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EVALUATION OF USEABILITY OF LEARNING MANAGEMENT SYSTEMS IN SECONDARY SCHOOLS I N ENUGU EDUCATION ZONE DURING COVI D-19 LOCKDOWN

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ABSTRACT
This study evaluates the extent of useability of learning management systems in secondary schools in Enugu Education Zone during COVID-19 lockdown. Two specific purposes and two corresponding research questions were raised to guide the study. The population of the study comprised 1763 teachers and 33 principals in the 33 secondary schools making the total population of 1796 in the Enugu Education Zone. Simple random sampling technique was used to sample 360 that is 20% of the entire population of Principals and Teachers of Enugu Education Zone. The instrument used to obtain data was a structured online Questionnaire constructed by the researchers and online interview using phone call for some of the respondents that are not in social media. The instrument used was validated by three experts. The data collected were analyzed using mean statistics. The findings showed that there are enough computers available for learning, television sets are available to learn at

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home, mobile internet accessible phones are available for learning and the is adequate internet connection in Enugu Education Zone, Enugu State, Nigeria. Also, it was found that desktop computers, laptops, televisions and mobile device are type of learning management system used in secondary schools in Enugu Education Zone, Enugu State, Nigeria during COVID 19 pandemic**.** Based on the findings of this study, the researchers recommended that enough computers should be purchased by the schools for successful implementation of e-learning system. The e-learning system should be accessible both on Local Area Network (LAN) and on internet.

Keywords: Learning Management System, and the extent of usability of Learning Management System in Secondary Schools in Enugu Education zone during Covid 19 pandemic.

Introduction

In essence, COVID-19 pandemic has completely upended the working life of teachers, SS3 Students are at home trying to do online lesson to prepare for WAEC and NECO exams. The time teachers would normally have spent in the classroom, they are at home running away from COVID19. Whatsapp, Zoom meetings, telegram and google scholar are the used as alternative when you have data and there is no clear end in sight.

Education is no longer limited within the four walls of a regular classroom setting in many countries of the world. The noticeable advancements had even called for the redefinition of formal education in some instances. Access to formal education has continued to grow for interested persons and teachers' roles are being redefined continually from being the sage at the centre of instructional system to the-guide-by the-side. Students at different levels are also able to learn more facts in less time due to the embrace of technology by education (Pardemean, & Suparyanto, (2014).

Computer technology in educational systems goes back to decades during the "information revolution." In the 19th century, the "teaching machine," a special-purpose electromechanical machine, was used to teach students. This device displayed the instructional material for students, making information perception easier and more efficient. The origin of the learning management system (LMS) can

be traced back to the 1990s, when it was known as the computer-based integrated learning system. During the 1980s, there were debates on the use of computers in education, when researchers, similar to now, conducted studies on effective learning systems. The use of computers was supported by the majority of scholars and teachers, but not by all, which led to continued debates. It was not until the 1990s that the World Wide Web, educational software, and personal computers placed computer-assisted pedagogy at the center of educational processes. These trends led to the development of Learning Management Systems.

The emergence of Learning Management System has been traced by some researchers to rudimentary training management systems, which thereafter became platforms for e-learning. Rudimentary training management systems were developed based on trial and error; the results of which were further used as the basis for computer learning systems. In teaching and learning, educational technology goes hand in hand with pedagogy. As such, Learning Management System, a software designed to assist administrative activities and facilitate how the students participate in e-learning materials, was developed. Ikediugwu, Obiakor & Ezenwagu (2020) said that the software application is used in tailoring content, e-learning programs, classroom and online events, tracking and reporting online programs, and documentation.

Isaacs, & Hollow, (2017) asserted that Learning Management Systems connect the students or learners with the learning contents in a standardized manner through software and programs specifically developed for student learning. They manage learning events, contents, and learners and administer and manage the learning processes and the performance of the learners by means of recording the activities on the computers and displaying statistics and plans. Often, the term "Learning Management System" is used interchangeably with the "course management system". Okechukwu (2018) said that the creation of learning resources, delivering content to the students, monitoring students' participation, and assessing their performance are tasks that are highly dependent on Learning Management System. Research shows that there is a need to centralize university processes

and create a sense of uniformity among the universities. Consequently, learning management system had to be implemented in many learning facilities. The new directions of these software applications included the educational focus on economic goals rather than social goals and discourse of free market competition.

The education system in Nigeria is run through 36 States and the Federal Capital Territory (FCT). Within these 36 States are 774 Local Government Areas (LGAs).

The structure of running education in Nigeria is linked through the three tiers of (l) the Federal Ministry of Education (FME) and Universal Basic Education Commission (UBEC) to (2) States Ministries of Education (SMoEs) and State Universal Basic Education Boards (SUBEBs) to (3) the Local Government Education Authorities (LGEAs) located in the Local Government Areas. The COVID-19 pandemic creates a complex challenge for the education delivery system to support equitable access to quality education for all children. Following the directives from the Federal Ministry of Education (FME), all schools have been closed in Nigeria affecting 50 million children and youths who are now not attending schools, in addition to the large number of children who were already out of school. Lennon, & Maurer, (2013) said that the impact of the school closure will be huge on education system of Nigeria which is already weakened in access to quality learning and low resilience to shock. Parents and host communities (especially in rural areas) are also predominantly illiterate and are may not be able to provide adequate support for learning if not well equipped and supported to do so. The restrictions caused by non-pharmaceutical interventions like social distancing have also impacted education at all levels and will continue to do so for at least several months, as learners and teachers are unable to physically meet in the schools and universities. COVID-l9 further exacerbates inequity in education, without state support, the absence of community and household interventions to ensure continuity of education will mean that the most vulnerable are less likely to access any form of education services and learning opportunities.

Besides, the budget has limited flexibility in reallocation of resources in education, which has implications for

the implementation of contingency measures and actions required to ensure equitable continuity of education. The coordinated and accelerated efforts from the government, Economic, social and technological forces are placing enormous demands on tertiary educational institutions and call for increasingly flexible and diverse systems to cater to an ever growing range of learning needs. Flexible approaches aim to provide learners with greater choice over when, where and how they learn by adopting various flexible delivery strategies such as distance education, online learning, and mixed mode delivery, self-paced or self-directed learning strategies. Traditionally, schools delivered their flexible teaching programs to students with the aid of print based course material and with limited information technology support such as email and electronic discussion lists. However, with recent advances in the digital technologies, institutions are increasingly seeking the potential use of information and communication technologies (ICT) to facilitate their flexible teaching needs. In particular, with the emergence of internet and web technologies, schools around the World have been seeking to exploit the use of e-learning technologies to support their distance teaching. Among the diverse e-learning technologies, the learning management system (LMS) is a popular e-delivery medium within schools. Ajadi, Salawu, & Adeoye, (2018) assert that with response to growing needs of the student population, online education is increasingly common in education. Schools are adopting e-learning technologies for two purposes:

1) To enhance the flexibility of traditional classroom-based face to face courses with web access to syllabus, materials and discussions
2) As a sole channel of distance education modality that eliminates or reduces "on-ground" classroom time.

Educators rarely have all the technological skills needed to develop custom web sites for online classes. Therefore, many educational institutions have adopted online course-building applications, or a learning management system to facilitate online learning. The popular Learning Management systems in use are Blackboard,WebCT and Moodle applications. Two major functionalities associated with Learning Management System are:

1. Course administration and management
2. Course pedagogy, teaching and learning.

Statement of the Problem

Every teacher was busy in the class teaching, trying to inculcate into student the necessary things they need to know. Beyond doubt, Covid-19 pandemic presents unique challenges and remain a major problem experienced around the world, the challenges of Covid-19 pandemic has resulted to the closure of all schools and institutions of learning in Nigeria, the Covid-19 pandemic is now the main thrust at all levels of government and the society at large. Therefore, Assessment of usability of learning management systems in secondary schools in Enugu Education Zone during Covid-19 lockdown, students' academic interest, the position of e-learning and the classroom conventional learning is seriously affected due to the pandemic. Above all, the premium placed on e-learning as a palliative due to the Covid-19 pandemic outbreak has devalued the conventional classroom learning system which foster learning interaction between teachers and students in the teaching and learning process within the classroom and beyond. A close observation shows that seriousness attached to e-learning at this critical period of Covid-19 pandemic seems to have affected the conventional method of teaching and learning. This therefore, should be a concern to Stakeholders in Education. Hence, the research seeks to investigate the availability of Learning Management system during Covid-19 pandemic on students' academic interest, especially with research focus on the learning management system, and online teaching and learning process in Enugu Education Zone.

Purpose of the Study

The purpose of this research was to assess the usability of Learning Management system during Covid-19 pandemic on students' academic interest, especially with research focus on the learning management system, and online teaching and learning process in Enugu Education Zone. The research specifically sought to:

1. Determine the usability of learning management System during COVID 19 pandemic on secondary school students academic interest in Enugu Education Zone, Enugu State, Nigeria

Ascertain the software used in learning management system in secondary schools in Enugu Education Zone during Covid 19.

Research Questions

The following questions were raised to guide the research:

1. To What extent does learning management System useable during COVID l9 pandemic in secondary school in Enugu Education Zone, Enugu State, Nigeria?
2. What are the software used as learning management system in schools in Enugu Education Zone during Covid 19 Pandemic?

Review of Related Literature

Concept of learning Management

A leaning management system (LMS) is a software application or Web-based technology used to plan, implement, and assess a specific learning process. Typically, a learning management system provides an instructor with a way to create and deliver content, monitor student participation, and assess student performance. Aiyebelehin, (2012) posited that a learning management system may also provide students with the ability to use interactive features such as threaded discussions, video conferencing, and discussion forums. Learning Management Systems (LMSs) are also described as internet based software allowing instructors to manage materials distribution, assignments, communications and other aspects of instructions for their courses". Learning management systems help the instructor deliver material to the students, administer tests and other assignments, track student progress, and manage record-keeping. Learning Management Systems are focused on online learning delivery but support a range of uses, acting as a platform for fully online courses, as well as several hybrid forms, such as blended learning and flipped classrooms.

Features of Learning Management

According to Oliver, (2018) System Integration with Human Resource Department - Learning Management Systems that aren't synchronized with Human Resources systems misses the boat. When systems are integrated, a human resources employee can enter new employees information into the Human Resource system, and the employee is automatically signed up for

training tailored to his or her role within the company. Administration tools- The learning management system must enable administrators to manage user registrations and profiles, define roles, set curricula, chart certification paths, assign tutors, author courses, manage content, and administer internal budgets, user payments, and charge-backs.

Adejumo,(2018), asserted that administrators need complete access to the training database, enabling them to create standard and customized reports on individual and group performance. Reports should be scalable to include the entire workforce. The system should also be able to build schedules for learners, instructors, and classrooms. Most important, all features should be manageable using automated, user-friendly interfaces. In addition, the system should be able to identify employees who need a particular course and tell them how it fits into their overall career path, when it's available, how it's available (classroom, online, CD-ROM), if there are prerequisites, and when and how they can fulfill those prerequisites. Once learners complete a course, the learning management system can administer tests based on proficiency requirements, report test results, and recommend next steps. In that capacity, Learning Management Systems are instrumental in assuring that organizations meet rigid certification requirements in such vertical markets as healthcare, finance, and government.

Content access-This involves the medium (e.g., classroom, CD-ROM, online, etc.) in which the content is delivered, the method (e.g., instructor-led, self-paced, blended) in which the content is delivered, the languages in which the content is delivered and to whom the content is being delivered (e.g., students, employees, customers, partners, etc.).

Content development- Content development encompasses authoring, maintaining, and storing the learning content. This is where the issues of authoring-tool compatibility, version control, and re-usable learning objects are considered.

Content integration-It's important for an Learning Management System to provide native support to a Wide range of third-party courseware.

When shopping for a Learning Management System, keep in mind that some learning management systems are compatible only with the supplier's own courseware, and others do little more than pay lip-service to learning content standards. Adeyemi, & Olaleye, (2017), posited that a Learning Management System supplier should be able to certify that third-party content will work within their system, and accessing courses should be as easy as using a drop-down menu.

Skills management-Skill assessment and management capabilities revolve around learners assessing their competency gaps. Skills assessments can be culled from multiple sources, including peer reviews and 360-feedback tools. Managers must be able to determine whether results are weighted, averaged, or compared to determine a skill gap. Businesses also might use this feature to search their employee base for specialized skills.

Assessment capabilities-It's a good idea to have an assessment feature that enables authoring within the product and includes assessments as part of each course. Evaluation, testing, and assessment engines help developers build a program that becomes more valuable over time.

Adherence to standards-A Learning Management System should attempt to support standards, such as SCORM.

SCORM:- stands for Shareable Content Object Reference Model, is a set of technical standards for e-Learning software products, SCORM tells programmers how to write their code so that it can "play well" with other eLearning software. It is the de facto industry standard for eLearning interoperability.

Support for standards means that the Learning Management System can import and manage content and courseware that complies with standards regardless of the authoring system that produced it. Beware: Unless the supplier certifies that the content will work on your Learning Management System, plan on additional expenses.

Configurability- If an organization needs to completely re-engineer its internal processes to install an learning management System or employ expensive programming resources to make changes to the Learning

Management System, then it's probably not a good fit. Also, it's helpful if IT and designers can access the LMS behind the scenes; they need to set processes and standards based on company policy. To make some systems IT user-friendly, some LMS providers have user groups or customer advisory councils that provide insight into installing or upgrading systems. Security-Security is a priority in any data system containing employee information and proprietary content. Security measures typically include passwords and encryption.

Examples of Learning Management System

Many online platforms have tools and features designed specifically for educators, according to Olson, Codde, deMaagd, Tarkelson, Sinclair, Yook, & Egidio, R. (2016) they include:

- Blackboard - Blackboard is a comprehensive online education platform that includes a mobile application and real-time collaboration features. Assessment tools include an online test generator, interactive rubrics, and built-in reports.
- Desire2L earn - This is an integrated suite of products for the creation, delivery, and management of online courses. Includes a mobile application, student assessment data, and tools for capturing and broadcasting presentations live and on-demand.
- Edmodo: Edmodo is a free learning management platform that merges classroom content, safe communication, and assessment with social media savvy. Students and parents can get quick answers to questions as well as stay current on class assignments and happenings via the student planner and discussion threads. Post a warm-up question, or take a quick poll to get student input on the day‘s topic or to quickly assess understanding. Save time by using teacher-created assessments, and let Edmodo do some or all of the grading for you. Collect, grade, and return student essays virtually, perhaps using an outside feedback tool such as mp to promote student collaboration. Or use the teacher and student planner feature to efficiently manage assignments and deadlines. If you‘re looking to monitor student progress or

personalize learning, try using the CK-12 and Wise-wire integrations to increase student engagement and assign standards-based formative assessments. Edmodo is a free online platform that emphasizes collaboration and social media to customize learning. Designed specifically for classroom use, this platform includes tools for homework, assessment, discussion, and mobile learning. Additionally, Edmodo communities connect teachers to a global network of educators.

- NEO- NEO is a learning management system (LMS) that makes it easy to create and manage all learning activities, whether it's building online classes, assessing students, enhancing collaboration, or tracking achievement. Intuitive design. Easy to implement. Powerful features. NEO offers both free and premium plans unlimited storage. The K12 platform features instructional content delivery, calendar, discussion, videoconferencing, blog, and wiki tools. Assessment tools include an online grade book, rubric generator, and built-in reports.
- Google Scholar- Google Scholar is a free Website construction and hosting tool that is part of the Google Apps for Educators suite. There is a slight learning curve in getting accustomed to the nuances of using Google Sites. This post will serve as a resource to get you up and running with creating, editing, and revising in Google Sites. Google sites is a free, customizable Website templates with settings for accessing and sharing information. Provides seamless integration with Google Docs* and Google Calendar*.
- Moodle - Moodle actually stands for Modular Object-Oriented Dynamic Learning Environment is a free software, a learning management system providing a platform for e-learning and it helps the various educators considerably in conceptualizing the various courses, course structures and curriculum thus facilitating interaction with online students.

The usability of Learning Management System in Secondary Schools in Enugu Education zone during Covid 19 pandemic

COVID-l9 has forced the schools around the world to adopt online learning. We are now in a state of emergency and must react with different and available ways of learning such as e-learning systems and mobile learning applications. Online learning is not new to learners, nor is distance learning. However, COVID-19 is reviving the need to explore online teaching and learning opportunities. According to UNESCO (2020) confirms that universities and schools closure have several adverse consequences on students such as interrupted learning which results in students and youth being deprived of opportunities for growth and development.

- Telegram Messenger: is software used for communication and instant messaging and offers many possibilities such as sending various media files, in addition to making voice or video calls.

Many activities can be carried out through social networking sites, the most important of which is web-based collaborative learning.

Telegram as an E-Learning Tool

Nowadays we find ourselves in front of many applications and software that appear on a daily basis for the purpose of social networking, but few of us are looking for the possibility of using them in education.

Therefore, the importance of social media programs, sites, applications and software in the educational process increases.

As educators, you should look for the possibility of investing the means and applications of social communication in the educational process in a practical and functional manner, with the aim of facilitating a lot of tasks for the teacher and the learner in the educational process.

Therefore, online digital learning systems can address this problem with easy access to these systems and offer fast internet connections.

In fact, e-learning tools are playing a crucial role during this pandemic. E-learning systems can assist learning providers to manage, plan, deliver and track the learning and teaching process.

Furthermore, it aims to help instructors, schools and universities facilitate student learning during periods of universities and schools closure. In addition, most of these system are free which can help ensure continuous learning during this Coronavirus pandemic. However, the provision and usage of online learning materials in e-learning system is becoming the main challenge for many universities during COVID-19 pandemic.

E-learning system is an important source of information, due to its ubiquity (availability anywhere and anytime), low cost, ease of use and interactive character.

E-learning system such as Blackboard has several fantastic features that is valuable for use during this Coronavirus pandemic. Using this system, it well might well be more practical. For example, through e learning system, study be texting or engaged in some learning activity with teachers on a laptop device from their home. In addition, students can easily get learning con1 their mobile devices because they can be connected to mobile networks or wireless networks. Okiki, (2016) mentioned that one approach learning is the use of learning management system (LMS). Thus, e-learning to offer, organize and manage e-learning activities within a system, such as enrolment, exams, assignments, course descriptions, lesson plans, mi syllabus, basic course materials, etc. (Haghshenas 2019). By converting from traditional learning, this will enable learner's access to e-learning system

Blackboard 24hours per a day, and presents several benefits such as increase effect and efficiency of learning services through improved connectivity with teachers better access to learning materials (Idris and Osman 2015).

Theoretical Framework

Diffusion of Innovation Theory

Diffusion of Innovation Theory is another theory that tends to attempt to explain why users will or will not adopt the use of a new technology Rogers,(2002).
Diffusion is the process of communicating an innovation or intervention among the members of a social system over a period of time Sanson-Fisher, (2004). The decision to accept an innovation and the innovation

adoption rate are affected by the adopter's perception of the innovation Hsu, (2012). This perception is based on the most influential characteristics of innovation, such as relative advantage, compatibility, complexity, trial ability, and observability of the innovation Samson-fisher (2004), Hutchins, (2001), Hsu, (2012). This study focuses on the relative advantage, compatibility, and complexity of the innovation as they have been widely studied and have been noted to have the most consistent significant relationship to innovation adoption Hsu (2012).

Methodology

Research Design

The survey design was adopted for this study. Nworgu (1999) asserted that the survey design permits description of conditions as they exist in their natural settings. Ali (2018) further maintained that the design of a study can be categorized as survey if it involves the selection and study of samples from a chosen population and which is considered to be a representative of the entire group. The survey research design therefore is considered most appropriate for this study because it allows the collection of the original data and also described the conditions as they existed in their natural setting. It also helps to homogenize the population and affords all the respondent equal chances of being chosen for the study.

Area of Study

The study was conducted in all the 33 secondary schools in Enugu Education Zone. Enugu Education zone is one of the six (6) education zone of Enugu State. The other zones are: Agbani Education Zone, Awgu Education Zone, Nsukka Education Zone, Obollo-Afor Education Zone, Udi Education Zone and Enugu Education Zone covers the activities of thirty three (33) Secondary Schools in 3 local government areas. (Enugu North, Enugu East and in Isiuzo) out of the 17 local Government area in the State. Enugu Education zone shares boundaries in the North with Obollo-Afor Education zone in the East with Udi Education Zone, in the West with Agbani Education Zone and in the South with Awgu Education Zone, which also compete in public examinations including SSCE (WAEC/NECO).

Population of the Study

The population of the study was drawn from the total number of secondary

school teachers and principals in all Enugu Education zone. There are 33 principals in Enugu Education Zone, 1763 teachers in the 33 secondary schools making the total population of 1796 in the Enugu Education Zone from the Research and Statistics Department of the Post—Primary Schools Management Board (PPSMB) Enugu on January, 2017.

Sample and Sampling Techniques

The sample size for the study is 360 respondents from all the schools that is 20% of the entire population of Principals and Teachers of Enugu Education Zone. The researchers used a simple random sampling technique for the selection of the sample. Ali recommended that the population of a study should be between the ranges of 20% and 5%. Here stratified random sampling was used to get a fair representative of the population.

Instrument for Data Collection

The instrument that was used for this study is a structured online Questionnaire constructed by the researcher and online interview using phone call for some of the respondents that are not in social media. The questionnaire was made of two sections; section A and section B. Section A contains the personal data of the respondent while Section B contained the (24) twenty—four question items that are related to research question, structured along four point Likert rating scale provided for the respondents to make their responds as follows:

Very High Extent (VHE)
High Extent (HE)
Low Extent (ME)
Very Low Extent (LE)

Validation of the Instrument

The instrument was face-validated by three experts who are lecturers (teaching) in Enugu State University of Science and Technology, Enugu. The advice, criticisms, re-arrangements and corrections given by these experts was used to readjust the instrument to ensure its validity.

Reliability of Instrument

The researcher employed a Test-Retest method. This method can be described as a system where a respondent who had completed a questionnaire previously was asked to do so at a later date, after two weeks. After this, the two responses are compared using correlation analysis.

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Test-retest or stability test provides evidence that scores obtained on a test at one time (test) are the same or close to the same when the test is re-administered some other time (re—test). A pilot study was conducted in two secondary schools located in Enugu South L.G.A which were not part of the sample used in the study. Twenty (20) teachers were selected as respondents. The researcher after giving out the questionnaires to the respondents to elicit their responses on two different occasions, collected it from them, and used the data obtained to compute their correlation which yielded 0.95 using Pearson Product Moment Coefficient.

Method of Data Collection

When the data collecting instrument was ready after validating and testing their reliability, the researchers posted the questionnaire on the individual telegram and use phone call to interview respondents that are not in the social media.

Method of Data Analysis

Mean analysis method was used to analyze the data. The formula for mean is given as:

$$\bar{x} = \sum \frac{FX}{N}$$

$\bar{x}$ = Mean
X = nominal value
F = frequency
N = total number of frequency
$\sum$ = summation
The yardstick mean is calculated as:

$$\bar{x} = \sum \frac{FX}{N}$$

$\bar{x}$ = $\frac{(4 + 3 + 2 + 1)}{4}$

$\bar{x}$ = 2.50

The decision rule was any mean up to 2.50 and above will be accepted as "Agree", while a mean score below 2.50 was rejected as "Disagreed"

Data presentation and Analysis

Research Question One

To what extent does learning management System usable during COVID 19 pandemic in secondary school in Enugu Education Zone, Enugu State, Nigeria?

Table 1: analyses of data on extent of usability of learning management System during COVID 19 pandemic in secondary school in Enugu Education Zone
N=360

S/N	Items	SA	A	D	SD	N	∑FX	X	DEC
1	Students use smart phones for the lesson	115	97	85	63	360	984	2.73	Agree
2	They used Whatsapp mostly than other apps for lessons	127	103	75	55	360	1022	2.83	Agree
3	Mobile internet accessible phones are available for teachers	116	96	83	65	360	983	2.73	Agree
4	There is adequate internet connection for those in the urban areas	111	109	80	60	360	991	2.75	Agree

Source: online survey 2020

The results of the analyses in table 1 revealed that items 1, 2, 3 and 4 had mean rating of 2.73, 2.83, 2.73 and 2.75 respectively. These mean ratings are greater than the cut-off point of 2.50. the implication is that the respondents were in agreement that Students use smart phones for the lesson, They used Whatsapp mostly than other apps for lessons, mobile internet accessible phones are available for learning and the is adequate internet connection

Research Question Two

What type of learning management system used in secondary schools in Enugu Education Zone, Enugu State, Nigeria during COVID 19 pandemic?

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Table 2: Analyses of data on the type of learning management system software used in secondary schools in Enugu Education Zone, Enugu State, Nigeria during COVID 19 pandemic

S/N	Items	SA	A	D	SD	N	∑FX	X	DEC
5	Neo	110	100	82	58	360	962	2.67	Agree
6	Whatsapp	130	104	76	50	360	1034	2.87	Agree
7	Telegram	120	92	86	62	360	990	2.75	Agree
8	Google Scholar	115	113	84	56	360	1023	2.84	Agree

Source: online Survey 2020

The results of the analyses in table 3 revealed that items 9, 10, 11, and 12 had mean ratings of 2.67, 2.87, 2.75 and 2.84 respectively. These mean ratings are greater than the cut-off point of 2.50. The implication is that the respondents were in agreement that desktop computers, laptops, televisions and mobile device are type of learning management system used in secondary schools in Enugu Education Zone, Enugu State, Nigeria during COVID 19 pandemic.

Discussion of Findings

Research question one sought to find out the extent learning management System available during COVID 19 pandemic in secondary school in Enugu Education Zone, Enugu State, Nigeria?

The study established that there are enough computers available for learning, television sets are available to learn at home students, mobile internet accessible phones are available for learning and the is adequate internet connection in Enugu Education Zone, Enugu State, Nigeria.

Research question two sought to find out the type of learning management system used in secondary schools in Enugu Education Zone, Enugu State, Nigeria during COVID 19 pandemic. The results of the data analyses revealed that desktop computers, laptops, televisions and mobile device are type of learning management system used in secondary schools in Enugu Education Zone, Enugu State, Nigeria during COVID 19 pandemic

Conclusion

Based on the analysis of data, discussion of findings, the researchers drew the following conclusions.

There are enough computers available for learning, television sets are available to learn at home students, mobile internet accessible phones are available for learning and the is adequate internet connection. Also, personal computers, laptops, televisions and mobile device are some of the type of learning management system used in secondary schools in Enugu Education Zone, Enugu State, Nigeria during COVID 19 pandemic.

Recommendations

1. Enough computers should be purchased by the schools for successful implementation of e-learning system. The e-learning system should be accessible both on Local Area Network (LAN) and on internet.
2. More training / workshops should be organized to enhance learnability of e-learning system.

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