

## EFFECT OF TWO CONSTRUCTIVIST-BASED INSTRUCTIONAL APPROACHES ON SENIOR SECONDARY SCHOOL STUDENTS' ACHIEVEMENT IN ENGLISH LANGUAGE NARRATIVE ESSAY WRITING: IMPLICATIONS FOR CURRICULUM REFORM

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### Abstract

The study investigated the effect of two constructivist-based instructional approaches on senior secondary school students' achievement in English Language Narrative Essay writing: Implications for curriculum reform. The study employed the factorial research design. The study's population comprised all the 4,022 senior secondary two (SSII) students in 50 government-owned co-educational secondary schools in the 2022/2023 academic year in Umuahia Education Zone, Abia State. A sample of 109 SSII students in four sampled co-educational schools in the area was drawn for the study through multi-stage sampling procedure. The instrument for data collection was Narrative Essay Writing Achievement Test (NEWAT), adopted from WAEC past questions. The instrument was face-validated by three experts from the University of Nigeria, Nsukka. The instrument yielded a reliability coefficient of 0.93, using the Kendall's Coefficient of Concordance ( $w$ ). The data obtained were analysed using mean, standard deviations and analysis of covariance (ANCOVA). The results showed that the use of both instructional approaches is effective in enhancing students' achievement in English language narrative essay writing. Also, the findings showed that gender does not significantly influence students' achievement in English language narrative essay writing. Based on these findings, it was recommended, among others, that teachers should be trained and retrained to successfully incorporate cognitive and social constructivist teaching approaches in their teaching for curriculum reform.

**Keywords:** Cognitive and Social constructivist, Achievement, Gender, Curriculum Reform

### Introduction

Curriculum reform is the process of ensuring that an existing educational programme is not allowed to be out of tune with the current situation in society. The purpose of the exercise, according to Azikiwe (2018), is to improve learning outcomes, accommodate new changes in the learning environment, include new ideas, improve the existing ideas and skills and promote flexibility to reflect the constantly changing nature of the society. It is often embarked upon either as a routine exercise or in response to new ideas or identified problems. In Nigeria today, there is an urgent need for curriculum reform as a result of the prevailing dissatisfaction with the education sector (Jegede, 2022). One of the areas in need of the reform is the teaching and learning of the English language.

English language is a lingua franca which holds a great influence and prestige not only in Nigeria but also at the international level. The Federal Government in its National Policy on Education (Federal Republic of Nigeria, 2013) made it compulsory at secondary levels of education. This means that English language is a compulsory subject in Nigerian secondary educational curriculum. The focus of its teaching and learning is on four language skills. These skills are listening, speaking, reading, and writing. The four language skills are embedded in the curriculum to achieve total language mastery. In language development, writing is the

fourth language skill and a higher order skill. English language writing has different aspects such as essay writing, summary writing, report writing, letter writing, article writing, and speech writing, but this research is limited to essay writing.

Essay writing is an integral aspect of English language in Nigeria. It is taught and learned as a component of the English language, not as a separate discipline. An essay is a piece of writing usually short or in a prose on any subject. It is of different types. These are expository, argumentative, descriptive and narrative. A narrative essay requires the writer to tell a story from his/her point of view or personal experience, providing all the specific details to get readers involved and understand the storyline. Every narrative essay should have features, such as; plot, setting, character, conflict, and theme. Also, narrative essay should have a distinct beginning, middle, and end.

The West Africa Examination Council Chief Examiners' Reports from May/June of 2018 to 2021 shows that students' achievement in writing English language essays was extremely low and has been declining annually. The report explained the poor achievement as a result of lack of linguistic foundation. The majority of the candidates lost all the marks assigned to spelling, punctuation, grammar, and tenses sequencing. In addition, the assessment noted that the candidates had not been exposed to writing skills sufficiently. Also reacting to similar poor achievement in essay writing, Akogwu and Offorma (2018) noted that there is need for a good teaching method.

The teaching of English language narrative essay writing in secondary schools in Nigeria is dominated by the conventional teaching approach. This method lays emphasis on definitions and giving of notes to passive learners which does not give the students the opportunity to construct their own meanings collaboratively through discussions and arriving at their own conclusions. The conventional lecture method of teaching and learning narrative essay writing focused on the teacher writing the ideas on the chalkboard, while the students observe the process and listen. This is teacher centered approach. Hence, it may not encourage meaningful learning process. Another approach which may be used in teaching English language narrative essay writing is the use of cognitive constructivist and social constructivist-based instructional approaches.

Cognitive constructivism as propounded by Jean Piaget views learning on the basis of personal experience or experiential learning. It lays emphasis on the importance of learners building their own knowledge. It also views learning as a developmental process that involves change and construction building on previous knowledge (Piaget, 1971). Cognitive constructivist focuses more on facts and constructing knowledge within one's own schemas. In teaching of Narrative Essay writing, the cognitive constructivist approach provides the learners a good opportunity to carry out their individual task and projects which will help them to generate new ideas and acquire skills. Also, another type of constructivist teaching approach that could be used in teaching Narrative essay writing is social constructivist.

Social constructivist is a learning theory propounded by the Russian psychologist Lev Vygotsky in 1978. The theory states that individuals are active participants in the creation of their own knowledge. According to the theory of social constructivism, knowledge is not an individual experience but rather a common one that arises from language use and social interaction (Lynch, 2016). This means that learning concepts are transmitted by means of language, interpreted and understood by experience and interactions within a cultural setting. As research has shown that the cognitive and social constructivist approaches can improve students' performance when writing essays in the English language (Akogwu & Offorma, 2018), it is necessary to determine whether these approaches can also increase students' achievement in English language narrative essay writing.

In addition to instructional approach, research has indicated some close connection between gender and achievement in language learning. Gender refers to the opportunities and

characteristics that come with being a woman or a man in terms of the economy, society, politics, and culture. The roles that are accorded to the various sexes may be similar in certain communities but may differ in others, which may have an impact on educational achievements. Ifeacho (2017), for instance, reported that males perform better than females in essay writing. Other researchers like Ukume, Agbum and Udu (2018) established significant differences regarding the success of both genders in English language. Due to the disparities on the views of gender, it is included as a possible intervening variable in this study since the exact influence of gender on language is not clear.

Based on the foregoing, therefore, the researchers felt the need to establish through empirical evidence, the effects of two constructivist-based instructional approaches on senior secondary school students' achievement in English language narrative essay writing, as well as the implications for curriculum reform. Three research questions and three hypotheses were formulated for that purpose.

1. What are the mean achievement scores of students taught narrative essay writing using cognitive constructivist approach and those taught using social constructivist approach?
2. What are the mean achievement scores of male and female students in narrative essay writing in English language?
3. What is the interaction effect of constructivist instructional approaches and gender on students' mean achievement scores in narrative essay writing in English language?

**H<sub>01</sub>:** There is no significant difference in the mean achievement scores of students taught English language narrative essay writing using cognitive constructivist and social constructivist approaches.

**H<sub>02</sub>:** There is no significant difference in the mean achievement scores of male and female students in English language narrative essay writing.

**H<sub>03</sub>:** There is no significant interaction effect of constructivist instructional approaches and gender on students' mean achievement scores in English language narrative essay writing.

## Methods

The design of the study was factorial research design. The population consisted of all the 4,022 senior secondary two (SS II) students in 50 government-owned co-educational schools in the 2022/2023 academic year in Umuahia Education Zone, Abia State. Out of this number, 1,826 were males while 2,196 were females. The sample for the study was made up of 109 SS II students in four intact classes which were drawn through a multi-stage sampling technique. Out of this sample, 49 were males while 60 were females.

The researchers used one instrument for data collection, namely: Narrative Essay Writing Achievement Test (NEWAT). The NEWAT is a test with four questions adopted from West African Examinations Council (WAEC) past questions on narrative essay. The time allowed for the test was 50 minutes. The marks are made up of content – 10 marks, organization – 10 marks, expression – 20 marks and mechanical accuracy – 10 marks as stipulated in WAEC marking scheme. The instrument and the lesson plans for the two experimental groups were subjected to face validation by three specialists: one from curriculum studies, one from Language Education and one from Educational Measurement and Evaluation. All of them were from the University of Nigeria, Nsukka. The inter-rater reliability of the instrument was established using the Kendall's coefficient of concordance ( $w$ ), and reliability coefficient of 0.93 was obtained.

The NEWAT was administered as pre-test to the subjects before the commencement of the treatment. This was done by teachers of English in the schools that were used for the study. These teachers served as research assistants. The researchers trained these research assistants to get them acquainted with the skills involved in the use of cognitive constructivist approach

as well as the social constructivist approach in teaching English language essay writing. The training was carried out in each of the schools that were used for the study. It lasted for four days. One day was dedicated to the training of the research assistant in each of the four schools that were used for the study.

At the end of the training, the research assistants administered the NEWAT as a pretest. The experiment started after the pre-test. One group was taught using cognitive constructivist approach while the other one was taught with the social constructivist approach. The topics, the specific objectives and the evaluation techniques for the two groups were the same. At the end of the teachings, the NEWAT was administered and posttest. The data from both the pre-test and the post-test were used for data analysis by the researchers. Mean scores and standard deviations were used to answer all the research questions and the analysis of covariance (ANCOVA) was used to test all the hypotheses at 0.05 level of significance.

## Results

**Table 1:** Pretest and posttest mean achievement scores of students taught English language narrative essay writing using cognitive constructivist teaching and those taught using social constructivist teaching

Teaching Approaches	N	Pre-test		Post-test		Adjusted Mean Score
		$\bar{X}$	SD	$\bar{X}$	SD	
Cognitive Constructivist	53	20.96	4.12	33.96	5.22	34.12
Social Constructivist	56	19.96	3.90	33.66	5.18	33.65

**Note:** N = Number of Respondents,  $\bar{X}$  = Mean, SD = Standard deviation

The result in Table 1 shows that students taught English language narrative essay writing using cognitive constructivist teaching approach had a mean achievement score ( $\bar{X} = 20.96$ ,  $SD = 4.12$ ) at pretest and a mean achievement score ( $\bar{X} = 33.96$ ,  $SD = 5.22$ ) at posttest. On the other hand, those taught English language narrative essay writing using the social constructivist teaching approach had a mean achievement score ( $\bar{X} = 19.96$ ,  $SD = 3.90$ ) at pretest and a mean achievement score ( $\bar{X} = 33.66$ ,  $SD = 5.18$ ) at posttest. The posttest standard deviations of 5.22 and 5.18 for students taught using the cognitive and social constructivist teaching approaches respectively, indicate that the achievement scores of students were similarly spread from the mean in both approaches. The posttest adjusted mean scores of 34.12 and 33.65 for students taught using cognitive and social constructivist teaching approaches respectively, can be interpreted that both cognitive and social constructivist teaching approaches have similar positive effects in terms of increasing students' achievement in English language narrative essay writing, however, cognitive constructivist teaching approach proved to be slightly more effective.

**H<sub>01</sub>:** There is no significant difference in the mean achievement scores of students taught narrative essay writing in English language using cognitive constructivist and social constructivist teaching approaches.

**Table 2:** Analysis of covariance (ANCOVA) of the difference in the mean achievement scores of students taught narrative essay writing in English language using cognitive constructivist and social constructivist teaching approaches

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared ( $\eta^2_p$ )	Dec.
Corrected Model	1870.834 <sup>a</sup>	8	233.854	22.835	.000	.646	
Intercept	584.545	1	584.545	57.078	.000	.363	
PRENEWAT	1727.462	1	1727.462	168.678	.000	.628	
Group	8.585	1	8.585	.838	.362	.008	NS
Gender	8.959	1	8.959	.875	.352	.009	NS
Location	2.940	1	2.940	.287	.593	.003	NS
Group * Gender	32.973	1	32.973	3.220	.016	.031	S
Group * Location	1.474	1	1.474	.144	.705	.001	NSS
Gender * Location	.172	1	.172	.017	.897	.000	NS
Group * Gender * Location	.582	1	.582	.057	.812	.001	NS
Error	1024.120	100	10.241				
Total	127475.000	109					
Corrected Total	2894.954	108					

**Note:** df= Degree of Freedom, F= F-ratio, Sig.= Significant/probability value, Dec.= Decision, NS = Not Significant, S = Significant

The result in Table 4 revealed that there is no significant difference in the mean achievement scores of students taught narrative essay writing in English language using cognitive constructivist and social constructivist teaching approaches, ( $F(1, 108) = .838, p = .362, \eta^2_p = .008$ ). This is due to the fact that the associated probability (Sig.) value of 0.362 is greater than 0.05 level of significance at which the result is being tested. For this reason, the null hypothesis two ( $H_{02}$ ) which stated that there is no significant difference in the mean achievement scores of students taught narrative essay writing in English language using cognitive constructivist and social constructivist teaching approaches is accepted.

**Table 3:** Pretest and posttest mean achievement scores of male and female students in English language narrative essay writing

Gender	Pretest		Posttest		Adjusted Mean Score
	N	$\bar{X}$ SD	$\bar{X}$ SD		
Male	49	20.37 3.74	33.35 4.91		33.63
Female	60	20.52 4.27	34.18 5.40		34.14

**Note:** N = Number of Respondents,  $\bar{X}$  = Mean, SD = Standard deviation

Result in Table 2 shows the mean achievement scores of male and female students in English language narrative essay writing. The result indicates that male students had a mean achievement score ( $\bar{X} = 20.37, SD = 3.74$ ) at pretest and a mean achievement score ( $\bar{X} = 33.35, SD = 4.91$ ) at posttest. While the female students had a mean achievement score ( $\bar{X} = 20.52, SD = 4.27$ ) at pretest and a mean achievement score ( $\bar{X} = 34.18, SD = 5.40$ ) at posttest. The posttest standard deviations of 4.91 and 5.40 for male and female students respectively, signifies that the achievement scores of the female students were slightly spread across the groups than the scores of the male students. The adjusted mean scores of 33.63 and 34.14 for male and female students respectively, is indicative that female students demonstrate slightly better level of achievement in English language narrative essay writing than their male counterparts.

**H02:** There is no significant difference in the mean achievement scores of male and female students in English language narrative essay writing.

The result in Table 2 also shows ANCOVA of the difference in the mean achievement scores of male and female students in English language narrative essay writing. The result is indicative that the difference in the mean achievement scores of male and female students in English language narrative essay writing is not statistically significant ( $F(1, 108) = .875, p = .352; \eta^2_p = .009$ ). This is due to the fact that the associated probability (Sig.) value of .352 is greater than 0.05 level of significance at which the result is being tested. Therefore, the null hypothesis four (H04) which stated that there is no significant difference in the mean achievement scores of male and female students in English language narrative essay writing is upheld.

**Table 4:** Pretest and post-test mean interaction effect of constructivist instructional approaches and gender on students' mean achievement scores in English language narrative essay writing

Teaching Approaches	Gender	N	Pretest		Posttest		Adjusted Mean Scores
			$\bar{X}$	SD	$\bar{X}$	SD	
Cognitive Constructivist	Male	24	20.25	3.98	33.46	5.07	33.92
	Female	29	21.55	4.21	34.38	5.40	34.31
Social Constructivist	Male	25	20.48	3.57	33.24	4.85	33.33
	Female	31	19.55	4.16	34.00	5.48	33.97

**Note:** N = Number of Respondents,  $\bar{X}$  = Mean, SD = Standard deviation

The result in Table 4 shows the interaction effect of constructivist instructional approaches and gender on students' mean achievement scores in English language narrative essay writing. The result shows that male students taught using cognitive constructivist approach had a mean achievement score ( $\bar{X} = 20.25, SD = 3.98$ ) at pretest and a mean score ( $\bar{X} = 33.46, SD = 5.07$ ) at posttest. Whereas the female students taught using the same approach had a mean achievement score ( $\bar{X} = 21.55, SD = 4.21$ ) at pretest and a mean score ( $\bar{X} = 34.38, SD = 5.40$ ) at posttest. The posttest adjusted mean scores for students in the cognitive constructivist group were 33.92 and 34.31 for the male and female students respectively. Likewise, the result in Table 10 shows that male students taught using the social constructivist approach had a mean achievement score ( $\bar{X} = 20.48, SD = 3.57$ ) at pretest and a mean score ( $\bar{X} = 33.24, SD = 4.85$ ) at posttest. While their female counterparts had a mean achievement score ( $\bar{X} = 19.55, SD = 4.16$ ) at pretest and a mean score ( $\bar{X} = 34.00, SD = 5.48$ ) at posttest. The posttest adjusted mean scores obtained for students in the social constructivist group were 33.33 and 33.97 for male and female students respectively. Notably, the result shows that female students had slightly better achievement scores in English language narrative essay writing than their male counterparts when taught using both cognitive and social constructivist approaches.

**H03:** There is no significant interaction effect of constructivist instructional approaches and gender on students' mean achievement scores in narrative essay writing in English language.

Result in Table 2 also shows ANCOVA analysis of the interaction effect of constructivist instructional approaches and gender on students' mean achievement scores in narrative essay writing in English language. The result shows that the interaction effect of

constructivist instructional approaches and gender on students' mean achievement scores in narrative essay writing in English language is statistically significant, ( $F(1, 108) = 3.220, p = .016, \eta^2_p = .031$ ). This is because the associated probability (Sig.) value of .016 is less than the 0.05 level of significance at which the result is being tested. On this note, the null hypothesis three ( $H_{03}$ ) which stated that there is no significant interaction effect of constructivist instructional approaches and stated that there is no significant interaction effect of constructivist instructional approaches and gender on students' mean achievement scores in narrative essay writing in English language is rejected.

## Discussion

The findings of the study revealed that both cognitive and social constructivist instructional approaches have similar positive effects in terms of increasing students' achievement in English language narrative essay writing. However, cognitive constructivist teaching approach proved to be slightly more effective. Further analysis however revealed that there is no significant difference in the mean achievement scores of students taught narrative essay writing in English language using cognitive constructivist and social constructivist teaching approaches. The finding corroborates the outcome of Akogwu and Offorma (2018) who reported that students taught English language essay writing using the constructivist-based instructional approach performed better than their counterparts taught the same topic using the conventional lecture method.

The findings of this study also show that female students demonstrate slightly better level of achievement in English language narrative essay writing than their male counterparts. But further analysis unveiled that there is no significant difference in the mean achievement scores of male and female students in English language narrative essay writing. That is to say, gender has no significant influence on students' achievement in English language narrative essay writing. These findings contradict the outcome of the studies by Ifeacho (2017) who reported that males perform better than females in essay writing. Also, the finding to some extent disagree with that of Ukume, Agbum and Udu (2018), which showed that there was a significant difference in the writing achievement between male and female students who were exposed to reading club activities.

The study equally shows that there is a significant interaction effect of constructivist instructional approach and gender on students' mean achievement scores in narrative essay writing in English language. The finding corroborates that of Juni (2014), which showed that there was a significant interaction effect of teaching approaches and gender on students' listening comprehension. Therefore, there is a possibility that both male and female students taught using cognitive and social constructivist teaching approaches could exhibit different levels of achievement in English language narrative essay writing as shown by the finding of this present study.

## Conclusions

Based on the findings of this study, it is concluded that cognitive and social constructivist teaching approaches are effective in enhancing students' achievement in English language narrative essay writing. This therefore implies that both cognitive and social constructivist approaches when adopted in teaching English language narrative essay writing by the teachers would have similar effects in terms of increasing students' achievement in that aspect of the subject. The findings also show that gender has no significant influence on students' achievement in English language narrative essay writing. In addition, there is also significant interaction effect of constructivist teaching approaches and gender on students' achievement in English language narrative essay writing.

### Implications for Curriculum Reform

The findings of the study have some implications for curriculum reform. For instance, the finding which showed that the use of cognitive and social constructivist teaching approaches effectively enhances students' achievement in English language narrative essay writing means that the adoption of the two instructional approaches in the curriculum will be better in boosting students' achievement in that aspect of the subject than depending on the traditional approach of teaching. The implication of this result to curriculum reform is that if the benefits of the two approaches are not harnessed in the efforts to improve the experiences of the learners for the better, the main purpose of reforming school curricula for the optimization of learning outcomes of the programmes and learners may be jeopardized.

Also, the finding which showed that gender has no significant influence on students' achievement in English language narrative essay writing means that both male and female students would demonstrate similar levels of achievement in English language narrative essay writing when taught with both cognitive and social constructivist teaching approaches. This implies that the two approaches exert copious positive efforts on how both male and female students learn and form part of some necessary actions to be taken to strengthen new educational practices to provide quality learning opportunities. This is the focus of curriculum reform.

Equally, the finding which showed that the interaction effect of constructivist teaching approaches and gender on students' achievement in English language narrative essay writing is significant implies that even though the two approaches have the potential to improve teaching and learning and the delivery of quality education, gender still remains a curricular issue that needs to be sorted out in order for the curriculum to properly function as a veritable educational tool and propelling power of development.

### Recommendations

From the findings of this study, the following recommendations were made:

1. Teachers should be trained and retrained to successfully incorporate the cognitive and social constructivist teaching approaches in their teaching for curriculum reform.
2. Curriculum planners and developers should also make effort to incorporating the use of cognitive and social constructivist approaches as necessary tools to effective teaching and learning of English language narrative essay writing.
3. The school authorities should provide equal opportunities for both male and female students in order to close the achievement gap between male and female students.

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