

ASSESSMENT OF TEACHERS' PREPAREDNESS FOR INSTRUCTION IN THE 21ST CENTURY DIGITAL CLASSROOMS: PRIVATE SECONDARY SCHOOLS IN OYO METROPOLIS AS CASE STUDY.

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Abstract

Integration and usage of digital skills in classroom is a recent development in the black continent. The introduction of Information Technology (IT) into instructional delivery process now make the act of teaching and learning easier, accessible and more effective. Despite availability of ICTs, some teachers find it difficult to use IT for classroom instruction in today's digital world. This paper assessed teacher's preparedness for instruction in the 21st century digital classrooms. Descriptive survey research design was adopted and researchers' developed 20-items questionnaire were used as instrument for data collection. Consequently, the study revealed the attendant benefits that the common digital skills contribute to the quality of classroom instructions. It also showed that teachers' level of preparedness for technology integration and use in 21st century classroom is high (71%) and effective (96%); despite constraints (29%). The study concluded that technology advancement will improve teaching and learning, and other educational services in public and private schools. The paper recommended that government /proprietors of schools to adequately provide ICT infrastructures and regularly update them, in order to overcome the laickadaisical attitude of teachers' preparedness for classroom instruction.

Article History

Received May 25, 2023

Revised June 22, 2023

Accepted August 10, 2023

Available Online September 31, 2023

Keywords:

Teacher's Preparedness, Instruction, 21st Century, Digital Classroom, Secondary Schools

Introduction

The 21st century world is now a reality; change is the only constant thing and there is need for teachers to be at alert if we must be abreast with changes in technology. These changes are affecting so many things in schools and the whole idea of education and particularly, the act of teaching and learning. Some traditional teachers did not learn by the means of technology while in training, they do not believe that the present generation of learners can learn through digital technologies. It will become strange to expect the 21st century students to operate effectively in their millennium wearing the thinking caps of the old generation.

This has become imperative for teachers to keep abreast with modern teaching and learning through technologies available so as to help the students find, select and access necessary knowledge using instructional technology. Teachers play the main role in integrating technology in

classroom routine (Langworthy, 2013; Amran & Rosli, 2017). The way teachers implement teaching process affecting the outcomes of 21st learning (Langworthy, 2013; Amran & Rosli, 2017). Integrating information technology and media make it relevant with pedagogy, and teaching techniques play important parts in assisting and support 21st century learning progress among pupils (Rahim & Abdullah, 2017). Integration of technology offers opportunities for pupils to master 21st century skills like the information skills, emphasize on problem solving and ability in decision making (Osman & Basar, 2016)

As quoted above, teachers' ways of implement teaching process do affect students learning outcomes in the 21st century (Langworthy, 2013; Amran & Rosli, 2017). They acknowledged the content and learning standard, pupils' previous knowledge, preparing resources and select appropriate strategy; which match the skill to be taught by the teacher (Ariffin & Yunus, 2017; Rajendran, 2001)

According to Azubuike (2013), for teaching to be effective, a teacher must use a variety of productive methods, materials and teaching strategies.

The 21st-century classroom focuses on a creative, collaborative approach to learning. These are some digital skills that teachers can adopt in the 21st century digital classroom

1. **Create an engaging video content:** interactive video contents are powerful communication tools that can be used to accomplish various educational contents. They can be used in blended learning classroom, also, video appeal to a student's sense of reasoning because of its audio-visual model and it drive engagement better than text-based outputs. According to Ranasinghe and Leisher (2009), integrating technology into the classroom begins when a teacher prepares lessons that use technology in meaningful and relevant ways. Ranasinghe and Leisher also opined that technology should assist the teacher in creating a collaborative learning environment. Therefore, knowing how to create engaging video content is becoming a necessary skill for the 21st century teachers. A 21st century teacher needs to be able to design engaging videos that clearly capture and communicates necessary information. To do, the teacher need to get familiar with video editing and learn how to use a video editor to split or combine clips, remove or blurs unwanted parts in the video, apply green screen effects, insert links and text into videos, add voice-overs, insert animations, and more.
2. **Create digital assessments:** Assessments, regardless of their format and content, need to be inclusive and accommodating of learner variability. The goal is to create student-centered assessments that can evaluate student's comprehension and overall learning in an effective and efficient manner. There are various digital tools to use to create assessments most engaging of which are those that incorporate the

principles of digital game-based learning. These principles, according to Kucher (2021), are interactivity, immersiveness, adaptive problem solving, feedback, and freedom of exploration.

3. **Blogging:** This is one of the key digital activities to be adopted by teachers, creating a blog/website is one of the first things to do at the start of the new school year. A classroom blog is helpful in many ways: For teachers, it provides them with a virtual space where they can share teaching and learning resources with students, communicate with parents and the school community, share class news and announcements, collect student's feedback, and more. For Students, classroom blogs create a portfolio where they can save and share their learning artifacts and showcase their scholarly achievements.

In the field of education, blogs used for teaching and learning purposes, also called edublogs, have also gained some popularity and are gradually being used to promote learning through new Information and Communications Technologies (ICT) or e-learning (Chawinga, 2017).

They have become a new and compelling visualization tool, as they are not only effective in delivering content to students over the Internet but also encourage students to share and discuss ideas that help improve educational outcomes (Poore, 2013).

4. **Evaluate digital content critically:** The Internet is packed with all kind of information and unless you know how to critically assess sources you will probably end up wasting your time reading irrelevant contents. The web is a space where amateurish knowledge abounds. As teachers, the knowledge to the disseminated need to be precise, accurate, reliable and credible. Check the author background and see whether they have an authority in the field they are writing about (e.g., academic credentials, publications, experience, etc.). Determining whom to trust online is very complex and intellectually

challenging since source critical thinking has multiple interlinked dimensions (Nygren et al., 2020; Sundar et al., 2007). The ability to successfully navigate false, biased, and credible information has been linked to cognitive abilities and flexible thinking, whereas motivated reasoning and confirmation bias are related to less efficient navigation (Flanagin et al., 2018; Pennycook & Rand, 2018).

Majority of schools still adopt the traditional system of teaching also known as the conventional teaching method. This teaching method makes the students passive while the teacher remains the only active participant in the classroom. The students practice rote learning where students are asked to memorize the lesson and on the basis of this recitation, teachers take assignments, written tests or oral tests.

Modern Education is the latest and most recent version of education in schools and educational institutions in the 21st century. This aims to promote critical thinking, life skills, analytical skills, and decision-making skills for students and teachers. Online Education also uses the latest technology such as mobile apps, audio and video forums such as YouTube, Podcasts, E-books, movies, etc. teaching students and making the learning process attractive and engaging.

Looking at the necessities of teachers changing their precept mind on teaching techniques and instructional delivery despite the fact that they need to do their, research has shown that in Nigeria, many teachers are reluctantly embracing integration of technology into classroom for teaching and learning. Hence this study.

Statement of the Problem

So many factors contribute in making the adoption of innovation especially in education difficult in Nigeria. Even with the awareness of digital skills, integrating technology into the teaching- learning process is hindered by so many factors such as:

1. Little or no training for teachers in the use of 21st century learning technologies. Mueller et al (2008) has expressed the view that for successful integration of technology into the classrooms, teachers need to be properly trained on designing modern lessons suitable for learning through technology, use of learning technology devices, modern communication and accessing, disseminating knowledge via modern technologies and educational benefits of modern technologies. Most teachers are not interested in improving their skills to innovate in teaching, to access the internet and to use Google sites to complement their teaching.
2. High cost of high technology devices such as advanced computers, interactive boards, iPad, pictorial presentations, animations etc. and other mobile devices with the necessary applications for learning. Most of these devices are out of the reach of the teachers to plan their lessons. Most schools have no internet connectivity for teachers to use freely.
3. Teachers' perception: Despite increasing access to technology in schools, teachers are usually portrayed as hesitant users. They are accustomed to the old standard which can create frustration when trying to shift to a new paradigm leading them to stray away from the use of 21st-century technological devices. They perceive the effort needed to learn the new technology and practicality or value of it as a significant consideration in whether they use it or not (Mac Callum, Jeffrey, & Kinshuk, 2014).

Objectives of the Study

The main objective of this study was to assess teacher's preparedness for instruction in the 21st century digital classroom. The specific objectives of the study are to:

1. Assess teacher's digital skills and their adoption of new innovations
2. Determine the level of teachers' preparedness in the use of technology for instruction

3. Examine the effectiveness of digital skills in the 21st century classroom
4. Identify the challenges confronting the use of digital skills for instruction by the teacher.

Research Questions

The following research questions guided the study:

1. What are the digital skills common to teachers in the 21st century?
2. What is the level of teacher’s digital skill preparedness for technology integration in the 21st century?
3. How effective is the use of digital skills in the 21st century classroom?
4. What are the constraints to teachers’ use of digital skills in the 21st century classroom?

Methodology

The study adopted a descriptive survey research design. Survey research design is described as a type of research that studies large and small population by selecting and studying samples chosen from the population to discover the incidence, distribution and interrelations of variables. Survey research is therefore very useful for opinion studies.

The data gathering instrument designed for this study was a questionnaire tagged “ Teacher’s preparedness for instruction in the 21st century digital classroom”. The population of the study comprised private schools in Oyo metropolis. Purposive sampling was used to get teachers that are computer literate and uses digital skills in disseminating information. Five schools were used for the research. A total of 100 teachers completed the questionnaire. The items on the questionnaire were developed from the objectives. The questionnaire consisted of two sections; section A contains items on socio-demographic data of the teachers. Section B comprised twenty (20) items that addressed teachers’ preparedness for instruction in the 21st century digital classroom. The instrument was validated before its use. To determine the reliability of the instrument, 5 copies of the

instrument were administered on teachers outside the locale of this study.

Results and Discussion

The structure of the questionnaire used to source for data from respondents are given in the Tables below. The responses received are presented in Tables 1 to 5. Responses were categorized as ‘Yes’ or ‘No’. ‘Yes’ means the respondent either Strongly-agreed or Agreed that a given issue is true on the use of digital skills in Nigeria classrooms. ‘No’ however means the respondent either Disagreed or Strongly-disagreed on the matter. The degree of acceptance of the highlighted issues as part of identifiable issues on the adoption and usage of digital skills in classrooms are as shown in Figures 1 to 5. The result gives a true reflection of teachers’ preparedness for instruction in today’s digital classrooms.

The details on the frequency – distribution Tables and Figures below represents analysed data in the year 2023 by IBM SPSS 26, in respect of biographical data and research questions 1 to 4:

Analysis of Biographical Data

Table 1: Respondents’ Disciplines

		Frequency	Percent	Valid Percent	Cumulative	
					Valid Percent	Percent
Valid	Science	41	41.0	41.0	41.0	41.0
	Social Science	16	16.0	16.0	57.0	57.0
	Arts	29	29.0	29.0	86.0	86.0
	Commercial	8	8.0	8.0	94.0	94.0
	Technology and Engineering	6	6.0	6.0	100.0	100.0
	Total	100	100.0	100.0		

Table 2: Respondents’ Qualifications

		Frequency	Percent	Valid Percent	Cumulative	
					Valid Percent	Percent
Valid	NCE	36	36.0	36.0	36.0	36.0
	Degree	62	62.0	62.0	98.0	98.0
	Postgraduate	2	2.0	2.0	100.0	100.0
	Total	100	100.0	100.0		

Table 3: Respondents’ Years of Graduation

		Frequency	Percent	Valid Percent	Cumulative	
					Valid Percent	Percent
Valid	1990 - 2000	1	1.0	1.0	1.0	1.0
	2001 - 2010	21	21.0	21.0	22.0	22.0
	2011 - 2020	53	53.0	53.0	75.0	75.0
	2021 - 2023	25	25.0	25.0	100.0	100.0
	Total	100	100.0	100.0		

The above group of frequency tables 1 to 3 revealed that 100 teacher respondents across five (5) private schools participated in data collection exercise. Gender distribution of the respondents indicated 41 males and 59

females, which represent ratio 4 to 6. Respondents with NCE (National Certificate in Education - 36%), degree (62%) and postgraduate (2%) certificates from various disciplines such as Science (41%), Social Science (16%), Arts (29%), Commercial (8%), Technology and Engineering (6%) were sampled and took part in the study. The result analysis represent a fair and justified (i.e. valid) distribution of randomly sampled respondents, as far as secondary education level is concern. Furthermore, trained and qualified teachers with vast experience and of digital age (see table on “graduation year”) were used for the study.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	54	54.0	54.0	54.0
	Agree	42	42.0	42.0	96.0
	disagree	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

Adequate time to prepare for lessons and cover curriculum using digital skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	42	42.0	42.0	42.0
	Agree	48	48.0	48.0	90.0
	Disagree	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Figure 1

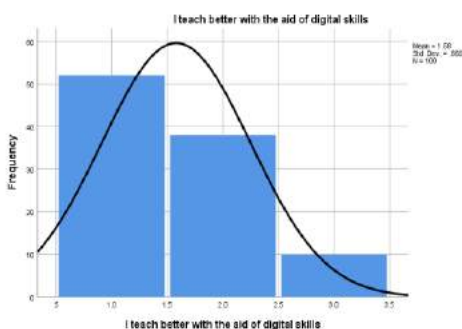


Figure2

Analysis Based on Research Questions of the Study

Research Question 1: What are the digital skills common to teachers in the 21st century?

teach better with the aid of digital skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	52	52.0	52.0	52.0
	Agree	38	38.0	38.0	90.0
	disagree	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

digital skills makes the students learn faster

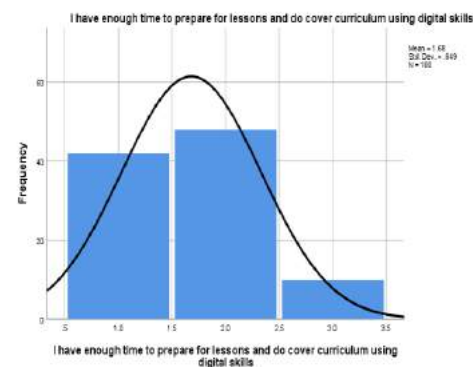
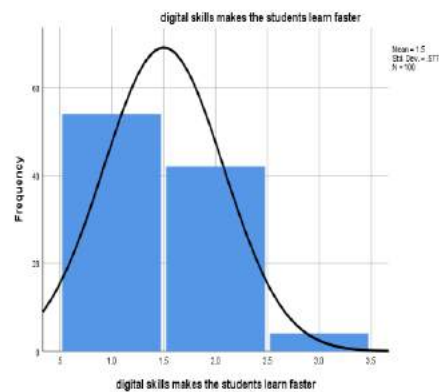


Figure 3

Computerise the passage of learning experience before dissemination

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	21.0	21.0	21.0
	Agree	52	52.0	52.0	73.0
	Disagree	24	24.0	24.0	97.0
	strongly disagree	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

Figure 4



Using digital skills in the classroom makes me more productive

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid strongly agree	38	38.0	38.0	38.0
Agree	53	53.0	53.0	91.0
Disagree	8	8.0	8.0	99.0
strongly disagree	1	1.0	1.0	100.0
Total	100	100.0	100.0	

Figure 5

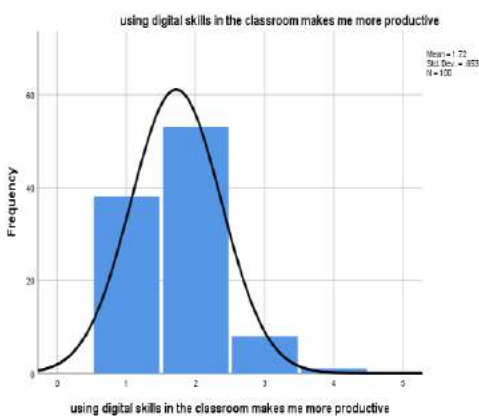


Table 4

S/N	Statement	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1.	I teach better with the aid of digital skills.	52	38	10	0	100
2.	Digital skills make students learn faster.	54	42	4	0	100
3.	I have enough time to prepare for lesson and do cover curriculum using digital skills.	42	48	10	0	100
4.	I computerize the passage of learning experience before dissemination.	21	52	24	3	100
5.	Using digital skills in the classroom makes me productive.	38	53	8	1	100

Table 4 shows that 52% respondents strongly agreed and 38% respondents agreed that “teaching with the aid of digital skills is better”, while 10% disagreed. This implied

that 90% of the respondents subscribed and use digital skills for classroom teaching and learning.

It further shows that 54% respondents strongly agreed and 42% respondents agreed that “digital skills makes students learn faster”, while 4% disagreed. This result revealed reasons for teachers’ continuous adoption of digital skills for classroom instructions.

Also, 42% respondents strongly agreed and 48% respondents agreed that “use of digital skills provide enough time for preparation before classroom lesson, and thus cover curriculum”; while 10% disagreed to the view. This result revealed a reason why the usage of digital skills for instruction is popular among teachers.

Furthermore, 21% respondents strongly disagreed and 52% agreed that “teachers do computerize learning experience before passage”, while 24% disagreed and 3% strongly disagreed to the statement. This result thus indicated that majority of the teachers are good in the use of Information and Communication Technology (ICT) for lesson preparation.

Lastly, 38% respondents strongly agreed and 53% agreed that “the use of digital skills in the classroom makes teachers’ productive”, while 8% disagreed and 1% strongly disagreed. This result thus revealed that usage of digital skills for instruction has improved creative ability and production capacity of teachers in private secondary schools.

The results on tables 4 revealed common digital skills and its attendant benefits / contributions to the quality of instruction for students and teachers’ professional development in private secondary schools.

Research Question 2: What is the level of teacher’s digital skill preparedness for technology integration in the 21st century?

students participate actively when teacher uses digital skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	46	46.0	46.0	46.0
	Agree	44	44.0	44.0	90.0
	disagree	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

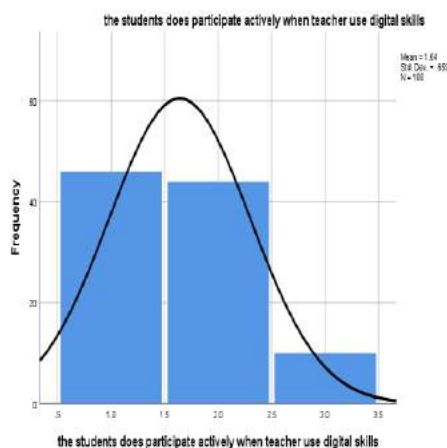


Figure 7

teacher enjoys using computer-aided instruction in the classroom

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	36	36.0	36.0	36.0
	Agree	52	52.0	52.0	88.0
	disagree	9	9.0	9.0	97.0
	strongly disagree	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

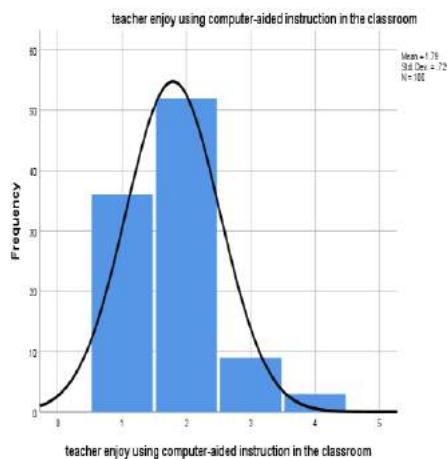


Figure 8

I conduct and examine test and assignment via available digital platform

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	17	17.0	17.0	17.0
	Agree	43	43.0	43.0	60.0
	disagree	30	30.0	30.0	90.0
	strongly disagree	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

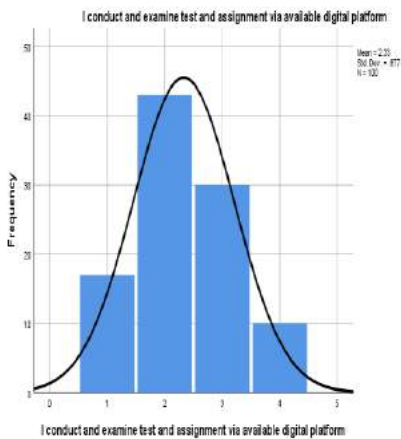


Figure 9

the integration of teacher's digital skills in classroom instructional delivery can improve students' academic achievement

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid strongly agree	47	47.0	47.0	47.0
Agree	49	49.0	49.0	96.0
disagree	3	3.0	3.0	99.0
strongly disagree	1	1.0	1.0	100.0
Total	100	100.0	100.0	

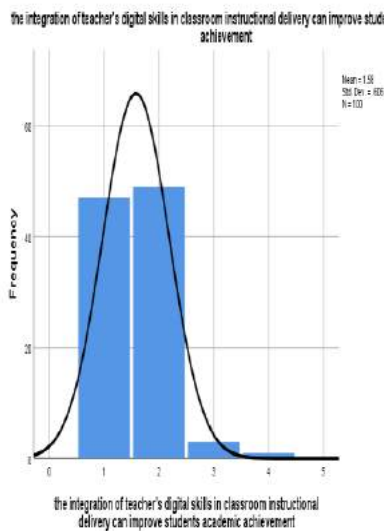


Figure 10

teachers are always impatient with the students when using digital skills for teaching and learning process

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid strongly agree	13	13.0	13.0	13.0
Agree	37	37.0	37.0	50.0
Disagree	39	39.0	39.0	89.0
strongly disagree	11	11.0	11.0	100.0
Total	100	100.0	100.0	

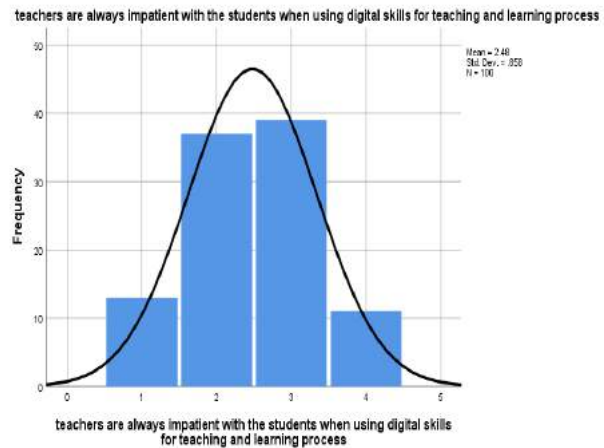


Table 5:

S/N	Statement	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1.	The students do participate actively when teacher use digital skill	46	44	10	0	100
2.	Teacher enjoy using computer aided instruction in the classroom	36	52	9	3	100
3.	I conduct and examine test and assignment via available digital platform	17	43	30	10	100
4.	The integration of teacher's digital skills in classroom instructional delivery can improve student's academic achievement.	47	49	3	1	100
5.	Teachers are always impatient with the students when using digital skills for information dissemination.	13	37	39	11	100

Table 5 shows that 46% respondents strongly agreed and 44% respondents agreed that “students actively participate in classroom activities when teacher is using digital skills

to teach”, while 10% disagreed. This implied that 90% of the respondents described the use of digital skills as effective tool for effective classroom instruction preparation, knowledge impartation and acquisition of skills.

It further shows that 36% respondents strongly agreed and 52% respondents agreed that “teachers do enjoy using computer-aided instruction in the classroom”, while 9% disagreed and 3% strongly disagreed. This result revealed teachers enjoyed the use of digital skills for classroom instructional delivery than the conventional mode of teaching.

Also, 17% respondents strongly agreed and 43% respondents agreed that “teachers do conduct and examine assignment or test via digital media platforms”; while 30% disagreed and 10% strongly disagreed to the view. This result revealed further use of digital skills for other practices in education: issuance and submission of assignment; conduct and assessment of test and examination via online platforms.

Furthermore, 47% respondents strongly disagreed and 49% agreed that “the use of teacher’s digital skills in the classroom’s instructional delivery enhanced learning and improve students’ achievement” while 3% disagreed and 1% strongly disagreed to the statement. This result revealed that teachers’ use of digital skills for instructions contributed to students’ improved achievement and performance.

Lastly, 13% respondents strongly agreed and 37% agreed that “Teachers are always impatient with the students when using digital skills for information dissemination”, while 39% disagreed and 11% strongly disagreed. The result indicated “draw” in the responses (i.e. 50:50), which means some teachers are proficient, while others lack proficiency in the use of digital skills for lesson preparation and instructional delivery.

The result on Table 5 revealed level of teachers’ digital skill preparedness for technology integration in the 21st

century classroom. This implies that teachers’ preparedness for technology integration into the classroom lessons of private secondary schools is high.

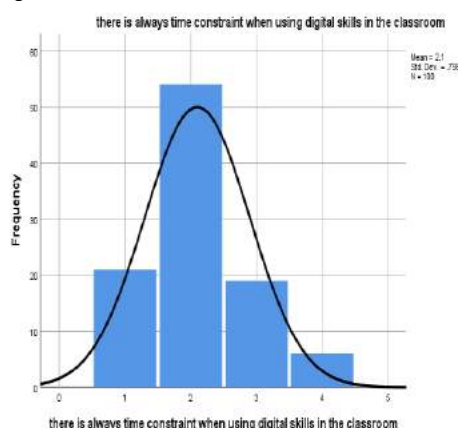
Research Question 3: How effective is the use of digital skills in the 21st century classroom?

Information on the tables and figures below represents results of the data analysed that answered research question

there is always time constraint when using digital skills in the classroom

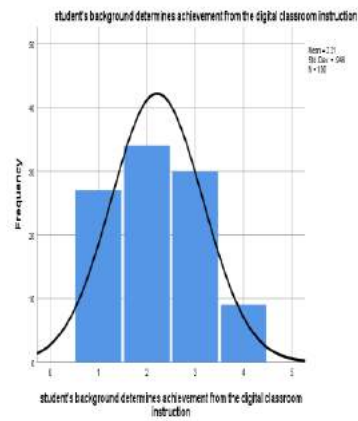
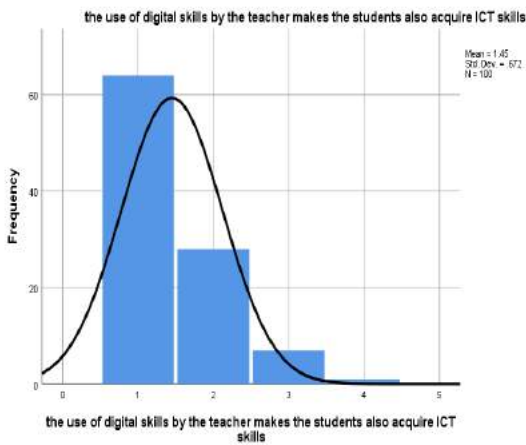
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	21.0	21.0	21.0
	Agree	54	54.0	54.0	75.0
	disagree	19	19.0	19.0	94.0
	strongly disagree	6	6.0	6.0	100.0
	Total	100	100.0	100.0	

Figure 11



the use of digital skills by the teacher makes the students also acquire ICT skills

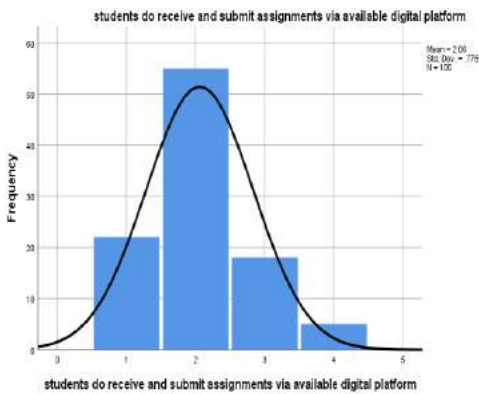
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	64	64.0	64.0	64.0
	Agree	28	28.0	28.0	92.0
	disagree	7	7.0	7.0	99.0
	strongly disagree	1	1.0	1.0	100.0
	Total	100	100.0	100.0	



students do receive and submit assignments via available digital platform

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	22	22.0	22.0	22.0
	agree	55	55.0	55.0	77.0
	disagree	18	18.0	18.0	95.0
	strongly disagree	5	5.0	5.0	100.0
	Total	100	100.0	100.0	

Figure 12



the use of digital skills makes students acquire functional / marketable skills that is sellable after graduation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	41	41.0	41.0	41.0
	Agree	52	52.0	52.0	93.0
	Disagree	6	6.0	6.0	99.0
	strongly disagree	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Figure 13

Table 6:

S/N	Statement	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1.	There is always time constraints when using digital skills in the classroom.	21	54	19	6	100
2.	The use of digital skills by the teacher make students acquire ICT skills	64	28	7	1	100
3.	I receive and examine students' assignment via available digital platform.	22	55	18	5	100
4.	The use of digital skills make students acquire functional skills that are sellable after graduation.	41	52	6	1	100
5.	The use of digital skills make students record excellent performance in their subjects.	27	34	30	9	100

Item 1 on the Table 6 above shows that 21% respondents strongly agreed and 54% respondents agreed that “there is always time constraints when using digital skills in the classroom.”, while 19% disagreed and 6% strongly disagreed. This implied that 75% of the respondents do experience time constraint whenever they choose to use digital skills for classroom instructional delivery. This result also revealed low proficiency level of private secondary school teachers in the use of digital skills for classroom instructional delivery. This result negate findings from previous researches that digital information is faster (ie, time saver, though subject to control) in presentation than conventional mode (Efunwole & Sijuwade, 2023).

It further showed that 64% respondents strongly agreed and 28% respondents agreed that “the use of digital skills by the teacher make students acquire ICT skills”, while 7% disagreed and 1% strongly disagreed. This result indicated that students do acquire both updated but functional knowledge and skills whenever teachers use digital skills for lesson preparation and classroom presentation.

Also, 22% respondents strongly agreed and 55% respondents agreed that “teachers do receive and examine students’ assignment via available digital platform”; while 18% disagreed and 5% strongly disagreed to the view. This result implied that majority of teachers in private secondary schools has advanced the use of digital skills to

conduct of assignments, tests and examinations via available / democratic platform.

Furthermore, 41% respondents strongly disagreed and 52% agreed that “the use of digital skills make students acquire functional skills that are sellable after graduation”, while 6% disagreed and 1% strongly disagreed to the statement. This result revealed that that the use of digital skills for lesson preparation and instructional delivery is efficacious to the extent that students will not only acquire knowledge but sellable skills.

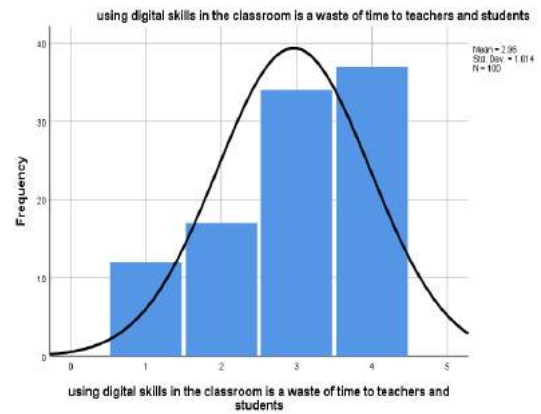
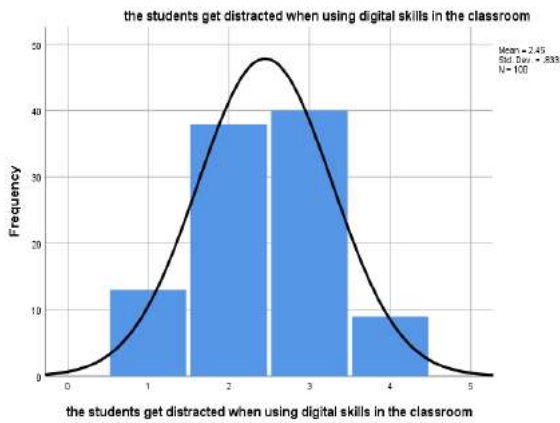
Lastly, 27% respondents strongly agreed and 34% agreed that “The use of digital skills make students record excellent performance in their subjects.”, while 30% disagreed and 9% strongly disagreed. Here, the result confirmed that the usage of digital skills greatly contribute to the excellent performance of students in private secondary schools.

The result on table 8 revealed that the use of digital skills in private secondary schools is efficacious. This implies that teachers’ usage of digital skills for instruction in the classrooms of private secondary schools is effective.

Research Question 4: What are the constraints to teachers’ use of digital skills in the 21st century classroom? The details on the frequency – distribution Tables and Figures below represents analysed data and result in respect of research question 4:

the students get distracted when using digital skills in the classroom

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid strongly agree	13	13.0	13.0	13.0
agree	38	38.0	38.0	51.0
disagree	40	40.0	40.0	91.0
strongly disagree	9	9.0	9.0	100.0
Total	100	100.0	100.0	

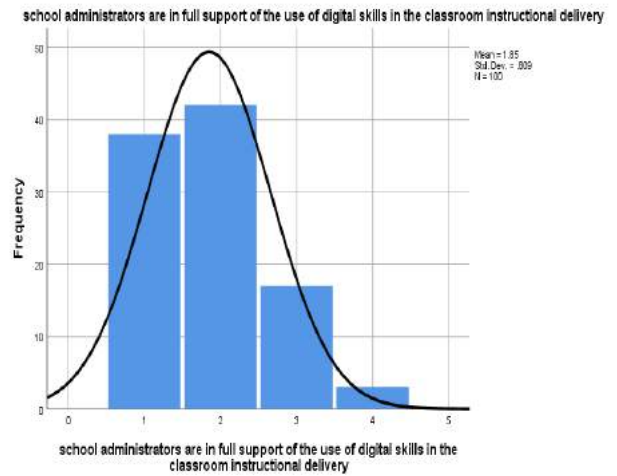
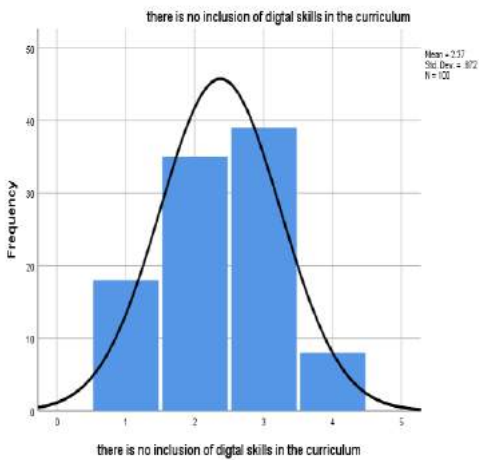


there is no inclusion of digital skills in the curriculum

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid strongly agree	18	18.0	18.0	18.0
agree	35	35.0	35.0	53.0
disagree	39	39.0	39.0	92.0
strongly disagree	8	8.0	8.0	100.0
Total	100	100.0	100.0	

school administrators are in full support of the use of digital skills in the classroom instructional delivery

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid strongly agree	38	38.0	38.0	38.0
agree	42	42.0	42.0	80.0
disagree	17	17.0	17.0	97.0
strongly disagree	3	3.0	3.0	100.0
Total	100	100.0	100.0	



using digital skills in the classroom is a waste of time to teachers and students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid strongly agree	12	12.0	12.0	12.0
agree	17	17.0	17.0	29.0
disagree	34	34.0	34.0	63.0
strongly disagree	37	37.0	37.0	100.0
Total	100	100.0	100.0	

total overhauling of schools will make integration of the technology and use of digital skills possible in the classroom

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid strongly agree	29	29.0	29.0	29.0
agree	55	55.0	55.0	84.0
disagree	8	8.0	8.0	92.0
strongly disagree	8	8.0	8.0	100.0
Total	100	100.0	100.0	

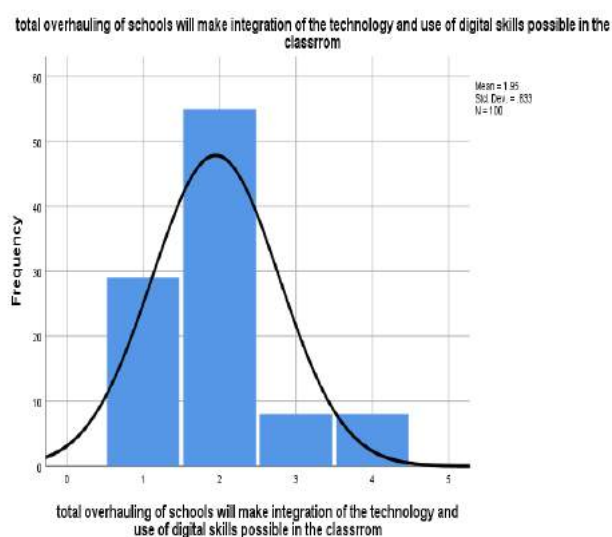


Table 7:

S/N	Statement	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1.	The students get distracted when using digital skills in the classroom.	13	38	40	9	100
2.	There is no inclusion of digital skills in the curriculum.	18	35	39	8	100
3.	Using digital skills in the classroom is a waste of time to teachers and students.	12	17	34	37	100
4.	School administrators are in full support of the use of digital skills in the classroom instructional delivery.	38	42	17	3	100
5.	Total overhauling of schools will make integration of technology and use of digital skills possible in the classrooms.	29	55	8	8	100

Table 7 above shows that 13% respondents strongly agreed and 38% respondents agreed that “the students get distracted when using digital skills in the classroom”, while 40% disagreed and 9% disagreed with the statement. This implied that the use of digital skills for teaching and learning is not yet popular among students of private secondary schools.

It further shows that 18% of the respondents strongly agreed and 35% respondents agreed that “there is no inclusion of digital skills in the curriculum”, while 39% disagreed and 8% strongly disagreed. This indicated that some teachers in private secondary schools are not familiar with current National Curriculum on their respective subjects.

Also, 12% respondents strongly agreed and 17% respondents agreed that “using digital skills in the classroom is a waste of time to teachers and students”; while 34% disagreed and 37% strongly disagreed to the view. This shows that teachers are adjudged to have keen interest in the use of digital skills for teaching and learning. Furthermore, 38% respondents strongly disagreed and 42% agreed that “School administrators are in full support of the use of digital skills in the classroom instructional delivery”, while 17% disagreed and 3% strongly disagreed to the statement. This result revealed the support of administrators / proprietors to the use of digital skills for delivery of classroom instructions in the private secondary

schools, which is a good omen for advancement of effective instructional delivery and learning.

Lastly, 29% respondents strongly agreed and 55% agreed that “total overhauling of schools will make integration of technology and use of digital skills possible in the classrooms”, while 8% disagreed and 8% strongly disagreed. This implied that majority of the respondents subscribed to the need for total overhauling of schools for technology integration into the present-day digital classroom.

The result on table 7 revealed that constraints to the use of digital skills for lesson preparation and classroom instructional delivery in the 21st Century classroom is minimal. Thus, the integration of digital skills in teaching and learning process will strive (despite constraints) for effective knowledge and skill dissemination to students in digital classrooms.

Conclusion

Digital technology is still emerging, and its adaptability promises to have far-reaching effects on the educational system and networks of sub-systems / agencies and other organizations (Yusuf, 2005). No doubt technology advances are expected to improve teaching and learning performance and other educational services in public and private schools, including teachers' usage of digital skills for classroom's instructions, among others. In this paper we examined digital skills as veritable endowment for teachers / students in this digital age, and found out that it is still largely unexplored / underutilized in secondary schools due to several factors identified. The paper made further analysis based on responses gathered and also gave some implications and provided good suggestions for the Nigeria education system.

Recommendations

On digital skills usage for instruction by teachers, there is need for government / proprietors of schools to adequately provide ICTs infrastructure and regularly update them without reservation or compromise for other needs,

because that assure the measures and mechanisms in place for effective globally enriched knowledge sharing and skills acquisition.

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