

Extent of Information and Communication Technology Integration in Public Secondary Schools in Two Local Government Areas of Anambra State

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Abstract

The study on the extent of information and communication technology integration was carried out in fifteen public secondary schools in both Nnewi North and Ekwusigo Local Government Areas of Anambra State. Descriptive survey research design was adopted for the study. The population of the study was fifteen public secondary schools in the two Local Government Areas under study, thus no sampling technique was adopted as the entire population was studied. A checklist, interview, and questionnaire were instruments adopted for data collection of the study. Data generated in the study were analyzed with descriptive statistics using tables, percentages, and arithmetic mean. Findings from the study showed that the extent of ICT resources provision in most of the schools was low and the available ones in the schools were not kept in the school libraries, the extent of ICT resources used for services was low, the teachers in charge possess the necessary ICT skills to a high extent, but are not qualified school librarians. Several challenges such as insufficient ICT infrastructure, lack of proper security, and absence of qualified school librarians were highlighted and strategies such as fencing of the unfenced schools, and deployment of security men to the schools were proffered. Major recommendations made are that effort should be made by the government to complete the ICT agenda in all the schools through the provision of the remaining ICT resources, employment and posting of qualified school librarians to manage the school libraries, and the deployment of security men to the schools to remove fear of burglary.

Keywords: *School Libraries, ICT Resources, Nnewi North Local Government Area, Ekwusigo Local Government Area, Anambra State.*

Introduction

School library is a type of library meant for primary and secondary schools. Its major function is to provide the information

resources needed by pupils, students, and their teachers to perform well and attain academic excellence. School libraries are headed by professionals called school librarians or teacher librarians for those

who received training in the teaching profession. According to Eze (2016), school libraries perform other functions such as provision of instructional materials, and accommodation, and help to ensure that all members of the school have access to books and information and communication technology (ICT). Thus, school libraries stock such materials as books on various subjects taught in the schools, magazines, newspapers, films, exhibitions, models, pictures, maps, and tape recordings, as well as information and communication technologies like computers, DVDs, videos, television, radio, modem, Internet, among others. In this era of information explosion, information and communication technologies have become indispensable in both the management and dissemination of information. As a result, all libraries including the school library have keyed into the ICT agenda to remain relevant and keep their users abreast of current information and innovation. In support of this, the Australian School Library Association (2014), stated that the key focus of school libraries is to ensure equitable access to engage in the world of technology-enhanced information environments. Accordingly, school libraries embrace the continual development of new technologies and opportunities they can afford to improve efficiency and increase access to information. In the same vein, Southern Education Library Board (2014) stated that young people need to acquire the skills and knowledge to get the best out of new information and communications technologies.

In recognition of this vital role of information and communications

technologies in modern information management in schools and its potential in educational development, the Anambra State government released a cheque worth one hundred million for the development of two hundred secondary school libraries in the State, as well as one thousand, six hundred (1,600 computers to one hundred and sixty schools (Ibe, Okonkwo, Alor, & Onyekwelu, 2014). In doing this, the Anambra State government noted that the libraries will serve as information centres, promote reading culture in children and also act as storehouses of knowledge for teachers and students.

Certainly, the above roles cannot be realized in the school libraries if the information and communication technologies are not put to adequate use, and their use can only be possible if the teachers in charge of the school libraries possess the necessary ICT skills to teach the pupils and students, otherwise, the effort of the State government will be a failure. In support of this, the Australian School Library Association (2014) asserted that teacher-librarians need to acquire relevant technological expertise and be prepared for the challenging and dynamic nature of ICTs in the realm of teaching and learning. The teacher-librarians also need to be proficient in the use of information and communication technology tools to be able to impact positively on the students and prepare them effectively to cope with the present challenging technological world. More so, it is also not known if the ICT infrastructures are enough to ensure their effective integration in the services of the school libraries as this is also capable of stalling the whole ICT agenda in the schools.

These are the issues that agitated the researchers, and it is in the effort to resolve the afore-mentioned issues and ensure ICT use in the school libraries that necessitated the study on the extent of information and communication technology integration in public secondary school libraries in Nnewi North and Ekwusigo Local Government Areas of Anambra State.

Statement of the Problem

School libraries play significant roles in the realization and satisfaction of information and education needs of members of their parent institutions. In the present technological era, ICT has become indispensable in the realization of the objectives of both primary and secondary schools which include helping pupils and students to become better and responsible citizens, laying the foundation for lifelong learning and human development, as well as laying a sound base for scientific reflective thinking in both the pupils and students. In recognition of the pivotal role of ICT in the development of the schools, pupils, and students, the Anambra State government released funds and ICT equipment to its public schools including those in Nnewi North and Ekwusigo Local Government Areas of the State for the development of their school libraries. If the ICT agenda for the schools is not implemented, it will lead to a colossal waste of resources and impede school library development especially in both the Nnewi North and Ekwusigo education zones of the State.

The researchers were therefore agitated as follows: what is the extent of ICT provision in the school libraries, do the teachers in

charge of the school libraries possess necessary ICT skills, are there factors impeding ICT integration in the services of the school libraries?

It is in the effort to provide answers to the above posers that made the researchers empirically investigate the extent of information and communication technology integration in services of public school libraries in Nnewi North and Ekwusigo Local Government Areas of Anambra State.

Purpose of the Study

The purpose of the study was to determine the extent of ICT integration in public secondary school libraries in Nnewi North and Ekwusigo Local Government Areas of Anambra State. Specifically, the study sought to:

1. determine the extent of ICT resource provision in the school libraries;
2. find out the extent to which services are carried out with ICT resources in the school libraries;
3. find out the extent of ICT skills possessed by the teachers in charge of the ICT resources;
4. determine challenges against ICT integration in the school libraries;
5. proffer strategies to eliminate the challenges.

Research Questions

1. To what extent are ICT resources provided in the school libraries?
2. To what extent are services rendered in the school libraries using ICT tools?

3. What is the extent of ICT skills possessed by the teachers in charge of ICT resources in the schools?
4. What are the challenges inhibiting ICT integration in the school libraries?
5. What are the possible strategies for enhancing ICT integration in the school libraries?

Literature Review

School libraries play significant roles in the grooming and nurturing of pupils and students in both primary and secondary schools. These roles become easily realizable when information and communications technologies (ICT) are integrated into the system. In the present technological era, information and communication technologies play significant roles in the attainment of the goals of education at all levels. Ebijiuwa, as cited in Ikolo (2020) described ICT as tools for collecting, processing, storing, transmitting, and disseminating information. ICT presence in school library will help to attract users and go a long way in nurturing and moulding the pupils and students in primary and secondary schools, as well as equipping them with the necessary skills to make a meaningful impact in the society. According to the Southern Education Library Board (2014), research has shown that where IT is provided in the school library, independent learning is fostered, individual learners are motivated to high levels of achievement, staff learn alongside students, and learners with reading difficulties become motivated through interesting information presented in imaginative ways. ICT in the school

libraries will also ensure that difficult concepts are easily understood through multimedia applications and students can easily gain access to so many sources of information. The Australian School Library Association (2014) posits that ICT presence in schools will help to make teacher-librarians obtain the specialized knowledge, skills, and attributes required to use ICT to organize, store, and disseminate information in multiple formats, identify appropriate sources of information, and provide equitable access to relevant quality resources. It will also help teacher-librarians to shape the information-seeking behavior of users in the school and also guide the development of information, knowledge creation, communication, and presentation in schools. The information and communication technologies that ought to be in libraries include computers, printers, flash, DVDs, modems, scanners, projectors telephones, and television, among others. Ikolo (2020) identified the ICT resources that should be in libraries as computers, scanners, digital cameras, computers, software programmes, and telecommunication infrastructures like phones, faxes, modems, video conferencing equipment, and web cameras that facilitate retrieval, storage, organization, manipulation, presentation, and communication both nationally and internationally through digital media. Umana (2018) identified major ICT tools for effective service delivery in libraries as computers, the internet, e-mail, the Wide Web, and video. Nwalo, as cited in Ikolo (2020) highlighted the ICT resources used for services in libraries as computers, DVDs, CDS, Internet, and telephones. In their study on the extent of information and

communication technology integration in public libraries of Anambra State, Nwabueze and Ibe (2014) identified necessary ICT for services in libraries as mobile phones, computers, CD-ROM, printers, Scanners, DVD, flash, photocopiers, Internet, and e-mail. Adebayo, Ahmed, and Adeniran (2018) showed the ICT resources for services in libraries as computers, Internet, e-mail, and printers, while Akparobore (2021) listed the ICT resources that should be in libraries as computers, photocopiers, CD ROM, Internet, printers, projectors, telephones, digital cameras, audio and video tapes.

The aforementioned ICT resources are always deployed in libraries to render services as they offer benefits such as ease of service, fast delivery of services, cost-effectiveness, the opportunity for multiple uses of resources, accuracy, and prompt dissemination of information. Ashikuzzaman as cited in Adebayo *et al* (2018) enumerated immense benefits of ICT use in libraries as the provision of speedy and easy access to information, provision of round-the-clock access to users, access to unlimited information and easier, faster, cheaper, and more effective library operations.

The ICT resources are used in libraries to perform functions such as acquisition, circulation, serials control, reference services, user education, and computer training of users, Nwabueze and Ibe (2014) posit that the ICT resources are used in libraries to perform functions such as reference services, user-education, cataloguing and classification of materials, preservation, abstracting services, data

processing, photocopy services, series control, and indexing services. The ICT resources are also used to render services like inter-library loan, acquisition, bibliography services, security of materials, library administration, marketing of library services, information dissemination, and other extension services. Lisedunetwork (2019) stated that ICT can be utilized in libraries to perform functions such as reference services, online public access catalogues services, documents delivery services, institutional repository services, current awareness services, audio-visual services, online user education, and e-mail services, among others. Similarly, Lakshmikant and Jyoti (2014) stated that libraries use ICT resources to perform functions such as circulation, current awareness service, selective dissemination of information, reference service, and document scanning service. Other services rendered with ICT in libraries are electronic document delivery service, e-mail service, indexing and abstracting service, Internet service, reprographic service, OPAC services, online reader advisory service, and video conferencing. Adebayo, *et al* (2018) pointed out that ICT can be used in libraries to render services such as OPAC services, electronic document delivery services, user education, online reader advisory services, reference service, and current awareness services. Other services that can be rendered by libraries through ICT are selective dissemination of information, reprographic services, serial control, circulation services, indexing and abstracting services, scanning services, institutional repository services, and Internet services. However, a study by Nwabueze and Ibe (2014) showed that the

extent of information and communication technology integration in public libraries of Anambra State was low.

For librarians to remain relevant and continue to provide library services to their users optimally in the present technological era, they must possess relevant skills in the use of ICT. In support of the above assertion, Ikolo (2020) stressed that the application of ICTs in libraries cannot be successful if librarians do not possess ICT skills. Amusa and Adesoye (2018) explained that ICT skills refer to the aptitude and competencies required to operate and exploit opportunities offered by ICT, Ikolo (2020) identified the skills as automation skill, hardware and software installation skill, troubleshooting skill, e-mail skill, e-resources search skills, use of OPAC skill, web-design skill, social networking skill and web-based forum skill. Others are instant messaging skills, use of database skills, and Internet skills. Nwabueze and Ibe (2014) found that librarians in public libraries of Anambra State possess the skills to a high extent. The authors highlighted necessary ICT skills for library services as the ability to put on computers, use printers, and e-mail, use search engines, and use popular productivity tools like word-processing and spreadsheets. Others are the skill to use web 2.0 tools, operate slide presentations such as PowerPoint, skill to use software applications, operate online library services like OPAC, and Internet skills.

Authors such as Ikolo (2020) and Nwabueze and Ibe (2014) however identified several challenges that militate against ICT integration in library services.

According to Ikolo (2020), such challenges include poor Internet access, erratic power supply, insufficient technical support, lack of organizational commitment, lack of ICT skills, and inadequate funding and training. Nwabueze and Ibe (2014) revealed the challenges as poor funding, lack of ICT policy, poor electricity supply, inadequate ICT infrastructure, lack of training culture, and poor attitude of management to ICT application issues. In their study, Nwabueze and Ntogo-Saghanen (2017) found challenges against ICT integration as the high cost of ICT resources and inadequate funds. Oghenetaga, Umeji, and Obue (2014) found challenges against ICT integration in libraries as high cost of ICT resources, inadequate ICT resources, erratic power supply, and poor maintenance of ICT equipment. Igwebuikie and Agbo (2017) highlighted challenges against ICT integration in libraries as inadequate funding, lack of infrastructural facilities, inadequate staff, unstable power supply, frequent changes in technology, managerial problems, staff indifference and software problems.

However, several authors have proffered strategies that will enhance and sustain ICT integration in libraries. According to Nwabueze and Ibe (2014), the strategies are improved funding, awareness creation, orientation for staff, sensitization of staff through seminars and workshops, training and retraining of staff, adequate planning for ICT and provision of adequate collection development policy for e-resources. The Southern Education Library Board (2014) stressed that all library staff need training in basic ICT skills, and search techniques, time for hands-on experience,

time to attend external courses, as well as competence-based ICT certification training. Igwebuike and Agbo (2017) in their contribution, suggested increased funding for libraries, provision of adequate electricity, posting of more qualified librarians, staff training, provision of adequate technical support, provision of adequate ICT facilities, and proper supervision of ICT resources.

Methodology

Descriptive survey research design was adopted for the study. Fifteen public

secondary schools located in both Nnewi North and Ekwusigo Local Government Areas of Anambra State were studied. No Sampling techniques were adopted as the study population was small. A checklist, interview, and questionnaire were instruments used for data collection of the study. Tables, percentages, and arithmetic mean were used to analyze data generated in the study. Items with values 50% and above as well as 2.50 and above were interpreted as positive, while items with values below 50% and 2.50 were interpreted negatively.

Data Analysis and Findings

Research Question 1.

To what extent are the ICT resources provided in the public secondary schools?

Table 1: Extent of ICT resources provision in the public secondary schools.

SCHOOL LIBRARY	MOBILE PHONE	COMPUTERS	PRINTERS	PROJECTORS	SCANNERS	MICROFILM	INTERNET	CD-ROM	E-MAIL	TELEVISION	DVD	FLASH	MICROPHONE	CAMERA	MODEM	PHOTOCOPIERS	LIBRARY SOFTWARE	SATELLITE	INTRANET	PERCENTAGE (%) DECISION
G.S.S OZUBULU	✓	✓	✓	✓	-	-	✓	✓	✓	-	-	✓	-	-	-	✓	-	✓	✓	57.89 HIGH EXTENT
C.S.S OZUBULU	✓	✓	✓	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	21.05 LOW EXTENT
ZIXTON S.S OZUBULU	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.79 V. LOW EXTENT
C.S.S IHEMBOSI	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.53 V. LOW EXTENT
C.S.S ICHI	✓	✓	✓	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.05 LOW EXTENT
UNION S.S ICHI	✓	✓	✓	-	✓	-	✓	-	✓	-	-	-	-	✓	-	-	-	-	-	36.84 LOW EXTENT
BOYS S.S ORAIFITE	✓	✓	✓	-	✓	-	✓	-	-	-	-	✓	-	-	-	✓	-	-	-	36.84 LOW EXTENT
ANGLICAN G.S.S NNEWI	✓	✓	✓	-	-	-	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	73.68 V. HIGH EXTENT
MARIA REGINA S.S NNEWI	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	89.47 V. HIGH EXTENT
NNEWI HIGH SCH. NNEWI	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	94.94 V. HIGH EXTENT

NNEWI HIGH SCH. NNEWI																			
NIG. SCI. OF TECH. COLLEGE NNEWI	✓	✓	✓	-	✓	-	✓	-	-	-	-	-	-	✓	-	✓	✓	✓	47.37 HIGH EXTENT
OKONGWU MEMORIAL S.S NNEWI	✓	✓	✓	-	-	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	78.95 V. HIGH EXTENT	
WOMEN EDU. CENTRE NNEWI	✓	✓	-	-		HORDED INFORMATION													10.53 V. LOW EXTENT
AKABOEZEM S.S NNEWI	✓	✓	✓	✓	-	-	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	78.95 V. HIGH EXTENT
G.S.S ORAIFITE	✓	✓	✓	✓	✓	-	✓	-	-	-	-	✓	-	✓	✓	✓	-	-	63.16 V. HIGH EXTENT

Observation checklist shows that all the fifteen schools have varying levels of ICT presence. While ICT provision in some of the schools were to a very high extent it was to a high extent in some of the schools and to a low and a very low school in others. The ICT resources were provided to a very high extent at Anglican Girls S.S. Nnewi, Maria Regina S.S, Nnwi, Nnewi High School, Okongwu M.B.S, Nnewi, Akaboezem S. S. Nnewi, and G.S.S. Oraifite, thus with percentages 73.68, 89.47, 94.74, 78.95, 78.95 and 63.16 respectively. It was provided to a high extent at G.S.S. Ozubulu thus with percentages 57.89 it was provided to a low extent at Nig. S&T college Nnewi, community S.S. Ozubulu, Community S.S. Ichi, Union S. S. Ichi and Boy S.S Oraifite, thus with percentages 47.37, 21.05, 21.05, 36.84 and 36.84 respectively. it was provided to a very low extent, Zixton S.S Ozubulu, Community S. S. Ihembosi and women education Centre Nnewi, thus with percentages 15.79, 10:53 and 10:53 respectively. Observation also shows that the ICT resources were not kept in the School libraries, but in separate places known as ICT centres.

Research Question 2:

To what extent are services rendered in the libraries using the ICT resources?

Table 2: Extent of Services Rendered with the ICT Resources in the Libraries

SN	Services rendered	\bar{x}	Decision
1.	User-education	2.20	Low extent
2.	Circulation control	1.88	Low extent
3.	Security of library materials	1.54	Low extent
4.	Reference service	2.15	Low extent
5.	Computer skills training	2.60	High extent
6.	Preservation of library materials	1.58	Low extent
7.	Acquisition	2.35	Low extent
8.	Cataloguing & Classification	1.66	Low extent
9.	Dissemination of information	2.52	High extent
10.	Internet Services	2.31	Low extent
11.	Photocopying services	2.35	Low extent
12.	Library Administration	1.88	Low extent

The result from Table 2 shows that the extent of use of ICT resources to carry out computer training and information dissemination was high thus, with the mean scores of 2.60 and 2.52 respectively. While the use of ICT for services like user education, circulation control, security of library materials, reference services, preservation of materials, acquisition,

cataloging & classification, Internet services, photocopy services, and library administration was low thus with the mean scores of 2.20, 1.88, 1.54, 2.15, 1.58, 2.35, 1.66, 2.31, 2.35 and 1.88 respectively. The average mean of 2.09 shows that the extent of use of ICT to render services in the school libraries was low.

Research Question 3

To what extent do the teachers possess the necessary ICT skills?

Table 3: Extent of Skills Possessed by the Teachers.

S/N	ICT skills	\bar{x}	Decision
1.	Internet skills	3.19	High extent
2.	Skills to install and use printer	2.94	High extent
3.	Web- designing skills	1.94	Low extent
4.	Ability to use search engines	3.38	High extent
5.	Ability to use Web 2.0 tools	2.98	High extent
6.	Knowledge of installing and operate software applications	3.38	High extent
7.	Skills to use popular productivity tools like word processing and spreadsheet	3.24	High extent
8.	Ability to help users to use computers	3.31	High extent

The result presented in Table 3 shows that the teachers possess to a high extent the following ICT skills: Internet skills, the skill to install and use printers, the ability to use search engines, the ability to use web 2.0 tools, the knowledge to install and operate software applications, the skill to use popular productivity tools like word-

processing and spreadsheet, as well as the ability to help users to use computers, thus the mean scores of 3.19, 2.94, 3.38, 2.98, 3.38, 3:24 and 3.31 respectively, They possess web designing skill to a low extent, thus the mean score of 1.94. The grand mean of 3.05 shows that the extent of ICT skills possessed by the teachers was high.

Research Question 4:

What are the challenges to the integration of ICT in school library services?

Table 4: Challenges to the Integration of ICT in School Library Services.

SN	Challenges to use ICT	\bar{x}	Decision
1.	Inadequate ICT Infrastructure	2.94	Agree
2.	Poor funding	2.69	Agree
3.	Lack of electricity supply	3.13	Agree
4.	Poor Internet access	3.06	Agree
5.	Computer illiteracy of users	2.81	Agree
6.	Administrative barriers	2.69	Agree
7.	Lack of training programmes	2.81	Agree
8.	Lack of ICT policy in the schools	2.81	Agree
9.	High cost of ICT resources	2.68	Agree

The result of the data analysis in Table 4 shows that the respondents agreed that inadequate ICT infrastructure, poor funding, lack of electricity supply, poor Internet access, computer illiteracy of users, administrative barriers, lack of training programmes, lack of ICT policy, and high cost of ICT resources are challenges to the integration of ICT in

public secondary schools, thus with mean scores 2.94, 2.69, 3.13, 3.06, 2.81, 2.69, 2.81, 2.81 and 2.68 respectively. The interview also revealed that security issues pose a challenge as most of the schools keep the resources under constant lock as there was fear that they may be burgled, thereby denying students the opportunity to use the available ICT resources.

Research Question 5:

What are the strategies for enhancing ICT integration in public secondary schools?

Table 5: Strategies for Enhancing ICT Integration in the Secondary Schools.

S/N	STRATEGIES	\bar{x}	DECISION
1	Constant training for teachers handling ICT	3.75	Strongly agree
2	Organization of Seminars/Workshops for the teaching of students	3.86	Strongly agree
3	Carrying out orientation programmes for students	3.56	Strongly agree
4	Posting of qualified librarians to the school	3.82	Strongly agree
5	Provision of alternative source of power supply	3.75	Strongly agree
6	Writing of adequate collection policy for e-resources in the schools	3.31	Agree
7	Improved funding of ICT issues in the libraries	3.06	Agree
8	Provision of adequate ICT infrastructure in the schools	3.63	Strongly agree

The result of data analyses in Table 5 shows that the respondents strongly agreed that constant training for teachers handling ICT issues in the schools, organization of seminars/workshops for the teachers, orientation programme for students, posting of qualified librarians to the schools, provision of adequate ICT infrastructure in the schools are strategies that will enhance ICT integration in the secondary schools, thus with mean values 3.75, 3.86, 3.56, 3.82, 3.75 and 3.63 respectively. They also agreed that writing of adequate collection development policy for e-resources in the schools and improved funding of ICT issues in the schools will enhance ICT integration in public secondary schools, thus the mean values of 3.31 and 3.06 respectively. The interview

also revealed that the respondents are of the view that fencing the unfenced schools and posting of adequate security personnel to the schools will help to remove the fear of burgling that has led the authorities of the schools to keep the available ICTs under lock and key and which has affected access to the ICT materials as required.

Summary of Findings

- ❖ The extent of ICT resources provision in the schools was not the same for all the public secondary schools studied. Thus, while some of the schools have enough ICT which can ensure ICT integration in the services of the school libraries, others do not. The ICT resources were also not kept in

the school libraries but in separate places known as ICT centres.

- ❖ The extent to which ICT resources were used to render services in the schools' libraries was low.
- ❖ The teachers in charge of ICT resources in the public secondary schools studied possess ICT skills to a high extent, but they are not qualified school librarians.
- ❖ Challenges to ICT integration in the services of school libraries include inadequate ICT infrastructure, poor funding, lack of electricity supply, poor Internet access, computer illiteracy of the users, administrative barriers, lack of training programmes, lack of ICT policy, high-cost of ICT resources, lack of trained school librarians, and lack of adequate security measures.
- ❖ Strategies for enhancing the integration of ICT in the services of public secondary school libraries are constant training for teachers handling ICT, organization of seminars/workshops, orientation programmes for students, posting of qualified librarians to the school libraries, and provision of alternative sources of power supply. Others are adequate collection development policy for e-resources, improved funding of ICT issues, provision of adequate ICT infrastructure, fencing of the unfenced schools, and employment of security personnel to beef up security in the schools.

Discussion of Results

The discussion of the result was based on the following subheadings: the extent of ICT resources provision in school libraries; the extent of use of ICT resources for services in libraries; the extent of ICT skills possessed by the teachers in charge of the ICTs; challenges against ICT integration in the services of school libraries and; strategies for ensuring ICT integration in the school libraries.

The Extent of ICT Resources Provision in School Libraries

Result of the study showed that the extent of ICT resources provision in the school libraries was not the same, thus while they were provided to a high extent in some of the schools, the resources were provided to a low extent in the majority of the school libraries. This means that the integration of ICT in the services of most of the libraries will be greatly hampered by the poor number of ICT resources. Findings also show that the ICT resources were not kept in the school libraries but in places known as ICT centres. Certainly, this scenario cannot guarantee seamless integration of ICT in the services of the school library as a lot of problems will be encountered in carrying the ICT resources to the school libraries and back. It will also impact negative access which is crucial in ensuring that the students use the ICT resources provided in the libraries. The finding of the low extent of ICT provision tallies with Nwabueze and Ibe (2014) who in their study on the extent of ICT integration in public libraries in Anambra State, discovered that ICT presence in the libraries

was low and not evenly distributed among the libraries.

The Extent of Use of ICT Resources for Services in the School Libraries

The result of the study show that the extent of ICT application in the services of school libraries was low. Factors such as the separation of ICT resources from the school libraries, absence of qualified school librarians, and low availability of ICT resources in most of the libraries must have contributed to low extent of application of ICT resources in the library services. This is because, some ICT resources cannot operate in isolations in achieving the objective of their installation, and it is the librarians that have been trained to render the services that actually know how to utilize the ICT resources to render meaningful services to users.

The finding on the extent of ICT integration in school library services was also confirmed by Nwabueze and Ibe (2014) who in their study on the extent of ICT integration in public library services in Anambra State, found that ICT integration in the service of the libraries was low.

The Extent of ICT Skills Possessed by the Teachers

The result of the study revealed that the teachers in charge of the ICT resources in public secondary schools possess the necessary ICT skills to a high extent. However, findings from the study, show that they were not qualified school librarians, which would have exposed them to library routines and services. It would

have also equipped them with the knowledge to administer the affairs of the school libraries very well and ensure the amalgamation of the ICT rooms and libraries into one. The finding on the extent of skills agrees also with Nwabueze and Ibe (2014) who found that the librarians in public libraries of Anambra State possessed the necessary skills for ICT integration to a high extent.

Challenges Against ICT Integration in the School Libraries

The result of the study showed that challenges against ICT integration are inadequate ICT infrastructure, poor funding, lack of electricity supply, poor Internet access, computer illiteracy, administrative barriers, lack of trained school librarians, lack of ICT policy, high cost of ICT resources, and lack of adequate security measures. The problems of inadequate ICT infrastructure, lack of trained school librarians, lack of ICT policy, and inadequate security were glaring in the present study and needed to be addressed very urgently. The finding agrees with Oghenetaga, *et al* (2014) who also found the high cost of ICT resources, inadequate ICT resources, erratic power supply, and poor maintenance of ICT equipment as challenges against ICT integration in libraries.

Strategies for Enhancing ICT Integration

The result of the study also revealed strategies for enhancing ICT integration in libraries as constant training, through seminars and workshops, orientation programmes for students, posting of

qualified librarians to the schools, provision of alternative sources of power supply, provision of adequate ICT infrastructure, writing of policy for e-resources, fencing of the unfenced schools and employment of security men, to ensure the security of both the schools and resources. The Finding tallies with Igwebuiké and Agbo (2017) who proffered strategies for enhancing ICT integration in libraries as increased funding, provision of electricity, posting of more qualified staff, training of staff, provision of adequate ICT facilities, and proper supervision.

Conclusion

From the result of data analysis and findings, it can be concluded that: the ICT resources in the school libraries cannot guarantee ICT integration in the services of most of the school libraries. Also, despite the qualification of teachers from other fields, the absence of qualified school librarians in school libraries will continue to do more harm than good in terms of school library development, and efforts to integrate ICT into the services of the libraries will continue to be elusive if qualified school librarians are not employed in secondary schools to manage their libraries.

Recommendation

The following recommendations are made based on the findings of the study.

1. Adequate ICT resources should be provided in all the school libraries.

2. Qualified school librarians should be employed to manage all the school libraries.
3. The national body of the library association such as the Nigerian Library Association (NLA), should provide an adequate collection development policy for e-resources in all the school libraries.
4. The government should constitute a monitoring team for ICT development in all the school libraries.
5. Security personnel should be deployed in all the secondary schools.
6. The challenges raised in the study should be addressed through a holistic application of the strategies highlighted in the study.

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