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LIBRARIANS' ICT SKILLS DEVELOPMENT: NEED FOR EFFECTIVE LIBRARY SERVICES AND NATIONAL INTEGRATION IN ANAMBRA STATE

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Abstract

The study was focused on how to developed librarians' knowledge and ICT skills for effective library services and national integration. Three research questions guided the study. The study was conducted in Anambra State, Nigeria. Population of the study comprised 208 librarians (49 males and 159 females) in 16 libraries in Anambra State. There was no sampling as the population was small and manageable. Instrument for data collection was a questionnaire titled 'Librarians Knowledge and Skill of ICT for Effective Library Services and National Integration'. Data collected was analysed using mean score rating. The findings of the study revealed that librarians need ICT skills to develop web-based applications; access and deliver e-mails, e-resources and databases, and so on. It was also revealed that librarians in Anambra State possessed ICT skills such as sending e-mails; Internet searching; typing and printing documents; providing information literacy education, amongst others. Furthermore, the study revealed that librarians' knowledge and ICT skill could be developed through sharing of ideas with more knowledgeable librarians; brainstorming with computer operators working in the LIS Department; enforcing the use of e-mail services in contacting librarians and online publication of articles in high impact journals. It was recommended that the NLA should increase the number of professional development programmes such as conferences and seminars to enable librarians acquire new ideas and learn best practices.

Keyword: *ICT Skills Acquisition, Librarians Professional Development, Nigerian Library Association, Library and Information Science, Anambra State, Nigeria*

Introduction

The emergence of information and communication technology (ICT) has greatly transformed the pattern of information collection, processing, dissemination and storage. ICT is a diverse set of technological tools and resources which is used in collecting, creating, communicating, disseminating, storing and managing information (Eze, 2013). The ICT devices include computers and their accessories,

the Internet, projectors, radio and television. Investment in ICT is providing opportunities for achieving greater social and economic benefits which has made organizations of all sizes increase their dependency on technology and electronic devices, thus, moving toward network-enabled services (Ezziane cited in Nwankwo & Agwuna, 2021). Its facilities include diverse technological tools through which information can be accessed without the barrier of time and space.

The library is a social institution concerned with the provision and management of information sources, resources and services. The *Cambridge Online Dictionary* (2014) defined the library as a collection of information resources in print or other forms that is organized and made accessible for reading or study. The library is thus a collection as well as a building that houses such a collection or both (Yuvaraj, 2013). In a more traditional sense, a library is a collection of books organized for use and maintained by a public body, an institution, or a private individual (Nwankwo, 2017). Collection of information media other than books for use has made many libraries become repositories and access points for maps, prints and other documents and works of art on various storage media such as microform (microfilm/microfiche), audiotapes, CDs, cassettes, videotapes and DVDs.

Expectedly, acquisition of ICT skill is needed by librarians to render effective library services needed for national integration. This clearly shows that librarians should possess the requisite skills to function effectively in the information society. The acquisition and use of ICT now forms the basis for the use of power and development in the world of today. Librarians therefore, need the knowledge and possession of ICT skills to ensure effective delivery of library services in this 21st century. Hence this study investigated the librarians' knowledge and ICT skills for effective library services for national integration.

Statement of the Problem

Library services the world over has significantly changed due to developments in ICT. For instance, the traditional card catalogues and microfiche is gradually but steadily being replaced by the Online Public Access Catalogue (OPAC), databases, and reference sources that can be sourced via the Internet. Thus, library services the world over is IT driven. Many libraries now have their own home page in the World Wide Web which enables users to have easier access to a variety of Internet services they require without physically visiting the library. This recent development is an indication that services of librarians should include adequate knowledge and skill of ICT to meet the varying needs and

expectation of the library user. It also facilitates cooperation among independent groups; increases external links, and encourage national integration. Librarians without requisite skills to use ICTs and emerging technologies of the 21st runs the risk of becoming obsolete. Experience has shown that there seems to be inadequate number of librarians with requisite knowledge of ICT skills to cope with the emerging technologies of the 21st century. These are assumption that needed empirical evidence. It is against this background that this research sought to determine the ICT skills of librarians working in academic libraries in Anambra State for effective library services and national integration.

Research questions

1. What are the ICT skills needed by the librarians for effective library services and national integration in Anambra State?
2. To what extent do librarians in Anambra State possess ICT skills for effective library services and national integration?
3. What are the ways of developing professional librarians' knowledge and ICT skills for effective library services and national integration?

Literature review

Simply put, a skill is the ability to easily perform a task. There are different kinds of skills depending on the task to be performed. ICT skills include those skills needed by database managers, user interface designers, website creators, information technologists, computer technologists, network managers, cataloguing and metadata experts, digital archivists and project managers. Acquisition of these skills obviously requires team spirit, staff development and participation in Nigerian Library Association (NLA) (Ezeani, Eke and Ugwu, 2012). The skills are acquired and deployed in the duties of librarians such as acquisition, cataloguing, indexing, serial arrangements, readers' services, basic literacy education, coordination of public programs, basic computer training, and so on. Supposedly, libraries must continuously groom their librarians to acquire core digital competencies especially in ICT usage.

Thus, librarians need to develop their knowledge and ICT skill to match the emerging technological development of the 21st Century. This can be done through collaboration and social networking with colleagues, attendance to professional conferences of National Library Association and online discussion forums. According to Ukachi (2010), collaborating with professionals of ICT require training to develop knowledge and ICT skills to harness the power of information technologies and provide the state-of-the-art services. In the same vein, Anasi, Akpan and Adedokun (2012) opined that building knowledge and skill of ICT among librarians require encouragement in knowledge sharing and exchange via platforms like conferences, workshops, seminars, symposium, and so on. The use of ICT significantly improves knowledge sharing in organizations to enhance knowledge sharing. There is need for librarians to put proper mechanism in place to share and integrate their individual knowledge and skill of ICT to facilitate learning, create capacities and competencies within their profession as well as library services.

ICT is a crucial element in linking information and integrating knowledge in organizations. Presently, knowledge is communicated easily through e-resources like online text, e-mail, e-conferences such as teleconferences, videoconferences, etc. Others include e-magazines, e-journals, web forums, wikis, mobile phones, intercom, skype, web blogs, list serves, web chat rooms, Facebook, WhatsApp, Twitter, Instagram, Good knowledge of these modern ways of using technology is important for professional development of librarians. The integration of ICT in library services has transformed the core library functions such as acquisition, bibliographic mapping of information resources, metadata and representation of such data in catalogue card structure. It has also transformed information service delivery such as charging and discharging and other customer service related activities. Dhanavandan and Tamizhchelvan (2014) affirmed a paradigm shift from traditional library settings to ICT supported library. For instance, from custodian of books to service oriented information provider; print to digital; order in libraries to chaos on the web; one medium to multimedia/hypermedia; book

preservation to bit preservation among others. These shifts in the nature and structure of library services affect general library operations and require librarians to change their skills and knowledge in line with the changes (Wada, 2015) to effectively discharge their library duties.

As libraries provide unrestricted access to information in many formats and sources, their services in areas of CD-ROMs, databases and the internet become value added (Ezekwe & Muokebe, 2012). These services made librarians specialists in finding, organizing and interpreting information needs of the library user (Anike, 2014). However, the services of these specialists such as professional librarians require sound knowledge of ICT to ensure effectiveness in discharging library services. This means that libraries require expertise services in more dynamic ways to achieve users' satisfaction and national integration. National integration is the awareness of a common identity among the citizens of a country (Ekemini 2013). It is a process that attempts to erode the presence of the spirit of micro nationalities in place of a spirit of nationhood. It is very important to the building of a strong and prosperous nation.

National integration has been a top priority of the government of Nigeria since independence. Librarians get involved in national development through their ICT skills by providing information that is needed by every member of the society. The use of ICT in achieving breakdown of ethnic barriers, elimination of primordial ethnic loyalties and development of the sense of common identity (Ekemini 2013) is envisaged for national integration. Knowledge and skill of ICT is very crucial for national integration which is a three phased activities (Morgan, 2005): project, process and product. Librarians require knowledge and ICT skills to facilitate cooperation and understanding among independent groups, increase external links, make recent information available, encourage research and experiments, build network of people with common goals and facilitate interaction between people anywhere, anytime (Okoye cited in Obiadazie, Nwankwo, & Anene, 2019) to achieve national integration.

Methodology

The study adopted a descriptive survey research design which sought information on developing librarians’ knowledge and skill of ICT for effective library services and national integration. The study was conducted in Anambra State of Nigeria. Population of the study comprised all the 208 librarians in the 16 libraries in Anambra State (NLA Anambra State Chapter Directory, 2018). There was no sampling because of the small size of the population. Instrument for data collection was a self-developed questionnaire entitled ‘Professional Librarians Knowledge and Skill of ICT for Effective Library Services and National Integration’. The instrument has two parts: Part 1 sought information on personal data of the respondent while part 2 focused on the research questions that guided the study. Part 2 had three sections. Section A sought information on ICT skills needed by librarians; section B was focused

on the extent librarians in Anambra State possess these skill of ICT. Section C dwelt on ways to develop librarians’ knowledge and skill of ICT for effective library services and national integration. The instrument was structured on a fourpoint rating scale of strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD). The responses were weighted as follows: SA = 4, A = 3, D = 2, SD = 1. The researchers trained three research assistants who helped to administer the instrument to the respondents in libraries within Anambra State. A total of 199 out of 208 questionnaires distributed were returned and used for data analysis. Data collected were analysed using mean scores. Mean scores from 2.50 and above was adjudged to be acceptable while mean scores below 2.50 were regarded as non-acceptable. Result from the data analysis was presented in tables according to the research questions that guided the study.

Results

Research Question 1

What ICT skills do professional librarians need for effective library services and national integration?

Table 1: Mean Scores of Respondents on the Skills of ICT Professional Librarians Need for Effective Library Services and National Integration

S/N	ICT Skills Needed by librarians	X	Decision
1.	Skill of developing web-based applications	3.11	Acceptable
2.	Skill of accessing and delivering web-based mails	2.90	Acceptable
3.	Accessing e-resources in multiple computer networks	2.84	Acceptable
4.	Accessing e-resources in different databases	2.76	Acceptable
5.	Using ICT to transform information in another format in e-environment	3.01	Acceptable
6.	Expertise in installing new software packages e.g. computer anti-virus	3.14	Acceptable
7.	Expertise in updating an installed software package in the computer system	3.27	Acceptable
8.	Expertise in using search engines e.g. Firefox to get information	2.89	Acceptable
9.	Downloading documents and files from websites	2.74	Acceptable
10.	Online buying and recharging of data bundles for internet services	2.72	Acceptable
11.	Saving documents in primary and secondary memory e.g. CD-ROM	3.09	Acceptable
12.	Typing and printing using the computer system	3.19	Acceptable
13.	Scanning documents using digital scanners	3.24	Acceptable
14.	Designing and publishing library cards and materials using ICT	2.82	Acceptable
15.	Retrieving information stored in various file formats	3.02	Acceptable
16.	Using ICT for library inventory services	3.22	Acceptable
17.	Using computer to manage online library projects	2.74	Acceptable
18.	Creating backup of downloaded files for library services	3.00	Acceptable
19.	Using ICT to provide information literacy education for new library users	2.78	Acceptable
20.	Making subscription to databases, e-books and e-journals	2.98	Acceptable
21.	Expertise in using web-based productivity tools e.g. Google docs,etc.	3.01	Acceptable
22.	Skill in using web mails and entertainment tools like YouTube	2.67	Acceptable

Table 1 revealed the mean ratings of items 1-22 as the ICT skills needed by librarians for effective library services and national integration. They all received mean rating of 2.50 and above. They are thus accepted by the respondents as the skills of ICT needed librarians for effective library services and national integration.

Research Question 2

To what extent do librarians in Anambra State possess the ICT skills for effective library services and national integration?

Table 2: Mean scores of the respondents on the extent to which professional librarians in Anambra State possess the skills of ICT for effective library services and national integration

S/N	Item: Extent librarians in Anambra State possess ICT Skills	ICT	X	Decision
23.	I know how to use ICT to develop web-based applications		2.11	Not-acceptable
24.	I know how to deliver web-based services e.g. sending mails		2.90	Acceptable
25.	I can access e-resources in multiple computer networks		2.04	Not-acceptable
26.	I know how to use ICT to access different databases		2.16	Not-acceptable
27.	I can transform information from one format to another in e-environment		2.01	Not-acceptable
28.	I know how to install software package e.g. computer anti-virus		2.14	Not-acceptable
29.	I know how to update an installed software package in the computer		2.27	Not-acceptable
30.	I can use search engines e.g. Firefox to search for information in the internet		2.89	Acceptable
31.	I can download documents and files from different web sites		2.34	Not-acceptable
32.	I know how to buy and recharge data bundles online for internet services		2.22	Not-acceptable
33.	I can save documents and files in primary and secondary memory		2.09	Not-acceptable
34.	I know how to type and print documents using computer system		2.69	Acceptable
35.	I know how to scan documents using digital scanners		2.64	Acceptable
36.	I can design and publish library cards and materials using ICT		2.12	Not-acceptable
37.	I know how to retrieve information stored in various file formats		2.02	Not-acceptable
38.	I can use ICT for library inventory services		2.32	Not-acceptable
39.	I know how to manage online library projects		2.30	Not-acceptable
40.	I know how to create backup of downloaded files for library services		2.33	Not-acceptable
41.	I know how to use ICT to provide information literacy education		2.66	Acceptable
42.	I can make subscription to databases, e-books and e-journals		2.26	Not-acceptable
43.	I know how to use web-based productivity tools e.g. Google docs		2.70	Acceptable
44.	I know how to use entertainment tools like YouTube		2.82	Acceptable

Table 2 revealed the positive mean ratings for items 24, 30, 34, 35, 41, 43, and 44 as the ICT skills of ICT possessed by librarians in Anambra State for effective library services and national integration. They have mean of 2.50 and above. However, items 23, 25 - 29, 31 – 33, 36 – 40 and 42 have mean scores below the interior mean of 2.50. These items were therefore not accepted as

ICT skills possessed by librarians in Anambra State for effective library services and national integration.

Research Question 3

What are the ways of developing professional librarians’ knowledge and ICT skills for effective library services and national integration?

Table 3: Mean scores of the respondents on the ways of developing professional librarians knowledge and ICT skills for effective library services and national integration

S/N	Item: Ways To Develop ICT For Librarians	X	Decision
45.	Sharing of ideas with more knowledgeable librarians in the office	3.41	Acceptable
46.	Brainstorming with computer operators working in the LIS Department	3.10	Acceptable
47.	Enforcing the use of e-mail services in making contacts among librarians	3.01	Acceptable
48.	Enforcing online publication of articles in high ranking journals	3.14	Acceptable
49.	Enforcing the use of ICT in paper presentation during NLA conferences	2.70	Acceptable
50.	Attending professional development programmes organized by ICT professionals	3.28	Acceptable
51.	Using web productivity tools in collaborative writing of publishable articles	3.22	Acceptable
52.	Using social networking tools to collaborate and communicate with colleagues	2.71	Acceptable
53.	Participation in NLA online discussion forum	3.19	Acceptable
54.	Sharing knowledge with hardware engineers that design and develop ICT	3.11	Acceptable
55.	Sharing knowledge with computer software developers	3.18	Acceptable
56.	Sharing knowledge with database managers to learn relationship between data	3.35	Acceptable
57.	Self-learning via books, websites, online courses and free video tutorials	3.02	Acceptable
58.	Enrolling in hands-on workshops on computer appreciation	3.14	Acceptable
59.	Exploring the benefits of using ICT in library services using the internet	2.88	Acceptable
60.	Participation in special group discussions on current ICT issues and potentials	3.06	Acceptable

Table 1 shows the mean ratings of items 45-60 as the ways of developing ICT skill for librarians’ for effective library services and national integration. They have mean of positive mean rating of 2.50. They thus accepted as ways of developing ICT skills for librarians for effective library services and national integration.

Discussion of Findings

Analysis made on Table 1 revealed the ICT skills librarians needed for effective library services and national integration. They include the skill of developing web-based applications; accessing and delivering web-based mails; accessing e-resources in multiple computer networks; accessing e-resources in different databases among others. The findings of this study is in line with that of Yuvaraj (2013) who found that professional librarians should have the ability to use ICT to make subscription to databases, online journals as well as online books such as Library of Congress (LC), Exlibris, Polaris, Scribd, Discovery Service, Google Scholar, WorldCat, etc. Moreover, Wada (2014) revealed that good knowledge of the Internet usage is an important skill required of any librarian for effective delivery of library services.

Librarians can guide library clientele on how to use the Internet only if they have deep knowledge of its services. For instance, a professional librarian according to Wada (2015) must be able to search for information in the internet; identify the right information when found; navigate through the web in different Tabs and Windows; download and upload files to different database and e-mail accounts. Professional librarians need to possess the skill of managing computer networks which entails knowledge of connecting two or more computers through the use of computer networking tools to take full responsibility of the e-environment.

However, Krubu and Osawaru (2011) included knowledge of shared folders on personal and networked computers as well as how to configure printers on local and networked computers. Tella, Adaraloye and Akanbi (2014) in their study stated that librarians require ICT skills for cataloguing and classification, serial collection and circulation, budgeting, referencing, indexing and abstracting to improve information services to library users.

Table 2 revealed that the librarians in Anambra State has the ICT skills for delivering web-based services such as sending mails; searching for information in the internet; typing and printing documents; providing information literacy education among others. The study also revealed that professional librarians in Anambra State do not possess skills of ICT such as: developing web-based applications; accessing e-resources in multiple computer networks; and accessing different databases. This is in line with the findings of Nwosu and Eyisi (2012) who stated that majority of the present library educators were not trained in ICT and computer applications. However, lack of skill of ICT has negative impact on people especially those in workforce. Librarians who lack these skills has also lacked means of attaining professional growth, development and national integration. Wada (2015) noted that more clientele will visit libraries if professional librarians can assume multiple roles that emerge from possessing the knowledge and skills of ICT in areas such as search engines, word processing, spreadsheet, browser basics, virus/malware scanning, common keyboard command, basics hardware terminology, simple network diagnosis, connecting a computer to network, security and privacy. In other words, extensive ICT skills are prerequisite.

Table 3 revealed ways of developing ICT skills for librarians for effective library services and national integration to include sharing of ideas with more knowledgeable librarians in the office; brainstorming with computer operators working in the LIS Department; enforcing the use of e-mail services in making contacts among librarians; online publication of articles in high ranking journals; use of ICT in paper presentation during NLA conferences and workshops among others. Mastering ICT skills will make them gain confidence in delivering library services anytime, anywhere. Connolly as cited in Obiadazie, Nwankwo, and Anene, (2019), therefore advised that librarians in this digital age should learn to create something new and do something differently using ICT as contribution to knowledge.

Conclusion

This study revealed the ICT skills needed by librarians which includes developing web-based applications; accessing and delivering web-based mails; accessing e-resources in multiple networks and databases, making subscription to databases, e-books and e-journals. The avenues of developing librarians' ICT skills for library services and national integration includes attending professional development programmes like conferences, seminars and workshops as well as practicing knowledge sharing to learn new trends, ideas, best practices and discover opportunities. Knowledge and ICT skills are pertinent in today's information services for national integration

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Nigerian Library Association should increase the number of professional development programmes (like conferences, seminar and workshops) organized in a year to develop, update and re-train more members in the use of ICT in library services.
2. Librarians should attend conferences, workshops, and seminars of NLA to acquire new ideas, learn best practices and discuss issues they encounter in the use of ICT.
3. Federal government should equip libraries with modern ICT gadgets to help librarians learn how to use them effectively to discharge their duties. They should also send ICT experts from time to time to use these ICT to train and re-train new librarians.
4. Libraries should encourage collaboration and knowledge sharing among librarians by providing enabling environment to help them learn from one another.
5. Librarians should improve themselves by communicating and collaborating with one another using ICT, and also involving in online discussion forum organized by NLA.

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