



ETHICAL CONSIDERATIONS IN MANAGEMENT OF DIGITAL LITERACY AND INCLUSIVE EDUCATION IN PUBLIC SECONDARY SCHOOLS IN RIVERS STATE FOR SUSTAINABLE DEVELOPMENT



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Abstract

This study investigated ethical considerations in the management of digital literacy and inclusive education in public secondary schools in Rivers State for sustainable development. Two research questions and two hypotheses guided the study. Descriptive survey design was used in the study with a population of 8, 620 public secondary school teachers in Rivers State. A sample of 431 teachers representing 5% of the population was drawn through stratified random sampling technique. A questionnaire titled, “Ethical Considerations in the Management of digital Literacy and Inclusive Education Questionnaire (ECMDL & IEQ)” developed by the researcher was used for data collection. The instrument was well validated and the test of reliability via Cronbach Alpha method yielded a reliability index of 0.82. mean scores, standard deviation and rank order were used to analyse the research questions, while z-test was used to test the hypotheses at 0.05 level of significance. Results of the study revealed that ethical considerations in the management of digital literacy in public secondary schools in Rivers State include among others: digital divide; data privacy and security; accessibility and inclusion; and cyber security. While ethical considerations in the management of inclusive education include among others: access and equity; bias/discrimination; diversity and representation; and teacher training and support. Based on the findings, conclusion was drawn and the following recommendations among others were made: educators, government and stakeholders in secondary education must embrace the mindset of continuous improvement on ethical standards emerging from technological advancements and evolving pedagogical innovations.

Keywords: *Ethical considerations, digital literacy, inclusive education, sustainable development, and public secondary schools.*

Background to the Study

In recent times, the digital landscape in Nigeria has undergone a tremendous transformation. The country has witnessed a rapid increase in the number of people using smartphones who utilize the internet. According to Sasu (2024), Nigeria has an internet penetration rate of about 55%, with the number of internet users estimated to be around 123 million. With Nigeria’s population estimated above 200 million, this implies that over 40% of Nigerians do not have access to the internet. The digital technology has revolutionize every industry including the education industry. There is an increase in the adoption of digital technologies into educational practices which has changed the way we teach and learn. This change is characterized by the integration of digital tools and platforms to enhance students’ learning experiences, making teaching and learning more interactive, personalized and accessible.

The integration of digital technology in education has made the transfer of knowledge more easier, accessible, convenient and effective. Teachers now utilize the internet, projectors, and other technical tools to promote students’ learning. Today’s students according to Qureshi, Kahau, Razaa, Imran and Ismail (2021) prefer incorporating technology into all aspects of their lives, including education. The internet plays a crucial role in education, providing endless learning resources, tutorials, and support materials that enhance learning despite some potential challenges. Sustainable



development, which includes social well-being, heavily relies on education. Digital technology has become a key driver of educational reforms, introducing innovative learning tools such as mobile devices, smartboards, simulations, dynamic visualizations and virtual laboratories. These advancements have transformed education in schools and institutions.

In today's digital age, digital literacy has become a crucial aspect of education. digital literacy unlocks students academic performance by enabling students to access, evaluate, and utilize digital information effectively. Inclusive education is another reform in the education sector which aims at education for all and creating equal opportunities for all learners, irrespective of background, race, ability or socio-economic status. Inclusive education is relevant in promoting social justice and the fundamental right to education. As the world becomes increasingly interconnected, the importance of digital literacy and inclusive education for sustainable development cannot be over emphasized

In this digital era, educators are not only responsible for imparting knowledge but also for guiding students through a complex web of digital resources. Educational experience is no longer confined to the physical classroom but rather extends into virtual spaces. This demands for re-evaluation of ethical norms and standards. According to Kumar (2024), as educators harness the power of technology to enhance pedagogy, questions regarding the ethical implications of these practices have become very pertinent. Ethical considerations in digital literacy involves a lot of issues that touch on the core values of education: privacy, equity, and intellectual property. At the centre of these issues is the need to balance technological innovations with a commitment to foster an inclusive, secure and ethically sound educational environment.

Ethical considerations in the management of digital literacy and inclusive education involves how the adoption of these innovations align with concepts of right and wrong, fairness, justice, and respect for others, respect for autonomy, beneficence, non-maleficence, and integrity in all aspects of decision-making and education practice (teacher.institute, 2024). Public secondary schools are post-primary schools built, owned and managed by the government. They are funded by government with public funds. The researcher is not too sure of the ethical issues affecting the management of digital literacy and inclusive education in public secondary schools in Rivers State, hence, the motivation for this study.

Statement of the Problem

The integration of digital technology in education and the adoption of inclusive education have received general acceptance all over the world. This is due to the important roles they play in promoting education and the development of individuals., Despite, the increasing recognition of the importance of digital literacy and inclusive education, their full adoption in the educational system remains challenged by a number of issues, especially in remote areas. This is due to inadequate infrastructure, inadequate teacher training and inequitable access to digital devices and education. This has created digital divide, inequality of access to education and other ethical challenges. The researcher is bothered by this situation and the insufficient research works on it. Hence, the motivation for this study. Therefore, the problem of this study is to investigate ethical considerations in the management of digital literacy and inclusive education in secondary schools in Rivers State for sustainable development.

Aim and Objectives of the Study

This study aimed at investigating the ethical considerations in the management of digital literacy and inclusive education in public secondary schools in Rivers State for sustainable development. Specifically, the objectives of the study were to:

1. examine the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development.
2. determine the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development.

Research Questions

The following research questions were answered in this study:

1. What are the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development?
2. What are the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development?

Research Hypotheses

The following research hypotheses were formulated and tested at 0.05 level of significance:

1. There is no significant difference between the mean responses of male and female teachers on the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development.
2. There is no significant difference between the mean responses of male and female teachers on the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development.

Literature Review

Theoretical Literature Review

This study was anchored on two theories. The digital divide theory and the inclusive education theory. The digital divide theory was postulated by James Pick and Avijit Sarkar in 2016. The theory explains the disparity between individuals, communities, and nations in accessing and utilizing modern technology such as computers and the internet. This difference is influenced by factors like geographical locations, socio-economic status, and education. This leads to unequal opportunities for education, employment, and communication. This theory is relevant to this study because it identified that there is a digital divide (digital literates and digital illiterates) and some of the factors that promote this divide which form the ethical concerns that need to be addressed for the purpose of equity and social justice.

The inclusive education theory is not attributable to any single individual. It is a broad educational approach widely supported by UNICEF, international organizations around the world and various world leaders. The theory emphasizes that education is a fundamental human right and every individual should have access to quality education irrespective of their abilities, backgrounds, learning needs and socio-economic status. This theory is relevant to this study because we have many out of school children in our streets, gender inequalities and discrimination, unequal distribution of educational resources etc that have raised a lot of ethical issues in our educational system, with various implications to sustainable development.

Sustainable development would require creating an environment where equity and fairness thrives, recognizing and respecting our diversities, fundamental human rights, and the provision of equal opportunities for every individual to access quality education and development of necessary skills.

Conceptual Literature Review

Digital literacy involves the skills required to effectively and critically navigate, evaluate, and create information using a range of digital technologies. This according to UNESCO (2018) includes not only the ability to use digital tools and platforms but also the competence to understand and utilize digital information in a meaningful manner. The world today is a global village that is interconnected with each other through digital technology. This has made digital literacy to go beyond basic computer skills and extends into critical thinking, the ethical use of information, and the ability to collaborate effectively in online spaces (Ng, 2020). Digital literacy initiatives are designed to equip individuals with essential digital skills required to navigate the internet and obtain useful information relevant to their needs.



Inclusive education is one dimension of a right- based quality education which emphasizes equity in access and participation, and responds positively to the individual learning needs and competencies of all children. Effret and Itam (2016); Ozoji and Ozoji (2019) noted that it is child-centered and places the responsibility of adaptation on the education system rather than the individual child. Together with other sectors and the wider community, it actively works to ensure that every child, irrespective of gender, language, ability, religion, nationality or other characteristics, is supported to meaningfully participate and learn alongside his/her peers and develop to his/her full potential. The demand for quality inclusive education as a means of achieving education for all in Nigeria is outweighing the capacity of schools and governments in terms of ensuring equity in the provision of educational resources and services to the range of learners in the school system.

Inclusive education according to Odogwu (2017) and Chuka (2018) has faced a variety of social, cultural, economic, technological and pedagogical challenges. These factors pose tremendous challenges to its implementation. These challenges have resulted in a large population of learners being under served and excluded in a manner that shows injustice and deprivation of social right: many educational institutions in Nigeria face significant challenges in integrating digital literacy into their curricula. This according to Hollands and Tirthali (2020) is worsened by limited infrastructure, insufficient teacher training, and unequal access to technology. The gap in access to technology and digital literacy training further promotes educational inequalities by creating a digital divide that disproportionately impacts students from marginalized and remote areas as well as sustainable development.

The integration of digital literacy and inclusive education in secondary schools is necessary for preparing learners for the demands of digital age. When this is adequately implemented, it will promote widespread access to educational resources and also equip learners with relevant skills to adopt in a technologically-driven world. Inclusive education ensures that no student is left behind, while digital literacy prepares them to actively participate in the digital economy and society (Charles-Zalakoro, 2025). Realizing these aims appear difficult due to significant challenges of infrastructure, teacher preparedness, access to digital tools and uneven distribution of inclusive education practices. These factors have raised ethical issues that need to be addressed. Without addressing these issues, students from under served and marginalized areas are at risk of being left behind both in terms of academic success and digital competences (Iwu, 2021).

Ethical considerations in the management of digital literacy according to Garcia- Parra (2022) include the issue of autonomy, beneficence, non maleficence, justice, integrity, responsibility, and prudence. Other considerations include the issues of data privacy and security, misinformation and manipulation, accessibility and inclusion, responsible use of technology, critical thinking and evaluation, accountability and transparency. Accessibility and equity issues should be addressed to reduce the challenges of digital divide and inclusive design. According to Kumar (2024) digital divide raises ethical concerns regarding equal access to educational resources. With increasing integration of digital technology into education, government needs to ensure that all students irrespective of socio-economic background have equitable access to digital tools and online resources. Addressing this would require identifying the barriers to access and the ethical imperatives and dealing with them. Considerations in designing digital tools and platforms that are accessible to diverse learners is also very important for inclusiveness.

The collection, storage and use of students data has raised concerns about data privacy and security. This has posed the challenge of how educational institutions can guarantee confidentiality and security of students' sensitive information. Concerns according to Warschauer and Matachwiak (2010) on digital citizenship and responsibility are necessary. To them, it is necessary to teach the students about online safety, cyberbullying and digital etiquette. They need to understand copyright laws and should have respect for intellectual properties. Ethical content practices involve transparent attribution and acknowledgement of intellectual property (Kumar, 2024).

Cybersecurity has become very necessary in educational institutions because of the volumes of sensitive materials that they deal with. Ethical responsibility of schools in cybersecurity involves,

protecting staff and students' privacy. They have to implement adequate security measures to prevent unauthorized access to their database. Transparency is a key ethical principle in cybersecurity and in case of any incident, educators should communicate transparently with affected parties and take necessary measures to address it.

Other ethical concerns include misinformation, manipulation, bias and representation (Abubakar, Aliyu and Sani 2024). Educators need to ensure that digital resources and platforms reflect diverse perspectives and experiences. It is equally imperative to recognize and address biases, misinformation and manipulation in digital content and tools. According to Charles – Zalakoro (2025), understanding how to identify bias in information source and recognizing how perspective agenda can influence contents is crucial for developing critical thinking and ensuring a balanced understanding of topics.

Ethical considerations in inclusive education management involves the issue of access and equity. Many children in Nigeria (over 13 million) do not have access to education. They have been excluded in a manner that shows injustice and deprivation of their social and fundamental human rights (Okwudire, 2019). We also have school drop outs (those who could not complete their programmes) and learners who are segregated or discriminated against due to gender, ethnic origin, social factors, cultural backgrounds, sexual orientations and other factors. These factors erect hills of psychological, structural, attitudinal, and physical barriers that keep many children away from school. This increases the problem of access to education. This undermines the principles of inclusive education which ensures that every child regardless of any background, ability or socio-economic status should have access to quality education (Lukar and Dainte, 2016). Governments and educators need to identify and address all barriers to access to quality education in order to effectively implement inclusive education and enhance sustainable development.

Ethical concerns of bias and discrimination should be adequately addressed. According to Harvey (2013), many teachers, parents, and learners still have varying views, anxieties, beliefs, and preconceived misconceptions about the successful inclusion of people living with disabilities in the general education classrooms which result in a wide range of attitudes. Teachers, parents and learners should be given adequate orientation about inclusive education and those living with disabilities. Those living with disabilities are human beings who need love and care, as well as quality education, therefore, parents, teachers and the entire community should collaborate to create an inclusive learning environment that values diversity, promotes equity and supports the well-being and success of every child.

Inclusive education embraces diversity and representation which requires culturally responsive teaching and inclusive curriculum. This according to Smith (2010) should be based on universal design for learning, which is a barrier-free architectural and building design that meets the needs of everyone especially for people with physical challenge. Universal design for learning is any instructional methodology which is aimed at meeting the learning needs of every child in an inclusive classroom. The curriculum for a functional inclusive education system will reflect the diversity of students background and experiences. The management of inclusive education embraces the philosophy of accommodation and this enables teachers to provide individualized support and accommodation to meet the diverse needs of students. According to Ozoji (2014) accommodation includes adjustments made in class assignments or test taking involving the children with disabilities to ensure they have equal access to education.

Teacher training and support in inclusive education practice deserve adequate attention. Their professional development has a crucial role to play in ensuring that they develop the right attitude and are prepared for the challenges of educating students with disabilities. In order to achieve quality in the provision of educational services that meet the diverse needs of learners, there is the need for a well planned and implemented teacher professional development for both pre-service and in-service teachers to equip them with the attitudes, knowledge and skills, for teaching, managing and building the lives of their students (Okwudire, 2019). Fostering adequate collaboration among teachers, support staff and their families is equally necessary. Their incentives should be enhanced because they are the major

implementers of inclusive education. Supporting this view Eleyeji (2018) stated that the teachers make the difference between paper and practice in any educational system. Inclusive education will not achieve anything without teachers who are regarded as the major stakeholders in its implementation. They should be adequately motivated to carry out their duties effectively.

Methodology

This study adopted the descriptive survey design. The population of the study comprised of all the 8,620 public secondary school teachers in Rivers State. (Source: Secondary Education Management Board, 2024 report). A sample of 431 (200 male and 231 female) teachers representing 5% of the population was drawn through stratified random sampling technique from the three senatorial zones in the state. A questionnaire titled: “ Ethical Considerations in the Management of Digital Literacy And Inclusive Education Questionnaire (ECMDL & IEQ)” developed by the researcher was used for data collection. The instrument was adequately validated and the test of reliability using Cronbach Alpha method yielded a reliability index of 0.82. Mean scores, standard deviation and rank order were used to answer the research questions. While, z-test value was used to test the hypotheses at 0.05 level of significance.

Results

Research Question One: What are the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development?

Table 1: Mean scores, standard deviation and rank order analysis of data obtained from male and female teachers on ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development.

S/N	Ethical considerations in the management of digital literacy.	Male Teachers. N = 195		Female Teachers . N = 220		Mean set	Rank order	Decision
		$\bar{X}_1$	SD ₁	$\bar{X}_2$	SD ₂			
1	Digital divide	3.36	0.58	3.30	0.59	3.33	3 rd	Agree
2	Data privacy and security	3.40	0.56	3.32	0.58	3.36	2 nd	Agree
3	Accessibility and inclusion	3.6	0.62	3.28	0.61	3.27	4 th	Agree
4	Cyber security	3.34	0.59	3.00	0.67	3.17	8 th	Agree
5.	Bias, misinformation and manipulation	3.22	0.64	3.18	0.63	3.20	6 th	Agree
6.	Intellectual properties and copy right issues	3.38	0.57	3.42	0.55	3.40	1 st	Agree
7.	Accountability, transparency, critical thinking and evaluation	3.20	0.65	3.16	0.65	3.18	7 th	Agree
8.	Continuous teacher training/professional development	3.28	0.61	3.24	0.62	3.26	5 th	Agree
9.	Provision of smartphones and laptops to every student by government.	2.06	0.68	2.02	0.70	2.04	9 th	Disagree
	Aggregate mean and standard deviation	3.17	0.61	3.10	0.62			

Table one shows that items 1 to 8 in the rank order of 1st to 8th had weighted mean scores that were greater than the criterion mean of 2.50. They were agreed on or accepted by the respondents as the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development. The aggregate weighted mean scores of 3.17 and 3.10 for male and female teachers respectively, which are above the criterion mean, indicate that the respondents unanimously

agreed on ethical considerations for the management of digital literacy in public secondary schools in Rivers State.

Therefore, the ethical considerations in the management of digital literacy in public secondary schools in Rivers state for sustainable development include: Digital divide; data privacy and security; accessibility and inclusion; cyber security; Bias, misinformation and manipulation; intellectual properties and copy right issues; accountability, transparency, critical thinking and evaluation; and continuous teacher training/professional development.

Research Question Two: What are the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development?

Table 2: Mean scores, standard deviation and rank order analysis of data obtained from male and female teachers on ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development.

S/N	Ethical considerations in the management of inclusive education	Male Teachers. N = 195		Female Teachers . N = 220		Mean set	Rank order	Decision
		$\bar{X}_1$	SD ₁	$\bar{X}_2$	SD ₂			
1	Issues of access and equity	.44	0.59	3.40	0.61	3.42	5 th	Agree
2	Bias/discrimination	3.38	0.61	3.36	0.63	3.37	6 th	Agree
3	Diversity and representation	3.46	0.58	3.42	0.60	3.44	4 th	Agree
4	Teacher training and support	3.50	0.57	3.48	0.58	3.49	2 nd	Agree
5.	Teachers incentives/renumeration	3.52	0.56	3.54	0.55	3.53	1 st	Agree
6.	Issues of accommodation of learners and provision of individualized support	3.36	0.63	3.32	0.65	334	7 th	Agree
7.	Issues of functional inclusive curriculum.	3.48	0.58	3.46	0.59	3.47	3 rd	Agree
8.	Collaboration/engagement of all stakeholders	3.28	0.4	3.24	0.66	3.26	8 th	Agree
9.	Issues of over funding inclusive education	2.30	0.66	2.24	0.68	2.27	9 th	Disagree
	Aggregate mean and standard deviation	3.30	0.60	3.27	0.62			

Table 2 shows that all the items had weighted mean scores that were greater than the criterion mean except item number 9. The items in the rank order of 1st to 8th were accepted by the respondents as the ethical considerations in the management of inclusive education in public secondary schools in Rivers State For sustainable development. The aggregate mean of 3.30 and 3.27 for male and female teachers respectively indicate that the respondents shared a common opinion on the issue investigated.

Therefore, the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development include: the issue of equity and access; bias/discrimination; diversity and representation; teacher training and support; teacher incentive/renumeration; accommodation/individualized support; functional inclusive curriculum; and collaboration/engagement of all stakeholders.

Test of Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

H₀₁: There is no significant difference between the mean scores of male and female teachers on the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development.

Table 3: z-test of difference between the mean scores of male and female teachers on the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development.

Gender	N	$\bar{X}$	SD	DF	Z-Cal	Z-Crit	Level Of Sign	Decision
Male Teachers	195	3.17	0.61	413	1.158	+ 1.960	0.05	Null hypotheses Not significant
Female Teachers	220	3.10	0.62					

Table 3 shows a summary of mean, standard deviation and z-test of difference between the mean scores of male and female teachers on the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development. The z-test calculated which was used in testing the hypothesis stood at 1.158, while the z-critical value was + 1.960 at 413 degrees of freedom using 0.05 level of significance. The z-calculated was by far less than the z-critical value. Therefore, the null hypothesis of no significant difference between the mean scores of male and female teachers on the ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development was retained.

Ho₂: There is no significant difference between the mean scores of male and female teachers on the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development.

Table 4: z-test of difference between the mean scores of male and female teachers on the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development.

Gender	N	$\bar{X}$	SD	DF	Z-Cal	Z-Crit	Level Of Sign	Decision
Male Teachers	195	3.30	0.60	413	0.500	+ 1.960	0.05	Null hypotheses Not significant
Female Teachers	220	3.27	30.62					

table 4 shows a summary of the mean, standard deviation and z-test of difference between the mean scores of male and female teachers on the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development. The z-test calculated that was used in testing the hypothesis stood at 0.500, while the z-critical value was + 1.960 at 413 degrees of freedom, using 0.05 level of significance. The z-calculated was by far less than the z-critical value. Therefore, the null hypothesis of no significant difference between the mean scores of male and female teachers on the ethical considerations in the management of inclusive education in public secondary schools in Rivers State for sustainable development was retained.

Discussion of Findings

The findings of the study revealed that ethical considerations in the management of digital literacy in public secondary schools in Rivers State for sustainable development include: digital divide; data privacy and security; accessibility and inclusion; cyber security; bias, manipulation and misinformation; intellectual property/copy right issues; accountability, transparency, critical thinking and evaluation; continuous teacher training/professional development. The continuous and speedy integration of digital technology into education without due considerations for diversities among the

students has created the problem of digital divide among the students. While some students have access to digital technologies some do not have due to their socio-economic backgrounds. Some students can easily navigate or utilize digital tools while some can not. This was one of the factors responsible for the students poor performance in the last Joint Admissions and Matriculations Examination (JAMB). This according to Kumar (2024) has raised ethical concerns regarding equal access to educational resources.

Educational institutions collect and store data about their staff and students. Some of these informations are very sensitive and should be confidentially managed. This information includes students academic performance, medical records, behavioural patterns and learning preferences. While these information are vital in guiding and shaping students academic experiences, it also raises ethical questions regarding the extent of data collection, the purpose of its collection and their implications for students privacy. The engagement of third parties in the management of schools database raises more complexity in addressing privacy concerns. Corroborating this view, Kumar (2024), Warshauer and Matachimak (2010) advised educational institutions to implement robust security measures to protect themselves against unauthorized access, data breaches, and cyber threats.

Government needs to address the issues of accessibility and inclusion by ensuring that all the students irrespective of socio-economic backgrounds, location and other factors should have equal access to digital resources. They should identify all the barriers to the provision of equal digital literacy to all the students and deal with them. They should ensure that every child is carried along by making sure that digital tools and platforms are designed in a manner that makes them easily accessible by diverse learners. This will ensure inclusiveness in the provision of digital literacy.

Ethical considerations about the issues of bias, misinformation and information manipulation is very necessary. Educational institutions should teach their students how to identify fake and bias information source. This view is supported by Charles-Zalakoro (2025) who equally added that understanding how perspective agenda can influence contents is very necessary for developing critical thinking and ensuring a balanced comprehension of contents.

Equally necessary are ethical concerns about intellectual property/copy right issues, transparency and accountability. Supporting this view, Kumar (2024) emphasized on the need for educators to teach their students copy right laws, respect for intellectual properties, online safety, cyber building and digital etiquette. They should inculcate in them responsible digital behaviours and accountability in their online activities. The ethical concerns in the management of digital literacy can not be effectively addressed without looking at the teacher factors. Teachers professional development on digital literacy and ethics is very necessary because they can not give out what they don't have. They have the responsibility of educating their students about digital literacy, ethics and responsibility.

The study revealed that ethical concerns for the management of inclusive education in public secondary schools in Rivers State include: the issue of equity and access; bias/discrimination; diversity and representation; teacher training/support; teacher incentives/renumeration; accommodation/individualized support; functional inclusive curriculum; and collaboration/engagement of all stakeholders.

Equity and access are critical indicators of inclusive education that show the extent to which there is equitable access to educational facilities, environment, services and curriculum. Equal access to education connotes that students of all abilities have opportunities to learn, move and benefit from available educational services equally. An equitable inclusive education setting demands that school services and facilities for the general population of learners are available on equal terms to persons with disabilities and are responsive to their needs. Every Nigerian child has the fundamental right to be educated. With other 13 million out of school children in Nigeria, it is obvious that the rights of many children to education is being violated. This raises ethical concerns. Supporting this view, Okwudire (2019) stated that many inclusive schools in Nigeria currently are not friendly and accessible to persons with disabilities. Educational resources are not equitable distributed as wide gaps exist between schools located in urban areas and those located in remote areas. For sustainable development to be achieved, barriers to access and equitable quality inclusive education must be addressed.

One of the core issues facing the implementation and management of inclusive education in Rivers State is the issue of bias and discrimination. Many learners, teachers and parents have various feelings and thoughts about people with disabilities, and these shape their attitude towards them. Adequate orientation should be given to teachers, learners and parents about inclusive education and the lives of people with disabilities. This is necessary because the success of inclusion of children with special needs in classrooms largely depends on attitudes of the school community towards persons with disabilities (Okwudire, 2019; Lukar And Dainte, 2016). The beauty of inclusive education is the recognition and respect for diversity, hence, its fundamental principle is that all children should learn together wherever possible, regardless of any difficulties or differences they may have. Supporting this view Ozoji and Ozoji (2019) stated that inclusive education requires zero reject policy, least restrictive environment and integration, hence the need for a change of attitude to accept and respect diversity.

Teachers' inadequate knowledge or competence in classroom management and pedagogical accommodation of diverse learners with various physical, mental and learning characteristics in the same classroom has raised some ethical concerns. The incompetency of teachers could promote social and psychological barriers, as well as negative attitude to their job. They should receive professional development programmes from time to time. Supporting this view Okwudire (2019) asserted that professional development of teachers is crucial to meeting today's inclusive education demands considering the high prevalence, diversity and complexity that typify the nature of disabilities in today's classroom. Teachers occupy central role in inclusive education and should be adequately motivated. Providing the right motivation for teachers is significant and necessary to the delivery of quality inclusive education. There is no doubt that the present poor remuneration and level of motivation given to teachers in public secondary schools in Rivers State adversely affect the quality of education provided by these schools. It affects the willingness of teachers to provide individualized support and accommodations to meet the diverse needs of students, as well as making reasonable adjustments to ensure that students with disabilities have equal access to education.

Ethical concerns have been raised over the present curriculum of inclusive education. functional curriculum which according Ozoji and Ozoji (2019) is a hybrid that has basic elements of regular curriculum but more hands-on everyday skills. This should be used for teaching children with severe developmental delay in cognitive, emotional, physical and other aspects of human growth before they transit into the society. The curriculum is essentially developed for children with severe disabilities who may not cope with the contents of regular curriculum but who nonetheless have to be educated to live independent life as adults across environments. Functional curriculum focus on life competency, independence and adaptability outcomes for persons with severe disabilities.

Education of children is a responsibility of a range of stakeholders. It is important to engage these stakeholders and ensure that they partake in the shared responsibility of providing education to our children. Fostering adequate collaboration among teacher, parents and community members will promote quality inclusive education. Partnerships and collaborations play significant roles in successful schools, often providing supports and resources to meet staff, family and student needs. It is an important means of funding education. Supporting this view Okwudire (2019) acknowledged that partnership constitute an ongoing process of problem-solving through shared responsibly by relevant stakeholders. Unfortunately, creating a climate and sustaining a culture of collaboration is a challenge for many schools and this raises some ethical concerns.

Considering these ethical issues by school managers will help them to address most of the barriers confronting inclusive education. it will also assist them to create an inclusive learning environment that values diversity, promotes equity and supports the progress and well-being of every child.

Conclusion

The study investigated the ethical considerations in the management of digital literacy and inclusive education in public secondary schools in Rivers State for sustainable development. Based on the findings, it was concluded that addressing the ethical issues in the management of digital literacy

and inclusive education in public secondary schools in Rivers State will promote responsible digital literacy practices and create a safe inclusive and equitable digital learning environment. It will also enhance inclusive learning environment that have regards for diversity, equity and success of all learners.

Recommendations

Based on the findings, the following recommendations were made:

4. Educators, government and stakeholders must embrace the mindset of continuous improvement on ethical standards emerging from technological advancements and evolving pedagogical innovations
5. Policy makers and educators should develop ethical policy frameworks that prioritize equity, access and respect for diversity in the management of digital literacy and inclusive education in our school system.
6. Government should integrate digital literacy skills in school curriculum in all subjects and classes to ensure that all the students develop these skills.
7. Government should offer ongoing professional development opportunities for teachers to enhance their digital literacy and pedagogical skills. This should offer training on digital tools, universal design learning principles, and effective ways of using digital literacy skills in the classroom.
8. Government and stakeholders in secondary education should address all barriers of access and equity in the management of digital literacy and inclusive education in other to enhance the effectiveness of these programmes.

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