

Blended Learning in National Open University of Nigeria (Noun) - Prospects and Constraints

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Abstract – This study investigated the prospects and constraints of blended learning among National Open University of Nigeria (NOUN) students in Owerri study center. The study adopted descriptive survey design using researcher-made questionnaire to collect data. Four research questions guided this study with mean scores as the statistical tool. Fifty (50) students were randomly selected from across the disciplines as respondents. The findings of the study were as follows: **The benefits of blended learning in NOUN include: it enables NOUN students to study anywhere and at their own pace; it facilitates independent learning; it helps to reduce the withdrawal rate of students; it is cost effective; substitutes attending classes; enhances student learning outcomes and helps balance work and school. NOUN students love blended learning and prefer it to the practice of only face-to-face instruction. Three models of blended learning are practiced in NOUN and these are the face-to-face driver model, rotation model and self blend model. The constraints to the use of blended learning in NOUN are: the students at times feel lonely and isolated when using blended learning; technophobia; lack of computer operating skills by students; high cost of Information and Communication Technologies; poor internet connectivity and the fact that blended learning requires students to devote more time to their studies. Some recommendations were made among which is that NOUN should be well equipped with ICTs and the students exposed regularly to these to ensure they acquire computer skills. Also the federal government should ensure good internet connectivity in Nigeria to boost blended learning and the use of ICTs in schools.**

Keywords – Blended Learning, Information and Communication Technologies (ICTs), NOUN, Students.

I. INTRODUCTION

Teaching in the 21st Century of learning becomes a great challenge to educators as technology quickly and strappingly makes its debut in the classroom. Blended learning is going to become more prominent in the classroom, if it has not already. Teachers need to be well educated on what it can offer to the learning experience and how it can enhance student's performance and motivation towards learning. It is important that educators know what motivates and improves student performance and how to implement these motivational techniques/ tools within the learning environment. Blended learning is usually viewed as a combination of face-to-face and online delivery methods, with the aim of each complementing the other. Such an approach should, therefore, influence students' perceptions of the learning environment and, subsequently, their study approach and learning outcomes. It is thus expected that there is a significant relationship between blended learning, student learning experiences, and ultimate achievement.

II. OBJECTIVES OF THE STUDY

The aim of this paper was to investigate the prospects of blended learning in NOUN and its constraints. Specifically this study sought to:

1. Examine the benefits that blended learning provides to students' learning experiences.
2. Find out students' attitudes toward blended learning.
3. Find out ways blended learning is applied for programs at NOUN.
4. Determine the constraints to the use of blended learning in teaching and learning.

2.1 DEFINITIONS OF "BLENDED LEARNING"

There has been much discussion over the term "blended learning" in recent years, yet there continues to be no agreed-upon single definition (Poon, 2013). There is, however, a common theme presented in the literature – the recognition of some combination of virtual and physical environments. This common theme is evident as 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 involve humans operating independently. It continues as Mason and Rennie (2006:12) extend this definition to include "other combinations of technologies, locations or pedagogical approaches". It carries on as Garrison and Vaughan (2008:5) 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 and teaching in this new terrain. Contributing Littlejohn and Pegler (2007) observe that blended learning is a useful approach because it changes the focus of learning design by shifting the emphasis from simply considering the face-to-face and online environments to the design of issues, such as considering the process and synergy of blending between online and face-to-face environments.

Blended learning can also be considered good practice. In other words, the use of blended learning as a delivery method can make manifest two of Chickering and Gamson's (1987) seven Principles, which are "encourage students to engage in active learning" and "encourage contact between students and faculty." The use of blended learning can also potentially elicit another good practice principle, which is to give prompt feedback, as blended learning usually involves online interaction, which can facilitate feedback. However, whether prompt feedback occurs depends on how frequently the instructors and students use the relevant online platform.

The methodology behind blended learning is to combine classroom learning with mobile learning and online learning. It also has different names like mixed learning, hybrid learning, blended e-learning, melted learning, etc. According to Santosh (2013) there are six types of blended learning thus:

1. Face-to-face Driver (teacher led instruction)
2. Rotation
3. Flex
4. Online Lab
5. Self-Blend
6. Online Driver

Face-to-face Driver:

Face-to-face driver is a blended learning model in which teachers deliver most of the curriculum. Teachers lead the class in a lecture following an established protocol taking precedence and technology being a secondary thought. However, they also produce online resources to supplement or revise course material which students can study at home, in the classroom or in a technology lab.

Rotation:

In the Rotation model of blended learning: within a given course, a student rotates on a fixed schedule between learning online in a one-to-one, self-paced environment and sitting in a classroom with a traditional face-to-face teacher.

Flex:

Flex model of blended learning features an online platform that delivers most of the curricula. It's the model where most of the learning is done online and the face-to-face model exists to provide on-site support for a flexible and adaptive, as required basis through in-person tutoring sessions and small group sessions.

Online Lab:

Online lab is a model of blended learning that characterizes programs that rely on an online platform to deliver the entire course but in a brick-and-mortar lab environment. The entire course and teaching are done online. Teachers interact with students through pre-recorded videos, audio and video conferences or discussion forums and email.

Self Blend:

The Self - Blend model is a fully individualized approach that allows students to choose to take one or more courses online to supplement their traditional school's catalog. Maximum part of the learning is done online, but the student will still attend face-to-face classes.

Online Driver:

Online Driver involves online platform as well as teachers to deliver the curricula. Students work from remote locations most of the time and come to school for optional or required face-to-face classes.

2.2 Benefits of Blended Learning

According to Poon (2013), blended learning benefits both students and institutions. It facilitates improved learning outcomes, access flexibility, a sense of community, the effective use of resources, and student satisfaction.

Several research studies have demonstrated that courses using blended learning as a delivery method contribute to

improved learning outcomes for students (Garnham & Kaleta, 2002; Lim & Morris, 2009; O'Toole & Absalom, 2003; Twigg, 2003a). Twenty out of the thirty institutions which participated in research funded by the Pew Foundation in the United States reported having improved learning outcomes, and eighteen of the participating institutions demonstrated a decrease in student drop-failure-withdrawal (DFW) rates (Twigg, 2003a). Twigg (2003a) also reports that course redesign has resulted in students achieving higher grades, greater knowledge, and greater understanding of course concepts. López-Pérez, Pérez-López, & Rodríguez-Ariza's (2011) research on students' performance in a Spanish university shows that the use of blended learning has a positive effect in reducing dropout rates and improving examination marks.

Another key benefit of blended learning is the increased flexibility of access to learning that reinforces the student's autonomy, reflection, and powers of research (Chambers, 1999; Lebow, 1993; Radford, 1997; Sharpe, Benfield, Roberts & Francis 2006; Tam, 2000), and facilitates the review and control of learning (Osguthorpe & Graham, 2003). Blended learning modules have a combination of face-to-face and online components. This format allows learners who live some distance from a university to enrol in a program. In addition, the online components benefit other learners by allowing them to work whenever and wherever they prefer, as they can access the Internet without making the journey to campus. It also enhances students' ability to control their own pace of learning. Through blended learning, students are able to catch up on a course if and when they can. (Garnham & Kaleta, 2002; Owston, Wideman, Murphy, & Lupshenyuk, 2008; Smyth, Houghton, Cooney, & Casey, 2012).

Garrison and Kanuka (2004) as cited by Poon (2013) explored some of the benefits of using blended learning in higher education institutions. They describe how blended learning has transformative potential, offering institutions the opportunity to embrace technology, encourage a community of inquiry, and support active and meaningful learning. Owston et al. (2008) looked at professional development in schools of education and describes how blended learning has the ability to foster a professional learning community and yet still allow for the development of social cohesion due to the inclusion of a face-to-face component.

Cost and resource effectiveness is also considered an advantage of blended learning (Graham, 2006; Twigg, 2003b; Vaughan, 2007). Costs for institutions are saved as developed materials can be placed online and re-used for an extended period of time. Furthermore, the size of the cohort can be increased and the number of classes decreased. The use of blended learning can reduce the staff and student classroom contact time and consequently save on staffing costs. Though cost savings should clearly be considered a valid benefit of blended learning, many authors writing on this topic have maintained that cost saving should not be considered as the primary purpose for blended learning adoption, and that improved learning outcomes should still be the main rationale for implementation (Mitchell & Honore, 2007; Trasler, 2002).

Blended learning also promotes student satisfaction. Blended learning enables the students to become more motivated and more involved in the learning process, thereby enhancing their commitment and perseverance (Donnelly, 2010; Sharpe et al., 2006, Poon 2013). Staff and students have both reported that the online components of blended learning encourage the development of critical thinking skills. Student satisfaction has also been reported to be higher in blended learning courses compared with purely face-to-face courses (Owston et al., 2008; Twigg, 2003a). Therefore, blended learning is beneficial to both students and institutions.

2.3 Constraints to use of Blended learning

The use of blended learning has a lot of challenges for both the students and institutions. These include unrealistic expectations and feelings of isolation for the students while cost effectiveness, epileptic power supply and time commitment are challenges for the institution.

Vaughan (2007) as cited by Poon (2013) cites studies suggesting that students enrolled in blended courses can sometimes have unrealistic expectations. The students in those studies assumed that fewer classes meant less work, had inadequate time management skills, and experienced problems with accepting responsibility for personal learning. Students in such courses have also reported feeling isolated due to the reduced opportunities for social interaction in a face-to-face classroom environment (Smyth et al., 2012).

Having difficulty with more sophisticated technologies is another challenge for implementing blended learning. This was particularly the case where students had to rely on slow (e.g., dialup) Internet connections (Smyth et al., 2012). Poor Internet connectivity has been reported to inhibit students' ability to engage in online discussion (King, 2002) and creates considerable frustration (Hara, 2000; Hara & Kling, 1999; Welker & Berardino, 2005-2006), which can negatively impact learning.

Another challenge related to technology is the pervasive access the technology affords. Although the flexibility to learn online and from a distance provided by blended learning is perceived as advantageous, the pervasive access may also be invasive to learners' personal lives. For some, the online component results in more time devoted to study and less to personal concerns. This can lead to participants feeling overwhelmed and tired (Smyth et al., 2012).

Just as time concerns are a challenge for students, the first challenge for implementation of blended learning for universities is time commitment. Johnson (2002) estimates that planning and developing a large-enrollment, blended learning course usually takes two to three times the amount of time required to develop a similar course in a traditional format.

The other challenge for universities is the lack of support for course design. In order to ensure a successful blended learning experience for students, there must be university support for course redesign, which may involve deciding what course objectives can best be achieved through online learning activities, what can best be accomplished in the classroom, and how to integrate these two learning environments (Dziuban et al., 2006).

III. METHODOLOGY

This study was carried out on undergraduate students of National Open University of Nigeria (NOUN) in Owerri study centre. This is a distance learning university established to cater for the academic needs of workers. Fifty(50) students were selected randomly across the disciplines that served as sample. A researcher made questionnaire with 23 items was used as the instrument. This instrument was validated by 2 experts in Faculty of education Imo State University. The reliability coefficient was 0.75 using Cronbach Alfa statistics.

IV. RESEARCH QUESTIONS

The following research questions served as guide to this study:

1. What are the benefits of blended learning to the students?
2. What is the students' attitude toward blended learning?
3. In what ways is blended learning applied in NOUN?
4. What are the constraints to the use of blended learning in NOUN?

V. FINDINGS

Research Question 1: What are the benefits of blended learning to the students?

Table 1: Mean responses on the benefits of blended learning to students

S/N	ITEMS	SA	A	D	SD	\bar{X}
1	Blended learning enables students to study anywhere and at their own pace	156	24	4	1	3.7
2	It facilitates independent learning	116	54	1	2	3.5
3	It helps to reduce the withdrawal rate of students	64	69	14	4	3.0
4	It is cost-effective because one material placed online can be used and re-used for an extended period of time	76	69	14	1	3.2
5	It substitutes attending class	48	78	18	3	2.9
6	It enhances students learning outcomes	48	93	10	2	3.1
7	It helps balance work and school.	104	60	1	3	3.4

From the table above, items 1-7 had mean scores of 3.7, 3.5, 3.0, 3.2, 2.9, 3.1 and 3.4 respectively. Each of these mean scores is higher than 2.5. this shows that blended

learning has the following benefits: it enables students to study anywhere and at their own pace; it facilitates independent learning; it helps to reduce the withdrawal

rate of students; it is cost effective; it substitutes attending class; enhances learning outcomes and lastly blended learning helps balance work and school.

Research question 2: What is the students' attitude toward blended learning?

Table 2: Mean responses on students' attitude towards blended learning.

S/N	ITEMS	SA	A	D	SD	\bar{X}
8	Students love blended learning	32	84	18	05	2.8
9	They prefer blended learning to face-to-face instruction	40	60	32	04	2.7
10	Students prefer blended learning because it's interactive	44	69	28	03	2.9
11	Blended learning is highly motivating	72	69	14	02	3.1

From table 2 above, items 8-11 also have means above 2.5 showing that students love blended learning; they prefer blended learning to face-to-face instruction alone, they prefer blended learning because it's interactive and

lastly the students believe that blended learning is highly motivated.

Research Question 3: In what ways is blended learning applied in NOUN?

Table 3: Mean responses on ways blended learning is applied in NOUN.

S/N	ITEMS	SA	A	D	SD	\bar{X}
	The models of blended learning practiced in NOUN is					
12	The face-to-face driver model	56	72	16	04	3.0
13	Rotation model	56	69	14	06	2.9
14	Flex model	20	15	48	16	2.0
15	The "online laboratory" approach	40	12	48	12	2.2
16	Self blend model	60	66	18	04	3.0
17	The Online driver model	48	12	44	12	2.3

From the table above, items 12, 13 and 16 had mean scores of 3.0, 2.9 and 3.0 which show that the models of blended learning practices in NOUN are the face-to-face driver model, rotation model and self blend model. Items 14, 15 and 17 with mean scores of 2.0, 2.2 and 2.3

respectively shows that these models of blended model are not practiced in NOUN: the flex model, "online laboratory" approach and the online driver mode.

Research Question 4: What are the constraints to the use of blended learning in NOUN?

Table 4: Mean responses on the constraints to the use of blended learning in NOUN.

S/N	ITEMS	SA	A	D	SD	\bar{X}
	Factors that militate against effective use of blended learning					
18	Students at times feel isolated	60	78	14	02	3.1
19	Fear of use of new technology (technophobia)	56	66	22	03	2.9
20	Lack of computer operating skills/competence by students	72	60	22	01	3.1
21	High cost of information and communication technologies (ICTs)	76	69	10	03	3.2
22	Poor internet connectivity	76	60	16	03	3.1
23	Devotion of more time to study and less time to personal concerns	80	36	30	03	3.0

From Table 4 above, items 18-23 had mean scores of 3.1, 2.9, 3.1, 3.2, 3.1 and 3.0 respectively. This shows that the constraints to the use of blended learning in NOUN are: students at times feel isolated; fear of use of new technology; lack of computer operating skills by students; high cost of ICTs; poor internet connectivity and devotion of more time to study and less time to personal concerns.

school. Most students of NOUN are workers so blended learning is helping them to combine work with studies effectively. With the help of blended learning, they have a flexible time table and learn at their own time. This finding is in line with Chambers (1999), Lebow (1993), and Sharpe, Benfield, Roberts and Francis (2006) as cited by Poon (2013) who agree that one key benefit of blended learning is the increased flexibility of access to learning that reinforces the student's autonomy, reflection and powers of research. Contributing to these benefits, Gamham & Kaleta (2002) showed that courses with blended learning as a delivery method contribute to improved learning outcomes for students.

The study further revealed that NOUN students love blended learning and prefer it to the practice of only face-to-face instruction. They agree that it is both interactive

VI. DISCUSSION

The study revealed the benefits of blended learning to NOUN students as follows: it enables the students to study anywhere and at their own pace; it facilitates independent learning; it helps to reduce the withdrawal rate of students, it is cost-effective; substitutes attending classes; enhances students learning outcomes and helps balance work and

and highly motivating. Agreeing with the above finding Poon (2013) is of the view that blended learning enables students to become more motivated and more involved in the learning process, thereby enhancing their commitment and perseverance. Student satisfaction has also been reported to be higher in blended learning courses compared with purely face-to-face courses (Owston et al., 2008; Twigg 2003a).

From this study also, it is clear that only three out of the six models of blended learning are practiced in NOUN. These are: the face-to-face driver model where the teacher in a traditional setting employs online learning for remediation or supplemental instruction.

➤ Rotation model – in which the students move back and forth between online and classroom instruction.

➤ Self blend model – in which students choose on their own which courses they take online to supplement their school face-to-face instruction.

Finally, the findings revealed the constraints to the use of blended learning in NOUN as : the students at times feel lonely and isolated when using blended learning, technophobia, lack of computer operating skills by students, high cost of information and communication technologies, poor internet connectivity and the fact that blended learning requires that students devote more time to their studies. This study was carried out in Nigeria where internet services are still poor, ICTs are expensive, and many students fear the use of new technologies.

According to Smyth et al (2012), although blended learning provides pervasive access to information, this may be invasive to learners' personal lives. For some students the online component results in more time being devoted to study and less time to personal concerns.

VII. CONCLUSION

Blended learning is the combination of face-to-face and online learning experiences. This has been found to be very useful in education especially distance learning. Some benefits of blended learning in NOUN include: it enables the students to study anywhere and at their own pace; it facilitates independent learning; it is cost effective and enhances students learning outcomes. The NOUN students love blended learning and prefer it to the practice of only face-to-face instruction. Though blended learning is beneficial, there are some constraints to its use in NOUN. Some of the constraints include technophobia, lack of computer operating skills by students, high cost of information and communication technologies, poor internet connectivity, the fact that students at times feel lonely and isolated when using blended learning. In spite of these constraints in NOUN, blended learning should be encouraged.

RECOMMENDATIONS

Based on the findings of this study the following recommendations were proffered:

1. The federal government should procure adequate ICTs in NOUN and the students well-trained in the use of such facilities to ensure they acquire computer skills.
2. The NOUN administration should ensure that her students all have computers for blended learning on admission. This will ensure the use of such technologies for blended learning.
3. The federal government should ensure good internet connectivity in Nigeria to boost blended learning and the use of ICTs in schools.
4. Versatile knowledge of use of ICT should be a vital criterium for employment of NOUN facilitators. This will enhance blended learning among their student.

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