Blended Learning Approach on Delivery of Health Education Among Undergraduate Students in Tertiary Institutions in Lagos State, Nigeria

Fasoranti Afolabi Joseph[1*]

[1] *Department of Human Kinetics and Health Education, University of Lagos, Lagos, Nigeria*
* Corresponding author. Email: afasoranti@unilag.edu.ng

Abstract: The era 5.0 coupled with the outbreak of COVID-19 has had an enormous impact on teaching and learning all over the world in which Nigeria is not exempted. In order to reduce the impact of COVID-19 on education, blended learning approach could prove to be effective. Therefore, this study examined the impact of blended learning approach on delivery of health education among students in tertiary institutions in Lagos state. The descriptive research method and Focus Group Discussion were adopted for the study. The sample size comprised one hundred and fifty respondents. A validated Blended Learning Approach Questionnaire with reliability index of 0.89 was used as instrument for data collection. The results of this study indicated that blended leaning approach had significant impact on health education instructions and skills among undergraduate students. The study recommended that blended learning approach should be inculcated in order to improve learning outcomes among students.

Keywords: blended learning approach, delivery, health education, skills

1. INTRODUCTION

Education plays a prominent role in human and capital development of a nation. The relevance of education to social, physical and economic development of a nation cannot be underestimated. In 2020, during the outbreak of the corona virus pandemic, lots of government in the world came up with policies to curtail the detrimental effects of the virus. One of such polices is the closure of all schools. This in turn had negative effect on teaching and learning processes [1]. One year plus into the Corona virus outbreak, close to half of the world's students and pupils are still affected by partial or full closures of schools, and estimated 100 million additional school children will drop below the minimum proficiency level in reading as a result of the pandemic [2]. Therefore, prioritizing education recovery through advancement in technology such as online teaching (zoom, google meet), could prove to be crucial in order to avoid a generational catastrophe that comes with mass illiteracy.

In order to overcome the challenges that came with COVID-19, Government at all levels should create an equal access to education for students, effective delivery of society need-based educational contents, engagement of students through a carefully planned and structured pedagogical support with the online/blended learning technologies. Reference [3], blended learning approach is the effective combination of various modes of educational delivery in teaching and learning styles. Blended learning also involves the deployment of educational technologies in an environment that is conducive for both teachers and learners. Reference [4] sees blended learning approach as a system that combine face-to-face instruction with computer-mediated or educational technology-based instruction. Blended learning is the approach of teaching methods that combines face to face teaching techniques and virtual interactive collaboration [5]. He further reiterated that blended learning approach helps in adequate delivery of learning instructions such as sciences, which operates within the three domain of learning, which includes psychomotor, affective and cognitive domains.

Health education is the combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge and influencing their attitudes towards informed health decisions. Health education is the discipline of educating people about their health and also principles by which individuals and groups of people learn to behave in a manner conducive to the maintenance, promotion and restoration of health. It involves skill acquisition in health practices and knowledge-based attitudinal changes [6]. Therefore, to meets the educational objectives and goals of health education, blended learning approach could prove to be an effective tool. Blended learning is an innovative technique that embraces the advantages of both traditional teaching in the classroom and information communication technology (ICT) supported learning both offline learning and online learning.

In the current global situation, the use of blended learning technique can aid teaching-learning process in health education, and also promote students' academic performance. Health education entails teaching of skills such as demonstration and re-demonstration of healthy hygiene practices which can be acquired through observation in face – to- face interactions while knowledge-based health education principles and ethics of the profession can be thought through the online technique. Combination of both the virtual and

traditional methods of teaching (blended learning system) is the most suitable in delivering instructions to the students [7]. The blended learning helps to comply with COVID-19 guidelines which states that lectures above 250 students should be done virtually [8]. Blended learning approach combines the merits of virtual learning with some merits of traditional learning which in turn maximizes the efficiency of classroom training and provides better reinforcement in web-based elements. In this approach, a lecturer may teach the practical sessions in health education. Reference [9] revealed that application of a blended learning system improved students' performance and education achievement compared to other approaches. Also, students using the blended learning reported increase in their performance and learning outcomes as they have more time learning the task at their own pace and conveniences.

To this end, this article examined the influence of blended learning approach on delivery of health education among undergraduates in tertiary institutions in Lagos state Nigeria.

2. METHOD

This study adopted descriptive research method. A predesign questionnaire was constructed using google document. A network sampling technique was used in selecting the one hundred and fifty participants for the study. The participants cut across various level of health education students and lecturers in tertiary institutions in Lagos state. Participants were contacted through WhatsApp. Participation in the study was consensual, voluntary and totally anonymous. A validated Blended Learning Approach Questionnaire with reliability index of 0.89 was used as instrument for data collection. The instrument was divided into two sections. Section A elicited information based on the demographic data of the participants while section B contained 10 items on health instructions and skill acquisition in health education.

Data analysis was done using Statistical Package for Social Sciences (SPSS) version 22. The aims and objectives of the study were sent to the participants via WhatsApp messages and all participants signed informed consent form before the administration of the instrument. Descriptive statistics of frequency counts and percentages were used to analyze the demographic data of respondents while inferential statistics of chi-square was used to test the hypotheses at 0.05 level of significance.

3. RESULTS

Based on the results of the calculation of data analysis, the percentage of respondents: 39% men and 61% women. Of these, have different age categories. These data are presented in Table 1.

Table 1 Demographic Presentation of Respondents Demographic Characteristics

Gender	Frequency (n=726)	Percent (%)
Male	59	39.33
Female	91	60.67

Total	150	100
Age category		
18-23 years	88	58.67
24-29 years	37	24.67
30 years & above	25	16.66
Total	150	100

From the distribution of respondents, it comes from lecturers and students.

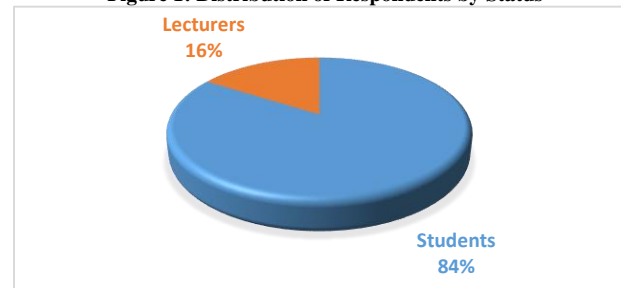**Figure 1: Distribution of Respondents by Status**

Table 1 and figure 1 respectively shows that majority of the participants are female, accounting for 60.67 percent of the total respondents. In the age category, 88 (58.67%) of the respondents were between the age of 18-23 years, 37 (24.67%) were between 24-29 years while 25 (16.66%) of the respondents were between the age range of 30 years and above. The study also revealed that 126 (84%) of the respondents were health education students while 24 (16%) of the respondents were health education lecturers.

Table 2: Responses on Influence of Blended Learning on Skill Acquisition in Health Education

Skill Acquisition in Health Education	SA	A	D	SD	F	$\bar{x}$
Blended learning approach is suitable to impact health education skills	73	67	9	1	150	3.54
It gives opportunity to practice the skill of demonstration by observation and practice of health education skills	121	21	3	5	150	3.67
I believe integration of blended learning will help me to carry out my assignment and research work	93	47	7	3	150	3.61
Blended learning will enhance my communication skills which is one of the key components of health education	45	56	28	21	150	3.12
It will be easy to adopt health advocacy and goal setting skills through blended learning	32	84	15	19	150	3.22
Grand mean						3.43

Table 3: Responses on Influence of Blended Learning on Health Instruction in Health Education

Health Instruction in Health Education	SA	A	D	SD	F	$\bar{x}$
I learn better in blended learning approach because it gives	62	69	11	8	150	3.48

opportunity to interact with my lecturers both online and physically						
Blended learning approach is suitable for effective delivery of health instruction	56	71	13	10	150	3.24
Integration of blended learning will broaden my breadth and scope in health education	12	96	6	36	150	3.33
I find blended learning to be impactful in health education instruction delivery	56	77	14	3	150	3.59
My academic performances and retention improves better during the blended learning sessions	45	84	11	10	150	3.41
Grand mean						**3.41**

Results obtained from table 2 and 3 shows that majority of the respondents agreed that blended learning approach will be effective in the delivery of skill acquisitions in health education with grand mean of 3.43. It also revealed that majority of the respondents agreed that blended learning approach is effective in the delivery of health instructions in health education with grand mean of 3.41.

Table 4: Chi-square Summary on the Influence of Blended Learning Approach on Skill Acquisition in Health Education

Variables	N	Df	L.S	X^2 cal	X^2 tab	Remarks
Blended Learning on Skill Acquisition	150	9	0.05	77.12	15.01	Significant

Table 4 indicated that the calculated x2 value of 77.12 is greater than the critical value of 15.01 established at degree of freedom 9 and tested at 0.05 level of significance. This shows that blended learning had significant influence on skill acquisition in health education.

Table 5 Chi-square Summary on the Influence of Blended Learning Approach on Health Instruction in Health Education

Variables	N	Df	L.S	X^2 cal	X^2 tab	Remarks
Blended Learning on Health Instruction	150	9	0.05	71.34	15.01	Significant

Table 5 indicated that the calculated x2 value of 71.34 is greater than the critical value of 15.01 established at degree of freedom 9 and tested at 0.05 level of significance. This shows that blended learning had significant influence on health instruction in health education.

4. DISCUSSION

From the findings of this study, result showed that bended learning had significant influence on the acquisition of skills in health education. Blended learning has the capacity to offer both the students and lecturers independence, as well as opportunities to acquire and develop skills such as information communication technology, advocacy and teaching skills. This finding also agrees with the findings of [10] who reported that blended learning approach provides the opportunity for students to select the mode most suitable to them as such gives confidence and necessary motivation to concentrate and improve in their academic pursuit.

The study also revealed that blended learning approach also had significant impact on the delivery of health instructions in health education. Blended learning approach afford the teacher to combine ICT and other technology assisted videos in the delivery of instructions to the students. It also provides the opportunity for the students to practice both online and offline at their own pace and environmental conditions. Blended learning has positive impact on learning process because it combines advantages of instructional models. It maximizes the efficiency of classroom training and provides better reinforcement in the web-based elements. Through blended learning, students have opportunity to prepare and interact with their fellow students and lecturers online which is not possible during physical classroom settings. [11], reported in their study that student exposed to blended learning exposure made a significant progress from pre-assessment to post-test assessment based on grade level, content covered and mode of instructions while students in the control group that were exposed to only traditional classroom only saw a fraction of the growth from pre- to- posttest assessment. Corroborate the result by stating that blended learning approach contributes to learners' engagement and overall positivity in regards of course design, content and delivery [12].

5. CONCLUSION

The aim of this study was to examine the influence of blended learning approach on the delivery of health education among undergraduates in tertiary institutions in Lagos state. The result of the study showed that there was significant influence of blended learning approach on skill acquisitions and health instruction as observed by health education students and lecturers. Although, blended learning has its own challenges which is peculiar to Nigeria environment but if it is properly harnessed and utilized, it will help to improve the delivery of instructions to the students.

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