# UTILIZATION OF DIGITAL FACILITIES IN PUBLIC SECONDARY SCHOOLS SUPERVISION AND INSPECTION IN UMUAHIA EDUCATION ZONE OF ABIA STATE, NIGERIA.

[1] **Dr. Ojeka, Gabriel Kalu** ojekagabriel6@gmail.com

[2] **Dr. Amobi, Blessing Adaobi**
adaobinwoye144@gmail.com

[3] **Dr. Omeziri, Ebere Thelma**
ebereomeziri@yahoo.com

[4] **Dr. Nwosu, Grace Oluchi** nwosu916@gmail.com

&

[5] **Dr. Ebere, Janerita Chinwe**
janeritaokutu@gmail.com

[1, 2, 3, 4, 5] Department of Social Science Education
Faculty of Education, Imo State University, Owerri

***Abstract***

*This study investigated the utilization of digitalization in school supervision and inspection in the administration of public secondary schools in the Umuahia education zone of Abia State, Nigeria. The study adopted the descriptive survey research design with a population of 646 stakeholders while the sample size was 162 drawn using a simple random sampling technique. It comprised 42 Principals/Vice principals, 100 teachers, and 20 inspectors. The instrument used for data collection was a self-structured checklist and questionnaire titled, "Utilization of Digital Facilities in Public Secondary Schools Supervision and Inspection in Umuahia Education Zone of Abia State, Nigeria Questionnaire" (UDFPSSIQ) which was validated by two experts from Education Measurement and Evaluation and Education Management and Planning, Imo State University, Owerri. The reliability of the instrument was established at 'r' = 0.83 using the Cronbach Alpha statistical tool. Three research questions guided the study. Research question 1 was analyzed using frequency and simple percentages of 50 % benchmark. While mean and standard deviation were used to examine research questions 2 and 3.The findings revealed a 20% total average indicating that the non-availability of digital devices, and the extent the digital devices are used for the digitalization of school supervision and inspection are low (cluster mean = 1.7), the respondents agreed to a high extent the strategies suggested by stakeholders for digitalization of school supervision and inspection in public secondary schools (cluster mean = 2.9). Based on the findings, it was recommended that the government develop a sustainable digital concept for school supervision and inspection, adequate digitalisation resources and Integration of digital competencies in educational programmes.*

***Keywords:*** *Digitalization, School Supervision, Inspection, Administration, Secondary School.*

## Introduction

Today, education continues to develop with advancements in technology, innovations and the changing needs of society. The educational system is aimed at providing quality education for all and preparing individuals for a rapidly changing and interconnected world. Anyaogu (2021) asserted that education has been identified as a veritable instrument for economic, social, cultural and political development. No nation can ignore its

implementation and survive. According to Offem and Iwang (2021), education is an instrument for a process of social reformation and transformation of individuals and the nation at large.

Secondary education occupies a very unique position in the educational system in Nigeria because it is the level that determines the academic and professional careers of students (Ogunbiyi and Obiweluozor, 2022).

No wonder, the National Policy on Education (NPE, 2013) asserted that secondary education is the education children receive after primary education and before the tertiary level. Taiwo as cited in Isiozor, Emeribe and Anyanwu (2017) asserted that Secondary education was established for children between the ages of 11 and 16 years in Nigeria.

According to the Federal Republic of Nigeria (NPE, 2013), the broad aims of secondary education within the overall objectives of Nigerian education goals are; preparing students for useful living within the society and preparing them for higher education. Precisely, secondary education aims to provide the opportunity for qualitative education for primary school leavers, cater for the differences in talents of the pupils, develop Nigeria's cultural heritage, produce a generation of people who respect the dignity of labour, foster Nigerian unity and to inspire its students with the desire for achievement and self-improvement both at school and in later life (Isiozor, 2019). Isiozor further asserted that only the provision of qualitative education can guarantee the accomplishment of secondary education goals. Olowonwfa and Orieaha as cited in Akuchie and Amataobi (2020) asserted that to achieve the educational goals as enunciated in her National Policy on Education, the educational system must be reliable. The reliability of the educational system can only be achieved through proper and effective school supervision.

The concept of supervision is common to all professions and occupations. This implies that no organization can function effectively without effective supervision (Jeremiah and Queensoao, 2024). Supervision is defined by Babalola as cited in Jeremiah and Queensoap (2024) as the interaction between at least two persons for the improvement of activities. It is a formative supportive and developmental process directed to improve and promote growth and development. Tuoyo (2000) as cited in Jeremiah and Queensoap (2024) contributing to the concept of supervision stated that it is the practice of monitoring the performance of school staff, noting the merits and demerits using befitting and amicable techniques to ameliorate the flows while still improving on the merit thereby increasing the standard of schools and achieving educational goals. Ogunsaju (1983) as cited in Jeremiah and Queensoap (2024) in an attempt to explain the concept of school supervision observed that it is the phase of school administration which focuses primarily or mainly on the achievement of the appropriate instructional expectations of educational systems. He further explained that supervision is one of the basic requirements in administration that concerns the tactics of efficient and proper management. Administration is the process of getting things done in an organizational setting using available human and material resources. Anukam as cited in Anyaogu (2021) emphasized that the process involves decision making, organizing, communicating, directing, coordinating and evaluation carried out to achieve organizational goal.

According to Oku, Emenalo & Okeke as cited in Akuchie and Amataobi (2020), school supervision therefore becomes a veritable tool for proper monitoring, guidance, direction and integration of available human and material resources for school utilization as well as an important component of quality control strategy in education for the maintenance of high educational standard in Nigeria. Akuchie and Amataobi (2020) asserted that school supervision leads to high productivity in the educational system as it enables the efficient and effective utilization of the available resources to achieve the goals and objectives of education in Nigeria via teaching and learning. Agbajeola (2019) asserted that maximum productivity is achieved when the resources are prepared, aligned and used for their intended purpose with learners.

Okeke and Uwazuruike as cited in Akuchie and Amataobi (2020) maintained that the supervisor's primary function is to oversee and co-ordinate school activities. He encourages and discourages certain behaviours and teaching methodologies. The supervisor does not only direct the work of those under him but is

the only person who links the school, teachers and students to his superordinate and the community. According to Nwaokugha and Danladi (2016), Supervisors assist; guide and mentor fellow teachers on their day-to-day activities to enhance effective service delivery and inspectors obtain information and disseminate it to stakeholders in the education industry. This practice is a fundamental norm for effective service delivery and a core and determinant issue on the work-ability or otherwise of government's innovations and policies in education that targets possible review or change of gear that can bring in the much-desired change or result in the education system. Okeke and Uwazuruike as cited in Akuchie and Amataobi (2020) asserted that the supervisor is responsible for the implementation of policies and programmes. This he does by creating a viable structure which works independently as he is perceived as an expert in human relations.

Supervision becomes imperative for monitoring the factor resources for the pursuit of maintaining standards and quality. Supervision is generally aimed at improving teaching-learning situations and identifying the demanding needs of the school to find appropriate solutions (Abdullahi, Omosidi, Sheu & Abdulkareem as cited in Abdullahi and Adebayo (2019). They further asserted that supervision is the supportive service given to teachers to upgrade their knowledge by learning and detecting what their problems are and then seeking the best method of solving them towards the realization of better learning. According to Jeremiah and Queensoap (2024), reports from school supervision and inspection provide feedback for regulatory agencies which are used as quality control mechanisms to modify or otherwise the content area, methodology, teacher production and utilization, school plant management and other related aspects of the school programme.

Educational inspection has among its functions and competencies the development of different actions with the aim of effectively and practically guaranteeing compliance with the principles set out in the education laws of their corresponding countries (Barea-Romero as cited in Martínez-Serrano, Romero-García, GarcíaMartínez, & Gavín-Chocano, 2023). According to Casanova; Domínguez-Alonso; and Pelegrí as cited in Martínez-Serrano et al (2023) among the most significant inspections is to promote the right to education and ensure compliance with the duties and functions of the different educational agents to guarantee attention for the needs arising from the diversity of naturally heterogeneous students. Haris, Naway, Pulukadang, Takeshita & Ancho as cited in Martínez-Serrano et al (2023) maintained that educational inspection should help schools by empowering teachers to take an active role and meet the proposed objectives while establishing bridges with management so that they implement timely changes within the school institution they lead.

School inspection and educational supervision (SIES) are widely regarded as a critical source of competitive advantage in the ever-changing environment of the education sector (Wanzare, 2002; Klaber, Mellon & Melville, 2010) as cited in Ololube and Major, 2024). According to Nwaokugha and Danladi (2016), constant surveillance of the activities of teachers, students, parents and host communities of educational institutions is necessary because, in addition to admitting constant changes, the education industry bristles with thorny social, economic, moral, and political, scientific and general issues that consistently demand the attention of stakeholders and the general public as to ensure that the objectives upon which schools and educational institutions are established are achieved. Fatimah (2022) concluded that a supervisor must have the competence to guide and motivate teachers to use technology in learning to achieve effective and efficient educational goals. Teachers along with other learning resources are responsible for controlling teaching activities. In this case, the classroom teacher controls the discipline and interest in student learning, while the supervisor is only responsible for guiding and motivating the teacher. According to Nwaokugha and Danladi (2016)there are unique features that set inspection apart from other similar practices in education. One unique feature of inspection is that unlike supervision that is principally initiated and carried out internally by heads of educational institutions, inspection is usually initiated and carried out by either the Local Government Education Authority, the Inspectorate Divisions of State Ministries of Education or those of the Federal Ministry of Education or any of its agencies in the case of countries where higher education has special units for inspectorate functions, meaning that forces that are external to schools engineer inspection.Nwaokugha and Danladi (2016) further asserted that ideally inspectors at the end of their inspection visits normally produce written reports where they itemize and detail whatever strengths and weaknesses they noticed in the course of their inspection visits. This is in addition to

holding post inspection briefing where causal remarks are made concerning certain issues that need immediate and urgent attention.

One known index for determining the effectiveness of government policies in educational institutions, teacher productivity and obtaining feedback on split-second innovations in education is the quality of supervision and inspection that goes on in the education industry (Nwaokugha and Danladi (2016). They further asserted that ideally, the education industry should and ought to come under water-tight surveillance from supervisors and accredited and professionally trained inspectors, if the government's use of education to achieve predetermined objectives is to be a success, policies of the government, activities of teachers, behaviours of learners, as well as those of host communities where educational institutions are located, should be the focus and central areas upon which supervisors and inspectors tirelessly and relentlessly beam their searchlights.

Education and learning continue to develop under the flow of changing times, educational institutions in this case must follow changes in existing technology following the needs of education itself. With technological advances, it requires an educational institution to make updates in the field of technology to adapt to the IT field. The development of information technology is used as a means for educational institutions to adapt to providing higher-quality educational services (Fatimah, 2022). Ebi-Awatua as cited in Ojeka, Onyedibe, Adindu & Amobi (2022) asserted that we are in the 21st century where learning has a new face as a result of the heavy presence of ICT devices, tools and emerging technologies which in no small ways have changed the traditional roles of both teachers and learners. It is striking that although technology is prevalent in our daily lives, the majority of teachers in many countries do not frequently use ICT in their practice. In some schools this may be due to the lack of provision, but teachers' professional development and their beliefs about work are key to unlocking technology's potential for teaching and learning (OECD, 2016).Therefore, it is a known fact that when adequate material resources especially those that pattern to digitalization are made available to school supervisors and inspectors, they tend to be more efficient and effective.According to Baeva and Grigorey (2020), the digitalization of education can radically change the essence of education as a space of communication, dialogue, socialization, forming not only knowledge but social skills as well.

Digitalization of the education system involves not only the introduction of digital technologies into the teaching process, but also the digitalization of all the processes in the education system, the development of electronic services for students, teachers and parents, and data exchange with other institutions with the aim of modernization and more efficient work when it comes to the administrative processes in all departments (UNICEF, 2021). According to Walkme (2023), Digitalization is the strategy or process of utilizing digital technologies, resulting in deeper changes that can alter the core of business models. Ultimately, these changes lead to opportunities for increased efficiency and revenue. Using digitized information, digitalization is the process of making workflows and processes easier and more efficient. Especially in today's tech-driven world, it is crucial to adopt a digital culture in order to survive and succeed. According to Falasteen as cited in Abdullahi and Adebayo (2019) digitization in education is the process of turning traditional methods of teaching such as paper documents, sounds and more to a digital format that can be understood by pupils or students toward the achievement of educational goals and objectives. According to Lundkvist, Meiling and Vennstrom (2010), the possibility of replacing paper-based punch lists with a digital system to process and access inspection data could provide a means for improving organizational experience feedback-based learning among staff. Cloonan and Sanett as cited in Abdullahi and Adebayo (2019) asserted that digitizing is the central way of making digital representations of geographical features, storing images, and creating electronic charts by digitizing traditional paper documents, graphs or images. According to Kannappanava, Rajamkanta and Tandur (2010) as cited in Onyia (2021) stated that digitization refers to the conversion of materials created in another format into an electronic form; this definition excludes materials that were initially created digitally, such as email communication. Similarly, Jagboro, Omotayo and Aboyade as cited in Onyia (2021) defined digitization as all the steps involved in the process of making collections of historical and other materials available online. Pandey and Misra, cited in Onyia (2021), describe digitalization as converting analogue information to a digital format. Digitization implies the creation of digital surrogates for an original copy or physical object. Using digitized information, digitalization is the process of making workflows and processes easier and more efficient.

Especially in today's tech-driven world, it is crucial to adopt a digital culture in order to survive and succeed (Walkme, 2023).

Digitalization encourages open access to resources such as electronic theses. Onyia (2021) asserted that Educational supervision in the digital age is crucial for ensuring effective learning outcomes and adapting to the evolving educational landscape. It helps monitor the integration of technology in classrooms, supports teachers in using digital tools, and ensures students' digital literacy. Onyia (2021) further asserted that Supervision also plays a key role in maintaining online safety, addressing challenges in remote learning, and promoting innovative teaching methods aligned with technological advancements. Overall, educational supervision fosters a dynamic and responsive educational environment in the digital era. According to Wase as cited in Onyia (2021) the vital role of educational supervision is to create awareness about digital technologies and ethics. Considering current students' needs, it is essential to monitor and instruct them on how to behave in the digital world. With the experience of these technologies and online resources, parents and educators often need to supervise and create awareness of the important rules children need to learn before participating in our digital world. Ding 2000 as cited in Onyia 2021 highlights the advantages of digitalization as follows:

- Digitalization means no new buildings are required; improvement in information sharing and redundancy of collections are reduced.
- Digitaliization leads to the development of the Internet in digitalized institutions  Digital materials can be transmitted, sorted and retrieved easily and quickly.
- It is cheaper to access electronic information than its print counterpart when storing files in an electronic device with compatible facilities and equipment.
- Digital texts can be linked, and made interactively, and improves the retrieval of more information.

Tosun and Bans (2011) as cited in Lateef and Muniru (2020) asserted that the use of information technologies in education has undoubtedly become an underlying factor for school improvement. Simin, Afshari and Seger (2013) as cited in Lateef and Muniru (2020) further asserted that information technology is not only for teaching and learning but also for administrative uses.Also, Fabunmi, Paris, and Fabunmi as cited in Onyia (2021) asserted that clients do not have to travel to libraries that have hard copies of library resources before they can access and use such materials. Pandey and Misra as cited in Onyia (2021) mention that digital projects allow users to search for groups rapidly and comprehensively from anywhere at any time; several users can access the same material the same time without a barrier. According to Gorlov, Karimova, and Sousa (2020), a smart education system involves providing access to content around the world, building learning in an interactive environment. It has been established that the digitalization of education identifies risks and problems that require solutions. Education processes as the aspect of the digitalized technologies – are the specific new sphere for promoting and developing the economy of the country in achieving high results of improvement and attracting investment from the outside.

Other benefits as summarized by Akpan-Atata and Enyene (2014) as cited in Onyia (2021) are as follows:

- Universal Access – people from all over the world, gain access to the same information as long as an internet connection is available.
- Capacity – in traditional libraries, there are limited storage spaces while digital books have the possibilities to reserve much more information, simply because digital information requires very little physical space to contain it.
- Cost – the cost of sustaining digital learning is lower than that of running a traditional learning.

- Enhanced searching methods through different search engines and manipulation of information.
- Improved facilities for information sharing.
- Access to information is made possible in a short time.
- Improved collaboration with other information institutions and centres, chances to form consortia where they can pull their resources together and get a real bargain of scale to acquire learning software.

Directly or indirectly, communication and human relations are at the root of any worthwhile supervision and inspection that is desirous of achieving the best for the education system and any critical observer can observe that supervision and inspection are complex acts that among other things incorporate feedback, counselling, mentoring, guidance, advice etc through effective communication (Nwaokugha and Danladi, 2016). The findings of Ojeka, Onyedibe, Adindu and Amobi (2022) revealed low ICT and technical infrastructures, inadequate facilities, insufficient fund, lack of adequate workshops and low access to digital computing resources in public secondary schools in Umuahia North Local Government Area of Abia State. According to Hernández-Díaz as cited in Martínez-Serrano et al (2023) educational inspectorate must have enough resources to actively participate in technical supervision tasks. In order to perform these tasks properly, it is necessary to strengthen aspects related to the technological use of information, as a new challenge, in order to quickly and effectively reach the whole educational context.This study objectively focuses on the utilization of digital facilities in public secondary schoolssupervision and inspection in Umuahia education zone of Abia State.Specifically, the study sought to;ascertain the available digital devices for school supervision and inspection, the extent to which the digital devices are used in school supervision and inspection and the strategies suggested by stakeholders for digitalization of school supervision and inspection.

**Statement of the Problem**

Education and learning continue to develop as a result of emerging technologies and innovations which in no small ways has changed the traditional roles of both school supervision and inspection. With technological advances, it requires an educational institution to make updates in the field of technology to adapt to the information technology field in providing higher-quality educational services. Digitalization of educational supervision and inspection in the digital age is crucial for ensuring effective learning outcomes, improving teaching-learning situations and identifying the demanding needs of the school to find appropriate solutions and effectively and practically guaranteeing compliance with the principles set out in the education laws of the nation.

It is striking that although technology is prevalent in our daily lives, the majority of school supervisors, teachers and inspectors of public secondary schools do not frequently use digital devices in their practice. The researchers were dazzled when they observed and got exposed to information that appear to support digitalization of school supervision and inspection is a mere dream, as schools lack digital devices, lack of professional development in ICT and lack of integration of digital competencies in study programmes. The trends has been continuous and attract the attention of the researchers. The study focuses on the utilization of digital facilities in public secondary schools supervision and inspection in Umuahia education zone of Abia

State.

**Research Questions**

The following research questions guided the study

1 What are the available digital devices for public secondary schools supervision and inspection in Umuahia education zone of Abia State?

2 To what extent are the digital devices used for the digitalization of school supervision and inspection in public secondary schools in Umuahia Education zone of Abia State?

3 What are the strategies suggested by stakeholders for the digitalization of public secondary schools supervision and inspection in Umuahia education zone?

## Methodology

The study adopted the descriptive survey research design with a total population of 646 individuals that comprised 56 Principals, 112 Vice Principals, 494 teachers from Umuahia Education zone and 40 inspectors from the Inspectorate units of Abia State Ministry of Education, Secondary Education Management Board and Teachers Registration Council of Nigeria. The sample size of the study was 162 chosen through the simple random sampling technique. It comprised 42 Principals/Vice Principal, 100 Teachers and 20 Inspectors. The instrument used for the collection of data was a self-structured checklist and questionnaire title;"Utilization of Digital Facilities in Public Secondary SchoolsSupervision and Inspection inUmuahia Education Zone of Abia State, Nigeria Questionnaire" (UDFPSSIQ) which was validated by two expertsfrom Education Measurement and Evaluation and Education Management and Planning,Imo State University, Owerri.. The reliability of the instrument was established at 'r' = 0.83 using the Cronbach Alpha statistical tool. Three research questions guided the study. Research question 1 was analysed using frequency and simple percentages (%) of the 50 % benchmark. While mean and standard deviation were used to analyse research questions 2 and 3, structured on a 4-point scale of Very High Extent VHE, High Extent HE, Low Extent LE and Very Low Extent VLE at a mean point of 2.50.

## Results

### Research Question I

What are the available digital devices for public secondary schools supervision and inspection in Umuahia Education zone of Abia State?

**Table 1.** Frequencies (f) and Percentages (%) of the respondents on available sigital devices for public secondary schools supervision and inspection in Umuahia Education zone of Abia State.

| N/S | Items | F | % | Decision |
|---|---|---|---|---|
| 1. | Portable Scanners | 27 | 16.7 | NA |
| 2. | Computer or Laptop | 33 | 20.4 | NA |
| 3. | Smartphone or Tablets | 108 | 66.7 | A |
| 4. | Digital Camera | 13 | 8.0 | NA |
| 5. | External Hard Drives or Cloud Storage | 27 | 16.7 | NA |
| 6. | Wireless Router or Hotspots | 13 | 8.0 | NA |
| 7. | Portable Printers | 47 | 29.0 | NA |
| 8. | Bluetooth Headsets | 41 | 25.3 | NA |
| 9. | Portable projector | 13 | 8.0 | NA |
| 10. | Battery packs or Power banks | 41 | 25.3 | NA |
| 11. | Document Management Software | 27 | 16.9 | NA |
| 12. | Digital Voice Recorder | 9 | 5.7 | NA |
| 13. | Protective cases or Bags | 41 | 25.3 | NA |
| 14. | Labeling and Indexing tools | 13 | 8.0 | NA |
| 15. | Backup System | 54 | 33.3 | NA |
| 16. | Quality Control Tools | 40 | 25.1 | NA |
| 17. | Maintenance Tools | 40 | 25.1 | NA |
| 18. | GPS Devices | 27 | 16.7 | NA |
| 19. | Vehicle mount and holders | 0 | 0 | NA |

| | | |
|---|---|---|
| **Total average** | **20.0 %** | **NA** |

Key: A = Available, NA = Not available No. of Respondents = 162

In table 1, data analysis showed that only item 3 had percentage score above the benchmark of 50% out of the 19 items on the available devices for the digitalization of school supervision and inspection. The 20% total average indicates that the devices for the digitalization of school supervision and inspection in public secondary schools in Umuahia education zone of Abia State are not readily available.

**Research Question 2**

To what extent are the digital devices used for the digitalization of school supervision and inspection in public secondary schools in Umuahia Education zone of Abia State?

**Table 2.**Mean scores and Standard deviation of responses on the extent the digital devices are used for the digitalization of school supervision and inspection in public secondary schools in Umuahia Education zone of Abia State.

| S/N | Item Description | VHE | HE | LE | VLE | $\bar{x}$ | STD | Decision |
|---|---|---|---|---|---|---|---|---|
| 1. | Portable Scanners | 0 | 0 | 108 | 54 | 1.7 | .51 | LE |
| 2. | Computer or Laptop | 28 | 42 | 56 | 36 | 2.4 | .72 | LE |
| 3 | Smartphone or Tablets | 0 | 49 | 81 | 32 | 2.1 | .21 | LE |
| 4 | Digital Camera | 0 | 0 | 46 | 116 | 1.3 | .48 | LE |
| 5. | External Hard Drives or Cloud Storage | 0 | 0 | 65 | 97 | 1.4 | .43 | LE |
| 6. | Wireless Router or Hotspots | 34 | 26 | 34 | 68 | 2.2 | .71 | LE |
| 7. | Portable Printers | 0 | 63 | 56 | 43 | 2.1 | .69 | LE |
| 8. | Bluetooth Headsets | 38 | 0 | 57 | 67 | 2.06 | .81 | LE |
| 9 | Portable projector | 0 | 0 | 81 | 81 | 1.5 | .73 | LE |
| 10. | Battery packs or Power banks | 0 | 27 | 72 | 63 | 1.8 | .70 | LE |
| 11. | Document Management Software | 0 | 0 | 81 | 01 | 1.5 | .73 | LE |
| 12. | Digital Voice Recorder | 0 | 0 | 61 | 101 | 1.4 | .46 | LE |
| 13. | Protective cases or Bags | 0 | 0 | 65 | 97 | 1.4 | .45 | LE |
| 14. | Labeling and Indexing tools | 0 | 29 | 57 | 76 | 1.7 | .52 | LE |
| 15. | Backup System | 0 | 0 | 85 | 77 | 1.5 | .69 | LE |
| 16. | Quality Control Tools | 34 | 0 | 68 | 60 | 2.1 | .25 | LE |
| 17. | Maintenance Tools | 0 | 0 | 95 | 67 | 1.6 | .56 | LE |
| 18. | GPS Devices | 0 | 29 | 57 | 76 | 1.7 | .55 | LE |
| 19. | Vehicle mount and holder | 0 | 0 | 50 | 112 | 1.3 | .47 | LE |
| | **Cluster mean and Standard deviation** | | | | | **1.7** | **.56** | **LE** |

Expected mean = 2.50 LE = Low Extent No. of Respondents = 162

The result of data analysis presented on Table 2 revealed that each of the items on the table has a mean below the expected mean of 2.50. the respondents indicates that the extent to digital devices are used for the digitalization of school supervision and inspection in public secondary schools in Umuahia Education zone of Abia State as being low with a cluster mean of 1.7.

**Research Question 3:**

What are the strategies suggested by stakeholders for the digitalization of school supervision and inspection in public secondary schools in Umuahia education zone of Abia State**?**

**Table 3.** Mean scores and standard deviation of responses on thestrategies suggested by stakeholders for digitalization of school supervision and inspection in public secondary schools in Umuahia education zone of Abia State**?**

| S/N | Item Description | VHE | HE | LE | VLE | $\bar{x}$ | STD | Decision |
|---|---|---|---|---|---|---|---|---|
| 1. | The government should develop a sustainable digital concept for school supervision and inspection | 35 | 42 | 57 | 28 | 2..5 | 0.16 | HE |
| 2. | Establishment of the required technical framework | 55 | 44 | 37 | 26 | 2.7 | | HE |
| 3. | Training of teachers, school administrators and inspectors on their new role. | 61 | 40 | 37 | 27 | 2..8 | | HE |
| 4. | Reviewing and optimizing processes, skills and systems | 73 | 32 | 75 | 0 | 3.3 | | HE |
| 5. | Continues professional development in ICT. | 37 | 74 | 29 | 22 | 2.8 | | HE |
| 6. | Incentives to adopt the most modern technologies | 48 | 65 | 49 | 0 | 3.0 | | HE |
| 7. | Digitalization resources are adequately provided. | 54 | 62 | 27 | 20 | 3.0 | | HE |
| 8. | Integration of digital competencies in study programmes | 51 | 51 | 31 | 29 | 2.8 | | HE |
| 9. | Designing a working network to support learning in schools | 44 | 44 | 44 | 30 | 2.6 | | HE |
| 10. | Designing a social network to support learning communities in schools | 77 | 41 | 24 | 27 | 3.1 | | HE |
| 11. | Creating a training and advice virtualized environment for teachers | 52 | 46 | 25 | 39 | 2.7 | | HE |
| 12. | Use of online electronics portfolios that can help to systemize the functions of teachers | 60 | 69 | 20 | 13 | 3.1 | | HE |
| 13. | Development of a corporate blog of the inspected schools | 54 | 36 | 40 | 32 | 2.7 | | HE |
| **Cluster mean and Standard deviation** | | | | | | **2.9** | | **HE** |

Expected mean = 2.50 HE = High Extent LE = Low Extent No. of Respondents = 162

From Table 3, the results of the findings revealed that items 8 to 16 have mean values above the criterion mean value of 2.50 as evidenced in the mean values of 2.5, 2.7, 2.8, 3.3, 2.8, 3.0, 3.0, 2.8, 2.6, 3.1, 2.7, 3.1 and 2.7. The findings revealed that the respondents agreed to a high extent with the strategies suggested by stakeholders for digitalization of school supervision and inspection in the administration of public secondary schools in Umuahia education with a cluster mean value of 2.9. These includes developing a sustainable digital concept for school supervision and inspection,establishing of the required technical framework, training of teachers, school administrators and inspectors on their new role, digitalization resources adequately provided. Others are integration of digital competencies in study programmes, designing a social network to support learning communities of schools and development of a corporate blog of the inspected schools.

**Discussion of Findings**

The results of the findings revealed that one out of the 19 items had percentage score above the benchmark of 50% on the available devices. It further revealed that the devices for the digitalization of school supervision and inspection in public secondary schools in the Umuahia education zone of Abia State are not readily available as indicated by a 20% total average. The findings of Ojeka, Onyedibe, Adindu and Amobi (2022) are I tandem with this study which revealed low ICT and technical infrastructures, inadequate facilities, insufficient fund, lack of

adequate workshops and low access to digital computing resources in public secondary schools. This is in conformity with OECD (2016), that although technology is prevalent in our daily lives, the majority of teachers in many countries do not frequently use ICT in their practice. In some schools, this may be due to the lack of provision. OECD (2016) further asserted that teachers' professional development and their beliefs about work are key to unlocking technology's potential for teaching and learning. In support of the availability of digital devices, Martínez-Serrano, Romero-García,García-Martínez&Gavín-Chocano(2023) asserted thateducational inspectors must have enough resources to actively participate in technical supervision tasks. To perform these tasks properly, it is necessary to strengthen aspects related to the technological use of information.Therefore, the researcher is of the opinion that when adequate material resources especially those that pattern to digitalization are made available to school supervisors and inspectors, they tend to be more efficient and effective.

The findings of this study revealed that the extent to which digital devices are used for the digitalization of school supervision and inspection in public secondary schools in the Umuahia education zone of Abia State is low with a cluster mean of 1.7.This is in conformity with OECD (2016), which asserted that although technology is prevalent in our daily lives, the majority of teachers in many countries do not frequently use ICT in their practice due to it unavailability..to buttress it importance,Nwanekezi and Walele (2016) asserted that ICT has become the rave of the moment in global socio-economic affairs. It has been described as an indispensable tool for any organization to stay competitive and play its role efficiently and effectively in the education sector, ICT is a potential tool to deliver high-quality education and prepare students for the information era. In line with the study, Martínez-Serrano et al (2023) asserted thatwhen school administrators are aware of the need for information technology(IT) skills and utilize it appropriately it will make work effective and efficient thereby making schools in 21st century compliance.

The findings from Table 3 revealed that the respondents agreed to a high extent with the strategies suggested by stakeholders for digitalization of school supervision and inspection in the administration of public secondary schools in Umuahia education with a cluster mean value of 2.9.Tosun and Bans (2011) as cited in Lateef and Muniru (2020) asserted that the use of information technologies in education has undoubtedly become an underlying factor for school improvement. Simin, Afshari and Seger (2013) as cited in Lateef and Muniru (2020) further asserted that information technology is not only for teaching and learning, but also for administrative uses. In support of the findings, Walkme (2023) asserted that storing files on the cloud supports digitalization; they're accessible to anyone, anywhere with customizable permissions and settings. This enables the growth of a business beyond a single geographic location.

## Conclusion

Based on the result of this study, it was established that stakeholders agreed that the devices for the digitalization of school supervision and inspection are not readily available, and the devices are not utilized for effective digitalization. Stakeholders suggested the development of a sustainable digital concept for school supervision and inspectionin the administration of public secondary schools.

## Recommendations

Based on the findings, it was recommended that the government should;

1. Develop a sustainable digital concept for school supervision and inspection,
2. Digitalization resources are adequately provided and
3. Integration of digital competencies in educational programmes.

**References**

Abdullahi, N. J. K. & Adebayo, T. A. (2019). Digitization in education system and management of early childhood care education in Nigeria. Retrieved on 12/4/2024 from https://files.eric.ed.gov/fulltext/EJ1239657.pdf#

Agbajeola, R. O. (2019) Organizational climate and teachers characteristics as predictors of Secondary Schools' productivity. KIU Journal of Social Sciences (1) Retrieved on 12/3/2022 from https://www.ijhumas.com

Akuchie, L. E and Amataobi, J. N (2020). Supervision in school administration. *In Issues and challenges in the administration of 21st century Nigerian education system. A book of reading in honour of Professor Iheanacho Longinu Anukam (eds).* Reliable Publishers, 14/16 Mere Street, Owerri, 45-55.

Anyaogu, R. O. (2021) *Educational management in a digital world: Emerging perspectives*. Owerri: Bon Publication.

Baeva, L. and Grigorev, A.(2020). Safety of digitalization of educational and social space. *Pakistan Journal of Distance & Online Learning.* 6(I)*,231-246. retrieved on 12/4/2024 from* https://files.eric.ed.gov//EJ1302062.

Fatimah, D. (2022). Effective use of technology in supervision educational institutions. *Indonesian Journal of Education* (INJOE), 2(2), 138-149.

Federal Republic of Nigeria (2013) *National Policy on Education*. Abuja: NERDC Press Ltd. Gorlov, S., Karimova, B. and Sousa, R. D. (2020). Digitalization as a new direction in education sphere. https://doi.org/10.1051/e3sconf/202015909014 Retrieved on 1/6/2024

Isiozor, G. N., Emeribe, I. C. &Anyanwu, O.J. (2017) Resources management in Nigerian education systemStrategic approaches. Lagos: Evergreen Productions

Isiozor, G. N. (2019) Effectiveness of principals in managing teachers' indiscipline in secondary Schools in Owerri Education zone in Imo State. In O. O. Oku et al (Eds). *Contemporary Issues in Educational Management and Allied Disciplines in a Digital era*. (pp 58-69). Owerri: Meybiks Nig. Publishers.

Jeremiah, S. and Queensoap, M. (2024). Role of school supervision and inspection in curriculum implementation, delivery and evaluation *Fuo Journal of Education Research* 3(1). https://www.foej.fuotuoke.edu.ngRetrieved on 23/5/2024

Lateef, O. A. and Muniru, A. A. (2020).The use of information technologies for improved school administration and management in ogun- state, Nigeria.*Journal of Contemporary Issues in Educational Planning and Administration,* 5(2),44-49.

Lundkvist, R., Meiling, J. & Vennström, A. (2010). Digitalization of inspection data; A means for enhancing learning and continuous improvements? 2:6-8 https://www.researchgate.net/publicationRetrieved on 23/5/2024

Martínez-Serrano, M.D.C.; Romero-García, M.A.; García-Martínez, I.; Gavín-Chocano, Ó. (2023). Inspection digital literacy for school improvement.13,701–714.https://doi.org/10.3390/ejihpe13040053 Retrieved on 23/5/2024

Nwaokugha, D. O and Danladi, S. A (2016). Language and communication: Effective tools for educational supervision and inspection in Nigeria. *Mediterranean Journal of Social Sciences* MCSER Publishing,

Rome-Italy. 7(3), 420-428. retrieved on 23/4/2024 from https://www.richtmann.org/journal/index.php/mjss/article/view/9069/8757

OECD (2016) Innovating education and educating for innovation: The power of digital technologies and skills, OECD Publishing, Paris. Retrieved on 23/11/2021 from*http://dx.doi.org/10.1787/9789264265097-en*

Offem, O. O. & Iwang, A. A. (2021). Towards effective strategies for improving health issue and Classroom Management in Covid-19 epidemic global challenge. *African Journal of Innovations and Reforms in Educational Management (AJIREM) 2(1), 23-30*

Ogunbiyi, O. D. and Obiweluozor, N. (2022). Community participation in conflict resolutions in the administration of public secondary schools in Ekiti State. *African Journal of Educational Management,* 23(2), 180-193. retrieved on 12/12/2023 from https://www.journal.ui.edu.ng

Ojeka, G. K., Onyedibe, O. N., Adindu, C. E, & Amobi, B. A. (2022). Innovative features, policy implementation and the sustainability of secondary schools' administration in Umuahia North LGA of Abia State, *Nigeria. Nigerian Journal of Educational Administration and Planning.* (NJEAP). 22(1), 115-139.

Ololube, N. P., & Major, N. B. (2024). School inspectionand educational supervisionimpact on teachers' productivity and effective teacher education programs in Nigeria. *International Journal of Scientific Research in Education.* 7(1), 91-104. Retrieved on 21/04/2023 from http://www.ijsre.com

Onyia, M. N. (2021). Digitization of education in Nigeria: A path to technological advancement. Association for digital education and communications technology conference proceedings https://open.library.okstate.edu/adect2021/chapter/digitization-of-education- in-Nigeria-a-path-totechnological-advancement/Retrieved on 13/5/2024

UNICEF (2021). Education system digitalization strategy. with the action plan for 2022-2027 Montenegro Stanka Dragojevica bb. https://www.unicef.org/montenegro/media/22611 Retrieved on 12/4/2024

Walkme (2023) What is digitalization? https://www.walkme.com/glossary/digitalization/Retrieved on 12/4/2024