FACTORS AFFECTING THE INTEGRATION OF DIGITAL TOOLS IN TEACHIN G AND LEARNING OF GENERAL STUDIES IN EDUCATION IN FCT COLLEGE OF EDUCATION, ZUBA

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Abstract
This study explores the factors hindering the integration of digital tools in the teaching and lear ning of General Studies in Education. The research design for this study was a descriptive surv ey design. The population for the study was all fifteen (15) lecturers in the Directorate of Gener al Studies in Education, FCT College of Education, Zuba-Abuja, as of March 2025. The entire population constituted the sample for the study, adopting census sampling technique and A Goo gle Form self-designed four-point Likert-scale questionnaire (r=0.75) titled "Factors Hinderin g the Integration of Digital Tools into the Teaching and Learning of General Studies in Educati on" was used to gather data, and data collected were subjected to the simple percentage statisti cal method. Results of the study revealed that 83.1% of General Studies in Education lecturers possess the knowledge needed for the use of digital tools for teaching and learning purposes; h owever, 83.1% of the lecturers agreed that students in FCT College of Education are not ready to receive learning instructions through the use of digital tools in General Studies in Education class. It was recommended that the school management and stakeholders should organize both in-door and out-door training and re-training workshops or webinars at least once a year for a cademic staff on the integration of digital tools in the teaching and learning process. Additional ly, they should assist in providing digital devices for learners who are unable to afford them, an d ensure free internet access on campus for both lecturers and students.
Keywords: Integration, Digital Tools, General Studies in Education, Teaching and Learning

Introduction

The knowledge and use of digital tools in the present modern era are very necessary for individu al survival and socialization. Blurton (2000) opines that digital tools are diverse technological r esources used to communicate, create, disseminate, store, and manage information. Digital liter acy is the comprehension of the use and safeguarding of the application of digital tools, resource s, and network infrastructures (Darmanin & Levy, 2021). They are a trend in the twenty-first ce

ntury (Madu, 2025) and have become the most important factor in the rapid development of any society (Abigail, 2021). In view of this, Enemuo and Onwuka (2024) stated that digital tools are considered the application of computer and telecommunications systems for purposes of access ing, collating, processing, analyzing, storing, retrieving, and transmitting data in diverse forms for various purposes.

Technology has changed many areas of life, in which education is not left out. In today's world, the incorporation of digital tools is an important part of teaching and learning, because tradition al methods are no longer enough to meet the needs of the 21st-century students. Technology inte gration is defined as using technology resources like computers, mobiles, cameras, networks an d social media platforms, software applications, and the internet in classroom activities and sch ool management (George Lucas Educational Foundation, 2007). Bower and Torrington (2015) gave a comprehensive list of free web digital tools, such as Google Classroom, Kahoot, and Ed modo, to enhance effective interactive learning.

Fig. 1 Typology of free web browser tools.



Source: Adapted from Matt Bower and Jodie Torrington (2020).

The image presents a visual classification (typology) of various categories of digital tools that can be used to enhance teaching and learning. The graphic uses a brain illustration to represent how these tools support different cognitive and technological areas in education.

These tools support the creation, presentation, and delivery of educational content in various formats:

Text-Based Tools: These are tools for writing and editing texts (e.g., Google Docs, Grammarly).

Image-Based Tools: These are tools for creating or editing images (e.g., Canva, Pixlr).

Audio Tools: They are tools used for recording and editing sound or podcasts (e.g., Audacity, Vocaroo).

Video Tools: Tools for creating, editing, and sharing videos (e.g., YouTube, Loom).

Multimodal Production Tools: Tools that combine various media types (text, audio, video) for richer content (e.g., Adobe Spark).

Digital Storytelling Tools: Tools that help learners and educators tell stories digitally (e.g., Storybird, Animoto).

Learning Management Systems (LMS): Platforms for managing course content and student engagement (e.g., Google Classroom, Moodle).

The role of digital tools in this modern era cannot be overemphasized, as it facilitates the integra tion of individuals into the global and local information society and ensures rapid technological advancement. Thus, the effective use of digital tools in the teaching and learning of the English language can genuinely develop essential 21st-century skills and enhance learning that makes s tudents globally competitive and relevant.

Teaching and Learning of General Studies in Education (GSE) Courses

General Studies in Education (GSE) covers different disciplines such as English, Mathematics, Computer Studies, Media Literacy, Family Life and Emerging Issues, Trafficking in Person, En trepreneurship, and so on. National Commission for Colleges of Education (NCCE) Minimum Standards (2012) pinpoints that the GSE courses aim to provide students with a comprehensive education beyond their specific fields of study, equip students with the necessary skills to addre ss pressing national issues such as climate change, insecurity, and corruption, and promote a mu ltidisciplinary approach, fostering critical thinking and enhancing communication skills, prepar ing graduates to engage effectively in various sectors of society. Talata (2019) highlights that th e minimum standards require successful completion of the five (5) semesters, or seventy-eight (78) hours of study sessions with a pass in the course before graduation, apart from the student's course of study in the college. Apart from GSE lecture being a large class, with the increasing n umber of students, classrooms are now more culturally, socially, and linguistically diverse than ever before, therefore, integration digital tools into GSE teaching and learning will make the tas k easy, interesting and effective, providing students with far-reaching experiences, since digital tools are task-made-easier and survival tools.

In addition, integrating technology in teaching and learning involves using various digital tools and resources such as Google classrooms, Zoom Meeting, Google Meet, Google Form, and oth er smart learning systems to enhance students' learning experiences, promote students' engage ment, and equip students for the digital age. Learning becomes more flexible, as students can ac cess materials at any time and from any location (Anderson, 2019). Integration of digital tools i n education can transform curriculum delivery in schools, influencing teaching methodologies and learning outcomes (Nkolika, 2024).

It is obvious that we are in a digital world, but many people in the digital world are digitally liter ate including facilitators in educational institutions. School is one of the major agents of change in society, and teachers or lectures in school are the orchestrators of the change, as they facilitat e teaching that brings about permanent change in behaviours. For facilitators (lecturers) to impa ct lives accurately in this era of technological advancement, they must be versatile in the use of digital tools to transfer knowledge to learners. Thus, for Nigeria to measure up with other nation s that have embraced the change in human society, teachers/lecturers must undergo training and re-training programmes on how to use digital tools in carrying out their primary responsibilities of bringing permanent change in learners through teaching. Hanimoğlu (2018) emphasizes that technology has made teachers become learners and improve their teaching performance, resulti ng in more content with the learners. Also, since the digital environment has changed how stude nts learn today, even teachers' approaches and strategies must adapt to the technology-rich envir onment (Banitt, Theis & Van, 2013). Likewise, the learning environment must be fascinating to enhance students' readiness. Availability of digital devices like laptops and smartphones, acces s to the internet, and learners' interest are also factors that determine learners' readiness, which can either make or mar the incorporation of digital tools into teaching and learning. Socioecono mic disparities can create a digital divide, limiting educational opportunities for disadvantaged students (Selwyn, 2020).

Research has shown that digital tools such as online learning platforms, virtual classrooms, vide os, and smart learning systems help teachers share information more easily and promote a more interactive and motivating learning environment. Kadiri (2012) submitted in the paper titled "T he Role of Information and Communication Technology in Language Teaching and Learning i n University Education" that digital tools play an increasingly remarkable role in the way stude nts communicate, learn, and live. Also, Prensky (2017) found out that interactive learning with digital tools increases students' motivation and engagement. Mayer (2020), in the study "Multi media Learning," reported that digital tools allow students to learn at their own pace, access a w

ide range of resources, and work together with classmates and teachers, no matter where they ar e. Moreover, Abigail (2021), in her study titled "Digital Integration into the Nigerian Education al System: Challenges and Prospects," reported that technological tools have helped in impartin g knowledge much better than the old methods. Adegbite and Ojedeji (2025) recorded that digit al tools, when integrated with educational strategies such as continuous professional developme nt, leadership training, and the promotion of a lifelong learning culture, can enhance workplace collaboration and productivity sustainably.

Nevertheless, using digital tools in the teaching and learning process comes with some challeng es that, if not properly taken care of, can jeopardize the motive and effectiveness. Technology c an be distracting, and relying too much on it might reduce critical thinking skills (Carr, 2019). P rivacy and security issues are another concern, as digital tools collect a lot of student data, whic h needs to be protected (West, 2019). Some students may not have access to the internet or devi ces, making it harder for them to learn (Selwyn, 2020). Zhong (2020) reported that poor resourc e institutions and students from poor backgrounds may have limited access to technology and th e internet, which may invariably affect their online learning environment. These possible challe nges are the reasons why Levi and Omoboye (2024) researched "Ways to Enhance Digital Liter acy Skills among Pre-service English Language Teachers of FCT College of Education, Zuba-Abuja," and the study revealed that giving grants, free access to internet connection on campus, and free webinars and workshops enhance digital literacy skills.

It is the vision of every educational institution to train individuals who are relevant and acceptab le in the society they find themselves in. Therefore, it is necessary to note that the amount of soc ietal problems an individual solves is what makes him or her relevant, thus, for FCT College of Education to keep abreast of other institutions that have embraced the new scientific developme nt in the world, there is an urgent need for the School Management and Stakeholders to enrich t he school environment with needed technologies and equip her staff with the skills necessary fo r the use of digital tools with its proper incorporation into teaching and learning process, thereby blending the 21st Century problem-solving skills with the long existing traditional method of fa ce-to-face teaching and learning, which is gradually becoming obsolete.

Statement of Problem

The rate at which Information Communication Technology has turned the whole world into a gl obal village has made it an issue of concern to every educational institution's management and s takeholders on how to upgrade both their human and material resources to keep abreast of the w orld around them. In Nigeria, integration of digital tools into the teaching and learning process t o produce individuals who can easily and conveniently survive in the 21st-century digital world seems to be taking too long to realize because of some factors, which include facilitators' (teach ers' and lecturers') knowledge on the use of digital tools and students' readiness to receive learn ing resources from teachers/lecturers using digital tools.

A GSE class is usually a large class, as it comprises all the students at a level, school, or faculty, and digital tools are task-made-easier tools. Teaching and learning activities will be more effect ive and interesting if GSE lecturers are versatile in the use and integration of digital tools, thereb y producing a digitally oriented society. It is on this note that the researchers tend to investigate factors hindering the integration of digital tools into the teaching and learning of General Studie s in Education at FCT College of Education.

Objectives of the Study

The main objective of this study is to investigate factors hindering the integration of digital tool s into the teaching and learning of General Studies in Education. The specific objectives are to:

i. Determine whether GSE lecturers possess the knowledge needed for the use and integra tion of digital tools;
ii. Determine FCT College of Education students' readiness to receive teaching and learni ng instructions through the use of digital tools in GSE class.

Research Questions

The following research questions were raised from the specific objectives to guide the study:

i. Do the GSE lecturers possess the knowledge needed for the use and integration of digita l tools?
iii. Are students in FCT College of Education ready to receive teaching and learning instruc tions through the use of digital tools in GSE class?

Research Methodology

The research design for this study was a descriptive survey design. The population for the study was all fifteen (15) lecturers in the Directorate of General Studies in Education (DGSE), FCT C ollege of Education, Zuba-Abuja, as of March 2025, and total population sampling, also known as a census, was used because of the population's small size.

The study employed a Google Form self-designed questionnaire titled "Factors Hindering the I ntegration of Digital Tools into the Teaching and Learning of General Studies in Education" to gather data. The questionnaire was prepared in a four-point Likert-scale model with the followi ng responses: Strongly Agreed (SA); Agreed (A); Disagreed (D); Strongly Disagreed (SD). The instrument was subjected to face and content validity, and the reliability of the instrument was d etermined by administering the instrument twice in the interval of two weeks on a group of five (5) lecturers who were not part of the sample. The reliability was determined using Pearson's Pr oduct Moment Correlation Coefficient (PPMCC), and the coefficient of 0.80 was obtained. The questionnaire was sent to the respondents via WhatsApp, and only thirteen (13) out of the fiftee n (15) academic staff responded to the instrument. The data gathered were subjected to a simple percentage statistical method.

Result and Discussion

Research Question 1: Do the GSE lecturers possess the knowledge needed for the use and inte gration of digital tools?

Table 1: Simple Percentage of Lecturers' Knowledge of Digital Tools

S/N	ITEM	A	D
		%	%
1.	I attended workshop/webinar on the use of digital tools within the last one year.	92.3	7.7
2.	I can create Google Classroom through which I can send learning materials to my students.	77	23.1
3.	I can design a Google Form for class attendance and conti-nuous assessment.	76.9	23.1
4.	I can organize a Google Meeting for engaging my students.	76.9	23.1
5.	I can set a Zoom Meeting for engaging my students.	92.3	7.7
	Total	**83.1**	**16.9**

Table 1 indicates that 83.1% of the General Studies in Education lecturers possess the knowledg e needed for the use of digital tools, while 16.9% of the General Studies in Education lecturers d o not have the knowledge needed for the use of digital tools. This implies that the General Studi es in Education lecturers in FCT College of Education possess the skills to use digital tools and i

ntegrate them into the teaching and learning of the various courses in the Directorate of Genera l Studies in Education.

Research Question 2: Are students at FCT College of Education ready to receive teaching and learning instructions through the use of digital tools in the General Studies in Education class?

Table 1: Simple Percentage of Students' Readiness to Receive Learning Instructions thro ugh the Use of Digital Tools

S/N	ITEM	A	D
		%	%
1.	Whenever I design Google forms for assessment, all my students usually attempt the questions.	23.1	76.9
2.	When I send learning resource to digital platforms like google classroom, none of my students complain of inability to access the information because they do not have Android phones or data.	0	100
3.	My students prefer virtual classes to face-to-face tradition-al teaching and learning classrooms.	30.8	69.2
4.	All my students have digital devices they can use to access educational programmes through digital tools	0	100
5.	My students prefer receiving learning instruction through the use of digital tools to being on social media platforms like Facebook, WhatsApp, TikTok, and Instagram on their digital devices.	30.8	69. 2
	Total	**16.9**	**83.1**

Table 2 shows that only 16.9% of the students in FCT College of Education are ready to receive teaching and learning instructions through the use of digital tools in the General Studies in Educ ation class, while 83.1% of the students are not ready to receive teaching and learning instructio ns through the use of digital tools in the General Studies in Education class. This means that stu dents in FCT College of Education are not ready to receive teaching and learning instructions th rough the use of digital tools.

Discussion of Findings

The findings of the study reveal that the lecturers of General Studies in Education, FCT College of Education, are digitally literate and can deliver in the 21st-century classroom. This finding is i n line with the report of Ikwuka, Eleje, Iheanacho, and Onyebuchi (2024), who reported that sec ondary school teachers in Imo State's Orlu education zone are digitally literate and had a good a ttitude toward using digital technologies to collect student data. However, 16.9% of the lecturer s are not digitally literate, and this can be hazardous to the system because it is necessary to alig n technology adoption with well-structured educational frameworks to ensure that lecturers are equipped to utilize digital tools effectively. A lack of digital literacy among teachers can hinder the effective implementation of technology in the classroom (Mishra & Koehler, 2016).

On students' readiness to receive teaching and learning instructions through the use of digital to ols in General Studies in Education class, the findings revealed that students in FCT College of Education are not ready to receive teaching and learning instructions through the use of digital t ools as 83.1% percent of the lecturers General Studies in Education consented that the students are not ready, as many of them do not usually respond to information sent on digital platforms b ecause some of the students are not digitally equipped and some who are equipped are distracte d by social media and this at times doubles the work of lectures who try to incorporate the use of digital into the teaching and learning of the courses as they would have to revisit the activities se nt on digital platform using the traditional method. The finding of this study agreed with Eze, Se

fotho, Onyishi & Eseadi's (2021) findings that university students who may have the skills to u ndertake online learning face poor infrastructure.

Conclusion

This study investigates factors affecting the integration of digital tools into the teaching and lear ning of General Studies in Education in FCT College of Education. It is therefore concluded tha t FCT College of Education GSE lecturers are digitally literate and can deliver in the 21st-centur y classroom. However, students are not ready to receive learning instructions through the use of digital tools because some of the students are not digitally equipped, and some who are equippe d are distracted by social media.

Recommendations

Based on the findings of the study, the following recommendations were made:

- School management and stakeholders should regularly organize both in-door and out-d oor training and re-training workshops/webinars at least once a year for academic staff o n the utilization of digital tools in teaching and learning processes;
- Government, educational stakeholders, and management should help to provide digital devices for students who could not afford them.
- School management should provide free internet connection on campus for both lecture s and students' use.
- Lecturers who are digitally inclined should try to put it into use while discharging their d uties and also blend it with the traditional methods, thereby carrying students who are n ot digitally oriented along.
- Students should be engaged in workshops and seminars on the advantages of the use of digital tools in learning.

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