# Barriers Limiting The Use of Google Classroom For Learning Vocational And Entrepreneurship Courses

# Obielodan Omotayo Olabo<sup>1</sup>, Onojah Amos Ochayi<sup>2</sup>, Aderoju, Adekola Musiliu<sup>3</sup>, Onojah Adenike Aderogba<sup>4</sup>, Adigun, Boluwatife Joshua<sup>5</sup>

University of Ilorin, Ilorin, Nigeria<sup>1</sup> University of Ilorin, Ilorin, Nigeria<sup>2</sup> University of Ilorin, Ilorin, Nigeria<sup>3</sup> University of Ilorin, Ilorin, Nigeria<sup>4</sup> University of Ilorin, Ilorin, Nigeria<sup>5</sup>

**Abstract**. The dream of every undergraduates is to get a fascinated well-paid Job after school. One of the courses that could aid students' employment is the vocational and entrepreneurship courses. Due to the high number of students who partake in this course, some technologies were employed for the instructional process. One of such is the Google classroom. However, there are some complains from students on these learning technological platforms. This study therefore investigates the barriers limiting the use of google classroom for learning vocational and entrepreneurship courses. This study employs the survey method and 250 undergraduates were purposively sampled. The findings established that Poor power supply, loss of class control, High cost of purchasing relevant materials, Lack of adequate support system and laziness encouragement are barriers that hinder students' use of google classroom for learning vocational and entrepreneurship courses. The study concluded that some barriers which hinders students from using Google classroom for learning should be resolved. It was however recommended that the use of google classroom should be encouraged in schools, not only for learning vocational and entrepreneurship courses but for other courses.

**Keywords:** barriers; utilization; google classroom; learning; vocational and entrepreneurship courses; gender; academic level.

**Article History.** Received July, 2021. Revised October, 2021. Accepted December, 2021 **Corresponding Author.** Department of Educational Technology, University of Ilorin, Nigeria <u>tayoobielodan@yahoo.com<sup>1</sup></u>; <u>haymoresonojah@yahoo.com<sup>2</sup></u>; <u>kolaroju@gmail.com<sup>3</sup></u>; <u>temiladeadenike2015@gmail.com<sup>4</sup></u>; <u>digunbol@gmail.com<sup>5</sup></u>

# **INTRODUCTION**

Since the advent of Information and communication technologies (ICTs), it has been a major driving forces of knowledge-based and globalized societies of a new world era. It has accelerated rapidly since its adoption and its use has resulted in the globalization of knowledge and information resources (Islam & Islam, 2017). ICTs are playing an integral role in organizations and all other sectors they've been utilized including the education sector. The adoption and use of ICTs in education is highly expected as the 21<sup>st</sup> century students are digital natives; therefore, it is only natural to adapt it into their learning. This innovation brought about new methods and approaches to teaching and learning. It has caused a shift in learning patterns from face to face towards more open education, these including utilizing information and communication technology as learning resources and meeting their needs for almost unlimited information (Rahmad, Wirda, Berutu, & Lumbantoruan, 2019).

Information and Communication Technology (ICT) have become and taken a key role in the field of education, it has led to the development and modification in educational

methodology and curriculum delivery globally. Ever since its adoption It has become an indispensable instrument for the development of quality teaching and learning and it has dramatically reshaped the teaching and learning process in the education system. ICT offers powerful learning environments that can transform the learning and teaching process so that students can deal with knowledge in an active, self-directed and constructive way (Atsumbe, Raymond, & Duhu, 2012). The application of ICT to education has given rise to a new set of vocabularies used to describe new approaches to learning and curriculum delivery. Such terms include e-teaching, e-learning, and so on which are facilitated via the internet.

Google Classroom is a free web service developed by Google for schools that aims to simplify creating, distributing, and grading assignments (Okmawati, 2020). Google Classroom education is one of the features provided by Google Apps for Education (GAFE) which was released to the public on August 12, 2014. It is an application that allows the creation of classrooms in cyberspace. It is used as a means of communication between students and lecturers, in organizing classes, especially when students and lecturers cannot do face-to-face learning (Izenstark & Leahy, 2015). The primary purpose of Google Classroom is to streamline the process of sharing files between teachers and students.

Over the years, a stereotypical view concerning technology use and gender has been developed, which is, relative to men and boys, women and girls might have more negative attitude towards technology and technology use, and they would be less actively engaged in technology-related activities and behaviors (Islahi, 2019). However, the research findings from various individual studies about gender difference in the attitude toward technology use have been inconsistent, making it difficult to draw any firm conclusion. Literature suggests that gender represents critical part in realizing the variation in perceptions towards technology skills and attitudes on e-learning which includes using google classroom for learning; Results gotten from similar studies will be reviewed and related to the study.

One of the reasons that has caused the Nigeria educational system to be greatly faulted by most people is the inability of the system to provide a structural employment plan for Universities graduates after the completion of their Bachelor degrees and these has led to increase in the number of dependent population of the nation and has in turn affected the economic growth of the country. Unemployment often becomes the stock of all those individuals who are not engaged in any productive activity and who are either unable to find work on the prevailing real wage rate or who are in the process of switching to a new job.

Most of the graduates been produced are for export purpose since Nigeria labor market is shrinking and not expanding to the extent that smaller organization who cannot afford to pay more are downsizing, right sizing or even outsourcing their employment agencies (Olanipekun, Brimah, & Rabiu, 2015). Therefore, it has led to the continuous loss of good size of our human capital to other nations, where they contribute in no small measure to the development of the host economies, while those who cannot go abroad remain frustrated, unemployed and underemployed (Brimah, Olanipekun, & Ibikunle, 2014).

It is no more news that technology can greatly enhance teaching and learning and help in achieving educational objectives. The integration of technology in the classroom can help teachers to present their lesson in a better way, it also helps the teacher in the explanation of difficult concepts so students are able to easily understand those concepts. Its rapid advancement in recent years has brough about new methods and approaches in which learning can delivered. Education has moved on from the past time where classes are held directly (face to face) in a teacher centered environment to a more enhanced and virtual environment where learning can take place without the teacher and students having to be in the same geographical location. The teacher or instructor can simply send learning contents, the students then access it and give feedback to the teacher on the learning contents.

Educators worldwide had no choice but to leverage online education technologies and applications to further teaching and learning. There are various mediums to be used including Microsoft Teams, Facebook Live, Google Classroom, Webex, Zoom and other chat applications like Whatsapp and Telegram. One of the platforms used which is now very popular is the google classroom, it allows teacher and students to share, edit and comment on learning materials thereby leading to continuity in passage of knowledge. Even though google classroom has being used by Unilorin students before the pandemic, there could however be several challenges against the use of google classroom especially for learning vocational and entrepreneurship courses, which is why this study investigated the barriers limiting the utilization of google classroom by undergraduates in learning vocational and entrepreneurship courses.

Purpose of the Study (1) examined the barriers against the use of google classroom for learning vocational and entrepreneurship courses; (2) investigated the influence of undergraduates' gender on the barriers limiting the utilization of google classroom for learning vocational and entrepreneurship courses; (3) investigated the influence of undergraduates' academic level on the barriers limiting the utilization of google classroom for learning vocational and entrepreneurship courses. Research Questions (1) What are the barriers against the use of google classroom for learning vocational and entrepreneurship courses?; (2) What influence does undergraduates' gender have on the barriers limiting the utilization of google classroom for learning vocational and entrepreneurship courses; (3) What influence does undergraduates' academic level have on the barriers limiting the utilization of google classroom for learning vocational and entrepreneurship courses; (3)

Research Hypotheses: The following null hypotheses were tested in the study: (1) Ho<sub>1</sub>: There is no significant difference between the barriers limiting male and female undergraduate on the utilization of google classroom for learning vocational and entrepreneurship courses; (2) Ho<sub>2</sub>: There is no significant difference among barriers limiting undergraduate students' utilization of google classroom for learning vocational and entrepreneurship courses based on their Academic level

#### METHOD

This section deals with the method that was used in the conduct of this research work. This is a descriptive research designed to examine the barriers limiting the use of Google classroom for learning Vocational and Entrepreneurship in University of Ilorin. The research employed the use questionnaire to elicit information from respondents. Survey research employs questionnaire in this regard to gather necessary and meaningful information from the respondents. The population for this study will comprise all students of University of Ilorin, Kwara state. The total number of students in University of Ilorin is 45,885 and simple random sampling technique were used to select 250 respondents. Some of the population were purposively selected based on gender.

The research instrument for this study was researchers-developed. The questionnaire consists of two sections that is, A and B. Section A consist of various questions on the respondents' demographic data that include faculty, gender, and level. Section B will comprise of structured questions which is in scale response mode. The questionnaire was based on using four point acting scale. The formats of response are: Strongly Agree (SA), Agree (A), Strongly Disagree (SD), and Disagree (D).

The instrument was validated by four experts in educational technology and business education for face and content validity. Their comments observation and corrections were used to produce the final draft of the questionnaire. Letter of introduction were produced and taken to the Dean of each faculties to seek permission to conduct in their faculties. Ethical considerations were considered as student were not forced to attest to the questionnaire. Also, their data were only used for the benefits of this research as their anonymity were kept confidential. The data collected for the study were analysed using frequency counts, percentages, mean scores. All hypotheses were tested at 0.05 level of significance. t test was used in testing Hypothesis one and hypothesis two was tested with Analysis of Variance (ANOVA).

# **RESULTS AND DISCUSSION**

This section presents the analysis on the barriers limiting the use of Google classroom for learning Vocational and Entrepreneurship in University of Ilorin, Nigeria and the interpretation of the data through the analysis of the questionnaire items after the administration of the research instrument were done. The section presents the description of the research subjects, statistical analyses and results based on research questions and research hypotheses stated earlier in chapter one. The demographic information of the respondents and the results of the analyses are also presented both in tables and figures.

A total of 250 undergraduate students from University of Ilorin, Ilorin, Nigeria, comprising of 120 male students and 130 female students made up the sample for this study. The 250 respondents were given the research instrument with the items, and eventually were available and responses from 250 undergraduate students were properly filled and returned amounting to 100% response rate. The sample size for this research was sufficient and representative.

The respondents' demographic data are presented in Tables 1-11

Table 1: Kes	Table 1: Respondents Data based on their Gender						
Gender	Frequency	Percent	<b>Cumulative Percent</b>				
Male	120	48.0	48.0				
Female	130	52.0	100.0				
Total	250	100.0					

 Table 1: Respondents Data based on their Gender

Table 1 shows that male and the female respondents formed the study of the total sampled respondents with 120 (48.0%) are male while 130 (52.0%) females formed different percentage of the total sampled respondents respectively. This is also shown graphically in figure 1.

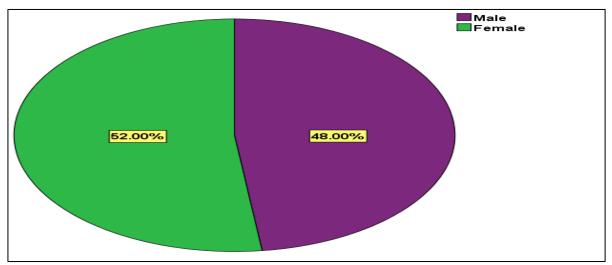


Figure 1: Graphical Illustration of Respondents' Gender

The pie chart revealed that female undergraduate students were more than their female counterparts.

Level	Frequency	Percent	Cumulative Percent
100	19	7.6	7.6
200	25	10.0	17.6
300	85	34.0	51.6
400	121	48.4	100.0
Total	250	100.0	

#### Table 2: Respondents Data based on their Academic Level

Table 2 shows that respondents from first to fourth year in the university formed the study of the total sampled respondents with 19 (7.6%) are in 100 level, 25 (10.0%) are in 200 level, 85 (34.0%) are in 300 level while 121 in 400 level formed a percentage 48.4% of the total sampled respondents respectively. This is also shown graphically in figure 2.

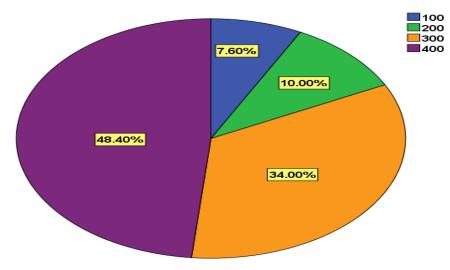


Figure 2: Graphical Illustration of Respondents' Academic Level

The chart in figure indicated that majority of the respondents were in their fourth year of their academic level, others are in first year, second year and third year respectively.

### Results

**Research Question One:** What are the barriers against the use of google classroom for learning vocational and entrepreneurship courses? The mean and Standard deviation was employ. yed to ground the barriers against the use of google classroom for learning vocational and entrepreneurship courses in table 3.

Table 3: Barriers Against the Use of GC for Vocational and Entrepreneurship
Courses

S/N	ITEMS	Mean	SD
1.	Poor power supply affects the use of electronic Devices for teaching and learning	3.56	.607
2.	Lecturers may lose class control if the use of google classroom is encouraged	3.17	.738
3.	Lecturers prefer the 'talk and chalk' method of teaching	3.16	.807
4.	High cost of purchasing relevant materials online discourages the use of google classroom	3.18	.751
5.	Lack of adequate support system discourage undergraduates to use of google classroom for learning.	3.44	.652
6.	High cost is a factor that deter the use of the internet by students and lecturers	3.18	.663
7.	Use of google classroom encourages laziness in students	3.12	.832
	Grand Mean on Barriers Limiting the Use of Google Classroom for Learning Vocational and Entrepreneurship Courses	3.26	.430

The barriers against the use of google classroom for learning vocational and entrepreneurship courses was presented in table 3. Poor power supply, loss of class control, High cost of purchasing relevant materials, Lack of adequate support system and laziness encouragement are barriers that hinder students' use of google classroom for learning vocational and entrepreneurship courses.

**Research Question Two** What influence does undergraduates' gender have on the barriers limiting the utilization of google classroom for learning vocational and entrepreneurship courses.

**Hypothesis One** There is no significant difference between the barriers limiting male and female undergraduate on the utilization of google classroom for learning vocational and entrepreneurship courses. t-test was conducted to determine if there is any significant difference between the barriers limiting male and female undergraduate on the utilization of google classroom for learning vocational and entrepreneurship courses. The result is shown in Table 4.

Table 4. Undergraduates utilization of google classifoom based on Gender							
Gender	Ν	Mean	Std. Deviation	Df	t	Sig. (2-tailed)	
Male	120	3.252	.473				
				248	-0.268	0.79	
Female	130	3.267	.388				

Tal	ble 4	: Undergrad	duates'	utilization	of g	google classroom l	based on Gen	ıder	
-	-			~					

Table 11 indicates that t (248) = 0.27, p = 0.79. This means that the stated null hypothesis was not rejected. This was as a result of the t-value of 0.268 resulting in 0.79 significance value which was greater than 0.05 alpha value. By implication, the stated null hypothesis was established thus: There was no significant difference between the barriers limiting male and female undergraduate on the utilization of google classroom for learning vocational and entrepreneurship courses in Table 4.

Research Question Three What influence does undergraduates' academic level have on the barriers limiting the utilization of google classroom for learning vocational and entrepreneurship courses

Hypothesis Two There is no significant difference among barriers limiting undergraduate students' utilization of google classroom for learning vocational and entrepreneurship courses based on their Academic level.

The analysis for testing this hypothesis as shown in Table 5 was ANOVA statistical tool on students' utilization of GC based on their Level.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	.315ª	3	.105	.563	.640
Intercept	1502.091	1	1502.091	8070.560	.000
Level	.315	3	.105	.563	.640
Error	45.785	246	.186		
Total	2703.000	250			
Corrected Total	46.100	249			

 Table 5: ANOVA on Barriers of utilization of Google classroom by Academic Level

a. R Squared = .007 (Adjusted R Squared = -.005)

The analysis on significant difference among barriers limiting the undergraduate students use of Google classroom for learning Vocational and Entrepreneurship based on their Academic level is displayed in table 12. The null hypothesis was rejected as F (3, 249) = 0.56 and p = 0.00 > 0.05. Since the p-value was greater than the significance value of 0.05, the hypothesis was not rejected. Thus, there was no significant difference among barriers limiting the undergraduate students use of Google classroom for learning Vocational and Entrepreneurship based on their Academic level.

### **Discussions**

This study investigated the barriers limiting the undergraduates' utilization of google classroom in learning vocational and entrepreneurship courses in university of Ilorin, Nigeria. The result from the study indicated that Undergraduate students identified poor power supply, loss of class control, high cost of purchasing relevant materials, lack of adequate support system and laziness encouragement as barriers that hinder students' use of google classroom for learning vocational and entrepreneurship courses. This goes in

accordance with the study conducted by Mathipa & Mukhari, (2014) who stated that poor accessibility to internet and computer resources are the main causes of the non-productive nature of Nigerian school system and poor academic performances of students in Nigerian schools. Also, there are constraints to the successful utilization of google classroom (Ezeugbo & Asiegbu, 2011) and e-learning facilities for curriculum implementation in schools. In addition, network costs in Nigeria consist of not only capital cost but also high operating cost (Osuafor & Emeji, 2015).

# CONCLUSION

The results gathered at the end of this research work shows that when there are some barriers against the use of google classroom for learning vocational and entrepreneurship courses. If solutions can be provided in resolving these barriers, it will attract and encourage students in using the technologies. This will not only reduce the time used in learning lesson contents but it will also foster collaboration and interactivity among lecturers-students and even between the students.

Based on the results drawn from this research, the following recommendations below have been made; The use of google classroom should be encouraged in schools, not only for learning vocational and entrepreneurship courses but for other courses. Also, it was recommended that lecturers should encourage the use of google classroom among the students and within themselves and see it not as their replacement but as a tool to further enhance and improve the quality of their teaching towards achieving instructional objectives

# REFERENCES

Akinola, D. (2012). A Survey of Entrepreneurship Education Curriculum as an Instrument for Reducing Unemployment in Nigerian Universities. *Abuja International Journal of Education And Management Sciences (ABIJEMS), 2, pp. 330-345.* 

Atsumbe, B. N., Raymond, E., & Duhu, E. B. (2012). Availability and Utilization of e-Learning Infrastructures in Federal University of technology, Minna. *Journal of Education and Practice* 3(13).

Belaya, V. (2018). The Use of e-Learning in Vocational Education and Training (VET): Systematization of Existing Theoretical Approaches. *Journal of Education and Learning* 7(5), 92-101.

Bhattacharjee, B. (2008). Factors affecting computer use among older adult users: A study in the backdrop of the Florida State University. PhD Thesis, . *College of Information, the Florida State University*.

Brimah, A., Olanipekun, W., & Ibikunle, O. (2014). Engendering Entrepreneurship Education Curriculum As A Catalyst For Solving Unemployment And Achieving Sustainable Development . *Al-Hikmah University Journal of Education*", *Vol. 1, No.1 2014*.

Chuang, Y. (2014). Increasing Learning Motivation and Student Engagement through the Technology- Supported Learning Environment. . *Creative Education*, 5(23): 1969.

Ertmer, P., Ottenbreit-Leftwich, A., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. *Computers & Education*, *59*, *423-435*.

Eshreteh, M. K., & Siaj, A. H. (2017). Attitudes of English-Major Students and Teachers towards Using Blended Learning in the English Department at Hebron University.

Ezeugbo, C. O., & Asiegbu, E. C. (2011). Challenges in the application of e-learning in Continuing Education Programmes (CEP) in Nigerian Universities: Challenges in the application of e-learning in Continuing Education PrograExploring Teachers' Perspective. *Ghana Journal of Education and Teaching (GHAJET), 12, 267-275.* 

Hadriana. (2017). Analysis of the use of ICT by public high school teachers in Pekanbaru. *Universitas Riau.* 

Howe, F., & Knutzen, S. (2012). Digitale Medien in der gewerblich-technischen Berufsausbildung, . *Studie im Auftrag des Bundesinstituts für Berufsbildung, Bonn.* .

Islahi, F. (2019). Exploring Teacher Attitude towards Information Technology with a Gender Perspective. *Contemporary educational technology*, *10(1)*, *37-54*.

Islam, M. S., & Islam, M. N. (2017). Use of ICT in libraries: An empirical study of selected libraries in Bangladesh. *Library Philosophy and Practice*.

Izenstark, A., & Leahy, K. L. (2015). Google classroom for librarians: features and opportunities. *Library Hi Tech News*, *32*(*9*), *1-3*.

Jamieson-Proctor, R., Albion, P., Finger, G., Cavanagh, R., Fitzgerald, R., Bond, T., & Grimbeek, P. (2013). Development of the TTF TPACK survey instrument. *Australian Educational Computing Journal* 27(3), 26-35.

Kerres, M. ((2012)). Mediendidaktik. Konzeption und Entwicklung mediengestützter Lernangebote, 3. Vollständig überarbeitete Auflage. . *München: Oldenbourg Verlag.* .

Lenz, K. (2009). Akzeptanz von E-Learning in KMU. Universität Erfurt, Dissertation.

Mathipa, E., & Mukhari. (2014). Teachers factors influencing the use of ICT in Teaching and learning in South African Urban Schools. *Mediterranean Journal of Social Sciences*.

Mwila, P. (2018). Assessing the attitude of secondary school teachers towards the integration of ICT in the teaching process in Kilmanjaro, Tanzania. . *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*.

Nwana, S. (2012). Challenges in the application of e-learning by secondary school teachers in Anambra state, Nigeria. *African Journal of Teacher Education (AJOTE)*, 2(1), 1-9.

Okmawati, M. (2020). The use of google classroom during pandemic. *Journal of English Language Teaching Volume 9 No. 2.* 

Olanipekun, W. D., Brimah, A. N., & Rabiu, R. O. (2015). ENTREPRENEURIAL AND VOCATIONAL EDUCATION REVOLUTION:. *Kuwait Chapter of Arabian Journal of Business and Management Review Vol. 4, No.12; August. 2015.* 

Osuafor, A. M., & Emeji, E. O. (2015). Utilization of E-Learning Facilities by Science Teacher Educators for Teaching Pre-Service Teachers in Nigerian Colleges of Education. *Asian Journal of Education and e-Learning (ISSN: 2321 – 2454).* 

Rahmad, R., Wirda, M. A., Berutu, N., Lumbantoruan, & Walbiden. (2019). Google classroom implementation in Indonesian higher education. *Journal of Physics*.

Sitzmann, D. (2015). Rahmenwerk für zielgruppenorientiertes Blended E-Learning im MINT-Bereich im Kontext des Lebenslangen Lernens. *Technische Universität Clausthal, Dissertation*.

Suri, G., & Sharma, S. (2013). The impact of gender on attitude towards computer technology and e-learning: An exploratory study of Punjab University, India. . *International Journal of Engineering Research*, 2(2),.

Te'eni, D. (2004). Levels of abstraction in designs of human – computer interaction. *he case of e-mail.DOI: 10.1016/j.chb.2004.02.028*.

Turel, Y. K., & Johnson, T. (2012). Teachers'Belief and Use of Interactive Whiteboards for Teaching and learning, *Educational Technology & Society*.

Warschauer, M., Zheng, B., Niiya, M., Cotten, S., & Farkas, G. (2014). Balancing the one-to-one equation: Equity and access in three laptop programs. *Equity & Excellence in Education*, 47(1), 46-62.

Yacob, A., Kadir, A. Z., Zainudin, O., & Zurairah, A. (2012). Student Awareness towards E-Learning in Education. *Procedia-Social and Behavioral Sciences*,.

Yang, K., & Wang, T. (2012). Interactive whiteboard: Effective interactive teaching strategy designs for biology teaching. . *E learning engineering, on jobtraining and interactive teaching*.

Zabadi, A. M., & Al-Alawi, A. H. (2016). University Students' Attitudes towards E-Learning: University of Business & Technology (UBT)-Saudi Arabia-Jeddah: A Case Study. *International Journal of Business and Management 11(6), 286-295.*