

PERCEPTION OF PRE-SERVICE TEACHERS ON THE USE OF BLENDED LEARNING TECHNIQUES IN NWAFOR ORIZU COLLEGE OF EDUCATION, NSUGBE, ANAMBRA STATE

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Abstract

Pre-service teachers face several challenges as they strive to achieve excellence in their chosen field. Not only must they prove they master their subject matter, but they must also show competence in classroom management, methodology, and assessment. These can be achieved during their pre-service training. This study examined perceptions of pre-service teachers on Blended Learning Techniques (BLT). The purpose of the study was to identify, examine and analyse the perceptions of pre-service teachers in Nwafor Orizu college of Education Nsugbe, Anambra state on Blended learning techniques. The population for the study was one hundred and forty (140), 200 level pre-service teachers and the sample for the study consisted of 70, 200 level pre-service teachers randomly selected using simply random sample. Two sub-scale questionnaires were used for data collection. The data were analysed using percentage, frequency table and simple statistical mean to find the average responses of the study. Means that fall below 2.50 were rejected. The results of the study showed that pre-service teachers had positive opinions about blended learning techniques and there are challenges in the implementations. It was recommended among others that, different models of blended learning techniques should be adopted according to the courses instead of one typical model for all courses. Also lecturers should be motivated and there should be stable and constant power supply. There should be free internet access for a successful implementation.

Keywords: *Blended learning techniques, face to face learning, web based learning, pre-service teacher, and internet.*

Introduction

There have been continuous efforts on the part of researchers, curriculum developers, teachers and all and sundry in the educational sector on how to improve teaching and learning process. The educational system at present is in a transition stage to meet the challenges of expansion and for providing individuals need, it is trying to adopt new technologies and exploring new paths to reach the goal of quality educational opportunities for all. At the same time, due to various factors like deficient budgets, lack of facilities, advantages of face to face interaction, Nigeria educational system is not completely ready to leave the traditional modes of knowledge transfer. George (2000), stated that technology plays a vital role in helping learners and teachers meet a higher standard and perform at increased levels by promoting alternative and innovative approaches to teaching and learning.

.The traditional model of learning in spite of its few shortcomings provides a much required human touch to the teaching-learning method. Temperament and behaviour of the teachers directly influence the blooming temperament of the students. Solely face to face interaction meets the emotional objectives in conjunction with cognitive and bodily function. Face to face traditional approach helps in developing a robust worth system. Social skills like cooperation, sharing, expression and respecting other's views are more easily developed in the traditional mode of teaching. Students learn not solely from books, or from lecturers

teaching inside the classroom but conjointly from the co-students, through their colleagues' group interaction, they learn several skills through socialization.

Pre-service teacher training programmes are organised, recognised and designed, private and public educational programmes designed to train to be teachers to formally enter the profession at a specified level of education.

In recent years, the increase of personal computer usage, developing internet technologies and quick internet connection laid the groundwork for providing a very important item of distance education with the web. Consistent with Davies (2003), Blended Learning combines training, coaching, and self-help. Blended learning technique is an instructional approach to teaching that has been a part of the education field for many years; however, a standard definition of this idea fails to exist. The term blended learning is a new approach to education and it is being used with increasing frequency within the academic world. A standard definition of blended learning as a type of distance education supported on web technology refers to the combination of traditional face-to-face educational methodology with the self-study online educational resources that makes it attainable to get pleasure from the potential of each teaching method. It is a mixture of pedagogic approaches that mix the effectiveness and also the socialization opportunities of the classroom with the technological enhancements of online learning (Dziuban, Hartman, Juge, Moskal, &Sorg, 2006).

Blended learning has been identified by the American society for training and development (ASTD) as one of the top ten trends to emerge in the knowledge delivery industry and it is emerging as a major global trend in an educational context (Allen & Seaman, 2006). Blended learning is known roughly as combining the traditional instructor-led classroom learning and technology-based eLearning. The significant presence of web-based instruction over the last few years has led to the emergence of the term blended learning, which is also called hybrid learning or mixed mode learning. Graham (2006) indicates that online (web-based) learning and face-to-face learning have remained mostly separate in the past due to the variations in their strategies and audience needs. He points out that 100% online learning, or distance learning, needs additional self-paced learning and learner-materials interactions compared with (traditional) face-to-face learning that places priority on human-human interaction. However, with innovations in technologies, facilitating human interaction in synchronous and asynchronous online learning has inspired the integration of face-to-face setting with an online setting.

Graham, (2006) acknowledged, that with blended learning approach, learning environments solve some communication problems sourced by distance education environments; decrease time and cost in traditional class; offer to use the buildings owning to education institutions.

No technique presented alone may be ideal for the accomplishment of the educational objectives as a result of the fact different individuals' needs different education methods. Blended learning allow user to find the most appropriate learning style to their education needs. Blended learning is a combination of the most effective set of approach and also the best added education strategies and the best instruction strategies that are practiced. (Wilson & Smilanich, 2004). According to Wilson and Smilanich, 2004, the benefits of using this approach are as follows:

- Reaching education in a widening field
- Easy practice
- Effectiveness of benefit-cost
- Positive professional results

- Serving numerous needs
- Developed education
- Enhanced student learning outcomes
- Flexibility for college students and lecturers improved autonomy, reflection, and research skills
- Reduced student withdrawal rate

In addition to the above, to make pre-service teachers information correlate with the present technological advancement and globalization, to minimize the teaching errors, to improve the quality, to increase student's exposure ICT supported teaching and learning process is a good option. ICT supported teaching provides a new dimension to teaching and learning process introduces students to wide pool of knowledge and opens before them innumerable opportunities to learn, unlearn and relearn. Every learner whether pre-service, in-service, physically challenged all can benefit through this mode of teaching which helps in reaching all students. One of the multiple realities of implementing quality preparation and support for pre-service teacher educators is an inclusion of 21st-century "technology" skills in teaching. To prepare students for the future, we must ensure that our teachers are equipped for the future as well. Therefore, teacher educators should be challenged to revise teacher preparation programs to reflect the needs of 21st-century learners so that teachers who will effectively and comfortably use technology to enhance student learning will be produced. While today's college of education students may be very familiar with social networking sites, digital music, and video sharing, they are not as familiar with many of the opportunities technology offers to enhance and provide quality instruction in a classroom setting (Albion, 2008; Orey, McClendon & Branch, 2006).

The traditional instructor-led classroom learning is a proven and effective means of learning, with full opportunities for interaction between the instructor and students, the learning-inducing stress of exams and homework, and relationship forming among students, etc. However, the requirement for the students to be in the classroom on designated days and times makes it difficult for certain students. Further, the lack of equipment in the classroom may make it difficult for the instructor to teach certain topics effectively. The technology-enabled e-learning can help address such difficulties posed by the limitations of the traditional classroom learning. There is a variety of types of e-learning, ranging from degree-conferring cyber universities and vocational schools, certificate-conferring programs, corporate training programs using videos of instructors delivering instructions – overlaid with PowerPoint pages, to people watching CDs on their computers or browsing the Web for materials on specific topics of interest.

However, pure e-learning has its own limitations, depending on the types of e-learning and how the e-learning is designed, these may include the absence of an instructor, poorly created or inconsistent materials (course contents) – compounded by the absence of an instructor or tutor, the absence of a deadline pressure – which tends to lead to lower learning efficiency, etc.

As both the traditional classroom learning and e-learning simultaneously offer strengths and suffer from limitations, it is only natural to combine the strengths of the two into blended learning. In this sense, it may be said that today the most natural form of learning is blended learning. The traditional classroom learning has required research, or at least thoughtful considerations on the part of the instructors for generations, to make it effective for learning. Similarly, research is still needed to realize the full potential of e-learning. Blended learning requires yet additional research to make the combination of the traditional classroom learning and e-learning as effective as possible.

According to Sainn and Ugwuegba (2002), perception is defined as, “the process by which we extract meaningful information from physical stimulation. It is the way we interpret our sensations”. Similarly, Roth (2001) provides a cognitive definition of perception by saying, “the term perception refers to the means by which information acquired from the environment via the sense organs is transformed into experiences of objects, events, sounds, tastes, etc.” Stuart-Hamilton (2000) views perception as a mental operation that considers sensory information, “the interpretation of the environment through the senses”, while thoughts and behaviours resulting from the detected stimulus are excluded. Significantly, perception is associated with three points as stated by Sainn and Ugwuegba, (2002), firstly, perception is influenced by the stimulus, individual’s experience, intention, and social needs. Secondly, the perceiver selects information and forms hypothesis to decide what is actually happening and finally, perception is an activity of higher mental processes that enable us to have our own view of the world, anticipate future happening and act accordingly. The pre-service teachers’ prior experiences, age and gender influenced their perceptions. Perceptions were not fixed because their views (on knowledge, pedagogy professional and interpersonal qualities) differed in response to new learning or new priorities. Learning for the pre-service teacher was developmental, moving from the focus on self to a deeper, more insightful ethical, professional view of them. Furthermore, perception of students towards a learning environment may influence their behaviours in that environment. The effect of experiences, culture and personality on perceptions makes people inevitably perceive things differently.

Therefore, the students’ perceptions reflect how they see their lecturers’ behaviours and teaching approach and vice versa. Consequently, exploring the perceptions of the pre-service teachers on the use of blended learning environment in colleges of education will assist in understanding how they learn in this new learning environment.

Pre-service teacher also known as teacher candidates, is used to describe student teachers who are enrolled in a teacher preparation program and working toward teacher certification. During this period of teacher education programmes, teaching practice goes side by side, while they are getting knowledge about theory papers. Pre-service teachers’ are those students who participated in pre-service training or education, a “course or program of study which student teachers complete before they begin teaching” (Richards & Schmidt, 2002). The beginning teachers in this case learn from their practice and from the culture and norms of the unique school settings where in they have been placed and interact with these cultures.

It is important for teacher educators to learn the methodology of how to get in touch with the core qualities of a good teacher and how they can stimulate these qualities in student teachers. This will lead to a deeper involvement in the learning process of teacher educators as well as student teachers. The blending of instructional objectives, strategies and the condition of online resources of teachers play a significant role in designing (Akkoyunlu & Soyly, 2008). That is, the learning process in BLEs concentrates on implementing designed and agreed to learn objectives through innovative instructional technologies adapted to transfer skills and knowledge in real time. Additionally, pre-service teachers’ satisfaction as well as their perception on blended learning in Nwafor Orizu College of education plays a significant role in order to assess the effectiveness of blended during their program. Chen and Jones (2007) conducted a survey on MBA students in an accounting class, which aimed at assessing students’ evaluation of course effectiveness and overall satisfaction of the traditional and blended courses. Students’ perceptions indicated that students in traditional setting were more satisfied with the clarity of instruction.

On the other hand, students in blended learning class gained an appreciation of the class and indicated more strongly that their analytical skills improved (Chen & Jones, 2007). This study indicated that when students

are in traditional setting, instruction becomes clearer but when they are in blended class, learning process may become doubtful for them although they see more improvements in their analytical skills.

Akkoyunlu Andsoylu (2008) researched students' views on blended learning with respect to their learning styles. They indicated that students' views on blended learning are positive with a level of 8.44 in a range of 1 to 10, 1 being the lowest and 10 being the highest. Furthermore, Akkoyunlu & Soyly (2008) pointed out that highest grade of students' perceptions is given to face-to-face environment that learning is best linked with classroom teaching. Face-to-face learning environment is favoured in both studies (Akkoyunlu & Soyly, 2008; Chen & Jones, 2007). Chandra and Fisher, (2009) have studied high school students' perceptions of a blended web-based learning environment. Their findings revealed that web-based learning environment has been evaluated as convenient, accessible, promoted autonomy of learning, promoted positive interactions between peers during web-based lessons, enhanced enjoyment and regarded as clear, easy to follow and understandable. Moreover, students preferred asking questions to teacher as face to face instead of asking through email (Chandra & Fisher, 2009). All these findings showed that face to face instruction is regarded as one of the very important part of education.

Blending learning has been faced with some challenges as indicated by Graham, Allen, and Ure (2005), the three major categories of challenges facing effective implementation of blended learning environment (BLE) include;

- **Finding the right blend:** This challenge is complex because it relates to achieving the right blend, both from a learning and cost-effective point of view.
- **Increased demand on time:** Adding an online component to a face-2-face course puts increased time demands and stress on the teacher as well as the department or the institution as the case may be in developing and delivering the blended course (Hartman, Dziuban & Moskal, 2002).
- **Overcoming barriers of institutional culture:** there are cultural barriers for both learners and instructors that must be overcome in order to use BLTS. The components of BLTS require a large amount of self-discipline on the part of the learners because learning in that setting is largely independent (Collis, 2003). In current higher educational online learning environments, students tend to procrastinate when they have little required contact.

Evidences abound that many learners do not complete online courses because they lack the discipline or the motivation to complete the courses. If BLTS are to be highly successful, there is need to ensure that learners imbibe the spirit of persistence.

Similarly, management support for BLTS is therefore very essential if they are to succeed as teaching and learning model in teacher education programmes. Changing instructional approaches in education is no mean task particularly when technology is involved.

Many researchers seem to agree that student attitude and experience is a key viable in the implementation of blended learning (Cartner, 2009; Coryell & Chlup, 2007; Sagarra & Zapata, Stracke, 2007). Making sure that learners have a positive learning experience is a fairly basic tenet of most, if not all, academic learning environments.

In this regard, understanding pre-service teachers' satisfaction of blended learning technique is a fundamental step that may provide insights into the enhancement of blended learning effectiveness. Therefore, it is

important to examine the perception of preservice teachers on the use of blended learning techniques in Nwafor Orizu College of Education.

Statement of the Problem

A better learning technique will equip pre-service teachers with the knowledge and high level of understanding very important for the development and implementation of a successful curriculum in primary and secondary schools when they are in-service. Different learning technique, have been tested but as a result of their lapses, the idea of combining the conventional form of learning and a digital type was invented which was named blended learning. There has been a continuous outcry on the poor academic performance of students both in primary and secondary schools, which can be related to the quality of teachers teaching them. As the saying goes, that you cannot give what you do not have therefore, pre-service teacher who are still in training to becoming teachers need to be grounded in every teaching method that will equip them in dispensing their duties well. While many pre-service teachers' considered blended learning as a good learning technique, others think otherwise. Hence the need to analysis the perception of pre-service teachers on blended learning technique.

Purpose of the Study

The main purpose of the study is to analysis the perception of pre-service teachers on the use blended learning technique. Specifically, the study tried to;

1. Determine the perceptions of pre-service teachers on the use of blended learning techniques in Nwafor Orizu college of Education Nsugbe.
2. Examine the challenges of blended learning in Nwafor Orizu college of Education Nsugbe.

Research Questions

The following research questions guided the study:

1. What are the perceptions of pre-service teachers on the use of blended learning techniques in Nwafor Orizu college of Education Nsugbe?
2. What are the challenges of blended learning in Nwafor Orizu college of Education Nsugbe?

Scope of the study

This research work is on the Perception of Pre-Service Teachers on the Use Blended Learning Techniques in Nwafor Orizu college of Education Nsugbe.

METHODOLOGY

Design of the Study

The study adopted a descriptive survey research design to analysis the Perception of Pre-Service Teachers on use of Blended Learning techniques in Nwafor Orizu college of Education Nsugbe.

Population of the Study

The population for the research includes one hundred and forty (140) year two students enrolled in the college.

Sample and Sampling Technique

The sample size used was seventy (70) students randomly drawn from the population. Since it was desirable to have equal gender representation, stratified random sampling based on gender was used.

Research Instrument

The instrument for data collection was a structured questionnaire, which was personally designed by the researcher. It consists of twenty-three (23) structured items divided into two major section labelled A and B. Section A contains three (3) items which seeks for bio-data of the respondents while section B represented the main body of the questionnaire having twenty (20) generated statements. Each item of the questionnaire was designed using 4-point scale method. These include Strongly Agree= SA, Agree =A, Disagree= D, Strongly Disagree= SD.

Method of Data Analysis

The result of every questionnaire items collected was calculated using percentage and frequency table and simple statistical mean to find the average responses for the study.

Decision rule

In interpreting the mean value, a mean of 2.50 was selected and means that falls below the mean score of 2.50 was rejected.

Data Presentation and Analysis of Students’ Questionnaire

Section A

Table 1: Distribution of Respondents by Sex

Sex	Frequency	Percentage
Male	35	50.0
Female	35	50.0
Total	70	100.0

Distribution of respondents by sex shows that, 50.0% of the respondents were male while 50.0% were females.

Table 2: Distribution of Respondents by Age

Age	Frequency	Percentage
15-25	42	60.0
26-36	23	32.9
37-47	5	7.1
48 and above	0	0
Total	70	100.0

Distribution of respondents by age shows that, 60.0% of the respondents are between age 15-25, 32.9% are between the age of 26-36, 7.1% are between the age of 37-47 and 0% are between the age of 48 and above.

Section B**Table 3:** The perceptions of pre-service teacher on the use blended learning techniques in Nwafor Orizu college of Education Nsugbe.

S/N	ITEMS	SA 4	A 3	D 2	SD 1	Mean
1	Blended learning technique makes lectures more interesting.	27	24	14	5	3.04
2	I prefer traditional method to blended learning technique.	6	7	25	32	1.81
3	Face to face and online modes are not sufficiently integrated.	44	11	9	6	3.33
4	Blended learning has made learning more accessible to student.	22	31	14	3	3.03
5	Blended learning in my school has improved teaching and learning.	33	16	12	9	3.04

Analysis for Research Question 1,

- For item 1, the mean score is 3.11 which mean that, blended learning technique makes lectures more interesting.
- For item 2, the mean score is 1.81 which means that, students do not prefer traditional method to blended learning technique.
- For item 3, the mean score is 3.33 which mean that, Students Face to face and online mode are not sufficiently integrated.
- For item 4, the mean score is 3.03 which mean that, blended learning had made learning more accessible to student.
- For item 4, the mean score is 3.04 which mean that, it makes students loose interest in some courses because a face to face approach will have been more suitable for those courses.

Table 4: The challenges of blended learning in Nwafor Orizu college of Education Nsugbe.

S/N	ITEMS	SA 4	A 3	D 2	SD 1	Mean
1	It is time demanding.	23	29	8	10	2.93
2	There are inadequate infrastructures.	11	14	16	29	2.10
3	There is a sufficient allocation of fund for it operation.	18	13	24	15	2.49
4	It has a Limited access to Internet facilities.	37	17	10	6	3.21
5	It is not suitable for practical courses.	22	25	14	9	2.86

Analysis for Research Question 2,

- For item 1, the mean score is 2.93 which means that, it is time demanding.
- For item 2, the mean score is 2.10 which mean that, there are no inadequate infrastructures.
- For item 3, the mean score is 2.49 which mean that, there is no sufficient allocation of fund for it operation.
- For item 4, the mean score is 3.21 which mean that, it has a Limited access to Internet facilities.
- For item 5, the mean score is 2.86 which mean that, it is suitable for practical courses.

Discussion of Findings

Research Question 1: The result from the first research question shows that; blended learning technique makes students find lectures more interesting, students do not prefer traditional method to blended learning technique, Face to face and online mode are not sufficiently integrated, blended learning had made learning more accessible to student and blended learning in my school has improved teaching and learning. The findings is in agreement with Akkoyunlu and Soylu (2008) who pointed out that highest grade of students’ perceptions is given to face-to-face environment that learning is best linked with classroom teaching. This is also in agreement with Graham, (2006)position as he pointed out, that with blended learning approach, learning environments solve some communication problems sourced by distance education environments; decrease time and cost in traditional class; provide to use the buildings owning to education institutions. A plausible reason for this might be that, blended learning technique comprises of both the advantages of face-to-face teaching techniques and that of the online.

Research Question 2: The result from the second research question, shows that, blended learning is time demanding, there are no inadequate infrastructures, there is no sufficient allocation of fund for its operation, it has a Limited access to Internet facilities and it is suitable for practical courses. The study is in agreement with (Graham, Allen, & Ure, 2005), who stated that the challenges facing effective implementation of blended learning technique includes; Finding the Right Blend, Increased Demand on Time, Overcoming Barriers of Institutional Culture, Inadequate Infrastructure, Limited access to Internet facilities and Insufficient allocation of fund to education.

This findings are not surprising since Nigeria is still having power outage, internet services are still not available to all students and fund allocated to education sector is below expectation.

Conclusion

Conclusively, based on the findings of the study on “perception of pre-service teachers on the use of blended learning techniques”, it was revealed that blended learning was an effective technique for quality teaching and learning. Though as it may be blended learning technique have challenges affecting the proper implementation and if these challenges are not giving swift attention, getting an effective teaching and learning environment as supposed by the usage of Blended Learning Technique will not be achievable.

Recommendations

Based on the outcome of the research, it is recommended that;

- Nwafor Orizu college of Education Nsugbe need to endorse different models of blended learning according to the nature of the courses instead of one typical model for all courses.
- A well-structured annual evaluation that investigates students’ and lecturers’ perceptions of blended learning has to be implemented for the development of the program.
- Lecturers need to have the motivation to teach blended courses in order to ensure a successful experience for themselves and their students. Certainly, they need to maintain sufficient teaching and IT skills.
- The need for a stable and constant power supply is necessary for proper implementation of Blended Learning Technique.
- Government need to make available fund and necessary infrastructure for the proper implementation of blended learning Technique.

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