

## Assessment of the Utilization of Digital Resources (TikTok, and Google Classroom) as Supplementary Teaching Resources for ICT in Some Selected Secondary Schools in Zamfara State Nigeria

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### Abstract

This study assessed the utilization of online digital resources (TikTok, and Google Classroom), as supplementary teaching resources for ICT in some selected secondary schools in Zamfara State, Nigeria. Three objectives, and three research questions were formulated, the population of the study was 1,850 teachers, and students of two selected secondary schools (NSS Kaura Namoda, and GSSS Gusau), the sample was 100 (50 students, and 50 Teachers), descriptive survey research design was used, questionnaire was the instrument used for data collection, and data were analyzed using descriptive statistics, the study concluded that TikTok, and Google Classroom simplify, and enhance teaching and learning process. One of the findings revealed that teachers were not utilizing TikTok, and Google Classroom, as supplementary teaching resources for ICT course, based on this the researcher recommended that TikTok and Google classroom should officially be recognized as supplementary teaching resources for ICT course in Zamfara state Secondary schools.

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### **Background to the Study**

Digital resources (TikTok and Google classroom), as supplementary teaching resources means the use of these platforms or applications to create contents for instructional, purposes, delivery, and assessments. Secondary schools' teachers can utilize these online digital resources (TikTok, and Google classroom), to develop, promote, facilitate, and enhance teaching, learning or academic activities especially in ICT course. Digital Resources (TikTok, and Google classroom) as supplementary teaching resources play an important role in facilitating, and enhancing learning, it facilitates many effective educational methodologies such as self-directed, independent and collaborative learning. It can connect people whom separated by schedule and location, and it can provide the opportunity of receiving immediate feedback, and assessment, making learning appear comparatively more achievable than it would without instant feedback, (Al-Hariri & Al-Hattami, 2016).

Digital resources (TikTok, and Google classroom) as supplementary teaching resources, employ the use of textual, audio, visual, and audio-visual facilities to enhance the process. Digital resources (TikTok, and Google classroom) usage as instructional means or teaching platforms can help to simplify curriculum usage and enhance learning for all type of students. It also provides a means of putting across information and ideas, for teachers, while for students it represents individual, or group teaching environment which moves at the required pace. Smartphone, computer tablet, computer system and so on are the digital devices use to access digital resources, and have come to play an important role in teaching, and learning, activities, study organization and management, students or community life services delivery, and dealing with finance, personal safety, and security (Romaniuk, 2018).

Most of the people around the globe view digital resources (TikTok, and Google classroom) as social platforms, where people interact, display information, create contents, attached video clips, and leave for the viewers, to view, share, save, download, comments, and so on, not knowing its benefit when properly used as supplementary teaching resources in academic activities, especially secondary school level to divert the attention of the teenage students to utilize it in their academic activities instead, this is in accordance with the business of Apps, revelation that TikTok's worldwide age demographics revealed that 14.4% of platform users are between 13 and 17 years old, while 34.9% are between 18 and 24 years old, (Adelhardt and Eberle 2024), this indicated that secondary school students are among the most TikTok users around the globe, according to Omar, & Dequan, (2020) TikTok has been used as an educational tool by professionals in various fields. based on this teachers can use it as supplementary teaching resources for ICT in other to cope with the global challenges attached to the teaching carrier, due to technological advancements, particularly Zamfara state where insecurity and banditry enters every corner and affect some boarding and day, secondary school, some of which are no longer operating now in the state, lack of Orientation training on the use of Digital resources (TikTok, and Google classroom), as supplementary teaching resources, Some students can't afford iPads, smart phones,

android, or tablet, more so, poor internet connectivity, data affordability, and sustainability, furthermore no study has been conducted to find out the utilization of digital resources, (TikTok, and Google classroom) as supplementary teaching resources for ICT in Zamfara state secondary schools. Therefore, this study intends to find out the utilization of digital resources (TikTok, and Google classroom), as supplementary teaching resources in some selected secondary school in Zamfara state.

### **Objectives Guiding the Study**

The objectives of this research work are as follows;

- i. Determine whether teachers use digital resources (TikTok, and Google classroom), as supplementary teaching resources for ICT in secondary school in Zamfara state
- ii. To assess how teachers perceived the advantages of the use of digital resources (TikTok and Google classroom) as supplementary teaching resources in teaching process
- iii. To identify the challenges associated with the use of digital resources (TikTok and Google classroom) as supplementary teaching resource for ICT in secondary school

### **Research Questions**

1. Do lecturers utilize digital resources (TikTok and Google classroom), as supplementary teaching resources for ICT in secondary school in Zamfara state.?
2. What are the perceived advantages of the use of digital resources (TikTok and Google classroom) as supplementary teaching resources in teaching process.?
3. What are the challenges associated with the use of digital resources (TikTok and Google classroom) as supplementary teaching resource for ICT in secondary school?

### **Literature Review**

This section reviews the related literature from the previous researchers on digital resources as supplementary teaching resources, its advantages, and also review the ways digital resources (TikTok and Google classroom) as supplementary teaching resources can improve teaching processes, and also the challenges associated with the use of digital resources (TikTok, and google classroom) as supplementary teaching resources.

### **Digital Resources as Supplementary Teaching Resources and its Advantages**

Digital resources (TikTok, and Google classroom) simplify not only teaching processes but also learning activities, it plays a vital role when compared to traditional method of teaching, utilization of it as supplement will enhance teaching, or academic activities in general. Digital resources as supplementary teaching resources refers to educational programmers, website, or online resources, and digital processing systems, that encourage active learning knowledge construction, and exploration in the teaching and learning process, (Olurinola, 2020). Digital resources as supplementary teaching resources are viable option to integrate into learning in order to improve the systems that

are already in place (Appollis, and Sutcliffe, 2022). Top Hat Staff, (2021), stated that the advantages of the utilization of digital resources (TikTok, and Google classroom), as supplementary teaching resources is that it Enable students have instant access to fresh information that can supplement their learning experience; and also has the value of having textbooks and course materials that are always up to date, which can even include additions suggested by the students. They further stated that utilization of digital resources (TikTok, and Google classroom), as supplementary teaching resources fosters more collaborative learning environment in which students can share information, work together on group projects and interact with their instructors online. It enables students to became more socially aware and students will be able to communicate confidently, and used computers or Smartphones routinely and appropriately; students will become self-motivated and independent learners; they can be able to mastered content quickly and shared their understanding spontaneously; gained the ability to work collaboratively; and developed a positive orientation toward the future (Rustin, 2019). However, the negative aspect of Digital resources (TikTok, and Google Classroom) as supplementary teaching resources especially TikTok is that it can be a distraction; students may find it hard to concentrate in class, and can disconnect students from social interactions. It can also foster cheating in class and on exams, quiz, test, or assignments. Top Hat Staff, 2021)

### **TikTok and Google Classroom as Supplementary Teaching Resources for ICT**

TikTok become a platform where contents, and ideas can be shared among people these include lessons outside classrooms. TikTok can be used to create short content, or videos on ICT course or any other subjects to be watch by the students. It can be used to guide, and explain lessons concepts and can be saved and watched or revisit by the students at their convenient time, (Jacobs, Pan, and Ho, 2022). TikTok is a popular application which allows individual or group personalized videos feed and posted, with a duration of 15 to ten minutes, allow users to watch, create, and share the videos among community, TikTok platform enable content creation for entertaining, educate users, delivering information and engaging users in a few seconds or minutes, (Omar, and Dequan, 2020)

### **Google Classroom**

Is a powerful community based social tool for learning, it allows students to post questions and receive answers from their teachers and fellow students? Furthermore, teachers can post intriguing questions and lessons materials for review at home it can also be integrated with other google products such great way to get feedback from students. (Chanham, 2018, Ekarani, 2018, Kumar, & Raja, 2015)

### **Methodology**

Descriptive survey research design has been used, the researcher adopted survey method to gathered and analyzed quantitative data using descriptive statistics of frequency and percentage. Population for the study covered two Secondary schools in Zamfara State, Namoda Secondary School, Kaura Namoda, and Government Science Secondary School Gusau, totaling one thousand eight hundred and fifty (1,850) students and teachers. 100 teachers and students were chosen as a sample 50 from each secondary

school. Questionnaire was the instrument used for data collection which has 3 sections, A, B, and C for research questions 1, 2, and 3.

### Result and Discussion

The study adopted descriptive statistics of frequency and percentage for data analysis.

$$f_x = \frac{\text{Total number of responses}}{\text{Total number of respondents}} \times \frac{100}{1}$$

**Table 1:** Responses on the lecturer's Utilization of online Digital Resources (TikTok and Google Classroom), as Supplementary Teaching Resources for ICT in Secondary School in Zamfara State

Utilization of online digital resources (TikTok, and Google classroom)	FREQUENCY	PERCENTAGE (%)
Yes	30	30%
No	70	70
<b>Total</b>	100	100%

**Source:** Questionnaire Administered 2024

From the above table 30 respondents representing 30% stated that they use online digital resources (TikTok, and Google Classroom), as supplementary teaching resources in Secondary school in Zamfara state, while 70 respondents representing 70% answer No. This indicated that Zamafara State Secondary schools' teachers were not utilizing online digital resources (TikTok, and Google Classroom), as supplementary teaching resources for ICT with the highest percentage of 70.

**Table 2:** Responses on the Perceived Advantages of the use of online Digital Resources (TikTok and Google classroom) as Supplementary Teaching Resources in Teaching process

Variable	Frequency	Percentage
Search for relevance teaching/learning materials	18	18%
knowledge acquisition		
Upload of audio, visual, and audio-visual instructional materials		
Preparation of online quiz, test, and record assessment automatically		
Automatic measurement and evaluation		
Watch, save, and download of online tutorials		
Collaborate lecturers, and students for instructional purposes		
All of the above	82	82%

**Source:** Questionnaire Administered 2024

From the above 18 participants representing 18% stated that the perceived advantages of the use of online digital resources are it enable search for relevance teaching/learning materials. while 82 participants representing 82% answer all of the above, this indicated that search for relevance teaching/learning materials, knowledge acquisition, upload of audio, visual, and audio visual instructional materials, preparation of online quiz, test and record assessment automatically, automatic measurement and evaluation, and watch, save, download of online tutorials were the perceived advantages of the use of online digital resources (TikTok and Google Classroom), as supplementary teaching resources in teaching process.



**Table 3:** Challenges Associated with the use of online Digital Resources (TikTok, and Google Classroom) as Supplementary Teaching Resource for ICT in Secondary School

Variable	Frequency	Percentage
Lack of orientation training	9	9%
Data subscription	23	23%
Lack of encouragement by the secondary school management in regards to the use of (TikTok, and Google classroom) around the school's premises	35	35%
All of the above	33	33%

**Source:** Questionnaire Administered 2024

From the above table, 9 respondents representing 9%, stated that lack of orientation training is the challenge associated with the use of online digital resources (TikTok, and Google classroom), as supplementary teaching resources, 23 respondents representing 23% stated that data subscription, 35 respondents, representing 35% stated that lack of encouragement by the secondary schools management as regards to the use of (TikTok and Google classroom) around the school premises, while 33 respondents, representing 33% answer all of the above. This indicated that lack of encouragement by the secondary school's management as regards to the use of online digital resources (TikTok, and Google classroom), around the school premises is the most challenge associated with the use of online digital resource (TikTok, and Google classroom) as supplementary teaching resources for ICT in secondary schools in Zamfara state with the highest percentage of 35.

### **Discussions of Findings**

The analysis of research question 1 revealed that Zamfara State Secondary Schools teachers are not utilizing online digital resources (TikTok, and Google Classroom), as supplementary teaching resources for ICT with the highest percentage of 70. This is contrary to the study conducted by Mohammed, and Abubakar, 2024, the study discovered that WhatsApp is the most online digital resources use as lecturing resources in higher institutions with the highest percentage of 79%.

The analysis of research question 2 revealed that search for relevance teaching/learning materials, knowledge acquisition, upload of audio, visual, and audio visual instructional materials, preparation of online quiz, test and record assessment automatically, automatic measurement and evaluation, and watch, save, and download of online tutorials are the perceived advantages of the use of online digital resources (TikTok and Google Classroom), as supplementary teaching resources in teaching process. This is similar to the study conducted by Pucell, Buchanan, and Friedrich (2013), the study discovered that interactive online tools have enhanced teachers' ability to teach writing and allow them to work more collaboratively with their students. It is also in line with the study conducted by Mohammed, and Abubakar (2024), the study discovered that

students' perceived advantages of online digital resources (Youtube and Whatsapp) in teaching and learning process were, that students can be able to download the instructional materials, tutorial, participate in quiz, tests, assignment, and record assessment automatically, among others perceived advantages with the highest percentage of 99%.

The analysis of research question 3 revealed that lack of encouragement by the secondary school management as regards to the use of online digital resources (TikTok, and Google classroom), around the school premises is the most challenge associated with the use of online digital resource (TikTok, and Google classroom) as supplementary teaching resources for ICT in secondary schools in Zamfara state with the highest percentage of 35. This is contrary to the study conducted by Scottish Government's social research, (2015), the study concluded that successful utilization of digital technology depends not just upon sufficient access to equipment, tools and resources, but also on the availability of sufficient training, and knowledge and support networks for teachers, it is also contrary to the study conducted by Mohammed, and Abubakar (2024), the study revealed that lack of orientation training on the use of online digital resources is the most challenge associated with the use of online digital resources (Youtube, and Whatsapp), in higher institutions among others with 92%.

### **Conclusion**

TikTok, and Google Classroom as supplementary teaching resources for ICT simplify and enhance teaching and learning process in a dynamic, and attractive ways that can lead to mastering or retention of contents created by teachers, and enable or ensure learning objectives achievement in advance.

### **Recommendations**

Based on the findings, and conclusion, the following recommendations were drawn

1. Zamfara state Secondary Schools teachers, and students should be trained on digital resources especially online digital resources (TikTok and Google classroom), as supplementary teaching resources for adequate utilization of it in teaching and learning processes.
2. Students should be encouraged, and trained or oriented, to develop the habit of utilizing TikTok, and Google classroom in their academic activities as such will reduce the habit of utilizing it in social activities.
3. Secondary schools' principals should officially recognize the use of TikTok, and Google classroom as supplementary teaching resources for ICT course.



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