# Information Communication Technology Use and Public Secondary School Teachers' Work Performance in the Post COVID-19 Era in Ibadan Metropolis for Sustainable Development

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The COVID-19 pandemic caused by the novel coronavirus brought about dramatic changes in the way education is delivered world-wide, with public secondary school teachers in Ibadan Metropolis in particular facing many challenges. In response, many teachers embraced digital technology to continue teaching, leading to the need to investigate the impact of Information Communication Technology (ICT) use on teacher performance in this era. The aim of this study was to explore the effect of digital tools on the work performance of teachers in public secondary schools in Ibadan Metropolis during the pandemic. The study adopted a descriptive research design, involving the use of a structured questionnaire to collect primary data from 384 teachers in Ibadan Metropolis. Data was analysed using descriptive statistics (percentages, means, and standard deviation). The results showed that a majority (3.33 weighted mean) of teachers used digital tools for their work during the pandemic. Significant associations were found between using digital tools and work performance of teachers. There was also a positive relationship between ICT use and teachers' job satisfaction scores in Ibadan Metropolis. This study showed that digital tools can greatly increase public secondary school teachers' work performance and lead to improved job satisfaction in times of a pandemic. It is therefore important for the government and stakeholders in education to invest in and promote the use of digital tools, especially during times of crisis.

**Keywords:** Information Communication and Technology, Work Performance, COVID-19, Sustainable Development, Oyo State.

Word Count: 228

#### Introduction

Performance is defined as the organization's accomplishment of the set objectives. It includes results that have been accomplished or realized as a consequence of individual or group efforts to advance the strategic objectives of the company. Performance includes both financial and behavioural results. It is seen in light of the choices made and the expected results. It is the work put forth by the doer to achieve desired results. To perform successfully at work is everyone's goal(Ahmed, Jameel et al, 2020). It's the genuine attainable goal of any firm. It has to do with a worker's conduct at work and how well their job tasks are completed. Teachers' problem-solving abilities, inventiveness in the classrooms, attitude toward teaching, and attitude toward work are all factors that affect how well they do at work(Ahmed, Jameel et al, 2020). Because of their creativity, teachers can bring new perspectives to the classroom, develop their teaching pedagogy, and modify instructional aids and resources to enhance the teaching-learning process. On the contrary hand, teachers' perspectives on their work as educators reflect their capacity to finish any given task(Akosile&Olakotun, 2019). The effectiveness of a secondary school educator determines the strengths, weaknesses, and potential management gaps in the educational environment (Akosile&Olakotun, 2019). Tasks are correctly completed by efficient staff the first moment (firsttime right). For instance, a customer service agent who consistently leaves work unfinished or who fails to finish a client's report might not be able to meet the company's goals (Ahmed, Jameel et al, 2020). A teacher who implements curriculum in the educational field makes every effort to achieve the desired outcomes (Akinsolu, 2010). A teacher is someone who devotes their time and energy to instructing others. To be regarded as a professional teacher, a teacher must have mastered the fundamental teaching techniques and be certified to implement the curriculum in a classroom setting. The following skills are therefore necessary for a professional teacher to have: professional knowledge, teaching pedagogical expertise, etc. A global problem in the twenty-first millennium is teacher performance. Academic achievement of a pupil is no longer the standard by which to judge a teacher's performance. The degree of performance by the teachers in the classroom will be good to great if the teacher is technologically aware and knowledgeable, as this can also have an impact on the teacher's work performance (Asmarani, Sukano et al, 2021).

Teachers should do their duties with precision, neatness, attention to detail, consistency, thoroughness, high standards, and adherence to procedures (Adediran, Patrick, et al, 2021). Reduction in errors and consistency in quality. On the forefront of technology of their profession are education teachers. In this digital age, school administrators are required to use technology to influence the conduct of their staff members in order to accomplish the specified objectives. Every teacher is distinctive in their own particular way. The COVID-19 pandemic caused Nigeria to go into total lockdown, which interfered with the academic schedule of schoolchildren. During this period, a lot of teachers were exposed to and pressured to engage their students online. Some teachers are currently required to learn how to employ technology within the classroom because

they have little to no prior experience with online instruction. Using technology to teach pupils is easier in some institutions (mainly private secondary schools), while it is more challenging in others (primarily public secondary schools) (public secondary schools), Ahmed, Jameel et al, 2020.

The term digital teacher refers to someone who strategically uses devices like computers, phones, and the internet to further educational goals(Aslan & Zhu, 2017). Both organizationally and personally, this can be handled. On a more intimate level, those in charge of managing digital assets typically carry out this task. A competent digital educator is knowledgeable of the institution's goals and knows how the tasks they perform help to achieve them(Arief, Muhammed et al 2020). A company that has effectively used its digital resources to establish and maintain a competitive edge could serve as an institutional level digital instructor in this regard. The most recent revolution in education has been the use of digital technology, especially in light of the COVID-19 pandemic. Initiatives to improve teachers' and student' digital technology competencies and skills have been spearheaded by Nigeria's Ministry of Education. Several factors, such as the teachers' degree of technology, their professional growth in the real world, and their learning culture, have an impact on digital instructors, (Ahmed, Jameel et al, 2020).

Digital teaching is the method of using technology, such as computers and phones, to strategically further educational objectives. Institutional and individual responses are both possible to this (Meng, Tan, et al, 2017). When put into a more personal perspective, this is typically carried out by staff members in charge of monitoring digital assets. These teachers of digital thought will examine how technology might make their institution more receptive to student demands and dynamic industry demands. An effective digital educator appreciates the worth of incoming information and the business procedures that support it(Aserin, 2020). They value their ability to communicate, their creativity, and their eagerness to experiment with new developing technology in order to help commercial projects. Today's world makes it clear that balancing the needs of teachers, businesses, and the entire workforce involves using digital technology. According to statistics, 42% of the nation's top academic institutions now think that training teachers is crucial to success in the digital age(Bone, Rachman, et al, 2021). The twenty-first century is the era of the information economy. The knowledge-based economy enters production and competitiveness to navigate any organization's new success(Benard & Jane, 2019). What you can accomplish with what you currently have is what matters. Data, which can be utilized to transform information into a product, is the foundation of everything. It serves as a more concrete element that can inspire new ideas for features in the future. Any organization's performance was forced to shift away from a profit-focused strategy and toward a more socialized objective as a result of these new circumstances (Masrur, 2021). Including in educational institutions, notably secondary schools, and higher education, where the place to foster innovation as a means of assisting the organization's performance in the face of its existential issue(Benard & Jane, 2019). Additionally, it has been found that digital teacher is particularly vital for teachers to implement and foster innovations attached to ICT Bright, & Alptekin, 2018) A schoolteacher is both a teacher of change in enhancing school technology and an expert in technology teacher (Benard & Jane, 2019). School teachers, who are the principals and teachers, are now transforming themselves on what the industrial revolution is pushing with to elevate the current education system in which their technological teacher is pointed out on how it will further enhance the technical proficiency of their teachers. The development of teachers' digital competency and awareness may be aided by teacher awareness (Budiharso. & Tarman, 2020). It entails cultivating teacher in schools and higher education institutions to assist teachers in learning and developing their digital capability for use in the classroom to create a digitally friendly learning environment (Bayo, Kwetishe e al, 2020)

#### **Statement of the Problem**

The outbreak of corona virus in the year 2020 which led to lockdown in Nigeria obviously disrupted a lot of governmental, social, religious and educational activities including teaching-learning activities, Oyo State inclusive. From observations and research reports in literature, it was observed by researchers that teacher's work performance plays a critical role in the functioning of education system and that when school teachers are not digitally inclined, it has effect on how the secondary school teachers will carry out their duties in ensuring a smooth run of the educational system thereby having a meaningful result in the teachers' work performance (Fakeye, 2010). The central roles teacher's play in determining academic outcomes of student's, interpreting the curriculum, carrying out school principals' directives to achieve stated goals and objectives is indeed crucial. There seems to be issues with teachers' work performance especially teaching tasks performance and the academic job description interpretation. Instructional strategies including use of Information and Communication Technology tools and proficiently with Digital skills and knowledge effective greatly in the present-day work performance of teachers, taking cognizance of the post covid-19 era and its demands. However, about three months after the total lockdown, private secondary schools' teachers started online teaching-learning activities while public secondary schools' teachers only engaged in radio teaching in Oyo State. This implies that public secondary schools in Ibadan metropolis could not integrate technology or virtual learning to rescue the situation. This inability to make use of technology for teaching-learning activities could be due to so many factors such as secondary school teachers not digitally inclined, cost, network issues, lack or insufficient infrastructural facilities, inadequate power supply and so on. Teachers work performance, with some other variables has been documented by researchers (Farroq, 2018). However, only few works have been done in respect of digital teacher, teachers ICT use vis a vis teacher work performance. Considering aforementioned, hence, the need to investigate the influence of digital teacher, ICT use on work performance in the Covid-19 era in Ibadan metropolis.

# **Objectives of the Study**

The general Objective of the study is to investigate the relationship between the digital teacher and public secondary school teachers work performance during COVID-19 in Ibadan Metropolis. The specific objectives are to:

- i. identify the level of secondary school teachers' work performance in the COVID-19 era in Ibadan metropolis. ii. identify the most used platform to teach secondary school students during COVID-19 era (during lockdown and after lockdown) in Ibadan metropolis?
- iii. identify the most used device to teach secondary school students during COVID-19 era (during lockdown and after lockdown) in Ibadan metropolis? iv. ascertain combined influence of digital teacher and ICT use on work performance of secondary school teachers during COVID-19 in Ibadan Metropolis
- v. examine relative influence of digital teacher and ICT use on work performance during COVID-19 era in Ibadan Metropolis

#### **Research Questions**

The following research questions were formulated.

- 1. What is the level of secondary school teachers' work performance (Creativity, attitude to teaching, and problem-solving ability) in the COVID-19 era in Ibadan metropolis?
- 2. What is the most used platform to teach during COVID-19 era (during lockdown, after lockdown) in Ibadan metropolis?
- 3. What are the most used devices to teach during COVID-19 era (during lockdown, after lockdown) in Ibadan metropolis?
- 4. To what extent is public secondary school teachers digitalized?

# **Hypothesis**

The following hypotheses were formulated.

 $H_01$ : There will be no significant combined influence of digital teacher and information communication technology (ICT) use on work performance of secondary school teachers during COVID-19 era in Ibadan Metropolis

H₀2: There will be no significant relative influence of digital teacher and information communication technology (ICT) utilization on work performance of secondary school teachers during COVID-19 in Ibadan Metropolis

# Methodology

This study employed a descriptive survey research design.

Ibadan Metropolis is made up of 11 local government areas, with a total of 228 schools and teachers 8,762 Multistage sampling procedure using the cluster, purposive and simple random sampling techniques was adopted to select the sample size of 505. In stage one, the cluster sampling technique was used to select 219 out of 228 schools. In the second stage, the schools were clustered into urban and semi-urban cities. In stage three, 51 schools were purposively selected from urban and 50 from semi-urban cities having a total of 101 public secondary schools as sampled schools based on the year of the establishment. In the last stage, a simple random sampling technique was used to select five teachers from each school making a total of 505 teachers.

A self-structured questionnaire called the teachers' questionnaire (TQ) was developed. The instrument was divided into three sections. Section A items were tailored to the demographic data of the teachers. Section B items addressed the indicator measuring the teachers' work performance and C items addressed the extent to which teachers are digitalised using four Likert-scale rating which was extrapolated from the content to address the research questions raised and the hypothesis.

In order to increase the study's credibility, validity, and reliability, Lead City University's ethical standards for data collection, analysis, and interpretation were meticulously followed.

Sections A and B of the structured questionnaires were evaluated using descriptive statistics, such as frequency, mean, standard deviation, graph, and percentage. An inferential statistical tool known as Pearson Product Moment Correlation was employed to test the only hypothesis raised for the study at a 0.05 level of significance.

Results

**Research Question One**: What is the level of public secondary school teachers' work performance (creativity, attitude to teaching, and problem-solving ability) in the COVID-19 era in Ibadan metropolis?

		Very	Often	Sel	ldom	Ra	urely	N	lever			
S/N	Items "I"	Freq	Per (%)	Freq	Per(%)	Freq	Per(%)	Freq	Per(%)	Mean	SD	teach
	students basics ar											_
1		27	75 54.2 0.58		1 38.4	- 28	5.5	8	1.0	5 3.46		
	them to find out themselves									more	for	
	improvice instrue	tional										

improvise instructional

	Lead C	ity Unive	rsity Pos	stgraduat	e Multidi	sciplinar	y Serial,	(Series 2	)		
2		143	28.3 0 584 n	315	62.4	47	9.3	0	0.0	3.19	
	students		0.5011	acciais	io teden						
3	provide opportunities for my students to share the class	199	39.4 0.725 tl	226 neir stron	44.8 ag and wo	76 eak point	15.0 ts with	4	0.8	3.23	
4	encourage my students to try out ideas to encourage	what th	ey have 3.18	0.660 le	31.7 earned frostudent's		54.7 n differer	67 nt situatio	13.3 ons	2	0.4
		_									
5		them to	think a 0.6	nd 3.01	119 0.689 m	23.6 notivate t	275 them to le	54.5 earn	108	21.4	3
6	look forward to the	103 20	4 261 5	1.7 130 2	25.7 11 2	.2 2.90 0	.735 cha	nge			
7	make use of different teaching	145	28.7 0.759 t	280 technique	55.4 es while	57	11.3	23	4.6	3.08	
	teaching improvise										
8	different	instruct	rional	194	38.4	224	44.4	81	16.0	6	1.2
0		msuuci		744 mate				01	10.0	O	1.2
9	make lessons more	enjoyal	ole and 3.09	143 0.688 a	28.3 alleviates	268	53.1	92	18.2	2	0.4
( 11	try to achieve the stated objectives of the lesson within 0.746 the given time feel less of myself		28.5	<ul><li>245</li><li>213</li></ul>	48.5 42.2	109 91	21.6 18.0	7	1.4 7.1	3.04 frame 3.00	0.891
11	when they couldn't provide the solution to a given problem	103	32.7	213	T4.4	<i>)</i> 1	10.0	36	7.1	5.00	0.071

	Lead C	ity Unive	rsity Pos	stgraduat	e Multidis	ciplinar	y Serial, (	Series 2)			
12	am always ready to seek solutions to teaching - learning problems	168	33.3	239	47.3	79	15.6	19	3.8	3.10	0.794
13	try to ask for student feedback while teaching	152	30.1	297	58.8	48	9.5	8	1.6	3.17	0.656
14	am always ready to make use of the internet in seeking for more knowledge	118	23.4	286	56.6	98	19.4	3	0.6	3.03	0.672
15	make use of the internet to find out more about teaching-learning	207	41.0	209	41.4	80	15.8	9	1.8	3.22	0.771
	Weighted Mean									3.13	

**Decision Rule:** Weighted mean < 2.50 means **Low**, 2.50 to 2.99 means **Moderate**, > 3.00 means **High.** Table 1 demonstrates a moderately high level of work performance (creativity, attitude to teaching, and problem-solving ability) among public secondary school instructors during the COVID-19 era (weighted mean = 3.13). The study also shows that teachers' creativity level is the highest (39%) among the three indicators for measuring work performance followed by problem-solving ability (32.1%) while their attitude to teaching is 28.9%. This implies that teachers in public secondary schools mostly teach pupils the fundamentals while letting the students pursue further learning on their own. Teachers do not make teaching more enjoyable to students compared with the olden days when students will always love to go to school.

**Research Question Two:** What is the most used platform to teach during COVID-19 era (during lockdown, after lockdown) in Ibadan Metropolis?

Table 4.2: Showing the most used platform to teach during COVID-19 era (during lockdown) in Ibadan Metropolis

Lead City University Postgraduate Multidisciplinary Serial, (Series 2)

Table 4.2: Showing Most Used Platform to Teach during the lockdown in Ibadan Metropolis

				At all Times	Son	netime	Rar	oly.	Nev	or		
			-	Per	3011	<u>ieume</u>	Kai	Per		Per		
S/N It	tems		Fre	eq (%)	Freq	(%)	Freq				Mean S	SD_Per
1	Zoom	324	64.2	152	30.1	29	5.7	0	0.0	3.58	0.599	10
2	Google meet	190	37.6	272	53.9	37	7.3	6	1.2	3.28	0.648	
3	Google class	207	41.0	215	42.6	82	16.2	1	0.2	3.24	0.722	
4	Dropbox	126	25.0	228	45.1	136	26.9	15	3.0	2.92	0.795	
5	Prezi 164	32.5	193	38.2	108	21.4	40	7.9	2.95	0.925		
6	Umang mobil	le app		119 2	3.6 26	52 51.	9 96	19.0	28	5.5	2.93	0.803
7	YouTube		191	37.8	246	48.7	67	13.3	1	0.2	3.24	0.679
8	WhatsApp	204	40.4	266	52.7	35	6.9	0	0.0	3.33	0.602	
9	Cisco		175	34.7	186	36.8	137	27.1	7	1.4	3.05	0.820
10	Webex	170	33.7	191	37.8	124	24.6	20	4.0	3.01	0.861	

Field Survey , 2022

Table 4.2 gives a clear picture of the most used platform used by public secondary school teachers to teach during Covid-19 era in Ibadan Metropolis. The most used platform by public secondary school teachers in Ibadan Metropolis is Zoom. The table reveals that at all times, public secondary school teachers make use of Zoom to teach during Covid-19 in Ibadan Metropolis with the highest percentage of (64.2%) followed by Google class of (41.0%) and the least is Umang Mobile App having the percentage of (23.6%). From the above, there is tendency that most secondary school teachers make use of Zoom as the best platform they can easily operates within a short period of time. It was also noted that during the period of Covid-19, Zoom is the major platform that was created for teachings, hosting meetings, seminars among others. In order words, the most use platform to teach during Covid-19 by public secondary school teachers in Ibadan Metropolis is Zoom.

Table 4.2.1: Showing Most Used Platform to Teach after the lockdown in Ibadan Metropolis

<del>-</del>	At all Times	Sometime	Rarely	Never
	Per	Per	Per	Per

S/N	Items	Freq	(%)	Freq	(%)	Freq	(%)	Freq	(%)	Mean	SD
1	Physical only	369	73.1	123	24.4	10	2.0	3	0.6	3.70	0.535
		197								3.31	0.646
2	Online only		39.0	279	55.2	18	3.6	11	2.2		
3	Hybrid (Physical &Online)	236	46.7	224	44.4	44	8.7	1	0.2	3.38	0.649
	Weighted Mean									3.46	

Field Sur vey, 2022

Table 4.2.1 gives an explanation of the most used platform by public secondary school teachers to teach after Covid-19 pandemic in Ibadan Metropolis. The most used platform by public secondary school teachers to teach after the pandemic in Ibadan Metropolis is Physical only. The table reveals that at all times, public secondary school teachers make use of physical only to teach after the pandemic lockdown in Ibadan Metropolis with the highest percentage of (73.1%) followed by Hybrid (Physical and Online) of (46.7%) and the least is Online Only having the percentage of (39.0%). From the above, there is tendency that most secondary school teachers make use of physical only to teach after the pandemic lockdown in Ibadan to teach with the view of having an interactive class with the students, seeing their facial expression while teaching as the best platform they can use to make teaching-learning more meaningful. It was also noted that during the period of Covid-19, Physical only is the major platform used in teaching so as to create a mutual relationship between the student's and the teachers.

**Research Question Three:** What is the most used device to teach during COVID-19 era (during lockdown, after lockdown) in Ibadan Metropolis?

Table 4.3: Showing themost used device to teach during COVID -19 era in Ibadan Metropolis

		At	t all								
		Ti	mes	Som	etime	Ra	rely	Ne	ever	_	
			Per		Per		Per		Per		
					(%)		(%)		(%)		
S/N	Items		(%)	Freq		Freq		Freq		Mean	SD
		Freq									
1	Smart Phones	301	59.6	167	33.1	35	6.9	2	0.4	3.52	0.643
		155									
2	CDs		30.7	230	45.5	113	22.4	7	1.4	3.06	0.764
		150									
3	DVDs		29.7	225	44.6	95	18.8	35	6.9	2.97	0.874
4	Biometric Scanner	187	37	222	44	80	15.8	16	3.2	3.15	0.797
5	Computers	204	40.4	254	50.3	45	8.9	2	0.4	3.31	0.645

Lead City University Postgraduate Multidisciplinary Serial, (Series 2) Telephones 220 43.6 226 44.8 59 11.7 0 0.0 3.32 0.672 6 7 Digital camera 12.3 3 0.6 174 34.5 266 52.7 62 3.21 0.669 41.8 230 45.5 62 12.3 2 0.4 3.29 Whiteboard 211 0.689 9 Interactive board 286 50 9.9 0 0.0 3.24 169 33.5 56.6 0.616 2 0.662 10 Projector 275 54.5 42 8.3 0.4 3.45 186 36.8

Field Survey, 2022

Table 4.3, the highest most used device for teaching during Covid-19 in Ibadan Metropolis is Smart Phone with a percentage of (59.6%). Secondary school teachers in Ibadan metropolis at all times make use of Smart Phone to teaching during Covid-19 pandemic era in Ibadan Metropolis with the view that it is easier for them to operate and carry about. This implies that, secondary school teachers enjoy using their smart phones to teach during Covid-19 era. This is followed by projector with a percentage of (54.5%). The projector helps secondary school teachers project or display what they are teaching the students using the computer thereby having audio-visual class to aid teaching. The least device that is mostly used to teach during Covid-19 is DVDs with the percentage of (29.7%). This implies that, public secondary school teachers in Ibadan don't really make use of DVDs for teaching during Covid-19 era in Ibadan Metropolis. This implies DVDs are only used for playing Videos. In the other hand, Smart Phones are used to teach, make calls for students to join the class, just to mention a few and also in conformity to the outcome of the research question on the most used device to teach during Covid-19 pandemic by the secondary school teachers in Ibadan Metropolis. This means that using smart phone to teach by secondary school teachers can help boost teacher effectiveness, work performance and time factor. Above all, the most used device to teach during Covid-19 by secondary school teachers in Ibadan metropolis is Smart Phone.

Table 4.3.1: Showing the most used device to teach after COVID-19 era in Ibadan Metropolis

		At all	Times	Som	etime	Ra	rely	Ne	ever		
			Per		Per		Per		Per		
S/N	Items	Freq	(%)	Freq	(%)	Freq	(%)	Freq	(%)	Mean	SD
1	Interactive Board	207	41.0	177	35.0	117	23.2	4	0.8	3.16	0.805
2	Smart phones	141	27.9	308	61.0	35	6.9	21	4.2	3.13	0.707
		183								3.18	
3	Power points		36.2	239	47.3	73	14.5	10	2.0		0.745
		150								3.10	0.705
4	Video clips		29.7	256	50.7	97	19.2	2	0.4		
5	Audio recording	200	39.6	224	44.4	76	15.0	5	1.0	3.23	0.732
6	Tape recorder	171	33.9	151	29.9	172	34.1	11	2.2	2.95	0.875
7	Digital camera	137	27.1	271	53.7	81	16.0	16	3.2	3.05	0.746
8	Projector	172	34.1	272	53.9	60	11.9	1	0.2	3.22	0.649

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9	Interactive board	139	27.5	337	66.7	29	5.7	0	0.0	3.22 0.535
10	White Board	260	52.1	213	42.2	26	5.1	3	0.6	3.46 0.623

Field Survey, 2022

Table 4.3.1, the highest most used device for teaching after Covid-19 in Ibadan Metropolis is Whiteboard with a percentage of (52.1%). Secondary school teachers in Ibadan metropolis at all times make use of whiteboard to teach during Covid-19 pandemic era in Ibadan Metropolis with the view that it is easier for them to write and illustrate with. This implies that, secondary school teachers enjoy using whiteboard to teach during Covid-19 era. This is followed by Interactive board with a percentage of (41.0%). The interactive board helps secondary school teachers to interact and impact knowledge into the life of the students. The least device that is mostly used to teach after Covid-19 is digital camera with the percentage of (27.1%). This implies that, public secondary school teachers in Ibadan make use of digital camera to teach during Covid-19 and not always in use after Covid-19 pandemic. This also implies that whiteboard is in conformity to the outcome of the research question on the most used device to teach after Covid-19 pandemic by secondary school teachers in Ibadan Metropolis. This means that using whiteboard to teach by secondary school teachers can help boost teacher effectiveness, work performance, teacher-student relationship and time factor. Above all, the most used device to teach after Covid-19 by secondary school teachers in Ibadan metropolis is Whiteboard.

**Research Question Four:** To what extent is public secondary school teachers digitalized? **Table 4.4: Showing the extent at which public secondary school teachers are digitalized.** 

	High	Extent	Extent	Low Extent		y Low tent			
		Per	Per	Per		Per	_		
S/N items	Freq	(%)	Freq (%)	Freq (%)	Freq	(%)	Mean	SD	

am digitally

1 332 65.7 127 25.1 43 8.5 3 0.6 3.56 0.673 inclined

appreciate that innovation

is

2 226 44.8 259 51.3 20 4.0 0 0.0 3.41 0.567 more than just creativity place value on my

		Lead Cit	y Unive	ersity Pos	stgraduai	te Multia	lisciplir	ary Serial,	(Series	2)		
3	communica 0.702 a	tion 2	231 vity sl	45.7 kills	205 40	).6	69	13.7	0	0.0	3.32	
	enjoys learn	ning throu	ıgh									
4	new 155 30.7 equipment	308 61.0	)	41	8.1	1	0.2	3.22	0.590	techno	logies a	and
	attend semi											
	and in-servi	ice										
5	training 209 41.4 grow my	256 50.7	7	40	7.9	0	0.0	3.33	0.618	prograi	mmes t	0
	teaching ski	ills										
	create a											
	highperforn											
6	environmen		29	25.5	334 66		42	8.3	0	0.0	3.17	
		where suc		s inevit	able aw	ake						
	possibilities to	s in peopl	e									
7	201 39.8 extraordinal	•		72 use of	14.3	0	0.0	3.26	0.690	deliver		
8	216 42.8 information	246 48.7	7	39	7.7	4	0.8	3.33	0.652	and rec	cord	
	tend to ove	rcome										
		2	258	51.1	191 37	<b>'</b> .8	53	10.5	3	0.6	3.39	0.697
	9 b											
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Weighted Mean	

Field Survey, 2022

**Decision Rule:** Weighted mean < 2.50 means **Low**, 2.50to 2.99 means **Moderate**, > 3.00 means **High.** 

Table 4.4 gives an answer to the above research question. From the above table, calculated weighted mean is 3.33 which is high. This implies that public secondary school teachers are digitalized. Digitalization is one of the major factors needed by secondary school teachers to grow in their profession and also needed in this fourth industrial revolution and being such, it has been powerful enough to attain its success on current educational improvement. A brief look at the happenings, that is, the era of Covid-19 pandemic (Nationwide lockdown) when schools were shut down and most school age children could not have access to education, rather, they resulted in watching home videos, playing video games, watching cartoons among others in Ibadan metropolis of Oyo State. The story wasn't so in other developed countries like the United State of America, Germany, Australia among others, where there is a paradigm shift of teachers from the traditional method (physical) of doing things to an advanced method (virtual platform). In other words, there is shift in education from the normal four walls of classroom to education in the air. This help to call for improvement and digitalization of public secondary school teachers in Ibadan metropolis. Digital teacher is someone who lead through the use of digital devices require greater effort from both the government and the administration. Hence, digital teacher must be versatile, creative, flexible and always prompt to make a change in the global world.

### **Test of Hypotheses**

**Ho1:** There will be no significant combined influence of digital teacher and information communication technology (ICT) use on work performance of secondary school teachers during COVID-19 era in Ibadan Metropolis

Table 4.5: Showing the combined influence of Digital teacher and Information Communication Technology (ICT) use on Work Performance of secondary school Teachers during COVID-19 era in Ibadan Metropolis.

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	36492.808	2	18246.404	525.510	0.000
Residual	17430.106	502	34.721		
Total	53922.914	504			

Field Survey, 2021

R=0.823,  $R^2=0.677$ , Adjusted  $R^2=0.675$ , where a= dependent variable and b= independent variables

Table 4.5 shows that the f-test significant (P -value < 0.05), thus, the null hypothesis is rejected. In other words, the table above shows that there is a combined influence of digital teacher and Information Communication Technology use on work performance of secondary school teachers during COVID-19 era in Ibadan Metropolis.

**Ho2:** There will be no significant relative influence of digital teacher and information communication technology (ICT) utilization on work performance of secondary school teachers during COVID-19 in Ibadan Metropolis

Table 4.6 showing the relative Influence of digital teacher and information communication technology (ICT) utilization on work performance of secondary school teachers in the COVID-19 in Ibadan Metropolis

	Unstanda	rdized Coeffic	ized ents			
	В	Std. E	Error	Т	Sig.	Model
			Beta			
(Constant)		40.511	4.577		8.851	0.000
Digital teacher Information		2.918	.100	.744	29.236	0.000
Communication Technology (IC used Field Survey, 20	T)	2.055	.129	.405	15.915	0.000

Table 4.6 shows the relative influence of digital teacher, Information Communication Technology on secondary school teachers' work performance. From the above table, it was deducted that both digital teacher and use of Information Communication Technology has significant (P- value < 0.05) on the hand public secondary school teachers in Ibadan metropolis.

# **Discussion of Findings**

Digital teaching is a strategy for advancing educational goals by the wise application of technology, including computers, smartphones, and the internet. Education is a profession. It is the transfer of knowledge from the knowledgeable to the uneducated. Working with students (learners) to assist them comprehend and decode the concept, apply their knowledge, and process it is necessary in order to produce a useful output. It is the responsibility of teachers to give knowledge to secondary school students enrolled in public institutions so they can contribute positively to society. Teachers are people who spend their time and energy instructing students. The efficiency of a secondary school teacher affects the environment's advantages, downsides, and potential management gaps. If a person has completed professional development in teaching techniques, they can also be considered a teacher. Given that public secondary school teachers in the city of Ibadan can start instruction from known to unknown, it is likely that the instructor is a qualified educator. This is consistent with studies examining the impact of innovative instructional strategies and digital teaching techniques on students' learning. (Muhammed, Suliman et al, 2020). Being able to use educational tactics including technology, a range of approaches, teamwork, establishing a positive learning atmosphere, and encouraging students to try new things as part of their learning is one of a teacher's responsibilities as a professional. Teachers that are dedicated about raising the caliber of learning outcomes are needed in educational institutions. The foundations of teachers training pupils and then providing them the chance to find out more for themselves are followed by this in the Ibadan metropolitan area with a percentage of (54.2%). This demonstrates the creativity of secondary school instructors in the Ibadan metropolitan area. There is a strong correlation between children' academic success and their teachers' creativity. This validates a study's findings that certain factors, such originality, were influenced by how well instructors performed at their jobs. Teachers indirectly instruct students by their creativity. Although it can be difficult, it motivates students to be imaginative in the classroom and keeps them engaged both inside and outside of the classroom.

This is in line with the study, which demonstrates that teachers' ability to use instructional tools to promote a good learning environment determines how effective they are at their jobs. (Gilakjani 2017). This act has an effect on teachers' problem-solving skills, causing 41.0% of them to use the internet to learn more about teaching and learning strategies, and 0% of instructors use the internet to learn anything at all. (23.45). It was discovered that some teachers do not use the internet to research their teaching-learning skills. This might be decided by, among other things,

the type of phones they used, their access to online resources, or how carefree they were when using the internet, (Mohd, Omar et al, 2019).

The correlation shows positive relationship NOT highly positive relationship between the extent to which teachers are digitalised and their work performance. This is consistent with research showing that digitalization is a potent tool with the potential to affect teachers' work effectively in the now and the future. This means that secondary school instructors can use digital learning strategies and utilize ICT to enhance student learning outcomes and job performance.

Table 2 shows how heavily computerized the Ibadan metropolis's school administrators are. The results of the study lend support to the idea that secondary school teachers in public institutions use technology to enhance their lessons and teaching methods. When using the internet, teachers at public secondary schools have demonstrated that they value uniqueness. In the twenty-first century, a teacher's ability to influence pupils' knowledge goes beyond their proficiency with interactive whiteboards and instructional materials to include their level of technical digitalization. People today use their phones for more than just making phone calls, texting, taking photographs, and using WhatsApp, thanks to advancements in technology. These days, teachers install software (educative software) for more practical applications like Zoom, Google Class, Youtube, and Dropbox, among others. Thanks to technology, a conference call can be made with every kid at the school. In order to assist their instructors' productivity in the Ibadan Metropolitan Area, they can also digitally or remotely plan and organize symposiums. According to a study on how digital leadership affects the development of company models, this is accurate, technological innovation (Granic&Marangunic, 2019).

#### Conclusion

This negates the findings of this study which state shows a moderately high level of work performance and positive relationship in Table 3

Again, the survey has shown the truth about the level of digitalization among public secondary school teachers in Oyo state's Ibadan metropolis in the modern day. Additionally, it demonstrates how highly digitalized secondary school teachers are. According to the study, there is a positive relationship between digital teachers and teachers' work performance in Oyo State's Ibadan metropolis.

In conclusion, this study also demonstrates the enormous impact that digital teaching, information communication, and technology have on public secondary school teachers' work performance, particularly in terms of their problem-solving skills, creativity, and attitude toward instruction.

#### Recommendations

Based on the findings of this study, the following recommendations were made.

- 1. Public secondary school teachers should always incorporate Information Technology into teaching.
- 2. Provision of more ICT equipment in secondary schools in Ibadan metropolis

3. Information on provision of regular training on the use of ICT equipment to teach in secondary schools.

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