

FLIPPED CLASSROOM MODEL OF BLENDED LEARNING AND SENIOR SECONDARY SCHOOL STUDENTS' PERFORMANCE IN ENGLISH LANGUAGE WRITING SKILLS IN RIVERS EAST SENATORIAL ZONE, RIVERS STATE

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Abstract

This study was conducted to investigate flipped classroom model of blended learning and Senior Secondary School Students' (SSI) Performance in English Language writing skills in Rivers East Senatorial Zone, Rivers State. Three objectives, three research questions and three hypotheses were formulated to guide the study. The research design used for this study was quasi-experimental research design. The population consisted of fifteen thousand eight hundred and twenty six (15,826) (SSI) students in public senior secondary schools in Rivers-East senatorial zone. A Sample size of eight hundred (800) students was used for the study. The instrument for data collection was English Language Performance Test on Writing (ELPTW), validated by two experts in English Language department. The reliability of the instrument was established with test retest method and the scores were correlated using Pearson Product Moment Correlation and a coefficient of 0.76 was obtained. Descriptive statistics mean and standard deviation was used to analyses the research questions while Analysis of Covariance (ANCOVA) was used to test the hypotheses at 0.05 level of significance. The results showed that the flipped classroom model of blended learning made the students at a posttest stage to have greater effect than the pretest stage in the use of English Language writing skills. There is significant difference in pretest posttest scores of students in flipped classroom model of blended learning made of the students at a posttest stage showed a greater effect than the pretest stage in the use of grammar, vocabulary, and punctuation. The study concluded that there is significant difference in the pretest posttest of flipped classroom blended learning and conventional method; hence the null hypothesis was rejected. Flipped classroom model leads to academic achievement because it encourages students' engagement, boost collaboration among students and critical thinking ability in English language writing skills. It was recommended that: parents should encourage their children by providing enabling environment for study at home so as to attain to their assignments, task and online materials before the main classes at school, Ministry of education should share free computers and other electronic system as it brings good result in student's studying abilities and academic performance.

Introduction

The universality of language means that language is found wherever human beings are. As a human property, it is basically used to express our thoughts, feelings, ideas, transmission of culture, development, advancement of technology, education and conflict resolution to mention but a few. Language is a system of communication by humans involving sounds, symbols, signs used globally to express thoughts and ideas etc. among human beings (Alfred & Ochuba, 2016).

Among other characteristics are: it is universal, creative, arbitrary, rule governed,

learnt and acquired, dynamic, vocal and written. There are four skills involved in language acquisition which are: Listening, Speaking, Reading on aspect of English language and writing. Writing is and has always been viewed as an important skill in English language acquisition and also the most difficult. It is a skill that requires diligent and constant practice to acquire. Its importance and difficulty are due to its reinforcement of grammatical structures and vocabulary that educators strive to teach their students.

Cushman (2011) writing is a medium of human communication that represents language with signs and symbols. In other words, writing is a tool that is used to make languages readable. It is the use of symbols such as letters of the alphabet, punctuation and spaces in order to communicate thoughts and ideas in a readable form. The knowledge of grammar, punctuation, sentence, structure and vocabulary are very essential to writing clearly. Azikiwe (2007) asserted that writing is a complex process with a number of operations going on simultaneously. As a complex process, it requires time, cognitive ability and diligent practice to achieve. In other words, considering the various reasons for writing, different approaches are also required to write depending on the purpose in order to communicate effectively. Furthermore, the type of writing also determines the mode of writing whether narrative, descriptive, argumentative or expository (Obi-Okoye, 2004).

Technology can be used to enhance English language writings skills, to create new and more powerful learning environment and to encourage creative and practice ideas for teachers and students. Many have also integrated technology into teaching and learning (Tafari, 2010). It helps students to be actively involved in the learning process. Technology is used by both teachers and students as reference point to attain information get new ideas, knowledge, skills and competences.

Technology makes teaching vivid and instructional processes easier (Dimitris, 2010). Media serve as entertainment sources and at the same time encourage students to write thereby improving their writing skills. It has fostered collaborative and cooperative work among students and thus encouraged good social habit. Students

improve on their English language writing skills as they read other people's writings (Bitchner & Knoch, 2010). Technology has brought several innovative teaching methods such as: Situated learning, Problem-Based Learning, Contextual Learning and Blended Learning among others. There has also emerged rotation model of blended learning which are: Station rotation, Laboratory rotation, Individual rotation and Flipped classroom (UNESCO, 2010).

Flipped classroom model is a rotation model in which students rotate on a fixed schedule between online delivery of content and instruction, generally outside of the classroom and face to face teacher guided practice (or projects) generally in a classroom setting (Christensen, Horn & Staker, 2013). Flipped classroom is one of the most recent learning models in which content attainment is shifted by the instructor. The term 'flipped classroom' was first put forward by Bergmann and Sam. Bergmann and Sam in Colorado pioneered flipped classroom using screen casting and video pod casting to deliver the learning content of science course in high schools.

The flipped classroom has since then become a teaching and learning approach in which the lesson content and materials are not presented in the class but are first experienced by the learners through the various alternative forms of technology prior to the classroom instructional session in which the concept is addressed for better assimilation (Gerstein, 2011). Normal classroom activities are done in a reversed order. Instructional contents are posted online outside the class and use class time for dwelling on gray areas in the online content. It is a pedagogy that involves moving direct instruction out of group to the individual learning space (Rosen, 2016). According to Teach Thought (2014), flipped

classroom is regarded as an instructional approach that requires students to do home study on the learning content while the class time is set aside for students to work in group to investigate and discuss the learning content with teachers serving as facilitators or advisers in the classroom (Makice, 2012; Johnson & Koszaika, 2012).

The English language writing skills also improve coherence and easy flow of thoughts. In general, proper integration of technology into face to face teaching and learning can result to the improvement of students' satisfaction, interests and students are allowed to read their classmates or other people's writings for improvement on their own work.

Students can also attend the lecture more than once for better understanding (Graham 2006). But, in spite of the effectiveness of integrating technology into traditional method of teaching and learning, English language teachers still teach writing using only the traditional method which has adversely affected the performance of student in writing and in English language writing skills. This study therefore, examined the effect of flipped classroom model of blended learning on Senior Secondary Students' performance in English Language writing skills, Rivers East senatorial zone.

Statement of the Problem

Owing to the fact that English Language plays vital roles in our nation such as: it is our lingual Franca, it is our school subject, it is the language of instruction, it is compulsory at all levels of education in both West African Examinations Council (WAEC) and Joint Admission and Matriculation Board (JAMB). It is still alarming on how poorly students perform in English language examination. According to the report by the Head of National office WAEC, Lagos as

recorded by Daily Trust of Thursday May 12th, 2013, only 31.8% and 31.28% candidates representing 529,425 and 512.00 candidates for 2012 and 2013 respectively passed English language at credit level.

Many reasons have been attributed to account for poor performance of students' in English language writing such as: students' poor mastery of English language grammatical structures, students' inability to construct sentences, inability to use proper sentence pattern; inability to identify correct grammatical forms in both speech and writing, lack of English language laboratory and over the years, English language teachers have stooped to the traditional teacher-centered method of teaching among other reasons (Tafari, 2010). The concern of this study was therefore, to investigate the possibility of flipped classroom, enhancing the performance of Senior Secondary School Students in English Language writing skills in Rivers East senatorial zone of Rivers State.

Objectives of the Study

The aim of this study was to find out the flipped classroom model of blended learning on senior secondary students' performance in English language writing skills in Rivers East Senatorial zone of Rivers State. Specifically, the objectives of this study are to:

- 1) Examine the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centered method on students' use of grammar.
- 2) examine the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centered method on students' use of vocabulary,

- 3) Examine the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of in punctuation.

- There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centered method on students' use of in punctuation?

Research Questions

The following research questions were drawn to guide this study:

- What is the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of grammar?
- What is the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of vocabulary?
- What is the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of in punctuation?

Hypotheses

The following null hypotheses guided the study:

- There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centered method on students' use of grammar.
- There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centered method on students' use of vocabulary.

Literature Review

Concept of Writing

Writing is a skill of output. It is regarded as one of the four basic skills in language skills and also the most difficult of the four basic skills to master. This is due to its strict adherence to rules of grammar, punctuation, spellings, organization, content and expression (Cao, 2015). Writing is intellectual activities that find ideas and thinks of ways to express and arrange them into statements and paragraphs that are clear to understand by the audience or readers. Writing demands intellectual efforts and cognitive ability as it involves generating ideas, planning, goal setting, monitoring, evaluating and expressing exact meanings thus Azikiwe (2007) asserts that "Since writing is a way of communicating with others, sharing ideas, educating and entertaining audience, there is need for the writer to make sure that he or she has written exactly what he intends to communicate to the readers for easy flow of communication" (Pham, 2016; Keats, 2010).

Writing is a productive skill that expresses feelings through written communication. Furthermore, writing is a craft and as with all craft, it needs constant and diligent practice to learn. Obi-Okoye (2004) considers writing as "Meaning made permanent in language." In order words, with writing one organizes one's knowledge and beliefs, into convincing arguments and to convey meaning through well-constructed texts.

There are many definitions of wiring, no wonder Fischer (2010) asserts that “No one definition of writing can cover all the writing systems that exists and have ever existed.” He further stresses that “A complete writing system should have as its purpose communication.”

Concept of Blended Learning

Blended learning has been defined in different ways by different authors and skills, new definitions are evolving. Friesen and Norm (2012) define blended learning as a “formal education programmed in which a student learns at least in part through delivery of content and instruction via digital and online media with some element of student control over time, place, path or pace”.

Muthuchamy and Thiyagu (2011) describe Blended learning as the integrated combination traditional learning with web based online approaches. They described it as combining off-line and on-line forms of learning where the online may be over the internet, intranet, computer and other software packages while the off-line is the traditional classroom where students and teachers meet face to face to engage in learning activities. Friesen (2012) describe Blended learning as an instructional process where the internet is being used with digital media with an established classroom form that need physical co-presence of teachers and students. Mustafa (2015) point out that blended learning seems to have more achievement gains than the traditional face to face classes.

Neumeier (2005) define Blended learning as a combination of face to face (FF) and Computer Assisted Learning (CAL) in a single teaching, and learning environment. While Sharma and Barrett (2007) generalized their understanding of Blended learning as a

course which combines face to face classroom component with an appropriate use of technology.

Blended learning is describe by Thorne (2003) as “a way of meeting the challenges of tailoring learning and development to the needs of individuals by integrating the innovative and technological advances offered by online learning with the interaction and participation offered in the best of traditional learning Blended learning is a ‘formal program in which a student learns’: at least in part through online learning place, path or pace, at least in part in a supervised brick and mortar location away from home; and the modalities along each student’s learning path within a course or subject are connected to provide an integrated learning experience’ (Christensen, 2015). Yong (2002) defined Blended learning as a situation where online education is combined with traditional classroom based instruction.

Singh and Reed (2001) also defined Blended learning as an instruction program that uses more than one presentation method to improve the cost of program presentation and educational output. Henze and Procter (2004) “argued that Blended learning must be viewed from the perspective of the learner and not the teacher”. It is the learning that emphasizes the central role of computer based technology instruction with the aim of accommodating learning styles of the students. It is the learning styles that effectively combine different methods of teaching in order to have the desired outcome.

Students in a traditional class can be given online assignment in order to give consideration to the subject matter, objectives of the instruction, individual characteristics and differences. Blended

learning was necessitated because all instruction may not be achieved in traditional classroom and technological environment (Ike, Iwu & Onwuagboke, 2015). Blended learning tends to achieve learning objectives by the use of technology to match the learning styles of individuals. It has gained ground in most enterprise as a way of delivering instruction, training people, giving out information and knowledge to large populations. Blended learning brings about success, satisfaction and retention if properly integrated. It provides and enhances good writing practice and it encourages peer collaboration. As an innovative teaching method, it offers students flexible teaching and learning environment so that learning takes place in the classroom and online (Shyamlee, 2013).

Furthermore, Blended learning gives opportunity to students to stay in touch with their teachers and classmates. It encourages interaction and communication. It is a learning that brings out the full potentials of students and gives supports by allowing students feel safe, ask questions and share ideas in order to develop (Faye & Andrea, 2014).

The spread of digital learning and its adoption has led to its integration into the traditional face to face (Vander, 2012). North American Council for Online Learning (2013) is of the view that "Blended learning is likely to emerge as the predominant model of the future and to become far more common than face to face or online learning alone". In general, Blended learning, when properly implemented, can result to the improvement of students' satisfaction and interest students are allowed to read their classmates' writing for improvement on their own; students can also visit the lecture more than once for better understanding (Graham, 2006).

Methodology

Research Design: The research design for this study was a non-equivalent pre-test, post-test, control group, a quasi-experimental design that determines the effect of flipped classroom model on senior secondary students' performance in English Language writing skills. Thus the present study was a quasi-experimental study because it made use of pre-test/post-test control group design and data was collected from students' scores before and after treatment.

Population of the Study: The population for the study consisted of all the senior secondary school students I (SSI) in Rivers East senatorial zone. There are fifteen thousand eight hundred and twenty six (15,826) (SSI) students in the public senior schools in Rivers state (Rivers State Schools Census Report, 2011-2019). There are 62 public secondary schools on Rivers East senatorial zone. Almost all the school subjects are offered by the students in this class level.

Sample and Sampling Technique: The sample technique that was used in this study is a simple random sampling technique in selecting eight (8) public schools in Rivers East senatorial zone, Rivers State. The researcher used flipped classroom group (FCG), and control group (CG) for the experiment. The sample size for the study consisted of eight hundred (800) public senior secondary school one (1) students from eight (8) selected public schools in the eight (8) local government area. A sample is defined as a portion or subject of the population, the size of which is determined by the type and objectives of the study (Skehan, 2003). There was no need to scatter the classes hence intact classes were used for the study.

Instrument for Data Collection: The instrument for data collection was English Language Performance Test on Writing (ELPTW) which was made up of subjective and guided questions. The instrument was designed to measure students' performance level in applying all the skills involved in writing and to ascertain that knowledge gained by the experimental group is from the instrument. ELPTW was constructed by the researcher and it consisted of 20 items covering grammar, vocabulary, punctuation and spelling which are distributed thus: grammar 5 questions, vocabulary 5, punctuation 5, and spelling 5.

Validity of the Instrument: The instrument was given to the supervisor and two other lecturers in Language Education to establish face and content validity-in order to establish face and content validity-in terms of language used in developing the items, adequacy of the items to the level of the respondents, and the appropriateness of the arrangements were checked. Comments and corrections of the supervisor were effected which made the instrument valid for use.

Reliability of the Instrument: Reliability coefficient of the English Language Performance Test in Writing was determined with the test-retest technique. The researcher made use of the English language teachers in one of the schools outside the sampled schools to administer the reliability instrument. The SS1 students were taught English language writing skills: grammar, vocabulary, punctuation and spelling and were given test. After two weeks, the same

test was re-administered to the students and their two scores were calculated using Pearson Product Moment Correlation and a coefficient of 0.76 was obtained which was considered suitable for the study.

Administration of the Instrument: The English language teachers of the sampled schools were used to administer treatment to the students. English Language Performance Test on Writing (ELPTW) was given as a pretest to all the groups. Experimental group was given treatment before class time (recorded topic CD) in form of flipped classroom. Afterwards, the control group received instruction on the same content using the conventional teacher-centred method alongside the experimental group. Two days after treatment, both groups were exposed to English language Performance Test on Writing (ELPTW) as post-test. All these were done after due consultations with the school authorities of the sampled schools.

Method of Data Analysis: Data gathered from the research work was analyzed using descriptive statistics: mean and standard deviation for the research questions while Analysis of Covariance (ANCOVA) was used to test the hypotheses. All hypotheses were tested at 0.05 level of significance.

Results and Discussion

Research Question 1: What is the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional method on students' use of grammar?

Table 4.1: Mean and Standard Deviation of Pretest Posttest Scores of Students in Flipped Classroom of Blended Learning (Experimental Group) and Conventional Teacher-Centered Method Group in the use of Grammar

Group	Pre-test		Post-test		Mean gain
	Mean	Standard	Mean	Standard	

	No	Mean	Standard deviation	Mean	Standard deviation	Mean gain
Flipped classroom (EG)	400	21.04	5.55	61.20	9.65	40.16
Conventional teacher-centred method (CG)	400	21.02	5.54	40.22	8.28	19.20
Total	800					

Table 4.1 reveals that the mean scores and standard deviation at pre-test stage of flipped classroom blended learning (experimental group) in the use of grammar was (21.04; 5.55), while conventional teacher-centered group was (21.02 ; 2.54). Meanwhile, at post-test stage the mean score and standard deviation of flipped classroom blended learning (experimental group) was (61.20 ; 9.65), while the conventional group was (40.22 ; 8.28) respectively.

This shows a mean gain of (40.16 and 29.20) in the experimental and control

groups respectively. This indicates that there is equal performance of both flipped classroom blended learning group and conventional group at pretest stage. It also shows that experimental group performed better than the control group at the posttest stage because of the treatment.

Research Question 2: What is the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional method on students' use of vocabulary?

Table 4.2: Mean and Standard Deviation of Pretest Posttest Scores of Students in Flipped Classroom of Blended Learning Group (Experimental) and Conventional Teacher-Centered Method Group in the use of Vocabulary

Group	Pre-test			Post-test		Mean gain
	No	Mean	Standard deviation	Mean	Standard deviation	
Flipped classroom (EG)	400	21.06	5.55	54.50	9.25	33.44
Conventional Teacher-Centred (CG)	400	21.04	5.55	35.10	7.25	14.06
Total	800					

Table 4.2 reveals that the mean scores and standard deviation at pretest stage of flipped classroom of blended learning (experimental group) in the use of vocabulary was (21.06 and 5.55), while conventional teacher-centred group was (21.04 and 5.55). This shows that students in the two groups have equal ability and performances at pretest stage.

Meanwhile, at posttest stage the mean scores and standard deviation of flipped classroom of blended learning (experimental group) was (54.50; 9.25),

while the conventional method (control group) was (35.10; 7.25) respectively. This shows a mean gain of (33.44 and 14.06) in experimental group and control group respectively. This indicates that the flipped classroom of blended learning group outperformed conventional group in the experiment because of the intervention.

Research Question 3: There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the

conventional teacher-centered method on students' use of in punctuation?

Table 4.3: Mean and Standard Deviation of Pretest Posttest Scores of Students in Flipped Classroom of Blended Learning Group (Experimental) and Conventional Teacher-Centered Method Group in the use of Punctuation

Group	No	Pre-test		Post-test		Mean gain
		Mean	Standard deviation	Mean	Standard deviation	
Flipped classroom (EG)	400	21.07	5.56	62.38	10.25	41.31
Conventional Teacher-Centred (CG)	400	21.05	5.55	38.10	8.28	17.05
Total	800					

Table 4.3 reveals that the mean scores and standard deviation at pretest stage of flipped classroom blended learning (experimental group) in the use of punctuation was (21.07 ; 5.56), while conventional teacher-centred method group was (21.05 ; 5.55). This shows insignificant difference in the result of the two groups at pretest stage.

However, at posttest stage the mean scores and standard deviation of flipped classroom blended learning (experimental group) in the use of punctuation was (62.38; 10.25), while the conventional group was (38.10; 8.28) respectively. These results

show a mean gain of (41.31 and 17.05) in the experimental group and control group respectively. This indicates that the flipped classroom blended learning group has a greater performance over conventional group in the experiment because of the treatment.

Test of Hypotheses

Hypothesis 1: There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional method on students' use of grammar.

Table 4.6: ANCOVA Results of Pretest Posttest Scores of Students in Flipped Classroom Model of Blended learning (Experimental Group) and Conventional Teacher-Centred Group (Control Group) in the use of Grammar

Source	Type III Sum of Squares	Df	Alpha level	Mean Square	F-value	P-value (Sig)	Decision
Corrected Model	21762.882	3		7254.294	34.189	.000	
Intercept	145243.835	1		145243.835	684.524	.000	
Pretest	1.421	1	0.05	1.421	.007	.935	Significant
Grammar	21755.095	2		10877.548	51.265	.000	
Error	168897.038	796		212.182			
Total	2211514.000	800					

Table 4.6 reveals F-value 51.265 and P-value of $0.000 < 0.05$ (which is less than) the chosen level of significant between 1 and 796 degree of freedom. Therefore, the null

hypothesis is rejected. This indicates that there is significant difference in pretest posttest scores of students in flipped classroom model of blended learning

(experimental group) and conventional teacher-centered method (control group) the use of grammar.

students in flipped classroom model of blended learning and the conventional teacher-centered method on students' use of vocabulary.

Hypothesis 2: There is no significant mean difference in the pretest posttest scores of

Table 4.7: ANCOVA Results of Pretest Posttest Scores of Students in Flipped Classroom Model of Blended learning (Experimental Group) and Conventional Teacher-Centred Method (Control Group) in the use of Vocabulary

Source	Type III Sum of Squares	Df	Alpha level	Mean Square	F-value	P-value (Sig)	Decision
Corrected Model	21762.882	3		7254.294	34.189	.000	
Intercept	145243.835	1		145243.835	684.524	.000	
Pretest	1.421	1	0.05	1.421	.007	.635	Significant
Vocabulary	21755.095	2		10877.548	45.855	.002	
Error	168897.038	796		212.182			
Total	2211514.000	800					

Table 4.7 reveals F-value 45.855 and P-value of $0.002 < 0.05$ (which is less than) the chosen level of significant between 1 and 796 degree of freedom. Therefore, the null hypothesis is rejected. This indicates that there is significant difference in pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional

teacher-centered method (control group) in the use of vocabulary.

Hypothesis 3: There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of in punctuation.

Table 4.8: ANCOVA Results of Pretest Posttest Scores of Students in Flipped Classroom Model of Blended learning (Experimental Group) and Conventional Teacher-Centred Method (Control Group) in the use of Punctuation

Source	Type III Sum of Squares	Df	Alpha level	Mean Square	F-value	P-value (Sig)	Decision
Corrected Model	13100.913	3		4366.971	66.204	.000	
Intercept	15540.445	1		15540.445	235.597	.000	
Pretest	1606.909	1	0.05	1606.909	24.361	.721	Significant
Punctuation	11567.723	2		5783.861	57.685	.025	
Error	18865.101	796		65.962			
Total	448146.000	800					

Table 4.8 reveals F-value 57.685 and P-value of $0.025 < 0.05$ (which is less than) the chosen level of significant between 1 and

796 degree of freedom. Therefore, the null hypothesis is rejected. This indicates that there is significant difference in

pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional method (control group) in the use of punctuation.

Summary of Findings

- There is significant difference in pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional teacher-centred method (control group) in the use of grammar, hence, ($F = 51.265 = 0.000$, $P < 0.05$). Therefore, the treatment of flipped classroom model of blended learning made on the students at a posttest stage showed a greater effect than the pretest stage in the use of grammar.
- There is significant difference in pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional teacher-centered method in the use of vocabulary, hence, ($F = 45.855 = 0.002$, $P < 0.05$). Therefore, the treatment of flipped classroom model of blended learning made the students at a post-test stage showed a greater effect than the pre-test stage in the use of vocabulary.
- There is significant difference in pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional teacher-centered method in the use of punctuation, hence, ($F = 57.685 = 0.025$, $P < 0.05$). Therefore, the treatment of flipped classroom model of blended learning made the students at a post-test stage performed better than the pretest stage in the use of punctuation.

Discussion of Findings

Difference in pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional teacher-centered method (control group) in the use of grammar

Research Question 1

What is the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centered method on students' use of grammar?

Hypothesis 1

There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centered method on students' use of grammar.

The result reveals that the mean score for pretest of students in flipped classroom model of blended learning (experimental group) and conventional method (control group) was (21.04 and 21.02) respectively. While the mean score for posttest of experimental group and conventional group was (61.20 and 40.22).

This implies that experimental group has gained a mean difference of (40.16) while the control group also gained a mean difference of (29.20), after posttest. This shows that students performed better in the posttest stage than the pretest in the favour of students in flipped classroom model of blended learning. However, difference in the posttest scores of experimental group and conventional group was as a result of the treatment in the experimental group that yielded greater effect.

Again, the ANCOVA results reveal ($F = 51.262$, $P = 0.000 < 0.05$) the chosen level of significant between 1 and 796 degree of freedom. Therefore, the null hypothesis is rejected, which indicates that there is

significant difference in the pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional teacher-centred method (control group). The result shows that students performed better in the experimental group than the control group because of the treatment at posttest stage.

This study is in line with the study of Behjat, Yamini and Bagheri (2011) who found difference in the pretest and posttest scores of experimental and control group of their own study. His result revealed that significant difference in the pretest posttest scores of students in experimental and conventional teacher-centered group. They contributed that flipped classroom model encourages students' engagement, ownership and boosts collaboration among students and critical thinking ability in the use of grammar. They also added that flipped classroom model increase success and retention as videos and other pre-recorded devices can be re-watched, rewind or fast forwarded depending when needed. They noted that students' voices are heard more than the teachers, thereby improving students led discussion.

The experiment conducted by Thought (2014) confirmed that there is significant difference in the pretest and posttest of flipped classroom model of blended learning and the conventional teacher-centered method. Hence, flipped classroom is regarded as an instructional approach that requires students to do home study on the learning content while the class time is set aside for students to work in group to investigate and discuss the learning content with teachers serving as facilitators in the classroom. This therefore increases the performance of students in English language and the use of grammar. Marine (2017) also supported the study when he

said flip classroom of blended learning had a better achievement than the traditional method.

Difference in pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional teacher-centered method (control group) in the use of vocabulary

Research Question 2

What is the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of vocabulary?

Hypothesis 2

There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of vocabulary.

The result reveals that the mean scores for pretest of students in flipped classroom model of blended learning (experimental group) was (21.06), while that of conventional teacher-centered group was (21.04). This shows no difference in the performance of the two groups at a pretest stage. Meanwhile, the mean scores for posttest of flipped classroom model of blended learning and conventional method was (54.50 and 35.10). This implies that experimental group has gained a mean difference of (33.44) while the control group also gained a mean difference of (14.06), after posttest. This shows that student's performances yielded a better result in the posttest stage than the pretest stage in the favor of students in flipped classroom model of blended learning. However, the difference in the posttest scores of experimental group and conventional group was as a result of

the intervention in the experimental which resulted in good performance in the use of vocabulary.

Again, the ANCOVA result reveals ($F=45.855$, $P=0.000 < 0.05$) the chosen level of significant between 1 and 796 degree of freedom. Therefore, the null hypothesis is rejected, which indicates that there is significant difference in the pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional method (control group). The result shows that students performed better in the experimental group than the control group because of the intervention at posttest stage. This study is in harmony with the study of Azikiwe (2007) who found difference in the pretest and posttest scores of flipped class learning strategy and conventional group of their own study. He supported that flipped classroom model demands intellectual efforts and cognitive ability as it involves generating ideas, planning, goal setting, monitoring, evaluating and expressing exact meaning in the use of vocabulary. He noted that blended learning seems to have more achievement gains than the traditional face to face classes.

Faye and Andrea (2014) also supported the study when they noted that flipped blended learning encourages interaction and communication. It is a learning that brings out the full potentials of students and gives supports by allowing students feel safe, ask questions and share ideas in order to develop. They also encouraged the teachers and students to embrace new technology for greater and positive achievement by the students.

Ike, Iwu and Onwuagboke (2015) supported that, it is the learning that emphasizes the central role of computer based technology instruction with the aim of

accommodating learning styles of the students. It is the learning styles that effectively combine different methods of teaching in order to have the desired outcome in the use of vocabulary. Consequently, that is why there is a significant difference in the pretest posttest of flipped classroom blended learning and traditional method in the experiment.

Difference in pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional teacher-centred method (control group) in the use of punctuation

Research Question 3

What is the mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of punctuation?

Hypothesis 3

There is no significant mean difference in the pretest posttest scores of students in flipped classroom model of blended learning and the conventional teacher-centred method on students' use of punctuation.

The result reveals that the mean scores for pretest of students in flipped classroom model of blended learning (experimental group) was (21.07), while that of conventional teacher-centred group was (21.05). This shows equal performance between the two groups at a pretest stage. Meanwhile, the mean scores for posttest of flipped classroom model of blended learning were (62.38), while conventional group was (38.10).

This implies that flipped model learning (experimental group) has gained a mean difference of (41.31) while the conventional group also gained a mean difference of (17.05), after the posttest

examination. This shows that students' performance better in posttest stage than the pretest stage in the favour of students in flipped classroom model of blended learning in the use of punctuation. However, difference in the posttest scores of experimental group and conventional group was as a result of the intervention in the experimental group which resulted in good performance in the use of punctuation.

Again, the ANCOVA result reveals ($F=65.962$, $P=0.025 < 0.05$) the chosen level of significant between 1 and 796 degree of freedom. Therefore, the null hypothesis is rejected, which indicates that there is significant difference in the pretest posttest scores of students in flipped classroom model of blended learning (experimental group) and conventional teacher-centred method (control group).

The result shows that students performed better in the experimental group than the control group because of the treatment at post-stage. This study is in accordance with the study of Makice (2012) who found difference in the pretest and posttest scores of their own study. He supported that students develop English language writing skills such as communications skills, technical skills, researching, brainstorming, exploring, sharing ideas, organizing and outlining ideas. Capitalization, paragraphing, correct spellings and good expressions are achieved using flipped model learning strategy.

There is always coherence and easy flow of thoughts. This study is also in line with the study of Graham (2006) who found significant difference in the result of experimental and traditional method. He supported when he contributed that flipped model learning results to the improvement of students' satisfaction, interest and students are allowed to read their

classmates or other people's writings for improvement of their own. This leads to academic achievement of English language students in the use of punctuation. Rao (2019) also supported that flipped model of learning has edged over conventional method because it develops the skill of inquiry which includes: collecting, evaluating information, comparing and contrasting and imagining situation from another perspective.

Conclusion

Base on the findings, the study concluded that there is significant difference in the pretest posttest of flipped classroom blended learning and conventional teacher-centred method; hence the null hypothesis was rejected. Flipped classroom model leads to academic achievement because it encourages students' engagement, boost collaboration among students and critical thinking ability in English language writing skills.

Flipped classroom model increase success and retention as videos and other pre-recorded devices can be re-watched, rewound or fast forwarded outside the normal classroom environment. It is an instructional approach that requires students to do home study on the learning content while the class time is set aside for students to work in group to investigate and discuss the learning content with teachers serving as facilitators in the classroom. It has more achievement gains than the traditional face to face classes because it is a learning that brings out the full potentials of students and gives supports by allowing students feel safe, ask questions and share ideas in order to develop.

Flipped model learning results in the improvement of students' satisfaction, interest and students are allowed to read

their classmates or other people's writings for improvement of their own, thereby leading to effective interaction and cooperation among students. Flipped model learning enhances English language writings skills, create new and encourage creative and practice ideas for teachers and students. It helps students to be actively involved in the learning process.

Recommendations

Based on the findings of the research, the following recommendations were made;

1. Parents should encourage their children by providing enabling environment for study at home so as to attain to their assignments, task and online materials before the main classes at school.
2. Parents, Government and stakeholders in education should provide required internet facilities and electronic systems for online information so as to enhance effective study of the students.
3. Ministry of education should share free computers and other electronic system as it brings good result in student's studying abilities and academic performance.

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