

# **EDUCATIONAL FACILITIES PROVISION IN A CHANGING WORLD FOR SUSTAINABLE DEVELOPMENT IN PUBLIC SECONDARY SCHOOLS IN LAGOS STATE**

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## **Abstract**

*This study examined educational facilities provision in a changing world for sustainable development in public secondary schools in Lagos State. Specifically, the study set out to examine the level of teachers training on the use of technologies in sustaining educational development in public secondary schools among others. three research questions and two research hypotheses were formulated to guide the study. This study adopted a descriptive survey research design and the population comprised 8,840 teachers in public senior secondary schools of Lagos State. Multistage sampling procedure was used to select 320 participants for the study. An instrument titled "Educational Facilities Provision and Sustainable Development Questionnaire" was used for data collection, and was validated with its reliability ascertained. The data collected were analysed using descriptive and inferential statistics. Some of the findings showed that inadequate staff training on the use of ICT and e-resources in sustaining educational development and poor funding by government to procure digital tools in schools. The study thus recommended that ministry of education through teacher service commission should as a matter of urgency embark on provision of training, workshops and seminars in digital tools appreciation to secondary school teachers to enable them acquire necessary digital literacy skills, the government should procure computers, software kits and install multimedia in schools.*

**Key words:** Educational facilities provision, sustainable development, teachers' training, school administrators

## **Introduction**

Investment in sustainable development is essential to social wellbeing which depends on education for societal survival. Information Communication Technology (ICT) and electronic resources (E-resources) aid knowledge and is a

force behind access to education for individuals who are interested in combining work and learning. If teachers and students alike do not have access to adequate provision of educational facilities such as tablets, laptops, virtual laboratories, dynamic visualization and digital video

conferencing platform to teach and learn, they would not be able to follow the 21st century technologies. Where there is no sufficient and effective technology assisted learning tools, the issue of sustainable development in education will remain a mirage. The completeness of technologies and techniques in school take learning to the next generation. However, the provision of technologies appears to have been difficulties for teachers and students (Shilpa, Radha & Movva, 2022). This is because government seem not to take seriously teachers' skills acquisition and knowledge which are relevant in measuring up with the new techniques and complex teaching process.

Teachers in Nigerian secondary schools are confronted with the problem of how to use advanced technologies to accelerate the growth of education in such way that effective and efficient education would be available to all, far and wide and this affects the society. The more worrisome aspect is how to integrate technology gadgets to deliver education to children outside the classroom setting. This is because teachers seem to be used to unsophisticated technique. Covid-19 and quarantine are concepts that have recently find its way into the society. Persons/human beings in the world over, are aware of the tragedy caused by the Covid- 19 pandemic. To cope with the economic effect of the pandemic, especially the disruption of educational system, most countries were not creating awareness and promoting digital technologies to their education system. In addition, the global investments and government incentives towards developing the educational system have declined which may harshly impact on educational facilities. The pandemic tend quickly to expose/show up the existing blemish in the infrastructure of education

system. Among the challenge is the low technologies intervention (such as mobile devices) in secondary level of education. The inadequate digital technologies in secondary education accounts for the negative dissemination of useful skill and knowledge (Criollo, Guerrero-Arias, Jaramillo-Alcazar, Lajan-mora, 2021).

Educational facilities provision refer to any technologies and techniques provided by the education managers to enhance teaching and learning process such as ICT, digital technologies, social media, multimedia and mobile devices. Oko and Michael (2016), observed that provision of educational facilities help students in learning better, and enable them to consolidate and deepen their knowledge and skills in JCT application. This may be the reason for globalization of education (application of digital technologies), hence, there is need for teachers to be abreast with the adequate skills and experiences needed for teaching through the application of ICT. If the skills are not adequate, education for sustainable development is likely to be affected because of poor training on the use of technologies. The provision of e-resources and ICT gadgets seems to be the major challenges members of teaching staff encountered in classroom. Poor ICT infrastructure in secondary schools in Nigeria restricts teachers' use of technology gadgets and forces teachers' continuation of conventional way of delivering instruction. Again, members of teaching staff are willing to integrate e-resource gadgets into classroom, however seem to be confronted with some challenges. Scholars (Charles, Shizhou, Justine, Salome, Robert & Lawrence, 2021) opined that schools are ICT-free and the needed digital technologies are not provided in the

schools. This showed that teachers seem ill-equipped to function optimally within the system. At present, it appears that Nigeria is yet to fully integrate ICT into its secondary education level curriculum. A great number of school administrative duties in secondary schools are still manually carried out and executed, with the teachers at the level of lagging in ICT knowledge and competencies. Further, teachers' poor training on the use of ICT affect the performance of teachers. It has been observed that teachers do not possess the necessary training, ICT skills and thus reducing their literacy and proficiency level. This is to say that the importance of technologies in Nigeria secondary schools cannot be overemphasized.

Apart from the issue of teachers' training on the use of ICT, most educational facilities are not procured thereby exposing teachers to career dissatisfaction. The procurement of technologies gives educational institutions conducive work environment for teaching and learning. Development of digital tools for pedagogical purpose has become inevitable. While emphasizing the role of digital technologies in accelerating the delivery of education content in developing countries such as Nigeria, the procurement of ICT appears to have left the secondary schools with long terms challenges in the area of funding. It has exposed many shortcoming in the schools about using technologies to teach, as such, secondary schools find it difficult to provide adequate digital tools. Also many schools do not have enough resources to procure digital tools.

### **Statement of the Problem**

There have been calls to support sustainable development in public secondary schools. However, much attention has been on

transforming curriculum. Transformation in other aspects, such as teacher professional development, change in textbooks and mode of assessment have not been touched. Furthermore, it appears that little information is given to sustainable practices in secondary schools, which does not elucidate the strategies that can be used at this level of schooling. This is because digital tools skills among teachers in secondary school are not given adequate attention in order to get the needed information for sustainable development.

Most teachers in secondary schools seem not to update their knowledge on recent trends in teaching and learning processes thereby lack improvement in their teaching skills. The inadequate of applications of digital skills (educational facilities provision) in secondary school teaching has draw the concern of education stakeholders to the competencies of teachers and that of students. This is because of low level of knowledge and skill possessed by teachers. For effective teaching and learning to be sustainable in secondary schools, educational facilities provision (ICT facilities and technologies) needs to be demonstrated through computer utilization, as well as through teachers' effectiveness in the areas of online library materials and information dissemination. If teacher are experiencing unpleasant situation in the effective use of technologies and techniques, it will affect the investment in educational facilities. This study then investigated educational facilities provision in a changing world for sustainable development in public secondary schools in Lagos State.

### **Purpose of the Study**

The purpose of the study was to examine educational facilities provision and sustainable

development in public secondary schools in Lagos State. The specific objectives were to:

- i. examine the level of teachers training on the use of technologies in sustaining educational development in public secondary schools;
- ii. determine the extent of school administrators procure ICT facilities and technologies required for sustainable development in secondary schools;
- iii. ascertain the challenges militating against the provision of educational facilities in secondary schools.

### **Research Questions**

Three research questions guided the study.

- i. What is the level of teachers training on the use of technologies in sustaining educational development in public secondary schools?
- ii. To what extent does school administrators procure ICT facilities and technologies required for sustainable development in secondary schools?
- iii. What are the challenges militating against the provision of educational facilities in secondary schools?

### **Research Hypotheses**

The following hypotheses were formulated to guide the study.

- i. There is no significant relationship between teachers' training on the use of technologies and sustainable development.
- ii. There is no significant relationship between procurement of ICT facilities and technologies; and sustainable development.

## **Literature Review**

### **Concept of Educational Facilities Provision**

Educational facilities are for instructional and utility purposes which are made available in educational setting (schools) to enhance teaching and learning as well as to ensure educational success. Educational facilities provision may include permanent and semi-permanent structures such as digital tools, machinery, laboratory equipment, other equipment as well as consumables. There is no doubt that the provision of educational facilities will enhance change for sustainable development in the 21<sup>st</sup> century public secondary schools. Educational facilities could be utilized effectively for the following purposes; to illustrate concepts; provide opportunity for firsthand experience; for experimentation and demonstration; for scientific investigation and discovery; to provide diversity of thoughts; for observation and inquiry; for development of scientific attitudes and skills and to protect the individual and also provide comfort. it is against this knowledge that Allen (2015) posited that, a school that is not progressively moving forward is a school that is failing to use appropriate school facilities.

Educational facilities in terms of electronic resources (e-resources) such as ICTs according to Oyediran and Dick (2018), aid learning by disentangling the barriers between the learners and teachers, enhance the socio-cultural behaviour of learners, serving as agents of change, improve learners' achievement and providing access to diversified educational materials. The integration of e-resources into the teaching and learning process would not only equip them with ICT-oriented pedagogical skills, it would also afford the teachers to explore diversified ways of assessing, evaluating and

reporting progress of learners. Teachers seem to be aware of some of the ICT literacy gadgets in instructional process, but the level of such awareness and competency could be questionable. As part of ICT integration, Lagos State primary school teachers are exposed to the use of Tablets through EKO Excel in delivering their instructions. The primary school teachers appear to be competent in accessing the contents of the already prepared modules.

### **Concept of Sustainable Development**

Sustainable development is continually evolving and that makes it difficult to have a universal concise accepted definition. One of the definitions worthy of note is Brundtland Commission (1987), it emphasizes sustainable development is the development that meets the needs of the present without undermining the future generation in accomplishing their needs. It is interested in providing the needs of the present without denying the future generation from achieving theirs by way of destroying the environment. It is the development that is environmentally friendly and strives to protect the infrastructures in the process of exploiting natural resources. Sustainable development is about creating equilibrium in economic consideration, the environment, and the improved life of the citizens in such a manner that none is detrimental to the existence of others.

According to Mukoni (2012), there is a limited awareness and understanding of the concept of sustainable development among the teachers resulting in keeping teachers from recognizing the relationship between education and political, economic and social development. Mukoni, (2012), suggested that effort must be made to train teachers on sustainable education

to better communicate ESD more creatively so that they can diversify sustainability issues in education and transform the behavior of students to actively interact, dialogue and reflect on the issues in the politics, social, economic and environment.

Anyolo (2015), assessed on how and to what extent Education for Sustainable Development is integrated in the Namibian School curriculum. In her study Anyolo found that Education for Sustainable Development (ESD) was integrated in the Namibian curriculum as a subject and all teachers participated in the study acknowledged the teaching of topics that led to sustainability practices in their subjects. These included such topics as sustainable development, environmental issues, nature conservation and tourism.

Watanabe (2015), studied how the Education for Sustainable Development was implemented in the secondary schools in Kesennuma City in Japan. The implementation strategy of ESD in Kesennuma City was emphasized from pre-school levels to high school levels supported by Kesennuma City Board of Education, also through developing the curriculum of which the curriculum was revised several times in improving ESD in schools.

### **Procurement of Required ICT Facilities and Technologies for the Sustainable Development of Public Secondary Schools**

Effective management of educational facilities entail availability of facilities through procurement of quality educational facilities. This is in the bid to enhance teaching and learning as well as to achieve school sustainability. According to Xaba (2012), procurement of school facilities is not enough to attain school improvement, it also requires some processes

which will facilitate learning by ushering in monitored utilization which will set a possibility for teachers and learners to attain educational goals as a part to develop the nation. Yusuf, (as cited by Amie-Ogan & Bikiya, 2020) explained that, “it will be impossible for the curriculum to be completed if the physical facilities required for teaching and learning are not available”. In agreement, Abdulkareen and Fasasi (as cited by Amie-Ogan & Bikiya, 2020) also posited that, programmes in education can only be implemented when there is procurement of adequate facilities in schools. This in essence indicates that if the facilities are not adequate for use by teeming number of students, acquisition of skills in technical training programmes will suffer and will lead to the production of highly unskilled personnel who are unemployable and unproductive. Similarly, studies carried out by Ikoya and Onoyase (2008), found out that “only twenty six percent (26%) of the schools across the nation (Nigeria) have school infrastructure in adequate quality and quantity”. This is an unfortunate case as the Federal Government of Nigeria’s expenditure on education is approximately less than ten percent (10%), over the years, which far negates the twenty six percent (26%) benchmark of UNESCO recommendation for education. It can thus be said that poor financing of the education sector has also contributed immensely to non-procurement of adequate facilities in secondary schools.

## **Empirical Review**

### **Education Facilities and Sustainable Development**

In classroom, Carol and Kim (2017) did a study on teaching sustainability in Higher Education

specifically on pedagogical styles in Columbia. They found that, students perceived sustainability as mainly related to technology and saw little relevance in social and attitudinal aspects. They also found an increase in student knowledge about sustainable development from courses that apply a more community-oriented and constructive, active-learning.

Evans (2011), studied the extent to which sustainability education was being practiced in secondary and higher education in Durango, (in the United States of America), aiming at developing a theory of the critical pedagogy of sustainability and promote its application within education settings. She used semi-structured questionnaire and documents to solicit information from teachers and students. Evans found that the critical pedagogy of sustainability education was not linked with political economic, social, cultural, and ecological facets of this global and local phenomenon. They study suggested that critical teaching must be counter hegemonic and oriented toward revitalization of the concept of place and place-based living and critical teaching must call up on students to name the world and not for the teacher to name it for them.

### **ICT facilities Provision and Sustainable Development**

Daudi and Nzilano (2019) examined perceptions of students on the use of ICT resources in Tanzanian public secondary schools. The findings of the study demonstrated that students had a good perception and competence towards using ICT resources for learning. Abdul-Salaam’s (2012) study on teachers’ ICT resource usage indicated teachers’ inadequate use of these ICT resources. Wanjala (2013) investigated teachers’

perspectives on ICT availability and use in government secondary schools in Kenya's Kirnilili District. A mixed-methods strategy was adopted by the researcher. The outcomes of the study revealed that ICT facilities in the sampled schools were inadequate and underutilized.

The study by Charles, Shizhou, Justine, Salome, Robert, and Lawrence (2021) looked at how teachers in Ugandan city primary schools in Kampala implemented ICT integration during teaching and learning, concentrating on the challenges instructors confront while adopting ICT facilities. The mixed research design was also used in this study. The findings revealed Inadequate ICT facilities and lack of time hampered teachers' and learners' access to these ICT facilities. The study by Abubakar (2016) focused on teachers' use of ICT in secondary schools in Nigeria's northeast. In this investigation, a mixed-method approach was used. Findings indicated that the available ICT facilities were poorly used.

### **Challenges in the Provision of Educational facilities and Sustainable Development**

Obaydullah and Rahim (2019) conducted a research on challenges in incorporating ICT facilities in teaching and learning. The research was conducted using a mixed-methods approach. The findings revealed that secondary school teachers lacked the competence to use these facilities; and the constraints identified to be militating against the provision, use, or maintenance of these facilities were lack of ICT infrastructure, equipment, and web-based materials, incompetence of teachers in using ICT facilities, lack of in-service training for teachers, and lack of technological assistance.

Mwendwa's (2017) study also considered the constraints of ICT use in schools. Findings

showed that lack of electricity, inadequate provision of ICT facilities, lack of internet services, and the underutilisation of the available ICT facilities were some of the constraints. Abubakar's (2016) study also revealed poor policy implementation, lack of basic social amenities, and insecurity as the constraints militating against ICT provision of educational facilities. The study by Ayeni and Ogunbameru (2013) evaluated the availability and use of ICT facilities in secondary schools in Ondo State. The data was collected and analyzed using a survey research design and quantitative methods. The findings revealed that ICT facilities were underutilized. Budgetary restraints are another ongoing challenge to providing ICT facilities in the school libraries. ICT facilities can be used to introduce children to the joy of reading, both for learning and for pleasure.

### **Methodology**

The study adopted a descriptive survey research design. The study population comprised all members of teaching staff in public senior secondary schools in Lagos State. There are altogether 322 public senior secondary schools and 8840 teachers in the study area. Multi-stage sampling procedure was used to select 320 participants for the study. This procedure was selected because the aims altered at each stage of the sampling. At the first stage, all the public senior secondary schools stratified based on Education Districts (District I-IV). at the second stage proportional sampling technique was used to select 32 public senior secondary which were 10 percent of the total; public senior secondary schools and was considered sufficient to explain the characteristics of the entire population. In the third stage, stratified sampling technique was employed to stratify the Education Districts into

zones from which 32 schools and 10 teachers each were selected through the use of random sampling technique bringing the total number to 320 participants.

Data were collected with self- research designed instrument named 'Educational Facilities Provision and Sustainable Development Questionnaire' (EFPSDQ). EFPSDQ has two sections A and B. Section A elicited demographic characteristics of the participants, while section B sought information on teachers training, procurement of technologies and challenges of educational facilities. The content validity of the research instrument was done by giving it to experts in measurement and evaluation to

determine the content domain. The test blue print cover all the items relating to all variable considered in the study. In order to estimate the reliability of the instrument, the modified items were administered to 30 members of teaching staff who are not inclusive of the schools used for the main study. The data collected was subjected to Cronbach Alpha reliability test. The Cronbach Alpha coefficient value was .86. The final copy of EFPSDQ was administrated to the participant by the researcher along with two research assistants. The returned rate of the questionnaire was 318 which represent 99 percent. Data are analysed using SPSS.

## Result

### Answer to Research Questions

**Research Question 1:** What is the level of teachers training on the use of technologies in sustaining educational development in public secondary schools?

**Table 1: Level of Teachers Training on the Use of Technologies in Sustaining Educational Development in Public Secondary School.**

S/N	Variable	Mean Response Rating			
		Mean	SD	RM	Extent
1.	ICT use in teaching and learning is essential to prepare lecturers to live and work in the 21st century.	2.56	0.598	1.44	High
2.	Opportunity for training on digital tools/technologies is somewhat limited in my school	2.90	0.633	1.17	High
3	Uses of ICT in the school enhance the sustainable educational development.	2.30	0.720	0.93	Low
4.	I participate in online training to increase my competency in the field.	2.21	0.801	0.89	Low

5.	Release time (time off from regular academic activities) to attend zoom meetings in order to keep abreast in my area of specialization.	2.06	0.705	0.83	Low
6.	There is the provision of multimedia facilities for teaching large classes in my school.	2.78	0.815	1.12	Low
7.	There is room for lecturers to engage in different online platforms in my school	2.00	0.757	0.81	Low
	<b>PooledMean</b>	<b>2.40</b>	<b>0.322</b>	<b>1.00</b>	<b>Low</b>

**Source:** Researcher's Field Survey, 2025. Sample size = 320. SD = Standard Deviation, RM = Relative mean. (RM  $\geq$  1 = High,, RM  $< 1$  = Low). Scale: 4 = Strongly Agree (SA); 3 = Agree (A); 2 = Disagree (D), 1 = Strongly Disagreed (SD). Scale Mean = 2.50

The result showed that teachers who participated in the survey agreed that **level of teachers training on the use of technologies in sustaining educational development** to a large extent is low in the public senior secondary schools (average mean = 2.40). For instance, academics reported that participation in online training to increase their competencies is low (mean score = 2.21), uses of ICT in the school enhance the sustainable educational development. (mean score = 2.30) lowly relate to sustaining educational development; and that provision of multimedia facilities for teaching large classes in the schools was lowly recognised, while the use of ICT in teaching is essential to prepare them to live and work in the 21<sup>st</sup> century with mean score of 2.56.

**Research Question 2:** To what extent does school administrators procure ICT facilities and technologies required for sustainable development in secondary schools?

**Table 2: School Administrators Procurement of ICT Facilities and Technologies Required for Sustainable Development in Secondary Schools**

S/N	Variable	Mean Response Rating			
		Mean	SD	RM	Extent
1.	I am involved in the procurement of school whiteboards, computers and ipads	2.74	0.813	1.14	High
2.	Learning facilities such as overhead projector, multimedia, digital libraries, smart boards, and digital camera are bought by the government	2.51	0.703	1.12	High
3.	Teaching facilities such ICT facilities, flip charts, computer setx interney facilities.ate procured by thr government	2.59	0.850	1.07	High
4.	The principal sometimes procure sporting facilities through P.T.F funds	2.49	0.727	1.03	High

5.	Video/radio recorders to record classroom teaching and learning are contracted out to favoured politicians of government	2.20	0.791	0.91	Low
6.	Education package (edu pack) for grading of students' script are procured through the school administrators	2.79	0.804	0.87	Low
	<b>Average Mean</b>	<b>2.58</b>	<b>0.401</b>	<b>1.00</b>	<b>High</b>

**Source:** Researcher's Field Survey, 2025 Sample size =320. SD = Standard Deviation, RM = Relative mean. (RM  $\geq$  1 = High, RM <1 = Low). Scale: 4 = Strongly Agree (SA); 3 = Agree (A); 2 = Disagree (D), 1 = Strongly Disagreed (SD). Scale Mean = 2.50.

The result revealed that participants are highly agreed with the level of procuring ICT facilities and technologies required for sustainable development in secondary schools with a average mean of 2.58. To a large extent participants agreed that they are involved in the procurement of digital tools such as whiteboards, computers and ipads, learning facilities such as overhead projectors, multimedia, digital libraries, smart boards, and digital cameras are bought by the government, education package (edu pack) for grading of students' script are procured through the school administrators; these responses have mean of 2.74, 2.71 and 2.59 respectively. Low extent was placed on video/radio recorders to record classroom teaching and learning which are contracted out to favoured politicians of government with response rating of 2.20.

**Research Question 3:** What are the challenges militating against the provision of educational facilities in secondary schools?

**Table 3: Challenges Militating Against the Provision of Educational Facilities in Secondary Schools**

S/N	Variable	Mean Response Rating			
		Mean	SD	RM	Extent
1.	Inadequate computer literacy among teachers and school administrators	3.04	0.665	1.15	High
2.	Inconsistent of electricity	2.98	0.807	1.12	High
3.	Poor funding of school facilities by government	2.89	0.785	1.09	High
4.	Inadequate of internet services in schools	2.81	0.722	1.06	High
5.	Puncity of teachers' training on ICT use	2.67	0.817	1.01	High
	<b>Average Mean</b>	<b>2.91</b>	<b>0.531</b>	<b>1.00</b>	<b>High</b>

**Source:** Researcher's Field Survey, 2025 Sample size =320. SD = Standard Deviation, RM = Relative mean. (RM  $\geq$  1 = High, RM  $<$  1 = Low). Scale: 4 = Strongly Agree (SA); 3 = Agree (A); 2 = Disagree (D), 1 = Strongly Disagree (SD). Scale \Mean = 2.50.

The result indicated the challenges militating against the provision of educational facilities in secondary schools. A large number of participants agreed that inadequate computer literacy among teachers and school administrators, inconsistent of electricity, poor funding of school facilities by government, inadequate of internet services in schools and puncity of teachers' training on ICT use.

### Test of Hypotheses

**H<sub>01</sub>:** There is no significant relationship between teachers' training on the use of technologies and sustainable development.

**Table 4: Relationship between Teachers' Training and Sustainable Development**

Variables	Mean	SD	N	Df	r-cal	Sig	Decision
Teachers' training	19.54	2.56	318				
sustainable development	13.58	1.86		316	-.64	.000	
							H <sub>0</sub> rejected

**Source:** Fieldwork, 2025

The result on Table 1 showed that r-cal (-.64) is not significant ( $p = .000 < 0.05$ ) at 0.05 level of significance. This means that there is no significant relationship between teachers' training on the use of technologies and sustainable development. Therefore, the null hypothesis is accepted at 0.05 level of significance.

**H<sub>02</sub>:** There is no significant relationship between procurement of ICT facilities and technologies; and sustainable development.

**Table 5: Procurement of ICT facilities and technologies; and Sustainable Development**

Variables	Mean	SD	N	Df	r-cal	Sig	Decision
Procurement	15.23	2.09	318				
Sustainable development	13.58	1.86		316	.71	.0010	
							H <sub>0</sub> rejected

**Source:** Fieldwork, 2025.

The result of tested hypothesis on Table 8 shows that r-cal value (.71) is significant ( $p= .0010 < 0.05$ ). This means that there is significant relationship between procurement of ICT facilities and technologies; and sustainable development. Therefore, the null hypothesis is rejected at 0.05 level of significance.

## **Discussion of Findings**

Answer from research question one and hypothesis one was tested, the results indicated that teachers' training on the use of technologies had no significant relationship on sustainable development at r-cal -.64 ( $p < 0.05$ ). This showed that the hypothesis was accepted. The analyses demonstrated that teachers' training on the use of technologies in sustaining educational development appears not to be an essential skill for academic success in the digital age. With this finding, it seems teachers are not train on how to use digital learning tools to teach in the classroom and guiding teachers on how to present their lessons using PowerPoint to influence sustainable development. This non-training has continues to exposed teachers to not conversant with using their smart phones to video real objects which they can use as teaching aids during instructional delivery. Training brings about proficiency, thus, with the findings, teachers seems not to be aware of the professional qualities that influence sustainable development. This finding is in line with Obaydullah and Rahim (2019), in their study concluded that secondary school teachers lacked the competence to use these facilities; and the constraints identified to be militating against the provision and use of these facilities were lack of web-based materials, incompetence of teachers in using ICT facilities, lack of in-service training for teachers as well as lack of technological assistance. This finding contradict the study of Gupta and Kumar (2024) who concluded in their studies that a large proportion of sampled teachers

showed an average level of digital literacy tools and little difference(s) were reported in the percentage of male and female teachers under the different levels of digital literacy tool available in schools. This might be as a result of teachers' training and usage of social media and search engines most often. This indicates a digital skill experience for academic use, likely due to various formal training and resources in education facilities (digital literacy).

Answer to research question two and hypothesis two was tested and showed that procurement of ICT facilities and technologies; significantly influence sustainable development in secondary schools at r-cal .71 ( $p= .0010 < 0.05$ ). This implied that in a bid to enhance teaching and learning as well as to achieve school sustainability, procurement of educational facilities is of importance. However, school administrators are partially procure ICT facilities and technologies required for sustainable development in secondary schools in Lagos State with an average mean score of 2.58. This indicated that school administrators were fully aware of the procurement of ICT facilities and technologies through Education Districts. It also showed that effective education for sustainable development entail availability of facilities through procurement of quality education facilities. This finding is in consonant with Xaba (2012) who opined that procurement of facilities is not enough to attain sustainable development but requires some processes which will facilitate learning by ushering in monitored utilization

which will set a possibility for teachers and students to attain sustainable development as a part to develop the nation. However, the finding of Wanjala (2013) whose study reavealed that basic ICT hardware and software are provided in most schools. This reason for this contradiction could likely have been due to the different research design used in the study ( the mixed methodology)and the later's sample, which was drawn from secondary schools.

Furthermore, Abdulkareen and Fasasi (as cited by Amie-Ogan & Bikiya, 2020) also posited that, programmes in education can only be implemented when there is procurement of adequate facilities in schools. The implication is that if the provision of educational facilities are not adequate, acquisition of skills in schools will suffer and will lead to the production of highly unskilled personnel who are unemployable and unproductive.

Findings from research question three indicated that the provision of educational facilities in secondary school in Nigeria to enhance sustainability development is poor. In many of the sample schools, educational facilities such as e-resources facilities were not provided in the schools. There is worry stemming from this finding, especially with the respite to the importance and the influence of educational facilities in innovative teaching and learning concerns. The poor provision of these digital tool facilities in secondary schools may have tilted the task enhancement of teachers at this level. This may be accounted by the plummeting fund allocation to education in Nigeria. This finding was in line with the finding of Charles et al. (2021), whose study indicated a poor provision of ICT facilities in schools.

The study found that inadequate teachers' training on e-resources, excess workload and

insufficient time for digital tools use; are serious concerns for education sustainability. This needs urgent redress for an enhanced educational provision.

## **Recommendations**

The study made the following recommendations:

1. School administrators should be involved in the procurement of Educational facilities as implementers of Educational programmes and policies in public secondary schools.
2. Ministry of Education through Teacher Service Commission should as a matter of urgency embark on provision of training, workshops and seminars in digital tools appreciation to secondary school teachers to enable them acquire necessary digital literacy skills.
3. The government should procure computers, software kits and install multimedia in schools. Teachers should endeavour to spare little of the time they use in social networking and chatting for educational advancement of their students which will also help them develop better skills in their chosen career.
4. The several challenges affecting educational facilities' provision in Nigeria, particularly Lagos State secondary schools be curbed or fully eradicated where possible.
5. School administrators should be empowered by the state ministry of education to achieve maintenance culture so as to safeguard educational facilities (digital facilities ) in secondary schools.

## Conclusion

The findings of this study have provided baseline information on the educational facilities status of secondary schools in Nigeria, particularly Lagos State. The study has thus implied the need for governments and concerned stakeholders in Nigerian education to support, fund, and procure educational facilities such as e-resources and ICT for use in secondary schools.

## References

Abdul-Salaam, A. O. (2012). *Assessment of secondary school teachers' use of information and communication technology (ICT) in Oyo metropolis of Oyo State*. Proceedings of the 1st International Technology, Education and Environment Conference (c) African Society for Scientific Research (ASSR).

Abubakar, A. M. (2016). *An Assessment of the Use of ICT in Teaching and Learning in Public Secondary Schools in Northeastern Nigeria*. An unpublished Dissertation submitted to the Eastern Mediterranean University, Gazimagusa, North Cyprus.

Allen, A. A. (2015). Effective of school management and supervision: Imperative for quality education service delivery. *African Education Review* 9 (3), 62-74

Amie-Ogan, O. T; & Bikiya, S. (2020). Educational facilities management for public secondary schools academic improvement in the 21<sup>st</sup> century. *International Journal of Innovation social & Science Education Research* 8 (1), 111-120

Anyolo, E. O. (2015), Implementing Education for Sustainable Development in Namibia A. Case of Three Senior Secondary School Dissertation in Education Humanities and Theology. University of Eastern Finland .

Ayeni, A. & Ogunbameru, M. (2013). Effective utilization and maintenance of ICT facilities for quality teaching and learning outcome in secondary schools in Ondo State, Nigeria. *International Journal of Research Studies in Educational Technology*. 2, 28-39. 10.5861/ijrset.2013.304.

Brundtland, G.H. (1987) Our Common Future: Report of the World Commission on Environment and Development. Geneva, UN-Dokument A/42/427.

Carol, S. S and Kim, C. (2017) Teaching Sustainability in Higher Education: Pedagogical Styles that make a difference. University of Victoria, Ottawa.

Charles, M., Shizhou, L., Justine, N., Salome, J. K., Robert, T, & Lawrence, S. (2021). Discourses in ICT integration: Pedagogical orientations in selected city primary schools in Uganda. *Educational Research and Reviews*, 16 (5), .172-180.

Cirollo, S, Guerrero-Arias, C. A., Jaramillo-Alcazar, A., & Lujan-Mora, S. (2021). Mobile learning technologies for education: benefits and pending issue. *Application Science*. 11 (9), 4111.

Daudi, Y., & Nzialano, J. L. (2019). ICT integration in teaching and learning: perceptions and practices of

Ertmer, P. A. (2005). Teacher pedagogical beliefs: the final frontier in our quest for technology integration. *Educational Technology Research and Development*. 53, 25 -39

Evans T.L (2011) Living and Learning Sustainability: Pedagogy and Praxis in

Sustainability Education. Prescott University College.

Gupta, R. K. & Kumar, R. (2024). Digital literacy among the students of senior secondary level: A study with reference to gender and locale. *Scholarly Research Journal for Interdisciplinary Studies*. 13 (83)100-110. <https://oaji.net/articles/2023/1174-1722503826.pdf>

Ikoya, P. O., & Onoyase, D. (2008). *Universal basic education in Nigeria: Availability of infrastructure for effective programmes*. Joja educational research and publisher.

Limon, M. K., (2015). Home Economics teachers' usage of information and communication technologies in Hong Kong and in Philippines and its implications. *International Journal of Academic Research in Progressive Education and Development*. 4 (4).

Mugliett, K. (2009). *ICT integration in home economics classrooms: a study using an online community of practice*. Unpublished Ph.D Thesis submitted to the school of education, University of Sheffield, United Kingdom

Mukoni, M. (2012) Teachers conception of Education for Sustainable Development: A Case of Secondary School Teachers in Gweru peri and urban, Zimbabwe.

Mwendwa, N. K. (2017). Availability of Resource Materials and Facilities for ICT Integration in the Public Primary School Curriculum in Kitui County, Kenya. *Saudi Journal of Humanities and Social Sciences*, Vol-2, Iss-5, 3 62-368. 10.21276/sjhs

Oko, B, A., & Michael, M. F. (2016). ICT and Quality of Teaching—Learning-related activities in Primary Schools in Ogoja Education zone of Cross River State, Nigeria. *Global Journal of Educational Research*, Vol. 15, 89-92. <http://dx.doi.org/10.4314/gjedr.v15i 1.10>

Oyediran, W, O., & Duck, T. T. (2018). Use of information and communication technology (ITC) in teaching profession in Ogun State, Nigeria. *International Journal for e-Learning Security (IJeLS)*, 7 (1).

Shilpa, B, Radha, P., & Movva, P. (2022). Comparative analysis of wireless communication technologies for IoT application, in: artificial intelligence and technologies. Springer, Singapore 383-394

Wanjala, A. S. (2013). Teachers' perceptions on the use of information communication technology in the administration of public secondary schools in Kimilili District, Bungoma County, Kenya. A project submitted to The Catholic University of Eastern Africa.

Watanabe, R. (2015), "Implementation of Education for Sustainable Development (ESD) in Japan: A qualitative case study of formal education in Kesennuma City", available at: <http://www.diva-portal.org/smash/get/diva2:841571/FULLTEXT01.pdf>

Xaba, M. T. (2012). A qualitative analysis of facilities maintenance a school governance functions in South Africa. *South Africa Journal of Education*, 32 (2), 215-229.