

## Student Acceptance of Blended Learning In Nigeria

Okocha, F.O., Eyiolorunshe, T. & Oguntayo, S.

Centre for Learning Resources,  
Landmark University  
Omu-aran, Kwara State, Nigeria  
Dada.foluke@lmu.edu.ng

### ABSTRACT

This study explains the factors that influence the acceptance of blended learning and the level of acceptance of the features of blended learning by undergraduate students in Landmark University. Questionnaires were used as the data collection instrument and the acceptance of blended learning was tested using UTAUT model. Data was analyzed using SPSS .Frequencies; Principal Component Analysis and Regression Analysis were used in analysis. The study found that Performance expectance and Facilitating conditions significantly influenced the acceptance of blended learning. In understanding the acceptance of blended learning features, the student's shows more interest in course-related readings and course materials available on the learning management system and less interest on discussion with lecturers and discussion with classmates. Performance expectancy was a major determinant on the acceptance of blended learning by students. It was also discovered that there is no relationship between the learning style of students and intention to adopt blended learning. This study has implications for university administrators on the importance of academic improvement and supporting features in the introduction of blended learning in educational institutions.

**Keywords:** Blended learning, UTAUT, technology acceptance

---

#### Aims Research Journal Reference Format:

Okocha, F.O., Eyiolorunshe, T. & Oguntayo, S. (2017): Student Acceptance of Blended Learning In Nigeria  
Advances in Multidisciplinary & Scientific Research Journal. Vol. 3. No.1, Pp 43-50

### 1. INTRODUCTION

Information technology has affected the student learning process making learners more willing to participate and encouraging the individualized learning process. Technology invariably has the power to close the learning gap making education a ubiquitous service. Information technology has further brought about active participation and learning in classrooms making use of collaborative technologies. 21<sup>st</sup> Century learning skills are different from what has always occurred, making it necessary for a change in approach by which knowledge is delivered. Knowledge transfer must stimulate critical thinking and problem solving skills also awakening creativity in the minds of learners.

Blended Learning is a learner-centered approach where the learner interacts with the instructor and with other learners and content through a thoughtful integration of face-face and online environments. It is a mix of online and face-face learning subject to a range of permutations in technologies, pedagogies and context (Graham, 2006, Garrison & Vaughan, 2008). In consideration of blended learning in a given institution, consideration must be made to users of the technology. Harris et al. (2009) highlight the importance of the perspectives of such stakeholders as organizations, instructors, and students. Among the perspectives, that of the students is the most vital. Hence, the Objective of this study is to find out factors that facilitate user acceptance of blended learning by undergraduate students in Landmark University

## 2. LITERATURE REVIEW

Blended Learning has been noted for its variation across institutional contexts (Graham, 2013). However, Finn and Bucci (2004) describes blended learning as an effective integration of multiple learning techniques, technologies, and delivery modes to meet specific communication, knowledge sharing, and informational needs of learners. Blended learning has change the approach of learning .Singh (2003) stressed that blended learning offers more benefits and it is more effective than the traditional e-learning approach.

Bonk and Graham (2012) stressed the accelerated growth of blended learning and cautions of the need to create strategic plans and directions due to its accelerated growth. Sharpe et al. (2006) states that blended learning can be adopted in institutions in 3 ways and these include making learning materials available through the learning management system, digital technologies and new pedagogies introduced and the use of digital technologies by learners.

Students are the major stakeholders in the educational process and research on student attitude towards blended learning is important (Park, 2000) Lopez-Perez et al. (2011) points that tertiary students prefer learning when traditional modes of teaching are complemented by Information technology. Learning occurs in different ways which makes it imperative to combine different approaches to learning through the use of educational tools. Howard (2009) reported that more than half of the online students surveyed missed face to face interaction with other students. In a study by Kehrwald, Rawlins and Simpson (2011) students were noted to have different experiences with blended learning and different values due to its impact on their program. Jackson, Jones & Rodriguez (2010) also noted that students become more independent in the blended learning environment while Lecturers become facilitator which is stated as a major challenge.

Blended learning in Nigeria is still in its infancy and has not fully taken shape in Nigeria ( Ololube, 2011). Certain challenges are still pertinent with the educational sector in Nigeria such as lack of infrastructures to support learning, nevertheless Nsofor et al (2014) states that adopting blended learning in Nigeria's Higher education system requires the exploitation of success stories so as to identify challenges specific to them. Blended learning removes barriers in providing answers irrespective of environmental, social or cultural circumstances. (Ifinedo & Ololube, 2007) identified barriers to ICT use in Nigerian universities as including inadequate funding, limited computer/internet access, poor infrastructure, power supply shortages, lack of trained faculty/personnel, and poverty. Private universities however are not faced with these limitations and it makes blended learning implementable in private universities in Nigeria (Ololube, 2011).

### 2.1 Theoretical Background and Hypothesis

Several models have been identified for the adoption of technologies and to predict its actual use but for the purpose of this study Unified Theory of Acceptance and Use of Technology (UTAUT) has been adopted because it is widely used and well validated among researchers. Venkatesh et. al. (2003) formulated the Unified Theory of Acceptance and Use of Technology (UTAUT) UTUAT is based upon the conceptual and empirical similarities across different technology acceptance models.

The model consists of 4 constructs and states that these constructs explain user acceptance and use of technologies. They are Performance expectancy, effort expectancy, social influence and facilitating conditions

**Hypothesis 1:** Performance expectancy has a positive effect on blended learning adoption

Performance expectancy is the degree to which using a system will improve the performance of the student .This construct has been the strongest in predicting behavioural intention ( Venkatesh et al.2003).

**Hypothesis 2:** Effort expectancy has a positive effect on blended Learning adoption

Effort expectancy is defined as the degree to which student believes adoption of blended learning will be easy

**Hypothesis 3:** Social Influence has a positive effect on blended Learning adoption

Social Influence is described as the degree a student thinks people he considers important should use the system. It has been shown that there is a positive effect between social influence and intention to use a technology

**Hypothesis 4:** Facilitating Conditions has a positive effect on Blended Learning adoption

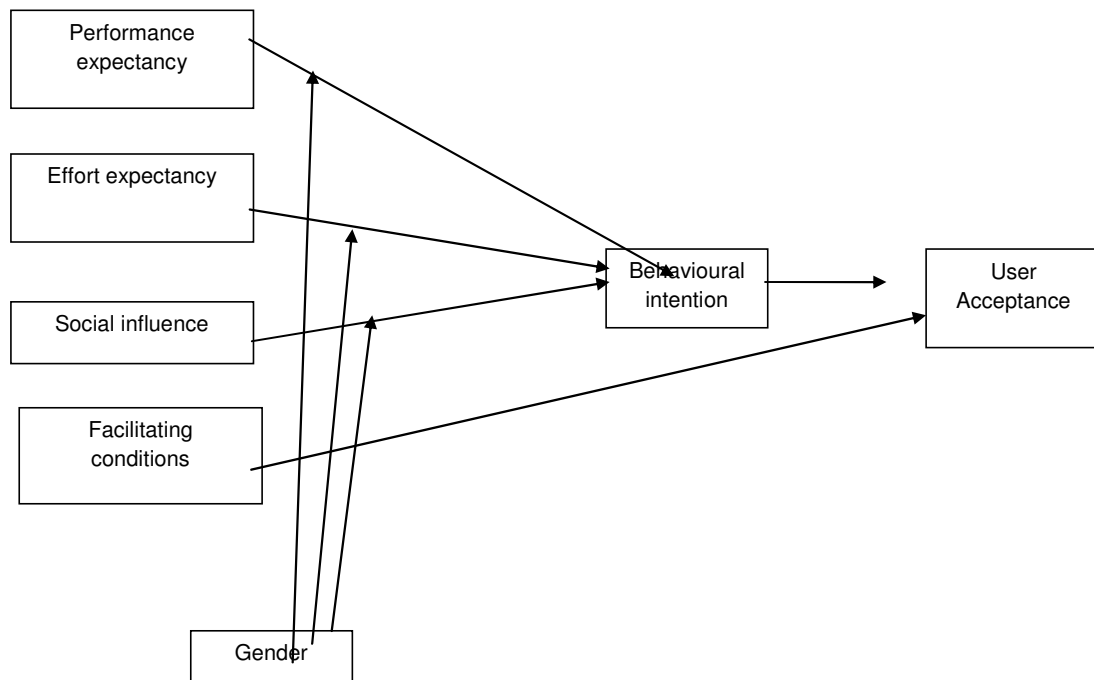
Facilitating Condition is the degree a student believes the organizational policies and structures and technical infrastructure support blended learning

**Moderating Variables**

The moderating variable considered in this study is gender based on the UTAUT model Venkatesh et al. (2003) reported, that gender plays a significant role in the adoption of technologies.

According to research on performance expectancy, gender is usually stronger in men (Venkatesh & Morris, 2000) , while Effort expectancy and Social influence are more significant in women (Cheng, Yu, Huang, Yu, & Yu, 2011; Venkatesh & Morris, 2000).

H5: Gender influences intention to adopt blended learning



**Figure 1: Model of Unified Theory of Acceptance and Use of Technology (UTAUT)**

### 3. RESEARCH METHODOLOGY

The study was made up of Landmark University undergraduate student. Landmark University is currently running a blended learning approach; this adoption is still in the early phase with uploading of lecture materials and course compact as the major aspects been implemented, few lecturers are engaged in discussions, quizzes and exercises. This study used a questionnaire-based survey which was adopted based on UTAUT model. The questionnaire consisted of close end questions. 300 Questionnaires were distributed, of which 205 were returned by students. Descriptive analysis, and regression analysis were used for analysis and principal component analysis and reliability analysis were used to test the reliability of the data.

### 4. RESULT

#### 4.1 Demographic Characteristics

Table 1 below shows that 56.8% of the sampled population is male while 43.2% are female. All levels in the university were fully represented in this study with 400 level accounting for the majority with 38.3%. Also College of Science and Engineering accounted for the majority of respondents from the colleges.

Table 1: Demographic characteristics of respondents

Table 1: Demographic characteristics of respondents

| Gender           | Frequency | Percentage |
|------------------|-----------|------------|
| Male             | 117       | 56.8       |
| Female           | 89        | 43.2       |
| Level of Study   |           |            |
| 100 Level        | 29        | 14.1       |
| 200 Level        | 34        | 16.5       |
| 300 Level        | 40        | 19.4       |
| 400 Level        | 79        | 38.3       |
| 500 Level        | 24        | 11.7       |
| College of Study |           |            |
| CAS              | 11        | 5.3        |
| CBS              | 73        | 35.4       |
| CSE              | 112       | 59.2       |

#### 4.2 Learning Styles

Table 1 reveals majority of respondents stated that the learn best with the aid of pictures while only 28% stated that the learn with the aid of sound. This implies that blended learning features should include more images and educational games and simulations rather than just words or text

Table 2: Learning styles of students

| Learning Styles          | Percentage |
|--------------------------|------------|
| Pictures                 | 54.9       |
| Sound                    | 28.2       |
| Words                    | 34.0       |
| Practice hands-on        | 35.9       |
| Reasoning                | 29.6       |
| Learn best in groups     | 35.9       |
| Learn best working alone | 41.3       |

### 4.3 Willingness to use blended learning

In Table 3, 66.5% of students were in support of course-related readings included on the Learning management systems to support teaching, while only 47.6% found discussion with classmates improving their learning. Majority of students were in support of course related readings, assignments, exercises and discussion with lecturers

**Table 3: Willingness to use blended learning features**

| Blended Learning Features  | Percentage willingness to use |
|----------------------------|-------------------------------|
| Course Materials           | 61%                           |
| Exercises                  | 59.2%                         |
| Course related readings    | 66.5%                         |
| Assignment                 | 59.2%                         |
| Discussion with Lecturers  | 56.8%                         |
| Discussion with Classmates | 47.6%                         |

### 4.4 Perceived Benefits of Blended learning Features

47.6% of the student population stated that the benefits of course materials available online is high, while 48.1% rated course-related readings with medium benefits and 36.4% rated discussion with lectures as low as shown in Table 4.

**Table 4. Perceived benefits of Blended Learning Features**

| Blended Learning Features  | Low   | Medium | High  |
|----------------------------|-------|--------|-------|
| Exercises                  | 21.4% | 41.3%  | 31.6% |
| Course Materials           | 7.8%  | 40.3%  | 47.6% |
| Course-related readings    | 15.0% | 48.1%  | 32.5% |
| Discussion with classmates | 31.1% | 37.4%  | 27.2% |
| Discussion with Lecturers  | 36.4% | 28.6%  | 30.6% |

### 4.5 Validity and Reliability

Principal component analysis was done to access the reliability of constructs .The results in Table 5 showed that item loadings were greater than 0.5, except for one item that was dropped from performance expectancy. A reliability analysis was conducted for the constructs of which all coefficients were satisfactory as having a reliability greater than 0.7 as stated by Nunnally(1978)

**Table 5: Crobach Alpha Reliability Test**

| Constructs                          | Crobach Alpha ( Reliability Test) |
|-------------------------------------|-----------------------------------|
| Performance Expectancy              | 0.787                             |
| Effort Expectancy                   | 0.829                             |
| Social Influence                    | 0.794                             |
| Facilitating Condition              | 0.715                             |
| Intention to adopt Blended Learning | 0.819                             |

#### 4.6 Hypothesis Testing

Regression analysis was carried out to test the research hypothesis, In Table 6, performance expectancy and facilitating conditions were significant with coefficients less than 0.05, while effort expectancy and social influence were not significant. This implies that only performance expectancy and facilitating conditions explain the intention to adopt blended learning in Landmark University

**Table 6:Regression Analysis of Constructs**

| Model                  | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|------------------------|-----------------------------|------------|---------------------------|-------|------|
|                        | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant)           | 1.137                       | .655       |                           | 1.736 | .084 |
| PerformanceExpectancy  | .655                        | .098       | .437                      | 6.708 | .000 |
| EffortExpectancy       | .012                        | .066       | .013                      | .188  | .851 |
| SocialInfluence        | .023                        | .062       | .027                      | .378  | .706 |
| FacilitatingConditions | .202                        | .063       | .218                      | 3.229 | .001 |

a. Dependent Variable: BehaviouralIntention

There was a significant relationship between performance expectancy and behavioural intention, we therefore accept the hypothesis. Performance expectancy had a significance of 0.000.It is therefore the strongest predictor of intention to adopt blended learning, the findings are consistent with previous research that states performance expectancy as the strongest motivating factor for the use of technology which corroborates the findings on Venkatesh (2003). Effort expectancy construct did not predict intention to use blended learning. We therefore reject the hypothesis. This can be explained based on technological proficiency of the younger generation. Hence they consider themselves proficient.

Social Influence Construct did not significantly predict behavioural intention. This implies that the opinion of others is not important in determining adoption of blended learning in Landmark University. Facilitating Conditions construct is proven to predict intention to use blended learning ( sig=0.001;p<0.005).Lecturers support for blended learning, university policies, internet bandwidth size and speed as well as knowledge are important in predicting adoption of blended learning by undergraduate students.

#### 4.7 Gender Moderating Behavioural Intention

The results of the moderating effects of gender differed from the hypothesis as shown in Table 7. We therefore reject the hypothesis. The findings differ from previous findings in which gender showed some moderating effects

**Table 7: Gender Moderating User Acceptance**

| Model              | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|--------------------|-----------------------------|------------|---------------------------|-------|------|
|                    | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant)       | 5.764                       | .583       |                           | 9.894 | .000 |
| Sex of respondents | .590                        | .385       | .107                      | 1.533 | .127 |

a. Dependent Variable: BehaviouralIntention

#### 4.8 Relationship between Learning styles and Behavioural Intention

The result showed that there is no significant relationship between learning styles and intention to adopt blended learning (  $p=0.208$  ).We therefore reject the hypothesis

| Model |                | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|----------------|-----------------------------|------------|---------------------------|--------|------|
|       |                | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)     | 6.250                       | .341       |                           | 18.308 | .000 |
|       | LearningStyles | .133                        | .105       | .089                      | 1.264  | .208 |

a. Dependent Variable: BehaviouralIntention

#### 5. CONCLUSION

The acceptance of blended learning by undergraduate students was the objective of the study, since blended learning is still in its infancy in Landmark University, the study set out to find those factors that influence the adoption of the technology. The study found out that majority of students are more interested in course-related reading and course materials features of blended learning .Also, students perceive course materials to provide high benefits on performance. Interesting students are not interested in collaborating with colleges and discussing with lecturers on blended learning platforms. The study further showed that performance expectancy and facilitating conditions influenced adoption of blended learning in Landmark University, while perceived ease of use and social influence did not have any influence on adoption.

Gender did not play any moderating effect on adoption of blended learning, as male and female undergraduate students' intention to adopt blended learning had no variation. This study also found out that there is no relationship between learning styles and blended learning adoption. This study has implications in providing insights on the acceptance of blended learning in universities. Undergraduate students consider blended learning useful in their academic pursuits and with supporting features being available will invariably lead to the acceptance of the technology.

## REFERENCES

1. Bonk, C.J., & Graham, C.R. (2012). *The handbook of blended learning: Global perspectives, local designs*: Wiley. com.
2. Cheng, Y. S., Yu, T. F., Huang, C. F., Yu, C., & Yu, C. C, 2011. The comparison of three major occupations for user acceptance of information technology: Applying the UTAUT model. *iBusiness*, 3 (2):147-158.
3. Finn, A., & Bucci, M., 2004, A Case Study Approach to Blended Learning. Los Angeles: Centra Software.
4. Garrison, D. R., & Vaughan, N, 2008. Blended learning in higher education: Framework, principles, and guidelines. San Francisco, CA: John Wiley & Sons, Inc.pp
5. Graham, C. R, 2006. Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds), *The Handbook of blended learning: Global perspectives, local designs* San Francisco, CA: John Wiley & Sons, Inc ,pp. 3-21.
6. Graham, C.R. 2013. Emerging Practice and Research in Blended Learning. In M. G. Moore (Ed.), *Handbook of distance education*. New York, London: Routledge
7. Harris, P., Connolly, J., & Feeney, L., 2009. Blended learning: Overview and recommendations for successful implementation. *Industrial and Commercial Training*, 41(3): 155-163. <http://dx.doi.org/10.1108/00197850910950961>
8. Howard, S.B, 2009. The benefits of face-to-face interaction in the online freshman composition course. *Journal of Online Learning and Teaching*, 5(4): 685-697.
9. Ifinedo, P., & Ololube, N. P, 2007. A discourse on the problems, prospects, and progress of distance education in a developing country. In E. P. Bailey (Ed.), *Focus on distance education developments*, (pp. 183-194). New York, NY: Nova Science Publishers.
10. Jackson, L.C., Jones, S.J., & Rodriguez, R. C. (2010). Faculty Actions That Result in Student Satisfaction in Online Courses. *Journal of Asynchronous Learning Networks*, 14(4), pp.78-96.
11. Kehrwald, B., Rawlins, P., & Simpson, M. (2011, December). *Learner experiences of online learning in blended learning situation: Different cohorts, different needs*. Paper presented at ascilite 2011, Hobart,
12. Lopez-Perez, V.M., Perez-Lopez, C.M., & Rodriguez-Ariza, L, 2011. Blended learning in higher education: Students' perceptions and their relation to outcomes. *Computers and Education*, 56(3):818-826. <http://dx.doi.org/10.1016/j.compedu.2010.10.023>
13. Nunnally, J. C, 1978. *Psychometric Theory*, New York: McGraw Hill.pp.245
14. Nsofor, C.C., Umeh, A.E., Ahmed, B., & Sani, I.D., 2014. Blended learning environment: An innovative pedagogical approach for redefining higher education in Nigeria. *Research on Humanities and social sciences*, 4(26),:21-27.
15. Ololube, N. P., 2011. Blended learning in Nigeria: determining students' readiness and faculty role in advancing technology in a globalized educational development. In A. Kitchenham (Ed.) *Blended Learning Across Disciplines: Models for Implementation*, (pp. 190-207). Hershey, PA: Information Science Reference. DOI: 10.4018/978-160960-479-0.ch011.
16. Park, S.Y. ,2009. An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning. *Educational Technology and Society*, 12(3):150-162. <http://dx.doi.org/10.6115/ijhe.2012.13.2.87>
17. Singh, H, 2003. Building effective blended learning programs, *Educational Technology*, 43(1): 51-54.
18. Sharpe, R., Benfield, G., Roberts, G., & Francis, R., 2006. The undergraduate experience of blended e-learning: A review of UK literature and practice. *The higher education academy* 74-78
19. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D, 2003, User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, .27(1):425-478.
20. Venkatesh, V., and Morris, M. G, 2000. Why Don't Men Ever Stop to Ask For Directions? Gender, Social Influence, and Their Role in Technology Acceptance and Usage Behavior, *MIS Quarterly*, 24(1)115-139.