Blended Learning on Students' Performance and Interest in Phonetics at University of Port Harcourt

CHUKWUEMEKA, CHINWE JOYCE[1], Professor C. N. Olele[2], Dr. L. N. Abraham[3]

[1,2,3]*Department of Curriculum Studies and Educational Technology, Faculty of Education, University of Port Harcourt, Nigeria*

Abstract:- This study researched on the utilization of A la Carte model of blended learning on the performance and interest of two hundred (200) level college students in the department of Educational Foundation, Faculty of Education, and two hundred (200) level college students of English department, Faculty of Humanities, University of Port Harcourt, Nigeria. Two-group pretest-posttest semi experimental research design was utilized. The investigation had three (3) research questions and three (3) hypotheses. A sample size of one hundred (100) students was drawn utilizing purposive sampling process. Two (2) instruments were utilized for data collection: Questionnaire on Students' Interest in Phonetics (QOSIP) and Phonetics Performance Test (PPT). The instruments response design was in four-point Likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree. A criterion mean of 2.5 was utilized to distinguish college students' interest for Phonetics through blended learning. Descriptive statistics (mean and standard deviation) were utilized to address the study questions while the null hypothesis were tested utilizing Analysis of Covariance (ANCOVA). The hypotheses were tested at 0.05 level of significance. The discoveries uncovered that A la Carte model of blended learning improved the performance and boost the interest of the students. It was thus suggested that Phonetics lecturers should blend their teaching to conquer the fear students have for Phonetics.

Keywords: Blended learning, Students' performance, Phonetics, University of Port Harcourt.

I. INTRODUCTION

English language as a channel of communication will never be over-emphasized. English remains Nigeria's Lingua Franca and the language of teaching in schools, it has kept up its position as the most fundamental subject in Nigeria educational system. The effect of English Language to Nigeria's nation building has driven the Federal government to pick it as an obligatory subject to each student from early years to secondary (FRN, 2014). Despite the vital role of English language among Nigerian speakers, performance at the senior optional school level have been poor (NECO, 2016; WAEC, 2016).

In any case, it remains the language of education regardless of the language policy indicated in the National Policy on Education. The strategy expresses that 'language of learning in the important school will be the language of the environment for the initial three years, From age four, language of learning will be English language (FRN, 2014). Often times, students consider language and speech, and will in general compare the manner in which words are composed because students invest so much energy figuring out how to read and spell, and are

normally told how important spelling is. The emphasis has been on spelling rather than speech sounds overlooking that speech sounds help spelling. English is additionally the language of governmental issues, religion, financial aspects and business.

Appropriate structure of the language abilities (Listening, Speaking, Reading and composing) opens doors of opportunities to students. The speaking ability is a complementary art to learning. Much the same as learning, speaking is neglected by language teachers. Utilizing Received Pronunciation includes building up a detailed skill about how and when to communicate complex skills for developing and overseeing connection. Pronunciation, stress pattern and intonation are parts of the speaking ability. Learning and speaking abilities are mind boggling skills that should be intentionally taught and learnt in Nigerian schools. Learning and speaking abilities are dismissed on the grounds that English teachers consider Phonetics to be in effect excessively troublesome. Communication, which includes speaking and listening, is important in learning. Marsk and Shain (2013), communicated the worldwide importance of English language which adds to the endeavors of contributor organizations, for example, the British Council, in financing programs focused at improving the English capability of non-native speakers in developing nations. Also, recent computer based Pronunciation teaching, concentrated on the communication techniques.

As per American Dictionary (2016 p 127), Phonetics is a part of language that centers around speech sounds and their creation, Pronunciation, blend, depiction and representation by composed symbols. Phonetics study the manner in which people produce and get speech sounds. It deals with the organization and clarification of speech sounds while phonology considers the sound arrangement of a language. Speech sounds are the premise of every meaning that can be communicated in a language. The human organs of speech encourage the generation of speech sounds. Phonetics are better taught and learnt when native speakers are watched and heard utilizing the language. UNESCO (2014) noticed that ICTs can grow access to language programs and the capacity to communicate relies upon the correct real working of the mind and different important parts of the body. Moreso, that was the reason the present achievement of Information Communication Technology on the planet has offered way to the making of innovative teaching methodologies. These methodologies have integrated the manner in which teaching

and learning happen in a school environment. For example, one area Technology has a superior impact is blended learning. The literature demonstrated that blended learning offered teachers approaches to prepare 21st Century students for 21st century working environment.

This study came up out of the information that blended learning (BL) environment offers a suitable one - on - one and self-guided Phonetics learning experience for higher institution students, much the same as the general acknowledged intertwining of the two methodologies of the web and face to face learning, permit free access and utilization of information. More so, such blend offers differed social collaboration styles in a synchronous or offbeat situation that met different issues and learning styles. Blended learning is the risen star of 21st century. Blended education which is similarly called hybrid learning is another methodology of learning that fuses Technology and smart media with conventional teacher driven classroom activities, giving students opportunity to be accountable for their learning.

In fact, some portion of the learning happens online such that the students have right on what and to what scope at which they get familiar with the content. Face to face and online education cooperate, making a genuinely consolidated teaching classroom. Learning nonetheless, has been upheld with numerous technologies: from radio in 1920s to TV in 1950s and internet learning in 1980s that commenced with computer based-learning (CBL) and moved to web based learning. Teaching and learning have been utilizing technology from 1900s to 2019. Technology has appeared as maps, slides, diagrams, models, movies, stereographs, (TV), radio, charts, Computers, CDs, important edge Computers, smaller scale Computers, films, overhead projector, Computers, iPad, telephones, smart mobile phones, interactive white sheets, programming interactive recordings, internet based life, for example, Facebook, WhatsApp, message, online journals, podcast, Instagram, wikis and so forth.

In light of the Cambridge Dictionary (2018), interest is characterized as the feeling of doing or endeavouring to give focus around something or of needing to be included with and to find out more about something. If something appeals to you, it attracts your attention to learn or hear increasingly about it or continue doing it. For this study, A la Carte or self-blend model was joined with face to face learning environment. It was important to discover the interest of the students in Phonetics through A la Carte model. Students' advantage was studied not on supposition. Additionally, how well an individual does or achieve something like a task is viewed as performance (Cambridge Dictionary, 2018). Amazing performance is the goal of each student and even teachers. Thus, it is pertinent to check the performance of the students who partook in Phonetics.

The following research questions guided this study:

1. To examine how difference in the mean interest scores (MIS) of the students taught Phonetics utilizing A la Carte model (ALC) and those taught in face to face learning environment (F-to-F)?
2. What is the difference in the mean interest scores (MIS) of male and female students taught Phonetics utilizing A la Carte model (ALC) and those taught in face to face learning environment (F – to-F)?
3. To find out the collaboration impact between blended learning and sexual category on students' Phonetics Interest Scores (PIS)?

Also, the following null hypothesis which were tested at 0.05 level of significance were formulated to guide this study.

1. There is no significant contrast in the mean of Phonetics interest scores (PIS) of students taught utilizing A la Carte model (ALC) and those taught in face to face learning environment (F-to-F).
2. There is no huge contrast in the mean of Phonetics interest scores (PIS) of male and female students utilizing A la Carte model (ALC) and those taught in face to face learning environment (F to F).
3. There is no noteworthy association impact between blended learning and sexual orientation on students' Phonetics interest scores (PIS).

II. METHODOLOGY

A semi-experimental research design was usedcontrol group and experimental group were required. Students in the control were not open to the test but rather the experimental group got the A la Carte model of learning. The study included the adoption of pretest, posttest non-equivalent design. The dependent variables which are students' interest in Phonetics (SIP) and students' Phonetics Performance Test (SPPT) checked through the students' post-test information. Additionally, the independent variable which is the teacher strategy or instructional method was shown as A La Carte (ALC) or face to face (F-to-F) technique which was controlled to determine the impact on the dependent variables; SIP and PPT in Education Foundation, Faculty of Education and English Department, Faculty of Humanities, University of Port Harcourt.

The sample size was one hundred (100) college students who were chosen through purposive sampling method utilizing explicit qualities or characteristics like web offices through computers, interactive white boards (IWB) smart boards, iPad (tablets), iphones and smart phones (Nwankwo, 2016). These gadgets serves as a pre requisite to take any web based course utilizing A la Carte or Self-blend model and the students must have access to web. Therefore, the experimental group was comprised of the students who have smart phones, computers and also can get to the web while the control group did not approach the web.

Two instruments were utilized for this study: (1) Questionnaire on Students' Interest in Phonetics (QOSIP) (2)

Phonetics Performance Test (PPT). The principal instrument was titled "Questionnaire on Students' Interest in Phonetics" (QOSIP). This had four sections marked one after another in order A, B, C, and D with 30 items. Likert size of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) was utilized to score the response of the students. The following qualities were dispensed to the responses: SA = 4, A = 3, D = 2, SD = 1. The standard that was utilized to survey the students' performance to blended learning (A la Carte model) was the normal of the response figures: $(4+3+2+1)/4 = 10/4 = 2.5$. In this way, students that scored underneath 2.5 had poor interest while students that scored above 2.5 showed high interest.

The research questions were clearly examined utilizing mean, standard deviation while ANCOVA was utilized for hypothesis.

III. RESULTS

Research question one: How different is the mean interest scores (MIS) of the students taught Phonetics using A la Carte model (ALC) and those taught in face-to-face learning environment (F- to- F)?

Table 1: Mean and standard deviation on the difference in the mean interest scores (MIS) of the students taught Phonetics using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F)

Group	N	Pre-test		Post-test		Mean Gain
		$\bar{x}$	SD	$\bar{x}$	SD	
ALC	43	85.44	14.42	91.814	14.45	6.37
F to F	57	94.12	15.32	101.90	12.03	7.77
Total	100					

Table 1 shows the pre-test and post-test difference between the mean interest scores (MIS) of students taught Phonetics using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F). The finding indicated that students taught Phonetics using face-to-face learning environment (F to F) had higher interest (Pre-test; $\bar{x}$ = 94.12, SD = 15.32, Post-test; $\bar{x}$ = 101.90, SD = 12.03, mean gain = 7.77) than student taught using A la Carte model (ALC) (Pre-test; $\bar{x}$ = 85.44, SD = 14.45, Post-test; $\bar{x}$ = 91.81, SD = 14.45, mean gain = 6.37).

Research question two: What is the difference in the mean interest scores (MIS) of male and female students taught Phonetics using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F)?

Table 2: Mean and standard deviation on the difference in the mean interest scores (MIS) of male and female students taught Phonetics using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F)

Testing Group/Gender		Pre-test			Post-test		Mean Gain
		n	$\bar{x}$	SD	$\bar{x}$	SD	
ALC	Male	19	87.95	16.03	91.95	16.34	4.00
	Female	24	83.46	13.01	91.71	13.13	8.25
F to F	Male	21	85.57	16.61	102.48	14.55	16.91
	Female	36	99.11	12.19	101.56	10.51	2.45
Total		100					

Table 2 shows the pre-test and post-test difference in the mean interest scores (MIS) of male and female students taught Phonetics using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F). The result indicated that female students taught Phonetics using A la Carte model (ALC) had higher interest (Pretest; $\bar{x}$ = 83.46, SD = 13.01, Post-test; $\bar{x}$ = 91.71, SD = 13.13, mean gain = 8.25) than their male counterpart (Pretest; $\bar{x}$ = 85.44, SD = 14.42, Post-test; $\bar{x}$ = 91.81, SD = 14.45, mean gain = 6.37).

Also, male students taught Phonetics using face-to-face learning environment (F to F) had higher interest (Pretest; $\bar{x}$ = 85.57, SD = 16.61, Post-test; $\bar{x}$ = 102.48, SD = 14.55, mean gain = 16.91) than their female counterpart (Pre-test; $\bar{x}$ = 99.11, SD = 12.19, Post-test; $\bar{x}$ = 101.56, SD = 10.51, mean gain = 2.45).

Research question three: To ascertain the interaction effect between blended learning and gender on students' Phonetics Interest Scores (PIS)?

Table 3: Mean and standard deviation on the interaction effect between blended learning and gender on students' Phonetics Interest Scores (PIS)

Testing	Male (n=19)		Female (n=24)		Mean Gain
	$\bar{x}$	SD	$\bar{x}$	SD	
Pre-test	87.95	16.03	83.46	13.01	4.49
Post-test	91.95	16.34	91.71	13.13	0.24

Table 3 shows the interaction effect between blended learning and gender on students' Phonetics Interest Scores (PIS). The result revealed that the interaction effect of blended learning and gender was higher before treatment (Male; $\bar{x}$ = 87.95, SD = 16.03, Female: $\bar{x}$ = 83.46, SD = 13.01, mean gain = 4.489) than after treatment (Male; $\bar{x}$ = 91.95, SD = 16.335, Female: $\bar{x}$ = 91.71, SD = 13.13, mean gain = 0.24).

Hypotheses

H$_{O1}$: There is no significant difference in the mean of Phonetics interest scores (PIS) of students taught using A la Carte model (ALC) and those taught in face-to-face learning environment (F- to- F).

Table 4: Summary of Analysis of Covariance (ANCOVA) on the difference in the mean of Phonetics interest scores (PIS) of students taught using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F)

Based Variable: Posttest						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	remarks
Corrected Model	6721.840[a]	2	3360.920	19.464	.000	P<0.05
Intercept	19058.669	1	19058.669	110.377	.000	P<0.05
Pretest	87.053	1	87.053	.504	.479	P>0.05
Group	6479.320	1	6479.320	37.524	.000	P<0.05
Error	16748.920	97	172.669			
Total	922554.000	100				
Corrected Total	23470.760	99				
a. R Squared = .286 (Adjusted R Squared = .272)						

Table 4 shows that there is significant difference in the mean of Phonetics interest scores (PIS) of students taught using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F) ($F_{1\ 97}$ = 37.524, P < 0.05). Hence, null hypothesis one is rejected at 0.05 alpha level.

H$_{O2}$: There is no significant difference in the mean of Phonetics interest scores (PIS) of male and female students using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F).

Table 5: Summary of Analysis of Covariance (ANCOVA) on the difference in the mean of Phonetics interest scores (PIS) of male and female students using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F)

Based Variable: Posttest						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	rmks
Corrected Model	6980.689[a]	4	1745.172	10.054	.000	P<0.
Intercept	16824.247	1	16824.247	96.925	.000	P<0.
Pretest	120.962	1	120.962	.697	.406	P>
Group	6239.712	1	6239.712	35.947	.000	P<
Gender	233.262	1	233.262	1.344	.249	P>
Error	16490.071	95	173.580			
Total	922554.000	100				
Corrected Total	23470.760	99				
a. R Squared = .297 (Adjusted R Squared = .268)						

Table 5 shows that there is no significant difference in the mean of Phonetics interest scores (PIS) of male and female students using A la Carte model (ALC) and those taught in face-to-face learning environment (F to F) (F_1 95 = 1.344, P > 0.05). Hence, null hypothesis two is retained at 0.05 alpha level.

H_{O3}: There is no significant interaction effect between blended learning and gender on students' Phonetics interest scores (PIS).

Table 6: Summary of Analysis of Covariance (ANCOVA) on the interaction effect between blended learning and gender on students' Phonetics interest scores (PIS)

Based Variable: Posttest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1131.320[a]	2	565.660	2.978	.062
Intercept	3181.213	1	3181.213	16.749	.000
Pretest	917.621	1	917.621	4.831	.034
Gender * Treatment	206.385	1	206.385	1.087	.303
Error	7597.285	40	189.932		
Total	322642.000	43			
Corrected Total	8728.605	42			
a. R Squared = .130 (Adjusted R Squared = .086)					

Table 6 shows that there is no significant interaction effect between blended learning and gender on students' Phonetics interest scores (PIS) (F_1 40 = 1.087, P > 0.05). Hence, null hypothesis three is retained at 0.05 alpha level.

The finding in table 1 demonstrates that students taught Phonetics utilizing face to face learning environment (F to F) had higher interest than student trained utilizing A la Carte model (ALC). Additionally, the outcome of table 4 demonstrated that there is significant difference in the mean of Phonetics interest scores (PIS) of students taught utilizing A la Carte model (ALC) and those taught in face to face learning environment (F to F). Besides, the finding in table 2 demonstrates that female students taught Phonetics utilizing A la Carte model (ALC) had higher interest than their male partner. Likewise, table 5 demonstrated that there is no noteworthy contrast in the mean of Phonetics interest scores (PIS) of male and female students utilizing A la Carte model (ALC) and those taught in face to face learning environment. The finding in table 3 demonstrates that the interaction impact of blended learning and sex was higher before test than after test. Likewise, the outcome in table 6 demonstrated that there is no significant interaction impact between blended learning and sexual category on students' Phonetics interest scores (PIS) (F1 40 = 1.087, P > 0.05). Consequently, null hypothesis three is held at 0.05 alpha levels.

IV. CONCLUSION

The findings of this study gave rise to the following conclusions:

1. The performance of college students of Education Foundations on Phonetics was improved through blended learning. Upgrade was not bias to a specific sex but rather it favored both male and female of Education Foundations than the control group.
2. Phonetics by means of blended learning is appropriate to college students in faculty of Humanities and Education Foundations. Therefore, Phonetics through blended learning is recommended to every of the faculties particularly in the Use of English as a course.

Based on the findings of this study, the following recommendations were made:

1. Policy makers, teachers and students should embrace an all-out change in perspective from traditional way to real usage of blended learning to teach Phonetics.
2. Language research centers ought to be furnished and sufficiently outfitted with assortment of instructional media, for example, recordings, CDs, interactive white boards, computers, web and projectors.

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