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Use of Electronic Resources in Teaching and Learning in Secondary Schools in Enugu State during COVID 19 Era: How Effective?

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INTRODUCTION

Over the years, teaching and learning has seen development from one stage to another consequent upon some factors ranging from natural events to technological advancements. For instance, Nigeria educational system was based on traditional approach and later transformed into formal education characterized with teaching and learning experience organized in the four walls of the school. Again, communication between teachers and students is done traditionally i.e. by personal contact and face to face interaction in the classroom. This arrangement was truncated by the unprecedented event of pandemic called "COVID-19". As a result of the spread of COVID-19 pandemic and a quick response by the Federal government to mitigate rate of the pandemic's surge, schools in Enugu state and the entire country were forced to close (Okoro 2021). The consequential lockdown resulted into unparalleled education disruption. This invariably reduced available opportunities for many people, both young and old to attend schools due to lockdown measure introduced by the government. As a result, the urgency to save the education system from total collapse inspired technological innovation in school managements, individuals, group and governments within the education sector to aid teaching and learning to secondary school students in Enugu State via electronic resources (Livina, and Mole, (2021).

Electronic resources refer to those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. It is the collective means of communication by which general public or populace is kept informed about the day to day happenings in the society. Today we are living in the era of information and communication technology (ICT) where a child starts playing on a touch-screen before he learns to crawl. The power of online technology has captured the minds of the generation and this influence could be

seen in the field of education. The technology for teaching students in this competitive scenario and in the era of COVID-19 include Zoom, WhatsApp, YouTube, face book, instagram, twitter, among others (Suraweera et al 2011). Utilization of electronic resources effectively helps to create an academic atmosphere where students, teachers, management and other stakeholders can participate in teaching and learning process irrespective of their locations. Despite the revolutionary changes brought by Information communication technology and the great potentials of EIRs in enhancing effective teaching, electronic information resources are grossly underutilized even during the era of COVID-19. It is as a result of this, that this study aims at providing an insight into the effective use of electronic resources in teaching and learning in secondary schools in Nsukka township of Enugu state during the COVID 19 pandemic.

Objectives

1. To identify the electronic information resources available in schools during COVID 19 pandemic.

2. To determine the extent of utilization of electronic information resources in schools during COVID 19 pandemic.

3. To find out the challenges encountered in the use of electronic information resources in schools during COVID 19 pandemic.

4. To find out the strategies proffered in the use of electronic information resources in schools during COVID 19 pandemic

Literature review

Over the time, there have been a lot of changes going on globally regarding the ways of information and how knowledge is being disseminated and transferred. With upsurge of COVID

19 pandemic which resulted into total lockdown, it becomes imperative to make use of electronic information resource in teaching and learning to support students in their learning and ensure continuity in teaching. Electronic information resources can be defined as those information resources that require technologies like computer to be able to access them; this could be through a personal computer, smart technologies, mainframe etc. Madondo, (2017), E-information resources requires any electronic product that delivers a collection of documents containing information or even data which can be in different formats. Omoike (2013) stated that electronic information resources comprise instructional materials such as audio and video cassettes, CD-ROM, television and radio broadcast as well as multimedia components such as computer and satellites.

Electronic information resources are believed to be beneficial in many ways. In this regard, Ekenna & Mabawonku, (2013) postulated that electronic information resources (EIRs) are the bedrock of academic success as they provide accurate and timely information for better educational outcomes and aid in the retrieval of huge amount of information for teaching, learning and research. Students use EIRs to retrieve current literature to study, carry out assignments and prepare for examination, electronic Information resources are also used to carry out research project, communicate and collaborate with peers and teachers via the Internet on e-mail or by following blog discussions (Adeniran, 2013). Electronic resources make school climate a social system which compels the principal, teachers and students to interrelate and share teaching and learning experience, planning, problem solving and also interact through personnel matters which are part of normal school routine (Nwobodo 2017)

Under-utilization of EIR alleged to be as a result of some challenges being faced mostly in the developing countries. In this vein, Adedokun and Fawole (2018), in a study on use of

Electronic Information Resources by Undergraduates of National Open University of Nigeria in Ilorin Study Center identified lack of information retrieval skills on the part of the students as a major challenge to the effect use of EIR. The non-availability of internet facilities in many schools, or the inability of schools that have internet facilities but cannot afford to subscribe for them was also identified as a problem of EIR. This by extension has brought about the problem of low bandit and poor network connectivity as well as erratic power supply which has truncated the interest of both the students and teachers in making use of judicious use of EIR. Gurikar and Gurika (2015). Relatively, Ogenetega (2014), found out that non-availability of online databases, lack of formal training in internet skills, slow band-wits, and slow server as issues of concern of EIR usage Mawere and Sai (2018) listed lack of competencies, poor infrastructures, uncooperative attitude of staff and students, parents un-affordability of android phones, fueling of generator and even lack of generators by some parents made learning via net almost impossible; the consistent loss of pass-words among others were listed as a major problems. Yebowaah and Plockey (2017). To proffer solutions to these challenges Gakibayo, Ikoja-Odongo and Okello-Obura(2013) postulated that it is of great importance for teachers and learners to have computer skills in order to use e-resources. Comparatively, Owolabi, Idowu, Okocha, and Ogundare (2016) inferred that it is absolutely necessary for staff to be highly competent in order to effectively use and manage electronics information resources at every level of learning.

Methodology

The research design adopted for the study was descriptive survey. The target population of this study comprised the teachers in the two schools that used electronic information resources in teaching and learning during COVID 19 pandemic in Nsukka town. Nsukka town is located in

Enugu state, Nigeria. The two schools namely Immaculate foundation Infant and junior school (IFIJS); University of Nigeria secondary school (UNSS) were purposely chosen as schools that engage in online teaching during the COVID 19 pandemic. The total population at the time of this study was 87teachers. A sample of 30 respondents were selected using purposive sampling technique to select teachers that participated in the study. A self-structured questionnaires were administered physically to the teachers at their respective classrooms. Data collected were analysed with the use of percentages and presented in tables.

Result

Table 1: Electronic information resources available

Electronic information resources	IFIJS	UNSS	√	X	D
Television	√	X	1(50%)	1(50%)	AV
Projector	√	√	2(100%)	0(0%)	AV
Computer	√	√	2(100%)	0(0%)	AV
Phone	√	√	2(100%)	0(0%)	AV
Internet facilities	√	√	2(100%)	0(0%)	AV
Film	X	X	0(0%)	2(100%)	NA
Radio	X	X	0(0%)	2(100%)	N A
Slides	√	√	2(100%)	0(0%)	AV

Key: IFIJS Immaculate foundation Infant and junior school; UNSS =University of Nigeria secondary school

The result presented in table 1 showed that out of eight (8) Electronic information resources in school listed in the table, an aggregate of 6(75%) are available while 2(25%) not available in school libraries in Nsukka town. Also, the researchers observed that in Immaculate foundation Infant and junior school; 6(75%) were available, while 2(25%) were not available; in University of Nigeria secondary school 5(62.5%) were available, while 3(37.5%) were not available.

Table 2: Extent of use of electronic information resources

Electronic information resources	VHE	HE	VLE	LE	%	D
Television	0	11	0	19	37	LE
Projector	1	19	6	4	66.6	HE
Computer	8	12	7	3	66.6	HE
Phone	24	6	0	0	100	VHE
Internet facilities	9	9	3	9	60	HE
Film	0	0	2	28	6.6	VLE
Radio	0	0	2	28	6.6	VLE
Slides	13	14	2	1	90	VHE

Key: VHE= very high extent, HE= high extent, VLE= very low extent, LE= low extent

Table 2 showed the extent of use of electronic information resources in both primary and secondary schools ranges from phone(100%) and slides(90%) at a very high extent; internet facilities(60%), projector and computer at a high extent (both at 66.6%); television(37%) at a low extent; film and radio at very low extent.

Challenges encountered in the use of electronic information resource

Challenges	SA	A	SD	D	%	D
Power outage	27	03	0	0	100	Agree
Inadequate fund	26	01	0	3	90	Agree
Lack of skill by the teachers	6	10	4	10	53	Agree
Lack of skill by the students	11	10	4	5	70	Agree
Lack of Internet facilities	19	9	0	2	93.3	Agree
Lack of android phone/computer	10	22	1	7	70	Agree
Lack of interest on the part of students	11	10	3	6	70	Agree
Low bandwidth	13	09	0	8	73	Agree

Key: SA=Strongly Agreed, A=Agreed, SD= Strongly Disagreed, D= Disagreed

Table 3 showed the challenges encountered in the use of electronic information resources in primary and secondary schools during COVID 19 pandemic. The result revealed that all the listed items were agreed on.

Table 4: Strategies to promote use of electronic information resources

Strategies	SA	A	SD	D	%	D
Provision of alternative power supply	25	5	0	0	100	Agree
Provision of Fund	22	8	0	0	100	Agree
Training teachers in computer/internet skill	13	10	2	5	77	Agree
Training students in computer/internet skill	10	14	0	6	100	Agree
Provision of Internet facilities	19	9	0	2	93	Agree
Provision of android phone/computer	10	14	1	5	80	Agree
Make the programme interactive	11	10	1	6	70	Agree
Provision of high internet bandwidth	15	10	0	1	83	Agree

Key: SA=Strongly Agreed, A=Agreed, SD= Strongly Disagreed, D= Disagreed

The result on table four showed that the respondent agreed that there is need for provision of alternative power supply, provision of fund, training students in computer/internet skill, provision of Internet facilities.

Discussion of findings

Result of the findings revealed the electronic information resources provided in the schools under study as: television, projector, computer, phone, internet facilities, and slides. Omoike (2013) pointed out that electronic information resources comprise instructional materials such as audio and video cassettes, CD-ROM, television and radio broadcast as well as multimedia components such as computer and satellites. However, television was found to be provided in only one school, while resources such as film and radio were not provided in both schools. The findings also revealed that the use of electronic information resources in primary and secondary schools were hindered by many challenges such as inadequate fund, power outage, lack of internet facilities, low bandwidth, lack of android phone/ computer, lack of interest on the part of the students and lack of skill to use computer and internet by the teachers as well as the students. The result of the findings indicated that the respondents agreed on all the listed items as the strategies to that can enhance the use of electronic information resources in primary and secondary schools. The finding is buttressed by Gakibayo, Ikoja-Odongo and Okello-Obura (2013) that it is of great importance for teachers and learners to have computer skills in order to use e-resources. To give credence to the study, Owolabi, Idowu, Okocha and Ogundare (2016) recommended that staff competency is one of the basic requirements for effective management of electronics information resources at every level of learning.

Conclusion

The study titled Use of Electronic Resources in Teaching and Learning in Secondary Schools in Enugu State during COVID 19 Era is a descriptive study that purposely studied the use of electronic information resources in two schools in Nsukka town of Enugu state. The study found that the schools possess some of the EIRs and they were made used of during the pandemic, nevertheless due to low bandwidth, lack of android phone, lack of computer, lack of internet facilities, lack of interest on part of the students and lack of skill on the part of both teachers and staff, the use of electronic information resources were not very effective. This therefore necessitate the provision of internet facilities, provision of high and stable bandwidth, training of both teachers and students on use of ICT, and the need to make online learning through use of EIRs interactive so as to appeal and sustain the interest of students.

REFERENCES

Adedokun & Fawole(2018). Use of Electronic Information Resources by Undergraduates of National Open University of Nigeria in Ilorin Study Center. Journal of Applied Information Science and Technology, 11 (1).

Adeniran, P. (2013).Usage of electronic resources by undergraduate students at the Redeemers University, Nigeria. International Journal of Library and Information Science,5(10), 319-324.

Daramola, C. F. (2016). Perception and utilization of electronic resources by undergraduate students: the case of the Federal University of Technology Library, Akure. American Journal of Educational Research 4(5): 366-370.

Ekenna, M. & Mabawonku, I. (2013). Information retrieval skills and use of library electronic resources by University undergraduates in Nigeria. Information and Knowledge Management, 3(9), 6-14.

Gakibayo, A., Ikoja-Odongo, J. R. &Okello-Obura, C. (2013).Electronic information resources utilization by students in Mbarara University Library. Library Philosophy and Practice (ejournal) Paper 869.

Gurikar, R. & Gurikar, R. (2015). Use of library resources and services by Karnatak University r research scholars: a case study. DESIDOC Journal of Library & Information Technology 35 (5): 361-367.

Livina, D. C. & Mole, A. J. (2021), "Academic Staff Use of Electronic Resources (ER) in

Nigerian University Libraries During the COVID-19 Lockdown Period" (2021). Library Philosophy and Practice (e-journal). 5341. https://digitalcommons.unl.edu/libphilprac/5341

Mammo, Y., & Ngulube, P. (2015). Academics' use and attitude towards open access in selected higher learning institutions of Ethiopia. Information Development, 31(1) 13-26

Mawere, T & Sai, K. O. (2018). Investigation on e-resources utilization among university students in a developing country: A case of Great Zimbabwe University. South African Journal of Information Management 20 (1).

Nwobodo, D. and Chineze, (2017). A Relationship between school climates and academic adjustment of students in secondary schools in Enugu state. International Journal of Education (IJOE) 2, (1).

Oghenetega, I. (2014). Usage and awareness of E-Resources by lecturers in two selected Nigerian Universities. Journal of Library & Information Science 3 (4): 761-774

Okoro, C. K. (2021) Covid-19 and the Imperative of Prioritizing Health and Education Sectors in Africa. In COVID-19 and afrocentric perspectives: health and economic implications. Ikechukwu, Chiugo and Ejikemeuwa(eds.)

Omoike, A. D. (2013). Use of electronic resources by distance students in Nigeria: the case of the National Open University, Lagos and Ibadan Study Centers. Library Philosophy and Practice (e-journal) Retrieved from http://digitalcommons.unl.edu/libphilprac on15/7/2014

Owolabi, S. Idowu, O. Okocha, F. & Ogundare, A. (2016). Utilization of Electronic Information Resources by Undergraduate Students of University of Ibadan: A Case Study of Social Sciences and Education. Journal of Education and Practice. 7, (13).