

POST-COVID-19 LOCKDOWN CHALLENGES AND OPPORTUNITIES FOR EDUCATIONAL MANAGEMENT AND PLANNING FOR ONLINE LEARNING IMPLEMENTATION IN RIVERS STATE

Agbovu, Daniel and Chukwuma, Charity Mgbeodichinma
Department of Educational Management, Faculty of Education
University of Port Harcourt, Rivers State, Nigeria

Email: danabove@gmail.com, charitychukwuma88@gmail.com

ABSTRACT

This study investigated the post-COVID-19 lockdown challenges and opportunities for educational management and planning for online learning implementation in Rivers State. The investigation was developed with two objectives, from which the research questions, and hypotheses were drawn. The study's research design was a survey. The area of the study was Rivers State. The study's population was 2,980 stakeholders composed of 287 principals and 1,693 executive board members of the Rivers State Senior Secondary School Board. The sample size of 475 participants comprised 165 principals and 310 school or executive board members, ascertained using the Krejcie and Morgan sampling tables. The participants were selected through a simple random sampling technique. The questionnaire used to collect the required data was titled "Post-COVID-19 Lockdown Challenges and Opportunities for Online Learning Implementation Questionnaire". The reliability of the instrument was assessed and confirmed, yielding a reliability index of 0.821. Mean and standard deviation helped answer the research questions, and a Z-test, with a significance level of 0.05, tested the hypotheses. Among other findings, the study revealed that the difference in the perception of principals and school board members about the challenges faced by educational managers and planners for online learning implementation in Rivers State was not significant. The study concluded that to fully implement online learning in Rivers State following the COVID-19 lockdown, educational managers and planners must address the impending challenges as soon as possible. The study recommended, among others, that educational managers and planners in Rivers State establish a comprehensive framework for online learning that includes infrastructure development, teacher training, and student support services.

Keywords: Post-COVID-19 Lockdown, Online Learning, Implementation, Challenges, Opportunities.

INTRODUCTION

Online learning, as a method of electronic learning and teaching, has become an educational innovation, and many more are on the way as technology advances. According to Hedge and Hayward (2014), e-learning is a new way of teaching and learning that makes use of digital technologies and the internet to provide accessible, well-designed, learner-centered, interactive learning environments at any time and from any location. Previously, the majority of teaching and learning took place in traditional classrooms, where students had to physically attend classes and interact with teachers and peers. Among other requirements that students and teachers must meet, they must write and submit their classwork in person. To teach and learn, many institutions in developed societies now rely heavily on technological innovations such as online learning. However, the emergence of the dreadful COVID-19 pandemic, which entered Nigeria in early 2020, motivated the adoption and implementation of online learning in public elementary and tertiary institutions in Nigeria.

During the COVID-19 era, it is significant to note that disruption in education was not limited to Nigeria alone but was experienced globally. Quick adaptation to remote learning methods was necessary for schools and universities around the world to guarantee students' continuity of education. According to Amadi and Urho (2015), educational institutions were also impacted by the pandemic, as workers' organised work stoppage to ensure adherence to requests made on an

employer or collective of employers did not exclude them. The post-COVID-19 lockdown era according to Osim and Ewona (2023) brought with it the 'new normal' –wearing of face masks, hand sanitizing/washing and social distancing. However, one thing it did not take away was the significance of the use of online platforms in education. Osim and Ewona noted that the pandemic has accelerated the adoption and integration of technology in classrooms, making online learning an essential tool for both teachers and students, especially in developed societies.

This shift highlighted the importance of technology in education and emphasized the need for further development and integration of online learning platforms in the future. According to Adnan and Anwar (2020), COVID-19 forces institutions of learning to adopt online learning as a means to ensure continuity of education during the lockdown and social distancing measures. However, the effectiveness of the transition to online learning in Nigeria has been mixed, with challenges and opportunities. According to Saxena et al. (2021), one area that needs to be investigated and evaluated is the efficacy and standard of online education in light of the present crisis. Considering that in Nigeria there are profound disparities in access to technology and internet connectivity, which are enough to create significant barriers to effective online learning. This digital divide is particularly evident in rural areas and among disadvantaged communities, where limited access to reliable internet and necessary devices hinders students' ability to fully participate in online classes.

The field of educational management is intertwined with various organisations, institutions, societies, and countries. It shares connections with different disciplines, combining the elements of art and humanity. Being a social science, it focuses on understanding and addressing the needs of individuals and their environments. Moreover, it is a profession that effectively oversees and allocates resources and activities (Chakma, 2019). As stated by Chakma (2019), educational management encompasses the allocation of resources, both material and human, the development of the school curriculum, the coordination of co-curricular activities, the creation of the school timetable, the maintenance of school and student discipline, the organisation and management of school properties, budgeting and financing, evaluation, and coordination. On the other hand, according to Noun (2009), education planning encompasses the proactive identification of challenges and the development of corresponding strategies. As per Olofube's (2009) findings, educational planning involves the systematic and analytical approach towards enhancing the effectiveness and efficiency of educational development, with the aim of meeting the needs of both students and society. Therefore, educational management and planning encompass the coordination and supervision of human, financial, and material resources in order to achieve educational objectives. Making well-informed decisions about curriculum, instructional methods, resources, and personnel management is essential. Secondary school principals and education board executives manage and plan education in Nigeria. They create a good learning environment, ensure effective teaching, and help students grow (FRN, 2013).

Consequently, the principals and education board executives have a crucial role to play in tackling the challenges in the implementation of online learning platforms as well as sustaining the opportunities that online learning can provide. Osim and Ewona (2023) defined the implementation of online learning as the integration of digital technologies and internet-based platforms into the educational system to deliver instruction and facilitate learning remotely. This includes the use of online resources, virtual classrooms, interactive multimedia, and communication tools to engage students in a flexible and personalised learning experience. According to Olayemi et al. (2021), the implementation of online learning requires careful planning, coordination, and support from school leaders to ensure equitable access to technology, effective instructional practices, and ongoing professional development for teachers.

Those responsible for the management and planning of secondary schools must address the disparities in the implementation of online learning during and in the post-COVID-19 lockdown era, which will require developing functional strategies to ensure equitable access to e-learning for all students. That is the motivation behind this study, which investigates the post-COVID-19

lockdown challenges and opportunities for educational management and planning for online learning implementation in Rivers State.

Statement of the Problem

Periodically, pandemics cause widespread illness and death. Economic instability, healthcare system failure, and social unrest can result. The COVID-19 pandemic's impact on Nigeria's education system has raised concerns. Schools and universities have closed, forcing students to adapt to remote learning, which has been difficult for educators and students. Lack of technology and internet connectivity in some regions has worsened educational disparities, especially for public secondary school students, who are typically 10–18 years old. Students with access to technology can study remotely, while those without can't. The digital divide has exacerbated the gap between socioeconomic classes.

This study seeks to identify the challenges educational managers and planners face in implementing online learning during the post-COVID-19 lockdown and the opportunities that have arisen. Nigerian educational management and planning appear unprepared for the sudden shift to online learning. This is shown by poor infrastructure, internet connectivity, and teacher and student training. One might think COVID-19 would have inspired educational managers and planners to invest in online learning resources and training. However, following the lifting of the lockdown, many schools returned to traditional face-to-face teaching without addressing the underlying issues.

Though one would not anticipate another pandemic to happen, in the event of a worst-case scenario, what would be the implications? Student and teacher adaptation to remote education may be hampered by online learning's underinvestment. Educational institutions must learn from the past and prioritise online learning infrastructure, reliable internet connectivity, and comprehensive educator and student training. By doing so, they can ensure that education can continue uninterrupted, regardless of unforeseen circumstances. Given this context, this study was prompted.

Aim and Objectives of the Study

The study aimed to investigate the post-COVID-19 lockdown challenges and opportunities for educational management and planning for online learning implementation in public secondary schools in Rivers State. The specific objectives of the study include to:

1. Examine the challenges faced by educational managers and planners for online learning implementation in public secondary schools in Rivers State; as perceived by principals and school board members.
2. Identify the opportunities that have emerged for online learning implementation in public secondary schools in Rivers State; as perceived by principals and school board members.

Research Questions

1. What are the challenges faced by educational managers and planners for online learning implementation in Rivers State; as perceived by principals and school board members?
2. What opportunities have emerged for online learning implementation in Rivers State; as perceived by principals and school board members?

Hypotheses

1. There is no significant difference in the perception of principals and school board members on the challenges faced by educational managers and planners for online learning implementation in Rivers State.
2. There is no significant difference in the perception of principals and school board members about the opportunities that have emerged for online learning implementation in Rivers State.

Literature Review

Online Learning

The definition of "e-learning" varies among individuals who use the term. Certain individuals utilise the phrase to designate material that has been assembled using the technological framework. Certain individuals link learning with online self-paced learning, whereas others acknowledge its potential for live learning and collaborative experiences. The widespread consensus is that e-learning is a crucial and highly recommended tool in the modern educational landscape. Parks (2013) asserts that the letter "e" is associated with more than just "electronic"; it also means "everything," "everyone," "engaging," and "easy." The term "e-learning" describes the process of enhancing and facilitating learning through the use of the Internet and other forms of information and communication technology.

As stated by Eze et al. (2018), e-learning refers to the full incorporation of modern telecommunication devices and ICT resources into the educational system. E-learning is a form of learning that utilises electronic technology to facilitate interactive education for both students and instructors. E-learning is also known as educational technology. The advantages of e-learning encompass enhanced delivery of content, increased interactivity, high-quality content provision, and a boost in confidence for both learners and educators within the educational field. In Nigeria, the adoption of e-learning is still at an early stage, primarily because of its dynamic structure, despite the numerous advantages it offers. However, when faced with a global health crisis like a pandemic, e-learning emerges as the sole alternative to ensure the continuity of the educational system (Anaekwe & Anaekwe, 2020). The utilisation of e-learning for instructional delivery in Nigeria is riddled with challenges.

Challenges of Online Learning Implementation

The Nigerian educational system is currently grappling with several challenges in implementing e-learning, especially in light of the ongoing pandemic. With limited alternatives for learning, e-learning has emerged as the sole medium for educational purposes. One of the difficulties faced in Nigeria is the inconsistent electricity supply, especially in rural regions, where there is no assurance of receiving a minimum of two hours of continuous power (Olayemi et al., 2021). The problem of inconsistent electricity supply in Nigeria is widely recognised as a persistent challenge that has had far-reaching effects on various sectors of the Nigerian economy, including the field of education.

The lack of reliable power supply in Nigeria has hindered the progress of numerous educational institutions in terms of technological advancements. In Nigeria, many students residing in rural areas face challenges due to the lack of connectivity to the national grid (Mahyoob, 2020; Osim & Ewona, 2023). Consequently, these students encounter difficulties in effectively utilising the e-learning platform. In addition, the scarcity of power has posed challenges in supplying electricity to educational gadgets like smartphones, laptops, and desktop computers.

Opportunity in the implementation of Online Learning

New research suggests that online education has the potential to raise both graduation rates and educational quality generally. Higher education's assessment of the National Learning Network (NLN) makes use of qualitative data to demonstrate that both the sophistication of students' e-learning expectations and the pervasiveness of ICT in college life are on the rise. According to Obododike and Okekeokosisi (2020), the following are the major visions, perspectives, possibilities, and prospects for Integrating e-learning into the educational system of Nigeria:

1. **Empower Learners:** According to the National Policy on Education (NPE), one of the primary goals of Nigerian education is to produce self-sufficient citizens who can contribute to the development of their society and the country as a whole. People in groups or individuals, regardless of age, Thanks to e-learning, individuals can become self-directed lifelong learners, taking responsibility for what and how they learn, and ultimately achieving their personal goals.

2. Creative and Innovative Teaching and Learning: Through the utilisation of E-learning, the process of curriculum content instruction and acquisition can be enhanced with increased creativity and innovation, effectively equipping individuals for the demands of the global knowledge society in the twenty-first century.

3. Flexibility of E-Learning: All students would be able to get the education they need, regardless of their location or learning style, if schools were more flexible. Students will have access to a wide variety of course materials, which will help establish the foundational principles of Nigerian education based on equity. E-learning can help achieve NPE's aim of providing all citizens with equal educational opportunities.

4. Electronic learning Better Value: Education leaders, evaluators, classroom lecturers, and teachers have the potential to explore creative approaches in utilising their resources, incorporating e-learning in combination with other teaching techniques to enhance both the quality and efficiency of education.

5. Create a Professional Workforce and Satisfied Citizens: - Thanks to e-learning, communities, groups, and the workforce in the knowledge society can produce members with the ability to continuously update their knowledge and abilities. Furthermore, online learning supports the facilitation of knowledge transfer and enhances the accumulation of practitioner knowledge in various aspects. As per the NPE, this will cultivate a feeling of unity.

During the pandemic, the Nigerian educational system will undergo a revolutionary change thanks to the introduction of e-learning and the incorporation of curriculum content. This will not only make the teaching and learning of the teacher's content more active, but it will also revolutionise the system overall. Online education is unparalleled in its ability to inspire students to learn on their own and launch them into structured, active learning environments, claim Kajetanowtez and Wierzejewski (2015). When it comes to formative evaluation, which is a key component of online learning, Kajetanowtezetal thinks it's a great way to encourage students to study on their own time. Consequently, this enables precise monitoring of their educational advancement and consistent achievements.

Review of Related Studies

In their study, Obododike and Okekeokosisi (2020) looked at the difficulties of introducing online courses to the Nigerian school system during the COVID-19 pandemic.. The research utilised the qualitative literature review methodology to examine and explore the study. The investigation uncovered that the difficulties emerge due to the differing levels of readiness of the establishments, absence of infrastructures, scarcity of funds, and policy concerns in the education sector of Nigeria. This study focuses on the Nigerian educational system in light of the global pandemic, taking into account the prevailing issues at hand. In this paper, the topic of the COVID-19 pandemic is explored in-depth, along with the importance of e-learning and the obstacles, as well as the potential benefits and execution of e-learning in Nigeria. Therefore, the research concludes that the current global pandemic is causing the educational sector to turn its focus inward. Institutions are currently adopting e-learning as a viable alternative to traditional face-to-face learning, allowing them to address any potential gaps in the academic calendar that may arise due to the pandemic.

In their study, Olanrewaju et al. (2021) examined the digital disparities and requirements of rural secondary schools in isolated communities, as well as the impact on e-learning in six Nigerian states: Kwara, Ekiti, Ebonyi, Bayelsa, Adamawa, and Kano, throughout the COVID-19 pandemic. The study employed a concurrent embedded mixed-method design approach to gather data from rural secondary schools in six Nigerian states. Based on the research results, the main factors contributing to the digital disparities in rural areas of Nigeria include insufficient ICT strategies and policies, socioeconomic status, limited internet access, unreliable electricity supply, and a significant poverty rate. To achieve SDG targets, it will be crucial to address the issue of bridging the digital gaps among students residing in remote areas of Nigeria. This is especially important

for SDG 4, which aims to guarantee inclusive and fair access to quality education and lifelong learning opportunities for everyone by 2030.

Research Methods

A survey research design was utilised in a study carried out in Rivers State, focusing on public senior secondary schools. The study's population consisted of 2,980 stakeholders of the RSSSSB. The population was comprised of 287 principals and 1,693 executive board members (RSSSSB, 2022). The sample size consisted of 475 stakeholders, comprised of 165 principals and 310 school or executive board members, which were ascertained using the Krejcie and Morgan sampling tables. Simple random sampling was employed to choose the respondents.

The data collection process involved gathering information from participants using the questionnaire titled Post-COVID-19-lockdown Challenges and Opportunities for Online Learning Implementation Questionnaire (PCOOLIQ). The tool consisted of a 20-question scale using a 4-point Likert scale, with a criterion mean of 2.5. The instrument's reliability was assessed using Cronbach's alpha, yielding a reliability coefficient of $r = 0.821$. The research questions were answered using the mean score and standard deviation, and the hypotheses were tested at a significance level of 0.05 using the Z-test.

Data Presentation

Research Question 1: What are the challenges faced by educational managers and planners for online learning implementation in Rivers State; as perceived by principals and school board members?

Table 1: Mean and Std dev. of the challenges faced by educational managers and planners for online learning implementation

S/N	Items	Principals (n=165)			School Board Members (n=310)		
		\bar{x}	SD	Remark	\bar{x}	SD	Remark
.1	Inability to provide adequate access to technology and internet connectivity for users	3.13	0.61	Agree	3.00	0.67	Agree
.2	Inadequate training and skills development for users	2.90	0.81	Agree	2.96	0.69	Agree
.3	Limited availability of digital learning resources and platforms in schools	3.09	0.82	Agree	3.00	0.73	Agree
.4	Difficulties in monitoring and assessing the progress of the implementation of online learning	3.44	0.68	Agree	3.12	0.61	Agree
.5	Inability to tackle the issue of language barriers for users who are not proficient in English	3.26	0.73	Agree	3.15	0.80	Agree
.6	Inability to provide equal access to online learning opportunities among users from different socioeconomic backgrounds	2.77	1.05	Agree	3.18	0.77	Agree
.7	Inability to spread the awareness of the dos and don'ts of online learning among users	3.20	0.92	Agree	3.09	0.81	Agree
.8	Inability to tackle the frequent power outages and unreliable electricity	3.50	0.58	Agree	3.14	0.78	Agree
.9	Inability to tackle the issue of the high cost of computer devices	3.04	0.77	Agree	3.27	0.71	Agree
.10	Inability to bridge the digital divide between users from urban and rural	3.21	0.60	Agree	3.71	0.51	Agree

areas

Grand Mean

3.15

3.16

Criterion Mean = 2.5, Mean: 1.0-2.49 = Disagreed, 2.5-4.00= Agreed.

Table 1 shows the post-COVID-19 lockdown challenges faced by educational managers and planners for online learning implementation in Rivers State; as perceived by principals and school board members. The result revealed that the majority of the principals agreed to items 1-10, with mean scores that are equal to or greater than the mean criterion (2.50). Similarly, the majority of the school board members agreed to items 1-10, with mean scores that are equal to or greater than the mean criterion (2.50).

The grand mean scores of 3.15 for principals and 3.16 for school board members show that both the principals and school board members agree about the challenges faced by educational managers and planners for online learning implementation in public secondary schools in Rivers State; which include among others; inadequate access to technology and internet connectivity, inadequate training and skills development, limited availability of digital learning resources and platforms, difficulties in monitoring and assessing the progress of the implementation of online learning, and inability to tackle the issue of language barriers for users who are not proficient in English.

Research Question 2: What opportunities have emerged for online learning implementation in Rivers State; as perceived by principals and school board members?

Table 2: Mean and Std dev. of the opportunities that have emerged for online learning implementation

S/N	Items	Principals (n=165)			School Board Members (n=310)		
		\bar{x}	SD	Remark	\bar{x}	SD	Remark
.11	There is an increase in the access to technology for online learning in schools	2.11	0.92	Disagree	2.13	0.94	Disagree
.12	Educational resources and materials can now be accessed from anywhere at any time.	2.08	0.92	Disagree	2.32	0.96	Disagree
.13	Learners now learn at their own pace, through online platforms	2.87	0.91	Agree	3.63	0.69	Agree
.14	Online learning platforms offer teachers and learners opportunities for collaboration	3.38	0.69	Agree	3.73	0.51	Agree
.15	Presently, learning progress can be easily tracked using online learning	2.08	0.93	Disagree	2.10	0.97	Disagree
.16	Through online learning use, the digital literacy level of students has increase	2.17	0.97	Disagree	2.11	0.96	Disagree
.17	Teachers can now access a wide range of educational resources and materials, using online.	2.93	0.68	Agree	3.14	0.56	Agree
.18	Today multimedia elements such as videos, interactive quizzes, and simulations can be incorporated into online lessons	3.00	0.52	Agree	3.13	0.62	Agree
.19	Online learning provides a flexible and convenient option for students who may have other commitments or limitations.	3.25	0.72	Agree	3.61	0.60	Agree
.20	Public secondary schools are now well facilitated due to the use of online learning.	2.11	0.92	Disagree	2.14	0.93	Disagree
Grand Mean		2.60			2.80		

Criterion Mean = 2.5, Mean: 1.0-2.49 = Disagreed, 2.5-4.00= Agreed.

Table 2 shows the post-COVID-19 lockdown opportunities that have emerged for online learning implementation in Rivers State; as perceived by principals and school board members. The result revealed that the majority of the principals agreed to items 13, 14, and 17-19, with mean scores that are equal to or greater than the mean criterion (2.50). They, however, disagreed with items 11, 12, 15, 16, and 20, with mean scores less than the mean criterion (2.50). Similarly, the majority of the school board members agreed to items 13, 14, and 17-19, with mean scores that are equal to or greater than the mean criterion (2.50). They, however, disagreed with items 11, 12, 15, 16, and 20, with mean scores less than the mean criterion (2.50).

The grand mean scores of 2.60 for principals and 2.80 for school board members show that both the principals and school board members agree the post-COVID-19 lockdown opportunities that have emerged for online learning implementation in public secondary schools in Rivers State; which include among others; opportunity to learn at learner’s pace, opportunity for collaboration, opportunity to access a wide range of educational resources and materials, opportunity to incorporate videos, interactive quizzes, and simulations into lessons, and opportunity for flexible and convenient option for students who may have other commitments or limitations.

Hypothesis 1: There is no significant difference in the perception of principals and school board members on the challenges faced by educational managers and planners for online learning implementation in Rivers State.

Table 3: Summary of Z-test on the difference in the perception of principals and school board members on the challenges faced by educational managers and planners for online learning implementation

Participant	n	\bar{x}	SD	df	Z _{cal}	Z _{tab}	Sig.	Decision
Principals	165	31.54	3.61	473	0.25	1.96	0.81	Retain: H ₀₁
School Board Members	310	31.62	3.43					

Table 3 indicates that Z_{cal} = 0.25, df = 473, and Z_{tab} = 1.96. Therefore, since Z_{cal} < Z_{tab} and P > 0.05, there is no significant difference in the perception of principals and school board members on the challenges faced by educational managers and planners for online learning implementation in Rivers State. Therefore, the null hypothesis is upheld at a significance level of 0.05.

Hypothesis 2: There is no significant difference in the perception of principals and school board members about the opportunities that have emerged for online learning implementation in Rivers State

Table 4: Summary of Z-test on the difference in the perception of principals and school board members about the opportunities that have emerged for online learning implementation

Participant	n	\bar{x}	SD	df	Z _{cal}	Z _{tab}	Sig.	Decision
Principals	165	25.99	2.86	473	7.34	1.96	0.00	Reject: H ₀₂
School Board Members	310	28.04	2.91					

Table 4 indicates that Z_{cal} = 7.34, df = 473, and Z_{tab} = 1.96. Therefore, since Z_{cal} > Z_{tab} and P < 0.05, there is a significant difference in the perception of principals and school board members

about the opportunities that have emerged for online learning implementation in Rivers State. Therefore, null hypothesis two is not accepted at the significance level of 0.05.

Discussion of Findings

The result of research question one revealed that both the principals and school board members agree about the challenges faced by educational managers and planners for online learning implementation in Rivers State; which include among others; inadequate access to technology and internet connectivity, inadequate training and skills development, limited availability of digital learning resources and platforms, difficulties in monitoring and assessing the progress of the implementation of online learning, and inability to tackle the issue of language barriers for users who are not proficient in English. The results of hypothesis one indicate that there is not a statistically significant distinction in the perception of principals and school board members on the challenges faced by educational managers and planners for online learning implementation in Rivers State. The findings are consistent with the result of Olanrewaju et al. (2021), which revealed identified a lack of ICT strategies and policies in Nigeria, socioeconomic status, poor internet connectivity, electricity, and a high poverty level as the primary drivers of digital gaps in remote communities.

The result of research question two revealed that both the principals and school board members agree the post-COVID-19 lockdown opportunities that have emerged for online learning implementation in Rivers State; which include among others; the opportunity to learn at learners' pace, opportunity for collaboration, opportunity to access a wide range of educational resources and materials, opportunity to incorporate videos, interactive quizzes, and simulations into lessons, and opportunity for flexible and convenient option for students who may have other commitments or limitations. The test of hypothesis two revealed that there is a significant difference in the perception of principals and school board members about the opportunities that have emerged for online learning implementation in Rivers State. The findings are corroborated by Obododike and Okekeokosisi (2020) who revealed that the prospect of e-learning in Nigerian education institutions includes empowering learners, creativity and innovation, offering flexibility, achieving better value, and generating a professional workforce and fulfilling citizens.

CONCLUSION

The study looked into the post-COVID-19 lockdown challenges and opportunities for educational management and planning for online learning implementation in Rivers State's public secondary schools. The study concludes that to fully implement online learning in Rivers State following the COVID-19 lockdown, educational managers and planners must address the impending challenges as soon as possible. Furthermore, the current implementation of online learning has resulted in the emergence of opportunities for teachers and learners, which must be sustained to yield positive results.

RECOMMENDATIONS

1. Educational managers and planners in Rivers State establish a comprehensive framework for online learning that includes infrastructure development, teacher training, and student support services.
2. The Rivers State government, through its Ministry of Education, should prioritise the allocation of resources towards improving digital infrastructure and providing necessary technological support to both teachers and learners.

REFERENCES

Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Online Submission*, 2(1), 45-51.

- Amadi, E. C & Urho, P. (2015). Educational management planners' view of strike action and its effects on educational management in Universities in Rivers State. *Singaporean Journal of Business Economics and Management Studies*, 4(7); 45 – 55.
- Anaekwe, M.C & Anaekwe, G.U. (2020). COVID-19 pandemic and social media: implications for health, science and technology education in Nigeria In E.C. Okigbo, J.N. Okoli, J.O.C. Okekeokosisi & N.N. Samuel (eds). *Role of education in the pandemic period in Nigeria*. Awka: College of Education Ikwo Printing press Ltd.
- Chakma, D. (2019). Educational planning: Nature and characteristics and principles of educational planning. <https://onlinenotebank.wordpress.com/2019/12/21/educational-planning-nature-and-characteristics-and-principles/>
- Eze, S. C., Chinedu-Eze, V. C. & Bello, A. O. (2018). The utilization of e-learning facilities in the educational delivery system of Nigeria: a study of M-University. *International Journal of Educational Technology in Higher Education*, 15(34); 1-20.
- Federal Republic of Nigeria (FRN, 2013). National policy on education. Abuja: NERDC Press.
- Hedge, N. & Hayward, L. (2014). Redefining roles. University e-learning contributing to Life-long learning in a networked world. *E-Learning*, 1:128 – 145.
- Kajetanowtez, R.A. & Wierzejewski, A. (2015). *Teacher training by distance: The Nigerian experience*. In John Daniels (Ed) proceeding of the 1995 ICDE conference. Birmingham, UK.
- Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 pandemic experienced by EFL Learners. *Arab World English Journal*, 11 (4) 351-362.
- Noun (2009). Concepts and theories of educational administration and planning EDA 811
- Obododike, M.P., & Okekeokosisi, J.B. (2020). Challenges of implementing e-learning in Nigeria educational system in the COVID-19 pandemic era. *Social Sciences and Education Research Review*, 7(1), 152-171.
- Olanrewaju, G.S., Adebayo, S.B., Omotosho, A.Y., & Olajide, C. F. (2021). Left behind? The effects of digital gaps on e-learning in rural secondary schools and remote communities across Nigeria during the COVID19 pandemic. *International Journal of Educational Research Open*, <https://doi.org/10.1016/j.ijedro.2021.100092>
- Olayemi, O. M.; Adamu, H.; and Olayemi, K. J. (2021). Perception and readiness of students' towards online learning in Nigeria during Covid-19 pandemic. *Library Philosophy and Practice (e-journal)*. 5051. DOI: <https://dx.doi.org/10.24093/awej/vol11no4.23>
- Ololube, N. P. (2009). *Understanding teachers' professional competencies for education effectiveness*. Owerri, Nigeria: Spring Field Publishers.
- Osim, T.A., & Ewona I.O. (2023). An investigation of the challenges of virtual learning in tertiary institutions in cross River state: The post covid-19 Era. *World Journal of Advanced Research and Reviews*, 19(03), 796–812. DOI: <https://doi.org/10.30574/wjarr.2023.19.3.1887>.

Parks, E. (2013). *What's the "e" in e-learning?* Ask International.com

Saxena, C., Baber, H., & Kumar, P. (2021). Examining the moderating effect of perceived benefits of maintaining social distance on e-learning quality during COVID-19 pandemic. *Journal of Educational Technology Systems, 49*(4), 532-554.