

Awareness and Utilization of Google Classroom Among Undergraduate Students of Ondo State Universities

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Abstract

Google Classroom is an online learning management system developed by Google that aims to streamline the process of creating, distributing, and grading assignments in a digital classroom setting Google Classroom is accessible on multiple devices, including desktop computers, laptops, tablets, and mobile phones, which enhances its usability and convenience. The present study is focused on the awareness and utilization of Google Classroom among undergraduates of Ondo State University for academic purposes. The study adopted descriptive research design; simple random technique was used to select three hundred (300) students out of the 1750 final year students from three (3) universities, one (1) each from the three (3) senatorial districts of the state. Three (3) research questions were raised for the study and three (3) experts in educational technology validated the instrument to ensure its content and face validity. The data collected were analyzed using mean and standard deviation among others. The findings showed that undergraduates were aware and utilize Google Classroom for academic purposes and it has positive impact on their academic performance. The study concluded that Google Classroom is an effective tool for academic purposes. It was therefore recommended that Teachers and the school administrators should consider integrating Google Classroom after proper planning in teaching as it provides students extended opportunities to learn.

Keywords: Google Classroom, Awareness, Utilization, Undergraduates, Academic purposes and Learning Management System

Introduction

E-learning technology refers to the use of digital tools and platforms to deliver educational content and facilitate online learning experiences. It encompasses various technologies, such as learning management systems (LMS), virtual classrooms, multimedia resources, gamification and social learning tools. E-learning technology enables learners to access educational materials anytime, anywhere, and at their own pace, providing flexibility and personalized learning experiences. E-learning technology has evolved significantly, incorporating interactive elements, multimedia integration, and adaptive learning systems to enhance learner engagement and improve learning outcomes. Elearning technology has also transformed teaching methodologies, shifting from traditional classroombased instruction to blended or fully online formats. E-learning technology plays a crucial role in promoting active and collaborative learning, allowing for higher levels of student interaction through discussion forums, online group projects, and collaborative learning spaces. With e-learning technology, educators can design interactive and multimedia-rich learning activities that cater to

diverse learning styles and preferences, ultimately enhancing the overall learning experience.

E-learning technology has become increasingly popular in recent years, offering numerous advantages in education and training. It provides flexibility in terms of time and location, allowing learners to access course material anytime and anywhere, as long as there is an internet connection. This convenience has been particularly beneficial for individuals who may have geographical or time constraints, enabling them to learn at their own pace and schedule (Wang et al., 2018). Furthermore, e-learning technology promotes active learning by utilizing interactive multimedia tools, simulation exercises, and virtual reality, which enhances engagement, motivation, and knowledge retention (Rodrigues, et al., 2019).

Google Classroom is an educational technology tool developed by Google that aims to simplify the process of creating, distributing, and assessing assignments in a virtual learning environment. Since its launch in 2014, Google Classroom has gained widespread popularity among teachers and students due to its user-friendly interface, efficient features, and its ability to enhance



the overall academic experience. These key features of Google Classroom and its importance in enhancing academic engagement and collaboration makes it unique among other learning management system.

Google Classroom is an online learning management system developed by Google that aims to streamline the process of creating, distributing, and grading assignments in a digital classroom setting. It provides a platform for teachers to communicate with students, share resources, assign tasks, and provide feedback. According to (Fahrurrozi, 2019), one of the key advantages of Google Classroom is its userfriendly interface and integration with other Google tools such as Google Drive, Docs, Sheets, and Slides. This integration allows teachers to easily share and collaborate on assignments and resources, providing a seamless workflow for both teachers and students. Furthermore, Google Classroom is accessible on multiple devices, including desktop computers, laptops, tablets, and mobile phones, which enhances its usability and convenience (Sahito, 2017). Another notable feature of Google Classroom is its ability to promote collaboration and engagement among students. With the help of tools like Google Docs, students can work together on assignments in realtime, encouraging teamwork and peer learning (Ritzhaupt, et al., 2019). Additionally, the platform facilitates efficient communication between teachers and students through announcements, comments, and direct messaging, helping to establish an interactive online learning environment (Mafa, 2018).

Google Classroom is a widely used platform for academic purposes among undergraduates. It offers a range of features that facilitate online learning, such as the ability to create and distribute assignments, provide feedback, and collaborate with peers. Studies have explored the benefits of using Google Classroom in higher education settings. For example, a study by (Nizal et al., 2016) found that Google Classroom enhanced student engagement, increased collaboration. improved communication between students and instructors. The platform can also help students develop digital skills necessary for the modern workforce. However, some challenges have been identified, such as technical issues and the need for sufficient training and support for both instructors and students. It is important for institutions to consider these factors and address any concerns to ensure effective utilization of Google Classroom for academic purposes.

Moreso, like any educational tool, Google Classroom also has some limitations. One common criticism is that it may not be suitable for all types of educational activities or pedagogical approaches. Due to its emphasis on assignments, grading, and file-

sharing, some educators argue that it promotes a traditional, task-oriented approach to teaching and learning, leaving less space for creativity, inquiry-based learning, or project-based activities (Gray et al., 2016). Another limitation is that Google Classroom heavily depends on internet connectivity and may not function optimally in areas with limited or unreliable internet access. This issue particularly affects disadvantaged students who may not have consistent access to internet resources outside of the school environment, creating disparities in their learning experiences (Wang et al., 2010).

Statement of the Problem

Despite the potential benefits of Google Classroom in Nigerian Universities, their full usage and impact have not been fully realized. Most of the existing research findings suggests that there is a need to further encourage and adopt the usage of it among undergraduates in Nigerian Universities. This gap in knowledge should be attended to by investigating the awareness and utilization of Google Classroom among undergraduates of Ondo State Universities.

Objectives of the Study

The objectives of the study are to determine:

- The level of awareness among undergraduates of Ondo State Universities about Google Classroom for academic purposes.
- ii. The extent of utilization of Google Classroom undergraduates of Ondo State Universities.
- iii. The factors influencing the utilization of Google Classroom among undergraduates.
- iv. Explore the perceived benefits of using Google Classroom among undergraduates.

Research Questions

The study sought and provided answers to the following research questions;

- i. What is the level of awareness among undergraduates of Ondo State Universities on Google Classroom?
- ii. What is the extent of utilization of Google Classroom among undergraduates of Ondo State Universities?
- iii. What are the factors influencing the utilization of Google Classroom among undergraduates?
- iv. What are the perceived benefits of using Google Classroom among undergraduates?



Methodology

A descriptive survey design was employed for the study. The population consisted of all 1750 final year undergraduates in three (3) universities, one university each from the three (3) senatorial districts in the state. The schools are: from Ondo North: Achiever University, Owo; from Ondo Central: Federal University of Technology, Akure; from Ondo South: Olusegun Agagu University of Science and Technology, Okitipupa. In order to give all the respondents an equal opportunity for being selected, a random sampling technique was adopted to select one hundred (100) respondents from each university regardless of their sex which makes a total of three hundred (300).

The instrument used in this study was selfdesigned questionnaire on Likert four points scales. The questionnaire had two sections A and B, section "A" was concerned with demographic information while section "B" sought to investigate the awareness

and utilization of Google Classroom among the undergraduates of Ondo State Universities. Copies of the questionnaire were presented to three (3) experts in educational technology for appropriateness and adequacy of the content of the instrument. The questionnaire was tested for reliability on twenty (20) randomly selected students from Adeyemi University of Education, Ondo, Ondo State who are not part of the study. The data gathered from the pilot study was analyzed to check for internal consistently of reliability and the Cronbach alpha value was 0.71. This indicated that the research instrument was highly reliable.

At the end of the exercise, three hundred (300) valid copies of the questionnaire were retrieved, upon which analyses of the results were carried out. Mean and standard deviation were used to analyze the data collected. Decision Value: Low = 0.00-2.44. High = 2.45-4.00.

Results The result of the study was presented based on research questions.

Table 1 Undergraduates Level of Awareness of Google Classroom

Item	SA	A	D	SD	Mean	Std. D
I have attended a training session or workshop on how to use Google Classroom for academic purposes	84	154	49	13	3.03	.79
I know how to join a Google Classroom created by my lecturer	125	113	49	13	3.17	.85
I am aware that I can submit assignments and receive feedback through Google Classroom	87	182	27	4	3.17	.64
I am familiar with the option to schedule and attend online meetings through Google Classroom	145	93	58	4	3.26	.81
I am confident in navigating and using Google Classroom effectively	79	135	62	24	2.89	.88
Weighted Average			3.10			

Key; SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree

Decision Value: Low = 0.00-2.44, High = 2.45-4.00

Table 1 shows the level of Google Classroom awareness among undergraduate students in tertiary institutions. The table shows that the students agreed to all the items as follows: they have attended a training session or workshop on how to use Google Classroom for academic purposes ($\bar{x} = 3.03$), know how to join a Google Classroom created by my lecturer ($\bar{x} = 3.17$), they are aware that they can submit assignments and receive feedback through Google Classroom ($\bar{x} = 3.17$), they are familiar with

the option to schedule and attend online meetings through Google Classroom ($\bar{x} = 3.26$) and they are confident in navigating and using Google Classroom effectively ($\bar{x} = 2.89$). Meanwhile, based on the value of the weighted average (3.10 out of 4.00 maximum value obtainable) which falls, within the decision value for high, it can be inferred that the level of awareness among undergraduate students about Google Classroom for academic purposes is high.



Table 2

Extent of Utilization of Google Classroom by Undergraduates

Item	SA	A	D	SD	Mean	Std. D
I can collaborate with my classmates on projects using Google Docs or Google Slides through Google Classroom	133	124	30	13	3.26	.81
I can use the discussion board feature on Google Classroom to engage with my classmates and lecturers	68	166	40	26	2.92	.84
I actively check for notifications and announcements from my lecturers on Google Classroom	113	94	93	0	3.07	.83
I have used Google Classroom to access course materials, assignments, or announcements outside of regular class hours	136	88	72	4	3.19	.85
I often use the mobile app version of Google Classroom compared to the desktop version	108	110	78	4	3.07	.82
Weighted Average					3.	.10

Key; SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree

Decision Value: Low = 0.00-2.44, High = 2.45-4.00

Table 2 shows the extent to which undergraduate students utilize Google Classroom for academic activities. The table shows that the students agreed to all the items that: they can collaborate with their classmates on projects using Google Docs or Google Slides through Google Classroom ($\bar{x}=3.26$), can use the discussion board feature on Google Classroom to engage with their classmates and lecturers ($\bar{x}=2.92$), they can actively check for notifications and announcements from their lecturers on Google Classroom ($\bar{x}=3.07$), they have used

Google Classroom to access course materials, assignments, or announcements outside of regular class hours ($\bar{x}=3.19$) and they often use the mobile app version of Google Classroom compared to the desktop version ($\bar{x}=3.07$). Meanwhile, based on the value of the weighted average (3.10 out of 4.00 maximum value obtainable) which falls, within the decision value for *high*, it can be inferred that the extent to which undergraduate students utilize Google Classroom for academic activities is high.

Table 3
Factors Influencing Awareness and Utilization of Google Classroom among Undergraduates

Item	SA	A	D	SD	Mean	Std.	Remark
						D	
The flexibility of Google classroom has helped in the completion of the school curriculum	145	142	13	0	3.44	.58	Accepted
Improving undergraduates' ability to study effectively	98	162	27	13	3.15	.75	Accepted
Easy access to paperless sharing among undergraduates	136	118	46	0	3.30	.72	Accepted
Provision of options to check in privately with lecturers	106	95	87	12	2.98	.90	Accepted
The ability to meet up virtually to promote effective learning experience	157	112	17	14	3.37	.79	Accepted

Key; SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree **Decision Value for Remark:** *Not Accepted* = 0.00-2.44, *Accepted* = 2.45-4.00



Table 3 shows the factors influencing the utilization Google Classroom of among undergraduate students. The table shows that the students agreed to all the items as follows: the flexibility of Google classroom has helped in the completion of the school curriculum ($\bar{x} = 3.44$), improving undergraduates' ability to study effectively ($\bar{x} = 3.15$), easy access to paperless sharing among undergraduates ($\bar{x} = 3.30$), provision of options to check in privately with lecturers ($\bar{x} =$ 2.98) and ability to meet up virtually to promote effective learning experience ($\bar{x} = 3.37$). Based on the result from this table and mean score acceptance by the decision rule, the factors influencing utilization of Google Classroom among undergraduate students are: flexibility of Google classroom has helped in the completion of the school curriculum, improving undergraduates' ability to study effectively, easy access to paperless sharing among undergraduates, provision of options to check in privately with lecturers and ability to meet up virtually to promote effective learning experience.

Table 4
Perceived benefits of Using Google Classroom

Item	SA	A	D	SD	Mean	Std. D	Remark
Google Classroom has improved my learning experience as an undergraduate student	131	130	39	0	3.31	.69	Accepted
Google Classroom will help me stay organized and manage my assignments more effectively	61	164	63	12	2.91	.75	Accepted
Using Google Classroom improves self-paced learning and independent study	125	57	108	10	2.99	.96	Accepted
It reduces the cost and stress of travelling to school for face-to-face teaching	136	112	52	0	3.28	.74	Accepted
The usage of Google Classroom for learning has improved my technological know-how.	122	111	41	26	3.09	.94	Accepted

Key; SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree Decision Value for Remark: *Not Accepted* = 0.00-2.44, *Accepted* = 2.45-4.00

Table 4 shows the perceived benefits and challenges of using Google Classroom for academic purposes among undergraduates. The table shows that the students agreed to all the items on the table that: Google Classroom has improved their learning experience as an undergraduate student ($\bar{x} = 3.31$), Google Classroom will help them stay organized and manage their assignments more effectively ($\bar{x} = 2.91$), they think using Google Classroom might improve self-paced learning and independent study ($\bar{x} = 2.99$), it reduces the cost and stress of travelling to school for face-to-face teaching ($\bar{x} = 3.28$) and the usage of Google Classroom for learning has improved my technological know-how. ($\bar{x} = 3.09$). Based on the result from this table and mean score acceptance by the decision rule, the perceived benefits of using Google Classroom among undergraduates are: Google Classroom has improved their learning

experience as an undergraduate student, Google Classroom will help them stay organized and manage their assignments more effectively, using Google Classroom improves self-paced learning and independent study; also it reduces the cost and stress of travelling to school for face-to-face teaching the challenges are: The usage of Google Classroom for learning has improved my technological know-how...

Discussion of Findings

The result of first research question revealed that the level of awareness among undergraduate students about Google Classroom is high. This may be as a result that Google Classroom is available to anyone with Google Apps for Education, a free suite of productivity tools including Gmail, Drive, and Docs which are directly linked and used as components of Google Classroom. The result of the



present study agreed with the previous studies, like (Iftakhar, 2016) which noted that Google Classroom has now with the advent of technology becomes a household name among learners and educators.

Furthermore, the results from this study also revealed that the extent to which undergraduate students utilize Google Classroom is high. This could be that the students viewed Google Classroom as a supporting collaborative learning environment since it allows teacher-student and student-student interactions. This is in line with (Heggart et al., 2018), and (Putra, 2020), who found that students strongly agreed to the use of Google Classroom in teaching and learning because they can access the information from the very same source through a variety of devices such as laptops, mobile phones or tablets any time.

In the same vein the finding shows that the factors influencing the utilization of Google Classroom among undergraduates are: flexibility of Google classroom has helped in the completion of the school curriculum, improving undergraduates' ability to study effectively, easy access to paperless sharing among undergraduates, provision of options to check in privately with lecturers and ability to meet up virtually to promote effective learning experience. This application saves time and is paperless, and makes it easy to manage classes and resources, get immediate access to quizzes, communicate and be systematic (Hulse, 2019).

The result from this present also showed that the perceived benefits of using Google Classroom for academic purposes among undergraduates are: Google Classroom has improved their learning experience as an undergraduate student, Google Classroom will help them stay organized and manage their assignments more effectively, and they agreed that using Google Classroom improves self-paced learning and independent study; also it reduces the cost and stress of travelling to school for face-to-face teaching and the usage of Google Classroom for learning has improved my technological know-how..

Conclusion

Based on the results gained from the questionnaire, it was found that the students are aware of the existence of Google Classroom. They considered Google Classroom as very easy to use, with this factor having the highest mean. They also believed that Google Classroom is highly useful in that it helped them to be more productive, allowed them to access materials conveniently and submit assignments quickly, and enabled them to interact with the teacher and other friends. Overall, students thought Google Classroom was simple to use,

accessible, and an effective tool, according to the qualitative data. They also expressed a strong desire to use Google Classroom the more.

Recommendations

Based on the findings of this study, the following recommendations are made:

- 1. Students should make more adequate use of Google Classroom for their studies as it provides students extended opportunities to learn.
- 2. The school management should organize a seminar to train the lecturers on the use of Google Classroom because of its advantages like encouraging students interaction, simplifying learning, no more lost/forgotten assignment and making grading more efficient.
- 3. The school authority should not only limit the utilization of Google Classroom to the final year students alone but the crusade on the awareness and utilization should also be extended to all the levels in schools because of the benefits that our findings have highlighted.

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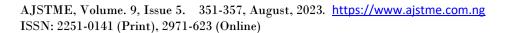
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