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Challenges of E-Learning in Public Secondary Schools in Rivers State

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Abstract

Over the decades, the introduction of technology into education has gradually changed how teaching and learning are done in schools worldwide. This revolutionary approach to teaching and learning is not only student-centred, it has great mobility that allows students to choose when, how, and where they learn. This paper focused on challenges of E-Learning in Public Secondary Schools in Rivers state, the paper professed that the e-learning process is more adaptable and fluid, and allowing education to reach a wider audience globally. It also stated that E-learning was adopted in Rivers State Public Secondary Schools, particularly during the COVID-19 pandemic. It accordingly showed great potential but was marred by several inherent problems among them are lack of preparation by teachers for the implementation, non-availability of E-learning infrastructure, erratic power supply, etc. The study concluded that e-learning has come to stay and that the Rivers State Government, through the Ministry of Education, move quickly to build a state-wide framework for the deployment of e-Learning in the state to keep the State's Public Secondary Schools connected to the future. The study suggested, among other things, that the state government: immediately launch a state-wide e-learning training programme, established computer laboratories in every Public Secondary School in the state, purchase standby generators and uninterruptible power supplies for all Public Secondary School in the state, hire technologists and technicians to perform routine maintenance on internet infrastructure and equipment, and also procured state-wide digital libraries and learning management systems to help monitor the students.

Keywords: E-learning, Challenges of E-learning, Technology

INTRODUCTION

Advancements in information and communications technologies, such as the use of digital devices and the internet, have redefined the process of administering education, moving away from the traditional physical interactions between teachers and students in the classroom towards virtual education which allows for the acquisition of knowledge both within and outside the classroom walls. Sahr (2019), pointed out that students and teachers have moved from a closed isolated classroom to a repository of learning where other people in the society are connected through the internet and production network culture of learning takes place. Salawudeen, (2010) remarked that these new technologies allow for more flexibility in learning and a wider reach for education in many countries globally. This phenomenon is enriched with several learning

benefits including the potential to transform the education system by expanding educational opportunities, transforming student populations and encouraging the development of new pedagogical methods.

United Nations (2020), reported in their policy brief for the month of August that the COVID-19 epidemic caused the biggest disruption of educational systems in history, affecting approximately 1.6 billion students in over 190 countries across all continents. Schools and other learning space closures impacted 94 per cent of the world's student population with up to 99 per cent in low and lower-middle-income nations. In Nigeria, the Federal Ministry of Education announced school closure on March 19th 2020 in reaction to the pandemic, state governments contextualized the announcement and a few private schools in Rivers state released schedules for the online learning model. As schools continue to adjust to ensure the continuous students' success in the face of the fight against the spread of the virus in Rivers state, one choice that must be made in urgency moving forward with a focus on the future is to continue to adopt solutions that will extend classrooms from the traditional brick and mortar to the virtual space.

Zu, (2008), stated that for more than a century now, there has been a demand for and use of alternatives to the traditional classroom setting, ranging from correspondence courses on paper to video and internet access. In the current dispensation, as stated in Lizcano et al. (2020), it is evident that e-learning is the best option available to ensure that epidemics do not spread, as it guarantees spatial distancing. Appana (2008), Cruthers (2008), Watson, Winograd, and Kalmon, (2004) noted that many people today see e-learning as an innovation that will expand access to better educational experiences by empowering students and instructors to participate in online learning communities, as well as improve educational quality and effectiveness by encouraging collaborative learning, Collaborating this statement Takalani (2008), opined that e-learning adds the benefit of encouraging learners to take responsibility for their learning and build self-knowledge and self-confidence. However, Andersson and Gronlund, (2009) noted that there are numerous challenges such as technical and organizational problems and the readiness of teachers and students, despite the challenges and studied figures, which indicate that students are less likely to benefit from this type of education.

This paper discussed the challenges of e-learning in public secondary schools in Rivers State. The work is arranged under the following sub-headings: e-learning, Types of e-learning, the need for e-learning, Challenges of e-learning, e-learning in public schools in Rivers State, Conclusion and Suggestions.

E-Learning

Elliott Masie used the term "e-learning" for the first time in a professional setting during the TechLearn conference at Disneyworld in 1999, (Sander, 2019). The term is used generally to refer to any type of learning that involves the use of technology. E-learning, frequently referred to as web-based or online learning involves all teaching and assessment approaches that use technologies such as Wikis, Blogs, Podcasts and learning management systems such as computers, internet and web connectivity to enhance the learning experience and research works

(Mahahusudhan 2008, Nadiu 2006). Nkanga (2007), noted that e-learning is a computer-assisted collaborative learning method that uses computers as the primary platform for Information and Communication Technology (ICT) and allows students and teachers to develop, advance, and share knowledge in a more common format, In line with this argument Eze et al., (2018), submitted that e-learning refers to computer-based (e.g., digital videos, tablets, projector, operating stems) learning process which links digital content, system-based administrations and mentoring support and aid in the interaction of students and teachers.

Suffice it to say that any system that allows the integration of technology into education to support both teaching and learning, transforming classrooms with digital learning tools, such as computers and mobile applications; expands course offerings, experiences, and course content supports all-round learning, builds 21st-century skills, and enhances learners' motivation is referred to as e-learning. This system of Learning has the potential to revolutionize education by bringing in a new linked teaching style. This strategy connects instructors with their students as well as professional information, tools, and systems to assist them in improving their education and personalizing learning.

Types of e-Learning

E-learning is a broad phrase that encompasses a variety of school environments. The type of learning that occurs in today's e-learning environment is frequently classified into broad categories namely: asynchronous, synchronous and Hybrid e-learning:

a. Asynchronous e-learning

Asynchronous e-learning is self-paced, learner-directed learning that does not take place in real-time, but rather in pause-and-resume mode. The learner and the teacher cannot both be online at the same time in this sort of e-learning. Email, blogs, discussion forums, eBooks, CDs, DVDs, and other technologies may be used in asynchronous e- learning. Learners can learn at their own pace, download documents, and communicate with teachers and co-learners. Many students choose asynchronous learning over synchronous learning because they may attend online courses at their leisure and avoid disrupting their everyday schedules. Learning takes place from the following sources:

- Self-paced online courses
- Discussion forums & groups
- Message boards

b. Synchronous e-learning.

Any learning activity in which all learners are simultaneously participating is called synchronous learning, it is real-time, highly interactive, and very social, (Kokoulina, 2020). Synchronous e-learning refers to online learning that takes place in real-time, where timetables are used for classroom sessions over the phone or via the Internet. In synchronous learning, students and teachers are both online and communicating from different locations in real-time, they supply and receive learning resources via mobile, video, web, and chat. During the event,

participants can voice their thoughts and engage in in-depth questions and solutions through this type of learning. In synchronous e-learning, increased technology and bandwidth skills are becoming more prominent. Learning takes place from the following sources:

- Audio and video,
- Conferencing,
- Chat webinars,
- Application sharing, and
- Instant messaging are all available in the virtual classroom.

C Hybrid e-learning.

Hybrid e-learning combines synchronous and asynchronous learning methodologies in such a way that they complement one another. Learners have more self-directed, focused, and autonomous learning experiences. Learners get the best of both worlds with this cost-effective and learner-centred strategy.

The need for e-Learning

E-learning has garnered enormous popularity over the years, delivering exceptional benefits for both instructors and students:

Personalized Learning & Support

E-learning allows teachers to move away from a "one-size-fits-all" learning paradigm towards a more targeted approach. Teachers create individualized learning experiences for students using a systematic learning process and a variety of material forms, which are impossible to provide in most traditional classrooms.

Easy & Fun Learning Experience

Students can access e-learning resources at any time and from any location using their mobile devices. Students having difficulty grasping a concept, have the option of repeating it as many times as they wish. They choose materials that are suitable for their needs and preferences.

Encourages Active Learning

Active learning is encouraged in an e-Learning environment. The digital instructional contents are designed to assist students to interact with the subject of study, solve issues using a variety of approaches, and participate in a discussion forum where they may debate difficulties, fresh concepts, etc.

Fresh Content

One of the most significant benefits of e-learning systems is that they offer constantly updated information. In today's world, e-learning helps people to synchronize with the world and maintain the necessary progression.

Increased Classroom Participation

E-learning increases communication between students and between students and the school: These parties can interact in many ways by using discussion boards, e-mail, and conversation rooms. These features, according to researchers, enable students to participate with and interact with the subjects at hand.

Reduction in schools' workload

E-learning Provide tools for analyzing grades, results, and exams, as well as the generation of statistics, as well as the transmission of student files and data to the College.

Easy access to the Teacher

E-learning has made it possible for students to submit queries to the instructor, and this benefit is more helpful and suitable for the teacher than being limited to his office, e-learning has made it much simpler to get and access the teacher as quickly as possible outside of official working hours. Kulik (1989), asserted that this would be more useful for those whose working hours were inconsistent with the teachers' schedule or when there was an inquiry at any time that could not be postponed,

E-Learning in Public Secondary Schools in Rivers State

On 3rd September 2016, the United Nations Educational, Scientific and Cultural Organization, UNESCO, trained 100 teachers drawn from different schools in Rivers State on the ICT component of teaching and learning. Speaking on the occasion Benoit Sossou, Director, UNESCO Regional Office, Abuja, the event was part of a global effort by the organization to promote excellence in knowledge acquisition and eliminate illiteracy, by helping teachers in the state to lay a solid foundation in the area of e-learning to deliver knowledge to students in core subject areas, (Vanguard Newspaper. 2016,).

Tidenewspaper, (2020, April 24), reported that the River State Government launched a unified e-learning platform for pupils and students in public and private schools, to overcome the physical closure of schools caused by the ravaging pandemic. The e-learning program was divided into two categories: the first was provided by the state-owned Rivers State Television station, and the second was provided via Zoom. The first category was meant for all those students that were to write external examinations, included in the category were JSS3 students who were preparing for JSSCE and the SSCE students who were also preparing for the SSCE, and the second category was meant to academically engage all other students that were shut out of school because of the pandemic.

In a bid to ascertain the impact of the unified e-learning platform for pupils and students in public and private schools in the state Onoyume a news and current affairs reporter of Daily Trust Newspapers on Sunday 6th September 2020 went out to interview parents in Port Harcourt and environs,.

> Mike Jaja, a Port Harcourt-based parent, said he is not complaining as his two children are accessing the-learning platform to attend virtual lessons, explaining further that he has spent a lot to acquire Android phones and Desktop computers for that purpose, Jaja said: "Two of his children attend Government Secondary School, Borokiri, and have effectively keyed into the state government virtual learning and the lessons have been rewarding."
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> Another Port Harcourt-based parent, Mrs Iheoma Oforji said apart from laptops and other digital gadgets she regularly buys data for her son to enable him to participate in the e-learning process. "It is very rewarding even though we spend a lot of money but it keeps the children busy," she said.
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> Izuchukwu Oforji, a student of Oyigbo Compressive College, Port Harcourt, whose parents have provided him with digital tools said e-learning kept his brain active and helped him to keep pace with the school's academic calendar.
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> But for Pascal Gogo, an indigent parent, e-learning is for the elite and not for children of poor parentage. "I can't afford the cost of android phones; laptops or computers to enable my kids to participate in the e-learning programme, ‘‘It was also difficult for them to hook up with the television version of the e-learning because in our area we don't have light and I don’t have a generator to enable us to connect to the programme," Gogo said.
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> A student of Oyigbo Community Secondary School, Godwin Gogo, said that his parents could not afford the cost of providing the e-learning platform for him to study. He said he does not have a computer, laptop or android phone to benefit from e-learning (Tide newspaper, 2020, April 24).

From the preceding report, it is clear that e-learning benefited both parents and kids; it also supported the state government in providing educational services even when schools were closed physically; yet, it came at a cost that prevented it from achieving the best results.

Challenges of e-learning in Public Secondary Schools in Rivers State

In most developing countries Nigeria inclusive, e-learning is seriously challenged by the availability and use of the new technology. Oliver, (2005) noted that numerous e-learning projects have failed to realize their aims and goals, leading many to question the quality and capabilities of this form of education, Ikemenjima (2005), further affirmed that there is a dearth of trained teachers for e-learning, lack of facilities, infrastructures, and equipment. Hadad, (2007), added that Ineffective e-learning participation is hampered by a lack of understanding of online learning tools, the ultimate success of which will depend on both students and teachers becoming confident and capable. Most of the teachers and students require adequate training on the use of e-learning technologies to be able to teach and learn effectively with it, those who may be able to navigate through the technology may also not have the professional discipline to remain focused. Appana, (2008) collaborated by attesting that while many students may have access to e-learning facilities, they tend to use them for entertainment rather than for learning.

The report from the Daily Trust of September 6, 2020 by Onoyume, in a nutshell, catalogued the experiences of the various users who responded to the reporter; their submissions form the basis of the challenges of e-learning in Public Secondary Schools in Rivers State, which can be summarised as follows:

High Cost of Computers and Mobile Devices: Some parents expressed their dissatisfaction with the expensive cost of computers and mobile devices, resulting in their children's exclusion from e-learning.

Cost and unreliability of Data: Some parents expressed dissatisfaction with the amount of money they spent on data to support their children's e-learning, while others expressed concern that their children would still be unable to learn as a result of the data's unreliability.

Synchronous e-learning ineffective: One of the students stated that his limitation was caused by the synchronized nature of television transmission, alleging that most of the time the lectures were aired on television, he was unable to participate due to a power outage.

Assessment and Management of Learners: There was no Learning Management System in place to assess learners or track and monitor students' progress.

No e-learning infrastructure: Most public secondary schools in Rivers State lack computer laboratories, internet connections, and competent instructors to conduct e-learning, and the majority are not linked to the power grid or have standby generators to supply electricity, making it hard for such institutions to support e-learning.

Lack of trained Teachers: Except for the 100 randomly chosen teachers who were trained by UNESCO on the delivery of key topics through e-learning, there hasn't been any training for teachers to enable them to improve e-learning teaching skills. Due to this, there aren't enough qualified instructors to lead online learning.

CONCLUSION

It is clear that e-learning is here to stay, and it is steadily changing the way teaching and learning take place. It has provided a new and flexible method of teaching and learning that is highly consistent, effective, scalable, and adaptable to the needs of all students and teachers alike.

Schools will heavily rely on the various types of electronic delivery systems and communication tools available in the market to deliver flexible educational content to students in the twenty-first century, this is coming on the heels of the digital revolution, which has resulted in remarkable changes in how educational content is accessed, consumed, discussed, and shared. Technology has tremendously impacted education, and it is spreading like wildfire.

It is essential that the Rivers state government, through the Ministry of Education, move quickly to build a state-wide framework for the deployment of e-Learning in the state in order to keep the state's public secondary schools connected to the future.

SUGGESTIONS

In light of the impediments of e-learning in Rivers state's public secondary schools, the following suggestions can help mitigate the negative consequences.

I. The state government should launch a state-wide e-learning training program, focusing on teachers and students. This should be accomplished through teacher in-service training, workshops, seminars, and conferences, and computer instruction should be mandatory for all pupils.

2. To improve web-based learning, computer laboratories should be created in every public secondary school in the state, with computers connected to the internet, the government should provide internet bandwidth and supply mobile devices to students; this is an unavoidable expense that should be weighed seriously.

3. To facilitate the usage of electronic equipment for e-learning in public secondary schools, the state government should purchase standby generators and uninterruptible power supplies to address the problem of epileptic or inconsistent power supply.

4. The state government should recruit technologists and technicians to perform routine maintenance on internet infrastructure and equipment, as well as provide user-support services in public secondary schools, to ensure that e-learning is implemented smoothly throughout the state.

5. The state government should establish digital libraries and state-wide learning management systems to help schools manage, measure, and evaluate students' progress through e-learning programs.

REFERENCES

Andersson, A. & Gronlund, A. (2009). A conceptual framework for e-learning in developing countries: *A Critical Review of Research Challenges*.

Appana, S. (2008). A review of benefits and limitations of online learning in the context of the student: *International Journal on e-learning, 7(1), 5-22*.

Eze S. C, Chinedu-Eze V, Bello A. O. (2018). The utilisation of e-learning facilities in the Educational Delivery System of Nigeria: *International Journal on Educational Technology in Higher Education. 15 (34): 1-20*.

Kokoulina, O. (2020, May 5*). E-Learning basics*. https://www.ispringsolutions.com/ blog/what-is-synchronous-learning.

Kulik, J. (1989). The *international encyclopaedia of educational technology*.

Mac-Ikemenjima, D. (2005). *E-Education in Nigeria: Challenges and Prospects.*

Mac-Ikemenjima, D. (2005, April). E-Education in Nigeria: Challenges and prospects. A Paper presented at the 8th UN ICT Task Force Meeting.

Maduhusudhan, M. (2008) *Use of UCC internet e-journals. Library Hi Tech, 26 (3), 369-386*

Nkanga E (2007). *The Rise of E-learning in the Country*.

Oliver, R. (2005). Using blended learning approaches to enhance teaching and learning outcomes in higher education. Proceedings of the international association of University Joondalup of Presidents' Teaching Showcase, Edith Cowan University.

Sahr. T. (2019). A keynote address at the first international conference of the faculty of education, the University of Port Harcourt with the theme: Digitalization of Education: The Implication for the 21st Century teachers.

Salawudeen, O. S. (2010) *E-learning technology*. The Nigerian Experience.

Sander Tamm, (2019. *The history of e-learning*: https://e-student.org/history.

Takalani, T. (2008). Barriers to e-learning amongst postgraduate black students in higher education in South Africa. Thesis presented in partial fulfilment of the requirements for the degree of Master of Philosophy (Information and Knowledge Management), Stellenbosch University.

Tide newspaper, T. (2020, April 24). RSG unveils e-Learning platform for third term resumption.https://www.thetidenewsonline.com/2020/04/24/rsg-unveils-e-learning-platform-for-third-term-resumption/

UNO (2020). Education during COVID-19 and beyond: The United Nations educational scientific and cultural organization, UNESCO

Zu, S. (2008). *E-learning importance and design*. Whiter Paper ITEC 860 Distance Education.