

Improving Teacher Education through Blended Learning in Nigeria's Colleges of Education

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ABSTRACT

The study was carried out to determine the contributions of blended learning in improving teacher education. The study was carried out in Alvan Ikoku Federal College of Education Owerri. A sample of three hundred pre-service teachers from the School of Natural science was used for the study. A researcher made questionnaire instrument of the Likert 4 points type was used to generate data. It had reliability coefficient of 0.72 determined through Persons product moment correlation coefficient. The generated data was analyzed using mean and standard deviation. The result revealed that, blended learning has positive contributions in improving teacher education. Based on the result, it was recommended that teacher education curriculum should incorporate blended learning approach in training pre-service teachers.

Keywords: Teachers' Education, Blended Learning

INTRODUCTION

Skills of teaching implementation are one of the most relevant skills needed by the teacher. These skills are acquired by the individual student in educational institutions before they move into the teaching field. Student teachers suffer from a weakness in teaching implementation skills, as well as the need to practice these skills effectively, which is definitely a barrier in front of achieving teaching goals effectively and quickly. Enhancing student teachers learning experiences has become more important in higher education in recent time due to increased students enrollment and diversification. Educational approaches that represent a shift in instructional strategy are often described as blended learning and virtual reality learning environments often considered as educational environments for blended learning. Bonk and Graham (2006) describe blended learning as the combination of web-based and face-to-face learning. This reflects that blended learning is the combination

of instruction from two historically separate models of teaching and learning. Traditional learning system and distributed learning systems. It emphasizes the central role of computer based technologies in blended learning. According to Singh and Reed (2001), blended learning is a learning programme where more than one delivery mode is being implemented for optimization of learning outcome and cost. It focuses on optimizing achievement of learning objectives by applying the right technologies in order to match the right personal learning style to transfer the appropriate skills to the right person at the right time (Singh, 2001). It was also noted that:

- i Blended learning refers to courses that combine face-to-face classroom instruction with online learning.
- ii It is also referred to as a form of enhanced classroom online instruction.
- iii Also referred to as mixed mode learning or hybrid learning.
- iv Blended learning is not simply “bolted on” to an existing face-to-face learning programme but constitutes a redesign of the teaching and learning relationship.

Williams, Bland and Christie (2008) define blended learning as a combination of traditional face-to-face learning and distributed learning, the latter of which is an instructional model that allows lecturers, students and content to be in different location”. A main feature of distributive learning is that the learning environment is designed to accommodate the fact that students have different learning needs and preferences. This pedagogical model encourages students to learn in an interactive and collaborative environment, and at their own pace and in their own time (Graham, 2006).

Yen and Lee (2011) asserts that blended learning, thoughtfully combining the best elements of online and face-to-face education, is likely to emerge as the predominant teaching model of the future. Graham (2006) describes blended learning as the convergence of face-to-face settings, which are characterized by synchronous and human interaction, with Information and Communication Technology (ICT) based settings, which are asynchronous, text based, and involves humans operating independently. Garrison and Vaughan (2008) define blended learning as the thoughtful fusion of face-to-face and online learning experiences” and emphasize the need for reflection on traditional approaches and for redesigning learning teaching in this new terrain. Zaytoon (2005) refers to blended learning model as it is a sort of learning and teaching in which E-learning complements traditional learning, because it employs E-learning tools, which includes computers, interest lessons, lectures, and training sessions which take place in real classroom such as computer laboratories, and intelligent classes. In these classes, the teacher meets his students face-to-face in the same time every time. In these types of learning, the instructor leads the process of teaching and learning but it does not mean that the instructor is responsible for students learning but it means that he is directing students’ learning process, while students learn collaboratively with their peers all the time. Thus, mixed learning is usually, a student centered learning (Zaytoon, 2005). Blended

learning extends teaching and learning beyond the classroom walls, developing critical thinking, problem solving, communication collaboration and global awareness. Blended learning enhances students learning especially by creating opportunities for them to improve their understanding through their own exploration and research of certain issues and topics (Sharpe, Benfield, Roberts and Francis, 2006). It encourages student – led learning and allows students to learn at their own pace. It gives greater flexibility of learning for students, which in turn, improves students learning experiences and achievement. In blended learning, the student can learn from an online course that matches his/her different learning styles, and at the same time, students can learn from lectures in class (Osguthrope and Graham, 2003).

In blended learning, a student can also learn from social interaction, whether face to face or online and get immediate feedback. Through blended learning, the students' achievement is higher because, retention of the learning material is increased through the use of media and VLE tools (Thompson, 2003) and has access to different online resource. Echavez–Solano (2003) found that the students in technology-enhanced classes had better understanding of course content, immediate feedback self learning and control of their learning. Blended learning environments provide students the option to select the type of learning environment that best meets their individual learning and scheduling needs. It allows students to experiences and takes advantage of the best educational elements that both face-to-face classroom environment and the online learning environment have to offer. Shea (2007) persists that blended learning often solves the problem of access. More specifically, student access to education is increase in terms of time and physical location and in terms of reducing or eliminating the need to be in a physical classroom space at a specific time. A well organized blend teaching practice course can encourage students to be active participants in the class discussion and may help to create a collaborative learning environment through providing asynchronous interaction among students and between instructors and students that is a key factor in student learning.

Education is one of the sectors that most benefited from the current technological advancement. With this development, time and space are no more barrier to education. Considering the different styles of learning among students, a single mode of instructional delivery may not provide sufficient opportunities to them. At the teacher education level, the pre-service teacher is supposed to be armed with different models of teaching as to be able to face the technological challenges in education. This study therefore looks at the contributions of blended learning approach in improving teacher education. The main purpose of this study is to determine how blended learning approach will improve teacher education. Specifically, it will determine

- i Pre-service teachers' perceptions of blended learning contributions to teacher education.

- i** If any difference exists between male and female pre-service teachers perceptions of blended learning and teacher education.

The following research questions guided the study:

1. What are the perceptions of pre-service teachers on contributions of blended learning in teacher Education?
2. What is the difference in the perceptions of male and female pre-service teachers on blended learning and teacher Education?

METHOD

The study adopted the descriptive survey research design in eliciting information from pre-service teachers on improving teacher education through blended learning. A total of three hundred pre-service teachers from School of Natural Sciences of Alvan Ikoku Federal College of Education, Owerri were sampled for the study. This consists of 200 hundred female and 100 males. They were all 300 and 400 level students. This sample size was drawn through simple random sampling technique across the seven departments. A 4-points likert type of questionnaire titled “Blended Learning and Teacher Education (BLTE)” designed by the researchers was used to elicit information from the respondents. It was divided into two sections. Section 1, dealt with respondents demographic variables while section 2, dealt with information on contributions of blended learning in improving teacher education. The face and content validity of the questionnaire instrument was determined by two measurement and evaluation experts and a teacher education expert respectively. Their judgments guided the modification of the instrument before it was administered. The instrument had reliability coefficient of 0.72 determined through test-retest method using Pearson Product Moment correlation coefficient. The instrument was administered to the students by the researcher and they were allowed to return them the next day. This was to enable them digest the content properly before responding. The data gathered through the questionnaire were analyzed using descriptive statistics (mean & standard deviation) in answering the research questions. Any item with response mean of 2.5 and above was accepted as a factor while any below was rejected.

RESULTS AND DISCUSSION

Table 1 shows that all items were accepted as they had mean scale above the instrument scale mean of 2.50. This implies that, the items conform to the contributions of blended learning in teacher education. Table 2 shows that a difference of 0.01 exists between the mean responses of male and female in-service teachers however, this difference is not meaningful. This implies that gender has no influence on the views of in-service teachers on the contributions of blended learning in teacher education. The result of the study revealed that, blended learning approach has a lot of contributions in the development of teacher education. This is evident in the

mean responses of the pre-service teachers which showed acceptance of the items which include understanding of content, classroom practices, student centeredness, classwork participation, enough time and feedback and many more. These are indications that blended learning will improve teacher education if appropriately applied. This result is in an agreement with those of Echavez-Solano (2003), Thompson (2003), Zaytoon (2005) who usually indicated the relevance of blended learning in teacher education. The study also revealed that the accepted mean responses cuts across gender as male and female pre-service teachers had positive responses on the contributions of blended learning in improving teacher education. This result is in tandem with that of Lord, and Lomicka (2008) which revealed a positive influence of blended learning in teacher education across gender.

Table 1: Summary of Pre-service teachers Responses

S/N Item	MALES		FEMALES		Remarks
	\bar{X}	SD	\bar{X}	SD	
1 Blended Learning enhances understanding of content area in teacher education	2.80	0.96	2.81	0.92	accept
2 Classroom practices in teacher education is improved through blended learning	2.72	0.92	2.71	0.93	accept
3 Student cent red lessons are enhanced through blended learning	2.70	1.02	2.68	1.00	accept
4 Blended learning improves learning experiences	2.62	0.93	2.70	0.94	accept
5 It enhances access to knowledge	2.60	0.94	2.62	0.92	accept
6 Blended learning is pedagogically rich	2.92	1.00	3.00	1.03	accept
7 It enhances students classroom participation	2.70	1.00	2.72	1.01	accept
8 Blended learning encourages students activity engagements	2.56	0.92	2.51	0.90	accept
9 Blended learning promotes students retention and learning	3.00	1.00	3.02	0.97	accept
10 Learners interact socially and negotiate meaning in blended learning classroom	2.80	0.92	2.73	0.93	accept
11 Learners have enough time and feedback in blended learning classes.	2.72	1.00	2.61	0.95	accept

Source: Survey, 2013

Table 2: Difference in mean responses of male and female pre-service teachers

Group	N	Mean	SD	Diff in.
Males	100	2.74	0.97	0.01
Females	200	2.73	0.96	

Source: Survey, 2013

CONCLUSION AND RECOMMENDATIONS

The study was carried out to determine the contributions of blended learning in improving teacher education. The result of the study revealed that blended learning has positive contributions in improving teacher education which holds no barrier across gender perceptions. Based on the findings of the study, the following recommendations are made:

- i. Teacher education curriculum in Nigeria should be redesigned to adequately include blended learning in classrooms environments.
- ii. Lecturers in teacher education institutions should be trained on the application of blended learning approach in their classrooms environments so that pre-service teachers can benefit.
- iii. ICT facilities required in a blended learning environment should be put in place by government as to enhance its application.

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