.28	
			.25		.04

From Table 4.2, students in the generative instructional group had a higher adjusted posttest achievement score ($\bar{x} = 14.65$) than those in the control group ($\bar{x} = 12.91$). The findings imply that the Generative Instructional Strategy is

more effective than the conventional method on students' achievement in summary writing. Table 4.3 traced the source of the significant effect of treatment on achievement.

Table 4.3: Scheffe Post hoc Test of Achievement by Treatment

Treatment	N	X	Treatment	
			Generative	Control
Generative	66	14.65		*
Control	59	12.91		

*Pairs significantly different at $p < .05$

Table 4.3 shows that the generative instructional group was significantly different ($\bar{x} = 14.65$) from the control ($\bar{x} = 12.91$) group. Therefore, the significant effect of treatment on

achievement was due to the significant difference obtained between Generative Instructional and control.

HO_{1b}: There is no significant main effect of treatment on students' attitude to summary writing.

Table 4.4: Summary of ANCOVA table showing the significant main and interaction effects of Treatment groups and Gender on Students' Attitude to Summary Writing.

Source	Sum of Squares	DF	Mean Square	F	Sig.	Eta
Corrected Model	1713.430	12	142.786	4.953	.000	.241
Pre Achievement	.156	1	.156	.005	.941	.000
<u>Main Effect:</u>						
_Treatment	532.473	2	266.236	9.236	.000*	.090
Gender	2.171	1	2.171	.075	.784	.000
<u>2-way Interactions:</u>						
Treatment x Gender	31.173	2	15.586	.541	.583	.006
Error	5390.325	187	20.981			
Total	7103.755	199	28.825	.728	.484	.008

*Significant at $P < .05$

Table 4.4 shows that there is a significant main effect of treatment on students' attitude to Summary Writing ($F_{(2,187)} = 9.23; P < .05$). This implies that there is significant difference

in the posttest attitude scores of students exposed to the Generative Instructional Strategy and those in the control group. Hypothesis 1 b is therefore, rejected.

Table 4.5: Multiple Classification Analysis (MCA) showing the direction of the difference in Students' Attitude to Summary writing between Treatment groups and Gender.

Variable + Category	N	Unadjusted variation	Eta	Adjusted for independent + covariates deviation	Beta
Grand Mean = 36.47					
Treatment group:					
Generative Instructional Strategy	65	1.10	.42	.98	.46
Control group	60	-3.80		-4.06	
Gender:					
Male	66	-.69	.13	.01	.00
Female	59	.92		-.01	
Multiple R-squared					.184
Multiple R					.429

From Table 4.5, the generative instructional group had higher adjusted post-test score ($\bar{x} = 37.45$) than the control ($\bar{x} = 32.41$). Table 4.6 presents the summary of the Post hoc tests carried out.

Table 4.6: Scheffe Post hoc Test of Attitude by Treatment

Treatment	N	X	Treatment	
			Generative	Control
Generative	66	37.45		*
Control	59	32.41		

*Pairs significantly different at $p < .05$

Table 4.6 shows that the significant effect of treatment on students' attitude to summary writing was due to the significant pair wise difference between the post-test attitude scores of Generative Instructional Strategy ($\bar{x} = 37.45$) and control ($\bar{x} = 32.41$).

HO_{2a}: There is no significant main effect of gender on students' achievement in summary writing.

Table 4.1 shows that there is no significant main effect of gender on students' achievement in summary writing ($F_{(2,187)} = .63, P > .05$). This means that there is no significant difference in post-test achievement scores of male and female students. Hence, hypothesis 2a is not rejected. From Table 4.2, the result shows that the male respondents have a post-test achievement mean score of 14.73, while the female respondents have a post-test mean achievement score of

15.22. Thus, the female students obtained a slightly higher post-test mean achievement score than their male counterparts, but this difference is not significant.

HO_{2b}: There is no significant main effect of gender on students' attitude to summary writing.

Table 4.4 shows that there is no significant main effect of Gender on the Attitude of the students ($F_{(2,187)} = .07, P > .05$). This means that there is no significant difference in the post-test attitude score of the male and female students. Therefore, the null hypothesis 2b is not rejected. Table 4.5 reveals that the males have slightly higher post-test mean attitude scores of 36.78 while the females have a post-test mean attitude score of 36.13. However, the difference is not significant.

HO_{3a}: There is no significant interaction effect of treatment and gender on students' achievement in summary writing.

Table 4.1 shows that there is no significant interaction effect of treatment and Gender on students' achievement in summary writing ($F_{(6,187)} = .38, P > .05$). This implies that there are no significant 2-way interaction effects of treatment and gender on students' achievement in summary writing. Therefore, hypothesis 3a is not rejected.

HO_{3b}: There is no significant interaction effect of treatment and gender on students' attitude to summary writing.

From Table 4.4, the result shows that there is no significant interaction effect of treatment and gender on students' attitude to summary writing ($F_{(6,187)} = .54, P > .05$). Based on this result, hypothesis 3b is not rejected.

Treatment on Students' Achievement in and Attitude to Summary Writing

Findings of the study revealed a significant main effect of treatment on student's achievement in summary writing. The result showed that the Generative Explicit Instructional Strategy was more effective at improving students' achievement in summary writing than the conventional method. The effectiveness of the Generative Instructional Strategy over Conventional method could be as a result of the fact that strategy is learner-centred which provided learners with the opportunity to participate actively during the process of instruction. During treatment, learners were fully involved in all the stages of instruction from brainstorming (focusing) to activity, discussion and application.

The high level of students' involvement enabled them to actively interact as well as work amongst themselves while the teacher facilitates the process and provides corrective feedbacks. Learners were able to work independently and arrive at their own summary answers through self-initiated and self-directed activities which they participated in during classroom instruction thereby making their learning experience to be concrete, real and permanent as they are able to retain and recall easily. The learners' level of involvement allowed them to engage in practice sessions and receive corrective feedbacks during the process of instruction thereby gaining the required knowledge which enabled them to summarise effectively.

The result is in line with the findings of similar studies (Sarani and Jabbari, 2010; Ogunleye and Babajide, 2011) that Generative Instructional Strategy has a significant effect on students' achievement in different course contents. The findings of this study also agreed with the submission of Chularut and DeBacker (2004) that Generative Instructional Strategy has a significant effect on the achievement, self-regulation and self-efficacy in learning of ESL students. The conventional method which was found to be the least effective strategy in this study might have performed low due to its characteristic as a teacher-centred instructional strategy which is poor student to student interaction and each student cannot go at his or her own pace (Roberts, 2009). This showed that dependence on teacher-centred instructional strategies cannot guarantee students' achievement.

Also, there was a significant main effect of treatment on students' attitude to summary writing. The mean score of students in generative instructional group is more than that of students in the modified lecture group. In the generative group, learners were actively involved and in control of their learning because they performed activities by themselves, identifying their conceptions, tasking them to identify their own misconceptions and correcting the misconceptions identified. The generative group's high level of students' involvement encouraged interactions and active participation in classroom activities; this led to an improvement in students' attitude to summary writing.

This supports the submission of Ray (2005) and Steiner and Morberg (2006) that learner-centred instructional strategies can improve students' attitude because it develops social skills and encourages learners to accommodate the views and opinions of the other members of his/her class. The result, however, disagrees with the findings of Maroufi (1989) that students' attitude towards generative instruction shows that they consider it as unstable, unserious and unreliable. The findings of this study are in line with Akinoso (2012) that conventional teaching strategy cannot improve students' attitude. Therefore, there is a need for a paradigm shift from the conventional teaching strategy to some other learner-centred instructional strategies that have been found to have significant effect on students' attitude to summary writing.

Gender on Students' Achievement and Attitude towards Summary Writing

The finding of this study revealed that there was no significant main effect of gender on students' achievement and attitude to summary writing. The result of this study supported the findings of Gadwa and Griggs (1995) that gender differences have no effect on students' achievement in learning. Though the female students obtained slightly higher mean achievement score than the males, the difference was not significant. This study has shown that summary writing as an aspect of English language is neither a male-dominated nor female-dominated subject in line with the findings of Elliot (1991). This result negates the findings of Tatarinceva (2009) that gender differences have serious implications for students' achievement in language learning in favour of girls.

Also, the findings of this study showed that there was no significant main effect of gender on students' attitude to summary writing. The result of this study supports the findings of Wyer (2003) that gender has no significant effect on students' attitude to learning. Although the female students obtained slightly higher mean attitude score than their male counterparts. The result of this study disagrees with the findings of Azubuike (2011) which suggest that there is a relationship between students' gender and their attitude to learning.

V. SUMMARY OF FINDINGS

The findings of the study revealed the following:

1. There was significant main effect of treatment on students' achievement in summary writing. The mean score shows that the Generative Instructional Strategy was more effective than the conventional method (control). Also, there was significant main effect of treatment on students' attitude to summary writing.
2. There was no significant main effect of gender on students' achievement in and attitude to summary writing.
3. There was no significant interaction effect of treatment and gender on students' achievement in and attitude to summary writing.

Conclusion

This study examined the effect of generative instructional strategy on senior secondary school students' achievement in and attitude to summary writing and found the strategy was effective at improving students' learning outcomes in summary writing. Gender has no effect on students' achievement in and attitude to summary writing. Treatment and gender are not effective at improving students' achievement and attitude to summary writing. Based on the findings of this study, it could be concluded that the generative instructional strategy has great potentials at improving both achievement and attitude of summary writing. In addition, these strategies encouraged active participation of students during lessons which led to higher achievement and positive attitude to summary writing. The use of the strategy built better teacher-student and student-student interaction during lessons as well as developed greater confidence in the students.

Recommendations

The following recommendations are made based on the findings of this study:

1. In order to improve students' achievement in summary writing, the use of generative instructional strategy to facilitate learners' active participation during the teaching-learning process or classroom interaction should be encouraged.
2. English language teachers should always encourage students' to actively participate in the summary writing classroom.
3. There is a need for training and retraining programmes such as seminars, workshops and symposia from time to time for pre-service and in-service teachers of English language to learn more on generative instructional strategies and other effective strategies in order to improve students' achievement in summary writing.

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