



## INTERNATIONAL JOURNAL OF APPLIED TECHNOLOGIES IN LIBRARY AND INFORMATION MANAGEMENT

<http://www.jatlim.org>

International Journal of Applied Technologies in Library and Information Management 10 (1) 03 - 23 - 32

ISSN: (online) 2467 - 8120

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Manuscript Number: JATLIM - 2024-10.01/23 - 32

### Influence of Infrastructural Facilities on Library Usage of Secondary School Students in Owerri Municipal Council, Imo State, Nigeria

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#### Abstract

*The study investigated Infrastructural Facilities on Library Usage of Secondary School Students in Owerri Municipal Council, Imo state, Nigeria. Two research questions and two null hypotheses guided the study, Pearson Product Moment Correlation design was adopted for the study. A total of 394 respondents comprised of SSS II and SSS III students were selected from 25, 195 students from nine public secondary schools in the study area using Taro Yamane sampling formula and proportionate sampling technique to ensure an unbiased representation of the population. The instrument used for the study was a four-point Likert rating scale titled "Influence of information resources and Infrastructural Facilities on Library Usage (IIFLU), the rating scale was divided in two sections. Section A was on respondents' biodata while section B covered the research question and usage of school library. Pearson Moment coefficient correlation formula was used. Cumulative reliability coefficient of .79 and .77, for each variable were obtained showing that the instrument is reliable. Pearson Moment coefficient correlation formula was used to answer the research questions, while t-test of simple linear correlation was used to test the null hypotheses at 0.05 level of significance. The study found out, among other things, that there is weak positive relationship between information resources and usage of secondary school libraries by students in the study area but the relationship is significant and that there is very weak positive relationship between recreational facilities and usage of secondary school libraries by students in study area but the relationship is significant. Based on the findings, it was therefore recommended that Government at all levels (local, state and federal) should look towards libraries and provide infrastructural facilities as it will go a long way in solving the problem of unavailability of library facilities and library usage in Owerri Municipal Council as found in this study.*

**Keywords:** infrastructural facilities, libraries, library usage,

#### 1.1 Introduction

One of the flaws in Nigeria system of education is being attributed to inadequate use of library and its resources. The library in this context is the school library which is found in institutions such as nursery, primary and secondary schools with the role of developing

and improving the intellectual capacity of pupils and students. Just as the heart is central to the human body so also the library is to the school. This means that the library is the core aspect of the school system. If the library is removed from the working of the school, the aim for establishing such school will not be

achieved hence the modern school child is taught to explore the world of knowledge through the use of school library. Library scholars have explained that a good secondary school library is that which is designed to serve the needs of secondary school students, their teachers and administrative staff and to some extent the immediate host community. Daniel (2004), observed that the library remains the power house of educational institutions and that an educational institution without a library is like a motor car without an engine and a body without a soul. In line with this, Smith (2002) avowed that, school library is the backbone of functional education without which academic excellence cannot be achieved.

Obviously speaking, both the library and the school are inseparable firms that one ceases to function well without the other. Thus, Akanwa (2017) defines the school library as a library found in the school environment where pupils, students and their teachers/staff have access to a variety of information resources. The school library according to the author is indeed a cultural and information centre of the child where the school child get access to information materials that will enable him/her develop instinctually, socially, emotionally and mentally. Mbagwu (2017) citing Fayose, gave a broad definition of the school library as that part of the school where collection of books, periodicals, magazines, newspaper, video tapes, study kits and other information resources are kept for use. This definition gives credence to the all important aspect of the school library which is the provision of reading/learning materials for the academic and recreational activities in the school environment.

### **1.2 Statement of the Problem**

School libraries have been appropriately described as the power house of a school. In spite of the importance of school libraries in information dissemination, studies have revealed that library usage among

secondary school students is of a very low extent and students have shifted from using library resources to self-help means of study (Solanke and Nwalo, 2016). Several factors are presumed as being responsible for this situation, some of which may include inconvenient library location, unpleasant library ambiance, inadequate information resources, unqualified library personnel, and perhaps lack of basic social amenities in school libraries such as electricity, chairs/tables, modern computers and internet facilities among others. Studies also show that infrastructural facilities aid effective service delivery and ensure comfort of both library staff and its users (Omeluzor, 2017). As such, infrastructural facilities may be inevitable since it has been recognized that essential facilities may enhance the use of school libraries by both the students/pupils and the entire school community. Perhaps, it is important to know if library infrastructural facilities could influence library usage among secondary school students particularly in Owerri Municipal Council area of Imo state. However, what seems to be unclear is the relationship between infrastructural facilities in school libraries and their usage by secondary school students, it is against this backdrop, that the researcher investigated influence of infrastructural facilities on the library usage of secondary school students in Owerri Municipal Council, Imo State in Nigeria.

### **1.3 Research Questions**

The following research questions were posed to guide the study:

1. What is the relationship between information resources and use of secondary school libraries in Owerri Municipal Council area of Imo state?
2. What is the relationship between recreational facilities and use of secondary school libraries in the study area?

#### 1.4 Hypotheses

For the purpose of this study, the following null hypotheses were formulated to guide the study:

**Ho<sub>1</sub>:** There is no significant relationship between information resources and use of secondary school libraries.

**Ho<sub>2</sub>:** There is no significant relationship between recreational facilities and use of secondary school libraries.

#### 2.1 Literature Review

Infrastructural facilities are essential facilities and tools that enhance the library's ability in delivering quality service to its patrons. Libraries of all types need infrastructure spanning from power generating set, furniture and fittings among others to keep pace with development in the information profession and advancement in technology in the delivering of information services. According to World Education Summit (2021) report, a well-equipped library housing a wealth of useful books or informative and multimedia resources coupled with a motivating or mood-lifting ambiance not only attracts students to use the library but also develops a liking to study. Infrastructural facilities in secondary school libraries should be its soft-core or otherwise, provides the necessary foundation on which the take-off into self-sustaining growth is not only possible but also assured. Obi and Ezegebe (2007) see infrastructural facilities as the space interpretation of the school curriculum. In other words, school library infrastructural facilities can be said to be the physical expression of the school programmes and activities as it is a consciously designed and controlled environment with the sole aim of promoting students' usage of the school library which is part of teaching and learning activities within the school. It is putting together of facilities to protect the physical, social and psychological

well-being of individuals associated with the school.

Researchers such as Indyor (2017) investigated the Influence of Infrastructural facilities on the management of public secondary school in Benue state. The findings revealed that School libraries and laboratories significantly influence the management of public secondary schools in Benue state. Again, Dahunsi, Alegbeleye and Madukoma, (2020) conducted a research on the Influence of Library Infrastructural Facilities on library patronage among academics in South-West, Nigeria. The study found that there was low level library patronage among academic staff in university libraries, most resources in the libraries were sparingly used by academic staff in universities. The study also found that even though more infrastructural facilities are available in academic libraries but they are inadequate. Further analysis revealed a significant influence of availability of infrastructural facilities on library patronage by academics in universities in South-West.

Recreation is a form of play or amusement, refreshment of the body. It can also be seen as an activity that involves play which allows for self-expression and from which relaxation, pleasure and satisfaction can be derived. According to Butler in Amadi, Okiridu and Kiinee (2020), recreation is an activity which is voluntarily undertaken and practically motivated to leisure and satisfaction. Recreation could vary from active competition through some form of amusement to quiet relaxation or sober meditation. The main purpose of recreation is basically the relaxation and revitalization of people so that they may efficiently return to their routine activities which are not recreational but economically gainful. It involves physical, mental and emotional activities which can reward the participants in terms of intellectual, physical and social growth, better health, improved citizenship and other qualities of personal development. One of the

determinants of students' learning outcome put forward by scholars, researchers and educational psychologist is the role recreational facilities play (Amadi, Okiridu and Kiinee, 2020). As the saying goes "all work and no play makes Jack a doll boy." It is widely believed that recreational facilities in the school library such as games (Scrabble, Whot, ludo, Ayo, puzzle, jigsaw, chess, monopoly, clue, candy-land, battleship, checkers, backgammon, trivial pursuit, splendor, Carcassonne, wingspan, play station 1 – 4, Scavenger hunt, Random Act of Kindness, I Spy, Find the author, Book Tic Tac Toe, Random writing game, Alphabet hunt, ABC order etc.) are beneficial in supporting the development of 21<sup>st</sup> century learning skills such as critical thinking, problem solving, collaboration and communication.

The reality of games in the school library is here to stay as game help students thinking skills, emotional wellbeing, creativity and social connection with others (Digital Australia Report, 2020). Games are essentially stories that can teach students about narratives structure and characters, teacher-librarian need to embrace game play in their libraries in order to transfer the skills and strategies student need to enhance 21<sup>st</sup> century literacies hence the school library should be perfectly positioned to integrate gaming into the library programme. Games do not only have the potential to improve students' literacy, they also provide a way for library staff to connect with their patrons and get them to use the library regularly as well as increasing student and staff engagement, readership and circulation rates which in turn improves students reading both fiction and non-fiction books associated with the games they play. According to Alimi, Ehinola & Alabi (2012), recreational facilities in the school environment (library) are consciously designed to promote effective teaching and learning hence made up of the indispensable system and structure to function effectively in

achieving the objectives for which it was established. Recreational facilities therefore constitute an essential aspect of the school library because unless the library is well equipped with adequate games and are made accessible to student, this can stir students interest in frequenting the library. Recreational facilities in the school library play an important role in the development of education program when considering large number of activities that take place in the school aligning with student's talents validate their sense of self through increasing self-efficacy, self-concept and self-esteem. In other words, recreational activities also energized library activities as most of the experiences asserted from participation are infused into learning and teaching activities. Recreational facilities often lead to continue development of initiative and potentialities beyond the formal or structural learning objectives.

The term library usage has been conceptualized in various ways by different scholars and researchers depending on their view, perception and focuses. Most scholar conceptualized library usage as library patronage, to some library usage is consumption of library resources, while few described library usage as visiting a library to consume its resources. The common ground to all is that, literature agreed that library resources are meant to be consumed by its users. Hence, it should be understood that users cannot use or consume without visiting a library either personally or electronically (Dahunsi, Alegbeleye and Madukoma, 2020). Thus library usage refers to the extent to which students visit the library to explore its infrastructural facilities for teaching, learning and relaxation. Library usage is the purposive visit to the library by its users to use library infrastructural facilities or services that meet up with their information needs.

Adeyomoye (2017) also describe library usage as a user purposeful visit to a library to use their resources or services for



either studying, researching or for recreational purpose, which is not limited to physical visit but also involves the use of online resources. Similarly, Iyanda (2018) views library usage as the extent to which the resources and services of a library are utilized for teaching, learning and research. She further stated that library usage is an interaction between an individual, group of individual and a library or information service with a view of satisfying the need for information. It should be noted that usage is user purposive visit to the library physically to consult its infrastructural facilities and services or electronically to use the internet to log into their website to use their digital resources at any point of need. Student library usage effectiveness is determined by their frequency of library visit, purpose of visit, type of facilities consulted during usage and mode of usage. According to Luke (2021), utilization of library infrastructural facilities is one way the school library can determine its usefulness and relevance in our secondary schools. The author further stated that utilization of library infrastructural facilities will influence students' academic performance and achievement, if adequate infrastructural facilities and services are provided. Use of school library facilities is still an issue in many schools and it is the expectation of school management and government to make adequate arrangement for the provision of good infrastructural

facilities in school libraries. To this end, efforts are being made by teacher –librarians to provide infrastructural facilities and services targeted at meeting the academic, social and recreational needs of students.

### 3.1 Research Methodology

A correlation research design was adopted for this study. Correlation research design investigates relationships between variables without controlling or manipulating any of them. A total of 25, 195 students in nine selected public secondary schools in Owerri Municipal Council were selected for the study. Participants covered in this study were only SSS II and SSSIII students. A sample size of 394 was selected using Taro Yamane sampling formula. The instrument used for data collection was researcher's structure modified rating scale. All the data collected were analyzed using Pearson Product Moment Correlation (PPMC) statistics. The null hypotheses were tested using t-test of simple linear correlation statistics at 0.05 level of significance.

### 4.1 Result and Discussion

#### Research Question 1:

**Table 1:** Summary of Pearson Product Moment Correlation on the Relationship between Information Resources and Usage of Secondary School libraries

		Information Resources	Usage of Secondary School Libraries
Information Resources	Pearson Correlation	1	.223**
	Sig. (2-tailed)		.000
	N	394	394
Usage of Secondary School Libraries	Pearson Correlation	.223**	1
	Sig. (2-tailed)	.000	
	N	394	394

Correlation is significant at the 0.01 level (2-tailed).

Table 1 reveals the r value is 0.223, df at 392,  $p < .05$  at 0.000. This means that there is weak positive relationship between library resources and usage of secondary school libraries by students in Owerri Municipal Council, Imo State.

#### 4.2 Hypothesis 1:

**Table 2:** Summary of t-test of Simple Linear Regression to test the Significant Relationship between Information Resources and Usage of Secondary School Library

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.127	.920		21.875	.000
	Information Resources	.162	.036	.223	4.527	.000

*Dependent Variable: Usage of Secondary School Library*

Table 2 also shows t statistics value of 4.527 which is less than the constant at 21.875, p value 0.000 is less than 0.05 as state. This signifies that there is significant relationship between information resources and usage of secondary school library because of the standardized coefficient beta which is 0.223.

The results relating to this specific purpose revealed that there was weak positive relationship between information resources and usage of secondary school libraries by students in Owerri Municipal Council, Imo State. The results of hypothesis relating to this specific purpose of the study also revealed that there was significant relationship between information resources and usage of secondary school library by students in Owerri Municipal Council, Imo State. This means that despite the inadequacy and presence of information resources, usage of secondary school libraries is not at its optimal. This explained the fact that students were not accessing the information resources because they were not meeting their educational needs hence there is significant relationship between information resources and usage of secondary school library by students in Owerri Municipal Council. This was further translated to the fact that

information resources positively contributed to usage of secondary school library by approximately 22%. However, the p-value obtained was less than 0.05 thus, the null hypothesis was rejected. This therefore implies that inadequacy of information resources negatively affected the interest of students and by extension, the usage of the library by students in the study area. These findings are in line with the findings of Dike (2006) that the types of available information resources in government owned secondary school libraries include: text books, newspapers, magazines and there is no non-print material, which implies inadequacy of information resources.

The findings are tandem with Owate and Okpa-Iroha (2013), who discovered that in some schools, the information resources are not properly organized and do not measure with the standard requirement for school libraries. The study further indicated that more often than not there is virtually no appropriate information resources available at all and there are budgets for stock upgrading or replenishment of school libraries in secondary schools. These results are in consonant with Ukwuoma (2004), who identified inadequate provision of

information resources as one of the factors that influence effective usage of information resources by student. This is true because the main purpose of school library is to provide the most useful and most satisfying reading materials possibly on all subjects in the school curriculum and also to meet the extra-curricular needs of students. Adebayo (2002)

categorically stated that a good percentage of public secondary schools cannot boast of having a functional library. Observation in the course of this study showed that a good number of public secondary school libraries in Nigeria lack current and relevant information resources in their libraries.

### 4.3 Research Question 2:

**Table 3** : Summary of Pearson Product Moment Correlation on the Relationship between Recreational Facilities and Usage of Secondary School libraries

		Recreational Facilities	Usage of Secondary School Libraries
Recreational Facilities	Pearson Correlation	1	.129*
	Sig. (2-tailed)		.011
	N	394	394
Usage of Secondary School Libraries	Pearson Correlation	.129*	1
	Sig. (2-tailed)	.011	
	N	394	394

Correlation is significant at the 0.05 level (2-tailed).

Table 3 reveals the r value is 0.129, df at 392,  $p < .05$  at 0.011. This means that there is very weak positive relationship between recreational facilities and usage of secondary school libraries by students in Owerri Municipal Council, Imo State.

### 4.4 Hypothesis 2:

**Table 4** : Summary of t -test of Simple Linear Regression to test the Significant Relationship between Recreational Facilities and Usage of Secondary School Library

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	21.176	1.203		17.606	.000
	Recreational Facilities	.134	.052	.129	2.569	.011

Dependent Variable: Usage of Secondary School Library

Table 4 also shows t statistics value of 2.569 which is less than the constant at 17.606, p value of 0.011 is less than 0.05 as stated in the table above. This means that the presence of recreational facilities is good predictor of usage of secondary school library because of the standardized coefficient beta which is 0.129. This can be translated to the fact that recreational facilities positively contributed to usage of secondary school

library by approximately 13%. In addition, since the p value obtained is less than 0.05, the null hypothesis is rejected. This means that there is significant relationship between recreational facilities and usage of secondary school library by students in Owerri Municipal Council, Imo State.

The results as it relates to this specific purpose showed that there is very weak positive relationship between Recreational

facilities and usage of secondary school libraries by students in Owerri Municipal Council, Imo State. The results of the null hypothesis relating to this specific purpose revealed that there is significant relationship between recreational facilities and usage of secondary school library by students in Owerri Municipal Council, Imo State. This, also mean that, despite the inadequate and presence of recreational facilities that much usage of secondary school libraries is not at its optimal. This situation is due to state of the recreational facilities in terms of being modern to attract usage. It is worthy to note that, the presence of recreational facilities is a good predictor of usage of secondary school library because of the standardized coefficient beta which is 0.129. This was translated to the fact that recreational facilities positively contributed to usage of secondary school library by approximately 13%. In addition, since the p value obtained was less than 0.05, the null hypothesis was rejected which means there is significant relationship between recreational facilities and usage of secondary school library by students in the study area and as such, could not attract much usage of the libraries by students who are now exposed to smart technologies like smart phones and iphones' learning games.

### **5.1 Discussion of Findings**

However, this implies that school libraries in the study area do not have recreational facilities; thus, students are using the libraries without recreational facilities. However, the observation may be due to educational policies of government, type of institutions and ages of the learners. The lack of recreational facilities in the school library irrespective of what may have led to it, will definitely have a negative influence on the usage of library as it is widely believed that recreational facilities in the school library are beneficial in supporting the development of 21<sup>st</sup> century learning skills such as critical

thinking, problem solving, collaboration and communication. According to Digital Australia Report (2020), stated, that the reality of games in the school library is here to stay as game help students' thinking skills, emotional wellbeing, creativity and social connection with others. Games are essentially stories that can teach students about narratives, structure, character and teacher librarians need to embrace game play in libraries in other to transfer the skills and strategies students need to enhance 21<sup>st</sup> century literacies.

Furthermore, as observed by Amadi (2020), that one of the determinants of students' learning outcome put forward by scholars, researcher and educational psychologist is the role recreational facilities play. Broh as cited in Amadi (2020) asserted that, recreational facilities provide networking opportunities which allow students to develop social skills in the form of increased interaction between peers, teachers and others in other specialization. However, Amadi (2020), further suggested that, recreational facilities provide for a stock of positive feeling and greater initiative which make students better able to cope with stress and react to challenging situation. Ogundele (2012), opined that recreational facilities should be provided in order to enhance effectiveness and efficiency in the academic performance of students hence the developmental context of recreational facilities in the school library cannot be over emphasized thus, there is no gain denying the fact that student will frequent the library if recreational facilities are provided.

### **Conclusion and Recommendations**

Based on the findings of the study, it is therefore concluded that there was low usage of school libraries by secondary school students in the study area as a result of inadequacy of infrastructural facilities. The researchers, however, recommended that



Government at all levels (local, state and federal) should provide modern infrastructural facilities as, this would go a long way in influencing the use of school libraries as found in the study; government should employ the services of professional librarians to serve in the school libraries and provide continuous training to these librarians; public school teachers and librarians should provide adequate library education to the students; government should provide funds for their libraries and educational policies should be reviewed to include recreational activities in the school libraries. In view of this, for effective usage of school libraries by secondary school students, there was urgent need for modern and adequate provision of infrastructural facilities in secondary school libraries and provision of professional librarians to manage the libraries.

## References

- Adeyomoye, O. (2017). Reading Culture and User Satisfaction as Determinants of Library Patronage by Undergraduate Students in Private Universities in Oyo State, Nigeria. (*Master's Dissertations Submitted to the Department of Information Resources Management. College of Management and Social Science Babcock University Ilishan-Remo, Ogun State*)
- Adebayo, E. I. (2002). Towards a functional children's libraries in school libraries in Ogba community of Rivers State in early childhood. *Education Today* 1(2) 20–21
- Akanwa, P. C. (2017). Library resources. In R. U. Ononogbo & Akanwa (Eds.). *Basic concepts of library practice*. Owerri: Supreme Publishers Alimi, O. S., Ehinola, G. B. & Alabi, F. O. (2012). School Types, Facilities and Academic Performance of Students in Senior Secondary Schools in Ondo State, Nigeria. *International Education Studies* 5(30), 44–48
- Amadi, E. A., Okiridu, O. S. F. & Kiinee, D. S. (2020). Perceived Influence of Recreational Equipment on Business Studies Students' Learning Outcome in Khana and Gokana Local Government Area. *International Journal of Innovative Human Ecology & Nature Studies*. 8(1): 9 – 18. Retrieved from [www.seahipaj.org](http://www.seahipaj.org) on 15/3/2022
- Dahunsi, F. T., Alegbeleye, G. O. & Madukoma, M. E. (2020). Influence of library facilities on library patronage of academics in South-West, Nigeria. *Global Journal of Applied Management and Social Science (GOJAMSS)*; vol. 18. Pp 229-248
- Daniel, C. I. (2004). The school libraries and the librarians. Making a difference in the knowledge age. *Being a compendium of papers presented at the 39<sup>th</sup> National Conference and AGM of the NLA held at Owerri*, 104–109
- Digital Australia Report (2020): The power of games. Retrieved from <https://igea.net.2019/08pdf>
- Dike, V. W. (2006). Reviving School Library in South-East Zone, Nigeria. *Library and Information Science Trends* 3 (1&2):50-60.
- Indyor, T. A., Azever, J. T. & Onyeanisi, T. U. (2018). Influence of Infrastructural Facilities on the Management of Secondary Schools in Benue State, Nigeria. *IJRDO-Journal of Educational Research*. 3

- Iyanda, D. F. (2018). Influence of Personal Factors Library Environment and Teaching Methods on Library Use of Students in Federal College of Education South-West, Nigeria (*Doctoral theses Babcock University, Ogun State, Nigeria*)
- Lukey, O. O. (2021). Factors influencing utilization of John Harris library, University of Benin, Edo state. Retrieved from: <https://creativecommons.org/licenses/by-nc/4.0/>(the "License").
- Mbagwu, I. F. (2017). Management Functions and Students Satisfaction with Library Services in Public Secondary Schools in Imo State(*Ph.D. Dissertation*) Imo State University, Owerri.
- Obi, E. & Ezegebe, C. C. (2002). *Management of School Plant for Effective Administration of School*. In G. N. Osuji & A. Ndu (Eds.). Educational Administration for Colleges of Education and Universities. Owerri: Tony Ben Publisher
- Ogundele, M. O. (2012). Recreational Facilities and Secondary School Students Academic Performance in Kwara State, Nigeria. *Journal of Vocation and Technology*. Vol.9 No.1-8
- Omeluzor, S. U. (2017). *Library Infrastructure, Organizational Culture and Mentoring as Predictors of Turnover Intention of Academic Librarian in South-South and South-East Nigeria*, being an unpublished theses submitted to the Department of Information Management Babcock University
- Owate, C. N. & Okpa-Iroha (2013): The availability and utilization of school library resources in some selected secondary school (High schools in Rivers State) *Educational Research and Review*. 8(16). P. 1449 – 1460. DOI: 10.5897/ERR2013.1511 <http://www.academicjournal.org/ERR>
- Smith, E. G. (2002). Texas School Libraries: Standards, Resources, Services and Students' Performance [Texas]: *EGS Research and consulting for Texas State library and archives commission*. <http://www.tsl.state.tx.us/ld/pubs/schlibsurvey/index.html> [23-10]
- Solanke, E & Nwalo, K. I. N. (2016). Influence of Users Needs and Satisfaction on Patronage of Reference Services by Undergraduate Students in Selected Universities in Osun State, Nigeria. *Library Philosophy and Practice (e-journal)* 1459. Available: <http://digitalcommons.unl.edu/libphilpr> Retrieved 21/02/2022
- Taro Yamane (1967): How to calculate a reliable sample size using Taro Yamane method. Available on <https://www.academia.edu>
- Ukwuoma, G.C. (2004). Acquisition and organization of information materials in selected secondary schools in Umuahia, Abia State. (*Unpublished BLS Project submitted to Department of Library and Information Science*), Imo State University, Owerri).
- World Education Summit (2021): The Premier Global Event on Innovation in Education held on March, 2021. Retrieved 10/02/2022 from: <https://www.wes.eletsonline.com>