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Abstract

This study explores the extent digital literacy is used in enhancing learners participation in the use of libraries in Rivers State, Nigeria. The study was guided by two research questions. The descriptive survey design was adopted for the study. The sample of 380 registered learners was drawn from a population of 3800 adult and vocational education centres using multi stage sampling procedure. Data collecting instrument was the researchers developed questionnaire that was face validated by three experts. The reliability coefficient value of 0.75 was obtained using the Cronbach Alpha Statistical tool. Data were analysed using the mean and standard deviation. Findings showed that the digital competence level of learners for enhancing the use of libraries was high. In spite of the high digital competence, its usage in learners participation in the use of libraries was low. Based on these findings, it was recommended that learners be exposed to modern technologies to accelerate their participation in the use of libraries.

Keywords: learners, participation, libraries, digital literacy

Introduction

Information and Communication Technologies (ICTs) have assumed prominent place in the development of the society in the 21st century. ICT is an umbrella used for any communication device or application. It consists of a set of telecommunication devices that accept data, process, store, retrieve and transmit information electronically (Umoke & Esheya, 2015). Thus, ICT is the combination of computer applications and communication technology for gathering, processing, retrieving, storing and disseminating of information. It helps in bridging the physical walls of the library through the accessibility of information without boundary. In playing this role, the library is regarded as a cardinal unit that strengthens the development of individuals, groups and society with its rich and resourceful information generation and management (Olori, Igbonekwu & Olori, 2022). This benefit is made possible through the use of ICT. To this end, Poore (2011) explained that in a digital age, to achieve a liberating and collective intelligence may not be possible until the attainment of digital literacy.

Digital literacy is therefore conceived as a response to the 21st century skills. Being subjected to debates as early as 1990s, Gilster (1997) remarked that not until 1997 that it was defined as the ability to comprehend and apply various forms of information science from several sources in order to present information on the computer. This definition establishes a link between ICT and digital literacy. This literacy is an inter-related set of skills or competences needed for success in the digital age (Martin, 2006). Digital literacy is the ability to effectively and critically navigate, evaluate and create information using a range of digital technologies (Emiri, 2015). It involves a variety of skills need to effectively function in the 21st century using ICT. It could be deduced that digital literacy is the application of technology for a presentation or problem solving, co-operating and knowledge sharing, as well as being aware of individual responsibilities and the individual rights to oneself and others (Betham & Sharpe, 2010). Invariably, this literacy offers an opportunity for individuals to solve problems and gain competence with technology through practice and experimentation (Robin, 2008, Smeda, Dakich & Sharda, 2012).

Digital literacy is concerned with the individual's realisation, attitude and capacity of digital tools usage to access, manage, integrate, analyse and synthesise digital information sources. The essence of digital literacy is to use digital media to communicate, create, reflect and solve daily life situation confronting the individual as well as the society. Hence, developing new media and digital literacy skills was conceived as one of the approaches for equipping the learners with knowledge to reach out to the people and society (Roy & Kundu, 2017). Studies have shown that through the use of digital technologies (DT) many unemployed youths were provided skills which offer them chances of getting employed or starting a business venture (Gwaka, 2018).

To be digitally literate means developing new ethics, new modes of participation in society and new ways of being an active citizen. Gwaka (2018) submitted that through digital technologies, interaction of individuals in different places is transformed, e-learning introduced, educational materials disseminated with greater opportunities offered to youths. One of the opportunities is participation in the use of the library. Participation is the process by which individuals are involved in activity to empower and improve their level of comprehension for problem solving. This participation is closely related to the top bottom approach where people are given the chance to formulate their own development (Olori & Okide, 2014). In this study, participation involves the search of information through the library by learners for the acquisition of digital literacy. Digital literacy therefore is categorised into three components, namely digital competence, digital usage

and digital transformation (Martin, 2006). These competences are also placed in three levels; digital competence (level 1), digital usage (level II) and transformation (level III).

The present study centred on the first and two levels owing to the peculiarities that are associated with the area of study. The digital competence encompasses the knowledge and skills required for an individual to use ICT to accomplish goals in his or her personal or professional life. Eshet-Alkalai (2004) noted that these competences are not limited to technical skills but focus on cognitive, social and emotional aspects of working and living in a digital environment. Although multifaceted in nature, yet it entails the ability to understand media, search for information critical about what is retrieved and communicate with others using a variety of digital tools and applications. No wonder the knowledge of new media served as an approach to empowering youths in the society (Roy & Kundu, 2017). The knowledge of digital literacy skills was evident on the effectiveness of communication and expression of ideas (Chan, Churchill & Chiu, 2017). This knowledge is believed to help in the use of a variety of media to present ideas and share such ideas with others in a creative way. The sharing of ideas in media entails the use of digital knowledge referred to as digital usage.

Studies have showed that the use of ICT has impacted on a range of areas such as education, health, agriculture and politics (Heek, 2014; Walsham, 2017). While it is acknowledged that the digital competences vary according to the sectors of the economy and the level of development of countries, study revealed that mobile phones are useful information tools connecting remote farmers with agricultural experts via video messages in a rural area. The ability to use these mobile agricultural services improves farmer's agricultural knowledge which in turn is translated to better output and thus income (Fu & Akter, 2016). Digital usage is the application of digital competence within a specific context. This literacy requires the technical competence to operate digital devices as well as a variety of cognitive skills needed to execute tasks in digital environments.

In spite of these skills, studies have shown that inadequate skill was a constraint to effective youth participation in rural projects (Iwuchukwu, Ogbonna & Agboti (2015). Youth participation therefore becomes their involvement in responsible, challenging action that meets genuine needs, with opportunities for planning and or decision-making affecting others in an activity whose impact or consequence is extended to others (Cornwall, 2010). This presupposes that with the knowledge of digital literacy, participation of youths which in this case are learners in the use of library can be intensified.

Acknowledging that the contributions of digital literacy have attracted various studies, access of the digital technologies with regard to access to libraries in Rivers State is still low. Considering the fact that the libraries are crucible of genius and fundamental to the intellectual experience and natural activity of the mind (Kyrillidou & Cook, 2008), the study therefore sets to examine the extent to which digital literacy is employed in enhancing learners participation in the use of libraries in Rivers State.

Purpose of the Study

The purpose of this study was to determine the extent to which digital literacy is utilised in enhancing learners participation in the use of libraries in Rivers State. Specifically, the study sought to:

1. determine the digital competence level of learners in enhancing the use of libraries in Rivers State.
2. ascertain the level of digital usage by learners in enhancing the use of libraries in Rivers State.

Research Questions

The following research questions guided the study

1. What is the digital competence level of learners in enhancing the use of libraries in Rivers State?
2. What is the level of digital usage by learners in enhancing the use of libraries in Rivers State?

Methodology

The study adopted a description survey research design. This design attempts to collect data and in a systematic manner the characteristic features about a given population. Hence, has been adopted by similar studies (Ugwuanyi, et al, 2020 and Olori, et al, 2022) The population of the study comprised 6,820 learners from 31 registered adult and vocational education centres in Rivers State. The sample size of 380 learners was purposively drawn from two local government areas out of the 23. These are Port Harcourt City and Obio/Akpor Local Government Areas The multi-stage sampling procedure was used for the selection. At the first stage, the two local government areas were selected using purposive sampling technique. The second stage involved the selection of

registered adult and vocational education centres from the chosen local government areas. The third stage involved the selection of the learners using random sampling technique.

The researchers'- structured questionnaire, titled 'Enhancing Learners Participation in the use of Libraries and Digital Literacy' (ELPLDL) was the data collecting instrument. The ELPLDL contained two parts, A and B. Part A elicited information relating to the personal data on the respondent. Part B elicited information on the objectives of the study structured in a cluster of two on a four point rating scale with assigned scores: very great extent = 4, great extent =3, low =2 and very low = 1. The instrument was further subjected to face validity by three experts, two from Community Development unit of Adult and Extra mural Studies, and one from Measurement and Evaluation unit of Science Education, all from the University of Nigeria Nsukka. The reliability coefficient alpha of 0.75 was obtained using the Cronbach Alpha statistical tool. Data were analysed using mean and standard deviation. The real limit of numbers was employed for decision making.

Results

Table 1:

Mean Responses on Learners' Digital Competence Level in Enhancing the Use of Libraries

		N_1=213			N_2=158		
S/N	**Statements**	$\bar{x}$	**SD**	**Remark**	$\bar{x}$	**SD**	**Remark**
1.	Safe use of smart phones and tablets	3.32	.54	High	3.32	.54	High
2.	Protection of digital rights, privacy and security	2.84	.74	High	2.86	.69	High
3.	Preservation of digital rights, privacy and security	2.75	.73	High	2.86	.69	High
4.	Use of digital technologies to collaborate	3.24	.59	High	3.20	.58	High
5.	Understanding of technologies, applications	2.33	.76	Low	2.37	.77	Low
6.	Understanding the application of software	2.19	.64	Low	2.17	.64	Low
7.	Use of digital skills toolkit for information search in the library	2.62	.64	High	3.08	.57	High
8.	Navigate to interest areas of the library	3.14	.58	High	3.01	.61	High
	Cluster Mean	**2.80**	**.65**	**High**	**2.85**	**.65**	**High**

N_1= Port Harcourt City Local Government Area, N_2 = Obio/*Akpor *Local Government Area

Items 1, 2, 3, 4, 7, and 8 had mean scores of high level classified within the real limit of 2.50 - 3.49) as against items 5 and 6 with low for learners in Port Harcourt City Local Government Area in Table 1. The cluster mean of 2.80 further show that the digital competence level of learners was high in enhancing the use of libraries. The Table also had the mean scores for items 1, 2, 3, 4, 7 as high for Obio/Akpor, but low for items 5 and 6. The cluster mean of 2.85 in the local government also show a high digital competence level of learners in enhancing the use of libraries in Rivers State.

Table 2:
Mean Responses on Learners' Level of Digital Usage in Enhancing the Use of Libraries

		N_1=213			N_2=158		
S/N	**Statements**	$\bar{x}$	**SD**	**Remark**	$\bar{x}$	**SD**	**Remark**
1.	Adaptation of digital technologies for information search in the library	3.02	.63	High	3.01	.61	High
2.	Assessment of content using new media from in the library	2.39	.63	Low	2.37	.63	Low
3.	Application of problem solving skills in the use of the library	2.24	.62	Low	2.24	.64	Low
4.	Analysis of digital results through information search in the library	2.08	.65	Low	2.13	.63	Low
5.	Accuracy in examination using the library	2.08	.57	Low	2.08	.56	Low
6.	Application of different approaches for problem solving in the library	2.27	.70	Low	2.28	.72	Low
7.	Sharing of information with computer through internet in the library	3.00	.68	High	3.07	.66	High
8.	Utilisation of social media in communicating current issues in the library	2.90	.65	High	2.84	.64	High
9.	Task development for effective use of the library	2.16	.59	Low	2.35	.75	low
10.	Utilisation of new technologies for innovation in the library	2.16	.59	Low	2.20	.58	Low
	Cluster Mean	**2.45**	**.65**	**Low**	**2.46**	**.65**	**Low**

N_1= Port Harcourt City Local Government Area, N_2 = Obio/Akpor Local Government Area

Respondents from Port Harcourt City Local Government Area in Table 1 had mean scores for items 1, 7 and 8 as high, while items 2, 3, 4, 5, 6, 9 and 10 were low. The cluster mean of 2.45 further indicate low learners digital usage in enhancing the use of libraries. The Table also reveal that respondents from Obio/ Akpor had mean scores of high for items 1, 7 and 8, but low for 2, 3, 4,

5, 6, 9 and 10. With the cluster mean of 2.46, respondents were found to have low learners digital usage in enhancing the use of libraries in Rivers State.

Discussion of Results

The study shows that the digital competence level of learners in enhancing participation in the use of libraries in Rivers State was high. This may not be unconnected with the fact that developing new media and digital literacy skills was considered as one of the approaches of equipping learners with knowledge to reach out to people in the society (Roy & Kundu, 2017). Suffice it to say that digital competence is shown on learners use of media for activities such as protection of information and networking for different purposes. This knowledge of digital technology is capable of addressing various needs of the individual (Robin, 2008; Smeda, Dakich & Sharda, 2012). This is also true as the interaction of individuals in different places is transformed through digital technologies (Gwaka, 2018). The spread of idea across different people further explains the place of library in disseminating information across a wide audience through the use of technology. With the empowerment of learners through digital literacy is believed to aid in the use of libraries for more development (Walsham, 2017, Fu & Akter, 2016). This further goes to show that the high competence level of learners could be seen as enhancing the use of libraries in Rivers State.

The study also shows low learners digital usage in enhancing the use of libraries in Rivers State. Although, the respondents acknowledged that while adaptation of digital technologies to dissemination of information search in the library was high, assessment of content application of problem solving skills and analysis of digital results through information search in the library were low. This low utilisation of digital technologies in the use of library may likely be associated with inadequate knowledge of the media. This may be true as digital literacy attempts to offer opportunity to individuals in solving problems and gaining competence with technology through practice and experimentation (Robin, 2008). In another study, the use of digital technologies was seen as offering the youths chances of getting employed or starting a business venture (Gwaka, 2018). These studies attest to the fact that the continuous practice of knowledge of digital technologies is capable of empowering the learners towards enhancing their use of libraries. This is because of the cardinal role the library plays in developing the individual with its rich and resourceful information generation and management (Olori, Igbonekwu & Olori, 2022).

Studies have also identified the impact of the use of ICT on education, health, agriculture and politics (Heall, 2014; Walsham, 2017; Fu & Akter, 2016). Considering the various prospects in the use of ICT, it is therefore not unlikely that when applied in the use of libraries, participation of learners is believed to improve for the acquisition of more knowledge.

Conclusion and Recommendations

The study concluded that the level of digital competence of learners was high in enhancing the use of libraries in Rivers State. However, learners level of digital usage was low. This invariably, accounts for its low participation in the use of libraries. In view of findings, it was recommended that

1. Learners be exposed to further training on the use of modern technologies for enhanced participation in the use of libraries.
2. Digital learning centres that are well furnished be provided by the government for easy accessibility by learners.
3. Sensitisation of learners on the importance of modern digital technologies in navigating to various areas of interest for individual development.

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