

#### © E. P. Udofia

#### First Published 2021.

#### All Rights Reserved.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the editor who is the copyright owner.

### NATIONAL LIBRARY OF NIGERIA CATALOGUING IN PUBLICATION (CIP) DATA

UDOFIA, Emem Paul (ED). Information Services and the School Library Media Centre. School libraries 2. Libraries and Readers 3. Library Science i. Title

Z 675.53. U21 2020 02525 ISBN: 978-978 -652-82-5-8

#### Published by:

Inela Venture & Publishers Ltd. Uyo 70 Dominic Utuk Avenue, Uyo

#### Computer Typesetting:

P & P Educational Consult, Uyo.

Technical Collator: Aloysius Daniel

## CHAPTER Twenty-four

# ENJOYING THE SCHOOL LIBRARY MEDIA CENTRE THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

Imaobong Ndifreke OBOT PhD & Mbuotidem Odudu UMOH (Esq.) PhD

University of Uyo, Uyo

#### Introduction

Information Communication Technology is an important tool needed to satisfy the information needs of all members of the school community. It also enhances the provision of library services to the school library. ICT is generic terms that refers to the technologies that are used to collect, store, edit, and communicate information in various formats (Raji, 2018). The world now experiences a digital scenario in which ICT has changed the possibilities of the job promotions and has brought changes to expected library performances (Janakiraman and Subramanian, 2015). This invariably goes to state that ICT is an indispensable tool in assisting all types of libraries in the provision of timely and relevant information, especially the school library which facilitates foundational education. Since, the vital activities of libraries comprise collection development, reference services management, document delivery service, access to organised collections held by the library and assisting users in information search and retrieval (Husain and Nazim, 2015), it is therefore very necessary to use modern technology to make library services faster (Bhoi, 2017) and timely at the foundational stage.

From observation, it is evident that many institutions and organizations including the library, encounter varied difficulties in trying to infuse ICTs to their services. ICT should no doubt be made a compulsory tool for information provision to aid societal growth and development. It is therefore pertinent that ICT be introduced at the foundational stages of a child's development so as to encourage mastery

and productive educational outcomes. This of course can be achieved through a school library media centre.

Information and Communication Technology is the application of technologies consisting of hardware, software, network and media for collection, storage, processing, transmission and presentation of information in vocal, textual, pictorial and multimedia formats (Igwe, 2011). In line with this, Aina, Okunnu and Dapo-Asuju (2014) postulated that ICT is a term used to describe the ability to access information with the use of telecommunication based internet resources which provide the ability to create, organise, manipulate and access information from remote locations across the globe within a short time. Also, the World Bank in 2002 stated that Information Communication Technologies (ICT) consists of the hardware, software, networks, and media used for the collection, storage, processing, transmission and presentation of information (voice, data, text, images as well as related services) (Hagg, Cummings and Phillips, 2007).

One of the most crucial initiatives of being a school librarian is to leave an imprint on the users by infusing the school (his role) into this technological era through ICT. This is to say that a school librarian should be conversant and highly skilled in the use of technological tools in order to teach pupils and students to become co-participants in the world of knowledge. Information and Communication Technology (ICT) tools and applications that can make the school library media centre a pleasurable one, as enumerated by Lamb & Johnson, Richardson and Valenza in Hughes-Hassell and Hanson-Baldauf (2008) include:

Communication and Collaboration Technologies—blogs, e-mail, live chats, threaded discussion forums, video conferencing, voice-over Internet protocol, virtual conferencing, and wikis. Production and Design Technologies—digital camera, digital imaging tools, digital video production tools, GIS, electronic white boards, podcasts, portable media players, presentation tools, streamed video, and web design tools.

Virtual Modelling Technologies—animated narrative vignette, computer simulation, and online gaming.

File Sharing Technologies—audio file sharing tools, peer to peer, photo file sharing tools, RSS feeds, and video file sharing tools.

Social Networking Technologies—social book marking, social networks, and virtual social networks

#### ICT Resources in the School Library

ICT as aggregate of computers, telecommunication gadgets, multidimensional resources and other related technologies are applied and utilized in the total process of information management and dissemination (Adebayo, Ahmed and Adeniran, 2018). These resources are sine-qua-non for facilitating ICT services in a school library. Therefore, Umana (2018) stated that ICT resources are paramount to effective delivery of school library services and include:

- i. Computers: these are used for various activities such as information generation, processing, storage, analysing and information dissemination. The use of computers in the library fast tracks information transmission and optimises the utilisation of available resources in the school library. Computer accessories include CDs, Flash drive etc. Computers are used to perform varied library operations like ordering/acquisition, circulation, answering reference queries etc. It is an essential management tool for every school library.
- ii. The internet: the internet enhances speedy flow of information. It is a network of computers communicating with others, often via telephone line. It provides a means for information sharing among individuals, units, institutions and organisations and provides up-to-date information to enhance productivity.
- iii. Electronic mail (email): this is the most widely used resource of the internet. It is used for receiving of messages (which are called mails) which are communicated through electronic device Communication through e-mails is fast and cheap for schools.
- iv. World Wide Web (WWW): this is also an internet-based resource Websites help individuals and schools find information and information resources. Relevant and timely information is made available to the public through the websites of schools.
- v. Video conferencing: this is an accessible and cheap tool for

- holding conference between two to more participants in various locations through data communication network.
- vi. Printing technology: a printer is a device that converts computer output into printed images. Examples as used in the library include laser printer, Inkject Dot-matrix printer, etc.
- vii. Online Public Access Catalogue (OPAC): this is the computer form of library catalogue used to access information resources in the library. It is an online database of materials held by a library or group of libraries, which can also be made available to the public.

#### Benefits of ICT in School Libraries

- The introduction of ICTs in the educational sector has brought about the computerization of print materials such as books, journals, newspapers, magazines, dictionaries etc. in the library which helps the library to save space and reduce proliferation of resources.
- 2. The internet provides up-to-date information on every subject as obsolete research findings can be accessed speedily.
- 3. ICTs facilitate the automation of the different manual services of acquisition, cataloguing and circulation of information resources in the school library.
- 4. Information dissemination in school libraries is also possible with the use of ICT tools such as CD-ROM, and email.
- 5. Information is faster and easy to access with the use of ICT in the school library.
- 6. It facilitates access to unlimited information from diverse sources
- 7. It enables easier, faster, cheaper and more effective library operations.
- 8. ICT tools enable the library to provide services more effectively and efficiently.
- ICT assists the school librarian in the efficient management of library functions, supervision of users and the improvement of information resources.
- 10. ICT enhances communication between the school units (of which the school library forms a part), promotes a sense of responsibility

- on the part of the school library administration through transparency in managerial functions and provides a means to which such functions can be accomplished with necessary ICT tools.
- 11. ICT exerts considerable influence on the school library through the management and exchange of information between the entire school system.
- 12. It facilitates the acquisition of ICT skills and competencies in both staff and school library users.
- 13. It enhances versatility in information handling and computer literacy in both staff and students.
- 14. It facilitates the provision of a wide array of information from different sources.
- 15. Information overload is well managed as information retrieval is simplified through computerization.
- 16. It saves space and reduces the influx of paper into the library.

#### Enjoying the School Library Media Resource Centre through ICT

- (a) Website Navigation to web-based resources: The school library through a school librarian, could create useful website resources and also teach students to navigate them. This will slowly make room for a higher standard of internet research among students within the school. Web-based resources can include:
  - i. Online Document Delivery Service (ODDS), short stories, classroom lessons, news and other documents mainly in Portable Document Format (PDF) could be delivered to library users' laptops, smart phones and desktops in the school library.
  - ii. Online Learning/User Education Programmes: These involve extra effort by the school librarian to teach library users how to navigate online based bibliographic or library user education or learning programmes such as online lessons on navigating online resources and virtual tours of library resources. Internet or CD-ROMs can also be used by the school library to educate users.
  - iii. Online Users' Advisory Programmes: School libraries could

- administer web-based versions of users' advisory programmes include advice on fictional materials chosen based on age. information on new acquisitions, book reviews for teens, recommendations and evaluation of the effectiveness of such programmes.
- iv. Web-based Information Resources: School libraries could offer access to web information such as databases, electronic books and relevant publications from various publishers.
- Enhanced eBooks: From observation, it is evident that the (b) uptake of eBooks is slow, if not present at all in primary and secondary schools in Nigeria. Attitudes are changing with ereading technology improving (Jabr, 2013) with the addition of music, moving images and games enabling immersion and engagement (James & deKock, 2013) and this ultimately results in widespread literacy and also facilitates utilisation of these resources in a school library media centre. Enhanced eBooks are very interesting companions for school children as the literature provided is captivating and interactive. Interactive eBooks have a broad range of resources and could serve as very important teaching and learning tools. This could reinforce the classroom routine teaching and learning procedure and also serve as learning opportunities to which students can actively get involved in the teaching-learning process for better educational outcomes. Therefore, Mills and Levido (2011) presented an excellent article regarding pedagogy for text production, outlining how effective the use of digital text creation can help to achieve student outcomes. This incorporates many traditional as well as 21st century skills in the creation and sharing of the texts which can be useful for teaching digital literacy in the library as well as collaborating with teachers so that they can use digital text creation tools in their teaching (Lynda, 2016). The author stated further that not only are digital texts an excellent teaching tool, they are also an excellent learning tool.
- (c) Web 2.0 Tools: Using Web 2.0 Tools and being versed in all types of

media is vital to the teacher librarians' role. The use of social media and other web 2.0 tools as a learning tool is fast dominating our schools as well as our entire lives. Therefore, using those tools such as Twitter, Wikispaces, good reads etc. could form a very useful learning tool which can produce very desirable educational outcomes. Therefore, Lynda (2016) believes that the library and teacher librarian play a vital role in teaching students how to research effectively thereby encouraging collaborative learning and also, teaching students and staff how to incorporate these tools into their pursuits which will ultimately lead to well-versed citizens with outstanding 21st century skills.

- Social media like Facebook, Twitter, Blogs are the fastest information dissemination tools. In order to help students enjoy the school library through ICT, social media tools can be used for promoting or marketing of both the library resources and e-resources.
- **Blogs** can be used to disseminate and showcase school library resources and services to enlighten, educate and give orientation to new students.
- Facebook on the other hand, has become a very potent and ultra practical tool for information dissemination in a school library. Facebook can be used to send current and ongoing programmes undertaken by the library such as library weeks, library orientation, user education programmes, exhibitions etc.
- d. E-Mail: This is a formal communication medium for exchanging messages and information in an electronic setup. It can be considered a faster medium for sending information such as personal messages, letters, articles, computer programming files, pictures and sounds to reach a recipient from any part of the world within a split second. School libraries use this communication technology to serve library users through sending mails for renewal or return of library materials. Email is usually brief but it is used to respond to a very important need within the school. It can be used for various forms of communication between staff and staff, staff and users as well as among various levels of users. Its aim is basically for timely provision of information.

- (e) Voice mail: This is a variant to email technology. Its difference exists in the fact that the mail is sent immediately through the voice. School librarians could use this to teach or carry out user education or orientation services.
- (f) Telephone: This communication technology is used by both school librarians and library users to follow up on a user, to ask questions on areas not understood during user education hours or possibly to ask queries regarding the availability of resources they (users) are most likely interested in.
- (g) Video conferencing: This is a communication technology using a conference medium involving two or more participants at different locations but linking each other through computer networks to transmit both audio and video data. This tool can be used to conduct user education or orientation, (for secondary schools that run a multi-campus system) to guide them in the utilization of resources and services in the school library. This technology can also be used by the school management together with library management to deliberate on ways to make the school library a very comfortable and beneficial environment for users.
- (h) Closed-Circuit Television (CCTV): This is a great technological medium deployed to provide security in the library through computer. This technology helps the school librarian better manage the library as he, as well as other technical staff in the library can supervise the entire library activities through a computer system. It helps to ensure that both the library staff as well as users are comfortable. It also provides security for the resources in the library and ensures that other forms of crime are at bay. It is also used to check incessant loitering and illicit movements in and around the library environs.

#### Specialised ICT Services for School Libraries Media Centre

a. Reprographic Technology: This involves duplication of materials through reprographic machines to facilitate photocopying of documents by users who may have a need for such. It also helps check theft and mutilation of information

- resources in the school library.
- b. Abstracting Services: This involves the provision of summaries to texts and fictional works in a bid to simplify works from various authors and make it accessible to users electronically.
- c. Scanning Services: Scanner is an important apparatus in a school library. It is useful for scanning print resources (such as text, image and particular pages of books) and helps in the establishment of a digital library.
- d. Ordering/Acquisition: The web has helped to simplify and enhance efficiency in the acquisition of library information resources. Order placing, duplication checking, price checking etc. are done very effectively using ICT techniques (Bhoi, 2017). The effort exerted at acquisition of resources is greatly reduced as invoices are now accessed through websites to boycott postal delay. Publishers and vendors are also available through websites like amazon, infibeam etc.
- Cataloguing and Classification: The advent and use of ICT has made it possible for remote librarians to access the huge databases of big libraries in developed countries for the purpose of adopting or adapting their bibliographic data for their own library use; and indeed the online catalogues have transformed the landscape of cataloguing and classification (Adeleke and Olorunsola, 2010). Therefore, with the help of internet based web-sources, cataloguing and classification of information resources has been simplified in school libraries. The Dewey Decimal Classification system which is the scheme used to organise resources in the school library is now made possible through online tools which can give bibliographic records of the entire school library information resources. Western libraries provide classification details in their online catalogue record, but there are also some online resources (which are online classification tools) where library resources (depending on the type of library) can be classified such as OCLC classify, LOC classification web and WebDewey (Bhoi, 2017).
- f. Circulation Services: Duties performed to facilitate the

- circulation of information resources in a school library using ICT include; issues, returns, overdue reminders, renewal, registration, user policies, daily check-in and check-out statistics, accreditation (both in and out) etc.
- g. Stock Verification: Before stock-taking, the school library collection should be stored in a computer database before verification of the stock to ascertain if the entire library stock will be done through the database. The stock available in the library is then scanned through a barcode scanner and the data collected from the scan are matched with the data available in the automation software to determine the number of books lost.
- h. Reference Service: Reference information resources like the encyclopaedia, directories, dictionaries, maps, biographies are available on the internet to provide general information for school library users. In the reference section (whether assumed, actually partitioned or separated), questions asked by users are called queries. Clarification of such queries can be made by a school librarian through the telephone, internet and e-mail. These ICT facilities provide quick and timely information provision in the reference section of the school library.
- i. Translation Service: Foreign students always require this service, likewise users who are eager to learn foreign languages. Online tools such as Bablefish translator and Google translator are used to translate from English to foreign languages and foreign languages to English as the case may be.
- j. Information Literacy: Though all students and teachers may use the internet for research purpose, gaming or navigating social media sites, they may not use it effectively. Therefore, the school librarian has a vital role in teaching information literacy in order to provide literacy skills for both teachers and students to grant them the ability to find and use information effectively. Information literacy is the keystone of lifelong learning and creating a foundation for lifelong learning is at the heart of the school library media programme (AASL and AECT in Hughes-Hassell and Hanson-Baldauf, 2008). School librarians should particularly be concerned with making students literate in

identifying, accessing and utilising information resources and providing them with the skills needed to maximally explore and utilize such information.

These skills according to AASL/AECT standards and which young people should possess, include:

- Accessing "information efficiently and effectively"
- Evaluating "information critically and competently"
- Using "information accurately and creatively"
- Pursuing "information related to personal interests"
- Appreciating "literature and other creative expressions of information"
- Striving " for excellence in information seeking and knowledge generation"
- Contributing "positively to the learning community" and recognizing "the importance of information to a democratic society"
- Behaving ethically "in regard to information and information technology"
- Participating "effectively in groups to pursue and generate information" (AASL/AECT, 1998, PP-43). School librarians value information literacy as the foundation of lifelong learning and they emphasize the process of learning rather than the accumulation of knowledge. By collaborating with diverse individuals within and beyond the school, by building awareness of the programme's contributions, and by applying and introducing instructional and information technologies, school librarians promote a clear vision for successful ICT programming.

#### Conclusion:

The school library that is optimally equipped with ICT tools will certainly serve as a veritable agent in teaching and entertaining student patrons. It is therefore imperative for school libraries to employ ICT in providing services to users so as to serve as the much needed agent of enlightenment and social orientation.

#### **Recommendations:**

1. Based on the role that ICT plays in Nigeria today, government

- should integrate ICTs into our school curriculum by providing relevant infrastructure and training at the foundational as well as secondary school levels of education.
- 2. Government could review the existing ICT policies to reflect the Nigerian ICT environment in order to ensure applicability and suitability in schools.
- 3. Government should evaluate the ICT policy implementation by providing periodic performance review especially as it has to do with school libraries and media resource centres.
- 4. School administrators as well as school librarians should conjoin with educational institutions like UNESCO and UNICEF in creating awareness and sensitizing users on ICT opportunities available to them.
- 5. School management must carry out regular ICT facilities update and checks as well as evaluation of human resources like hardware/software maintenance, replacement and support services for enhanced patronage of school libraries.
- 6. Government, Nigerian Union of Teachers (NUT) and relevant associations in schools should sponsor teacher librarians and school librarians to conferences, workshops and seminars in order to help them train and retrain users on the use of ICT for enhanced competence and skills in order to make the school library environment a pleasurable experience for users.
- 7. State government, proprietors of private schools and stakeholders should increase funding to primary and secondary schools in order to ensure the smooth implementation of ICT policies by teachers as well as librarians.

#### References

- Adebayo, O. A, Ahmed, Y. O. And Adeniran, R. T. (2018). Provision of Library Services: A Panacea for Sustainable Development in Nigeria. Library *Philosophy and Practice (e-journal)*.
- Adeleke, A. A. & Olorunsola, R. (2010). ICT and library operations. More on the online cataloguing and classification tools and techniques in Nigerian libraries. *The Electronic Library*, 28 (3), 453-462. Retrieved from https://doi.org

- /10.1108/02640471011052025.
- Aina, A.J., Okunnu, H. O. & Dapo-Asaju, H. S. (2014). ICT integration for sustainable development of Nigeria academic libraries: Issues and challenges. *International Journal of Information Research*. 3(4), 334–345.
- American Association of School Librarians (AASL) and Association for Educational Communications and Technology (AECT) (1998). Information power: Building partnerships for learning. Chicago: American Library Association.
- Bhoi, N. K. (2017). Use of Information Communication Technology (ICT) and Library Operation: An Overview. *Proceedings: International Conference on Future Libraries. From Promise to Practices.*
- Hagg, S., Cummings, M., Phillips, A. (2007). Management Information Systems for the Information Age 6<sup>th</sup> Ed. Boston: McGraw-Hill.
- Hughes-Hassell, S. and Hanson-Baldauf, D. (2008). Information and Communication Technology Use by North Carolina School Library Media Specialists: Perceived Competencies and Barriers. School American Association of School Librarians. Vol. 11 retrieved on 16/06/2020 from https://www.ala.org/aasl/slmr/volume11/lukenbill-immroth
- Husain, S. & Nazim, M. (2015). Use of different information and communication technologies in indian academic libraries. *Library Review*, 64 (1/2), 135-153. https://doi.org/10.1108/LR 06-2014-0070.
- Igwe, K.N (2011). Issues in the automation of libraries and information centres. In R. A. Jimoh and K. N. Igwe (Eds.). *Information and Communication Technology (ICT) systems for library services* (pp 87-108). Offa: Wunmi Commercial Press.
- Jabr, F. (2013). The reading brain in the digital age: The science of paper versus screens. Scientific American. Retrieved from <a href="http://www.scientificamerican.com/article/reading-paper-screens/">http://www.scientificamerican.com/article/reading-paper-screens/</a>
- James, R., & deKock, L. (2013). The digital david and the gutenberg goliath: The rise of the 'enhanced' e-book. *English Academy Review*, 30(1), 107-123.

- Janakiirman, A., and Subramanian, N. (2015). The Role of Information and Communication Technology (ICT) in Library and Information Science (LIS) in India. Retrieved from https://www/researchgate.net/publication/2995975501.
- Lynda (2016). ICT use and the role of the school library. Lynda's TL (Teacher Librarianship) Portfolio. Retrieved from https://thinkspace.csu.edu.au.
- Mills, K., & Levido, A. (2011). iPed pedagogy for digital text production. *The reading teacher*, 65(1), 80-91.
- Raji, S. K (2018). The Role of ICT as a Panacea for National Development. Retrieved from www.nacossa.or.ng
- Umana, K. (2018). ICT resources for sustainable development in Nigeria. Retrieved from www.nacoss.or.ng.
- World Bank Group (2002). Information and Communication Technologies. A World Bank Strategy (Washington DC: The International Bank for Reconstruction and Development/The World Bank, 2002).