Users' perception on Digital Inclusion in Library Services for Effective Study in Federal College of Education (Technical) Gusau, Zamfara State

Husaini Musa[1], Deepak Kumar Shrivastava[2], Priti Sharma[3]

[1]*Research scholar Department of Library and Information Science, Career Point University Kota, Rajasthan*
[2]*Dr. Divisional Librarian and Head Government Divisional Public Library Kota, Rajasthan*
[3]*Associate Professor Department of Library and Information Science, Career Point University, Kota, Rajasthan*

---***---

Abstract

Digital inclusion in library services has become significantly important in higher institution libraries; it allows users to access various information needs. This paper discusses users' perceptions of digital inclusion in library services to facilitate effective study at the Federal College of Education (Technical) Gusau in Zamfara state. Two objectives and respective research questions were outlined to guide this study. A qualitative research design was adopted, considering a total population of four hundred and fifty-two users. The study employed the simple random sampling technique, selecting twelve respondents, comprising two students from each of the six schools in the College. A self-structured interview served as the method for data collection from respondents; the instrument underwent validation by three experts who confirmed its suitability for the study. All interview conversations were recorded, transcribed, and subsequently analyzed. Responses were organized thematically using an inductive approach for category development. The primary findings of this paper revealed that digital inclusion in library services will enhance users' digital literacy, studying, and research within the College. The paper concludes that college library should provide adequate training in digital literacy for accessing electronic resources and subscribing to various digital resources relevant to all users in the college.

Keywords: Digital inclusion, library services, Effective study, Users' perception

1. Introduction

The advent of digital technology has profoundly transformed the landscape of education, necessitating a reevaluation of traditional academic practices and institutions. In the realm of higher education, libraries, once repositories of printed knowledge, are now dynamic hubs where digital inclusion intersects with conventional learning. This paradigm shift prompts a critical examination of users' perceptions regarding digital inclusion in library services and its impact on effective study. This study focuses on the Federal College of Education (Technical) (FCET) Gusau, located in Zamfara State, Nigeria, where the integration of digital resources into library services is a key consideration for academic development. The FCET Gusau is a higher institution where all students are female. It offers a three-year program leading to the award of the Nigeria Certificate in Education (NCE). The NCE curriculum encompasses various disciplines across six schools (faculties), housing diverse departments and courses in Science, Technical, Vocational, and Business Education

Digital inclusion is the concept of ensuring equitable access to and effective use of digital technologies for all individuals and communities, irrespective of their socio-economic status, geographic location, or other potential barriers. (Norris 2021), (Warschauer 2022), (Van 2023). As noted by Carvalho and Rodrigues (2019), digital inclusion in education encompasses the equitable access and effective use of digital tools and resources to enhance learning experiences. In the context of a technical education institution like the FCETGusau, where the convergence of technology and pedagogy is pivotal, understanding how users perceive and engage with digital inclusion in library services becomes paramount.

The library, traditionally viewed as a cornerstone of academic support, is now tasked with navigating the intricate balance between conventional print resources and a burgeoning array of digital materials. With this shift, the experiences and perspectives of users regarding digital inclusion become central to shaping the library's role in facilitating effective study. Scholars such as Warschauer (2022) argue that digital inclusion is not merely about access to technology but encompasses the ability to use digital tools to empower individuals in their educational pursuits.

In an era characterized by the pervasive influence of digital technology, the FCET Gusau, Zamfara State, stands at the intersection of traditional library services and the evolving landscape of digital inclusion. As educational institutions increasingly integrate digital resources into their academic frameworks, understanding the users' perception of digital inclusion in library services becomes imperative. This study seeks to investigate the challenges and opportunities faced by users in embracing digital inclusion in the library services of the FCET Gusau, with a specific focus on its impact on effective study. By identifying the factors influencing users' attitudes towards digital inclusion and exploring the barriers hindering its seamless integration, this research aims to provide insights that will contribute to the enhancement of library services for more effective study in the academic context of the institution.

2. Research Questions

The study investigates four subsidiary questions derived from the following questions.

1. How the uses of digital inclusion in library services provide effective study among the users in FCET Gusau?

2. What are the challenges on digital inclusion in library services in the college library?

3. Reviews

3.1 Users' perception

Users' perception, according to Lazar and Hochhesise (2017), refers to the subjective viewpoints, attitudes, beliefs, and opinions held by individuals or a group of users towards a particular subject, service, technology, or experience. In the view of Dilman, et-al and Christian (2014), it encompasses how individuals interpret, understand, and evaluate aspects related to the subject matter, often influencing their behaviors, decisions, and interactions within that context.

Studying users' perceptions is important in determining their acceptance, satisfaction, and potential use of services or technologies, providing important insights for improvement, or development of initiatives to meet their needs and preferences.

3.2 Digital inclusion in Library Services

Digital inclusion in library services refers to the efforts and initiatives taken by libraries to ensure equitable access to digital resources, technology, and information for all members of their community. It aims to bridge the digital divide by providing opportunities for individuals to engage with digital technologies, regardless of their socio-economic background or geographic location. Some of the digital inclusion in library services includes:

- ✓ Access to Information: Digital inclusion project in libraries ensure that community members in an institution, regardless of socio-economic status, have access to digital resources such as online databases, e-books, and scholarly articles, thereby broadening the scope of available information (ALA 2020).
- ✓ Bridge the Digital Divide: Libraries help bridge the digital divide by providing access to technology and internet services, allowing individuals who might not have these resources at home to utilize them for educational purposes, job searches, accessing government services, and more. Digital inclusion initiatives focus on making these resources available to all members of the community (ALA 2020).
- ✓ Digital Literacy Programs: Libraries offer digital literacy training programs to teach essential computer skills, internet navigation, online safety, and proficiency in using digital tools. These programs empower individuals to navigate the digital landscape effectively and responsibly (Rubin, 2019).
- ✓ Community Engagement and Outreach: Digital inclusion initiatives facilitate community engagement by hosting workshops, seminars, and training sessions on various digital topics. This encourages participation, collaboration, and knowledge-sharing among community members, fostering a sense of belonging and mutual support (Matarazzo, and Pearlstein, 2019).
- ✓ Support Lifelong Learning: Through digital inclusion efforts, libraries support lifelong learning by providing access to online courses, educational resources, and skill-building tools. This helps individuals stay updated and acquire new skills relevant to their personal and professional growth.

3.3 Effective study

Effective study refers to the strategic and purposeful approach individuals adopt to optimize their learning outcomes and comprehension of subject matter. This methodological approach involves various techniques and strategies that have been extensively studied and validated in educational psychology and learning sciences (Prince 2004; Kang 2016). These strategies according to Dunlosky (2013) include a range of evidence-based techniques that promote active engagement, deeper understanding, spaced repetition, and metacognitive reflection. Incorporating these strategies into study routines enhances learning outcomes, long-term retention, and the ability to apply knowledge effectively.

4. Methodology

Qualitative research design was adopted for this study. This research design aims at collecting data from NCE 3 students through the use of interview. The total populations of NCE 3 students are Four hundred and fifty two (452) from the six schools in the college served as the entire population of the study. Twelve students of the department from 6 Schools were purposively sampled to participate in the interview. A self-structured interview was conducted. The interview questions were framed from the research questions and objectives. All the conversations of the interview were recorded, transcribed, and analysed thematically. The thematic analysis was employed for the interview results. Each theme was identified and named for the final report of the analysis.

5. Results and Discussion

The analysis described the data transcribed using the interview. The sub-themes and the themes were extracted manually from the interview conversation. The themes were presented and discussed based on the opinions of the interviewees. Two students of department from each school was interviewed; such as school of Languages, Sciences, Technical, Vocational, ANFE/SPE and, ECCED. All interviewees requested anonymity. Therefore, the data represented was anonymised by not identifying the names of the respondents.

S/N	Themes	Sub-Themes
1.	Level/ experience	• Level of student • End users
2.	Types of digital resources within library services	• Online data bases • Multi-media resources • E-books
3.	Impact of digital inclusion in library services	• Improve study and research • Information literacy • Increase demand of information • Change in the information seeking behavior of users • Updating knowledge
4.	Challenges	• Power supply • Internet connectivity and Wi-Fi • Infrastructure • Access to information for all • Digital literacy

The table above is describing the themes and sub-themes abstracted from the interview scripts. And each was analysed based on the information given by the respondents.

Theme 1: Level and schools of the Interviewers

Participant	Level	School
Participant 1	03	Sciences
Participant 2	03	Sciences
Participant 3	03	ECCED
Participant 4	03	ECCED
Participant 5	03	ANFE/SPE
Participant 6	03	ANFE/SPE
Participant 7	03	Technical
Participant 8	03	Technical
Participant 9	03	Vocational
Participant 10	03	Vocational
Participant 11	03	Languages
Participant 12	03	Languages

The Table above shows that all the interviewees are in level 3 and they have been using the library for almost three years. All the interviewed participants have experience on using the library and its services. The significance of identifying the participants' levels/experience of using the library is to have an accurate and reliable data collected from them.

Theme 2: Types of digital resources within library Services

Digital resources within the library encompass various tools facilitating users in identifying their information needs electronically. These resources are made available online to support learners in finding relevant information for their studies and research. Participants identified several effective sub-themes concerning digital resources available within the library:

2.1 Online Databases

Online databases, offering scholarly articles, research papers, and journals, are subscribed to by the library. Some databases are fee-based, while others are freely accessible. Respondents highlighted:

"The college library provides online database services like EBSCOhost, Science Direct, HINARI, Questions and Answers, and Agora. These platforms offer a wealth of relevant materials through the library's website." (Participant 1)

Additionally, another participant mentioned:

"Besides the subscribed databases, the college library website uploads electronic theses and includes important links for library users." (Participant 11)

These views indicate that the college library offers online database services, providing access to platforms like AGORA, HINARI, EBSCOhost, among others.

2.2 Multimedia Resources

Multimedia resources, including videos, simulations, and infographics, aid in visualizing complex concepts, thereby enhancing understanding and retention of lectures. Participants noted:

"We have video cassettes and a vast collection of videos stored in the computer system for user viewing. These resources guide teaching practices and effective class delivery." (Participant 11)

Furthermore, another participant shared:

"The college library provides video resources covering topics like cooking, effective class delivery, and technical education. These resources are downloaded and stored in the library's computer systems." (Participant 9)

The college library offers multimedia services by providing video resources spanning teaching and learning, home management, and technology, stored for user access in the computer system.

2.3 E-books

E-books, comprising electronic text and audiobooks stored in various formats, contain educational information across different subjects. Participants mentioned:

"The college library has numerous e-books covering almost all subject areas, accessible through desktop computers in the library." (Participant 4)

Another participant added:

"Yes, the college library provides downloadable e-books, available not necessarily online." (Participant 2)

The college library houses a folder containing e-books encompassing subjects offered in the college, stored in different folders across computers within the library.

Theme 3: Impact of digital inclusion in library services

The Theme means the result of services as a result of digital inclusion in library service. The users of the college will change effectively in term of research, studies, digital skills, and so many things. The following points are provided by the respondents based on their views:

3.1 Improve study and research

Improve in research and study depends on the availability of quality materials, quality contents of the web site and, exposure of the users. The utilisation of the digital service will also improve the quality of research and study among the users in the college. Most of the participants stated that:

''If the College library is to sustain the use of digital services among the users, I think there will be an increase in research and study and that study will lead to so many innovation from the students''. (Participant 9)

The digital services are one of the element factors that can change the attitude of users through seeking knowledge without direct contact with librarians physically. Users can acquire knowledge of where to download relevant materials or to get the materials on relevant subject areas based on their need.

3.2 Information literacy

Information literacy includes all the skills for the effective use of information for the development of the users. Digital service will serve as a medium for acquiring information literacy as it was described by on e of the participants stated that:

''The users of the College will acquire information literacy skills, because some are not good in computer and finding information on internet is difficult for them, so if digital services can be effectively utilised many users will be digitally skilled'' (Participant 7)

Through the provision of digital resources users will acquire a vast knowledge on how to use ICT resources in getting the most relevant information for their study. Sometime library staff are organizing users by teaching them on how to identify materials in the library, illustrating the importance of effective internet searching, online catalogues, instructing on how to use reference materials for their research and so on.

3.3 Increase demand of information

The utilisation of digital services will increase the demand of information. When library is providing the right answers on so many questions raises by the users, there will be an increase in the demand of such information. Users will definitely patronizing the digital services because their solution is to get the relevance information for their study. The increase demand of information will bring about the users to become curious in research and they develop their abilities to criticize and, to use information. One of the participants described that:

''I think digital services will increase demand of information. You can see now, not all users are going into the library, because of the present of such services. Sometimes, when you go to library you do not need to ask where to get the relevant information because digital resources are available and easy to locate''. (Participant 1)

As described by the participant, the college library will be getting so many users that can develop their skills. Now the college library is experiencing high patronage due to the provision of digital services.

3.4 Changes in the Information Seeking Behavior of Users

There is change in the information- seeking behavior of the users. If the libraries do not transform to provide new modern services as per the demands and expectations of the users, they risk slipping into extinction. One of the participants stated that:

''Well, it change the behavior of users in seeking the information. Some users can not be able to ask question physically, so by provision of digital services, a person can ask question unanimously and be able to encourage adequately''. (Participant 5)

Another participant stated that*: ''Digital resources generally can change the information seeking behavior of users because they are very friendly and easy to indentify unlike the physical textbooks''.* (Participant 3)

The College library has provided the digital resources and most of the users like to use the online resources than the physical resources. These resource supporting users to retrieve information needed at any time and everywhere. The new generation, which is popularly known as millennial or digital, is more comfortable working in online environments.

3.5 Updating knowledge

Technology enables change and technology enforces change. Users in the college and patrons make a number of knowledge update as a result of digital services, if it is utilised. One key area is the relationship between users and technology. Users in the college will update the way they behave and think to work effectively in an electronic environment. Majority of the respondents stated same as that:

''When digital resources are utilised efficiently, a person is logically updating his knowledge, because he will be intermingling with technology and many skills will be acquired concurrently''. (Participant 8)

Another participant stated that:

''If the service is successfully utilised by ourselves, I think we are updating our knowledge and be able to become digital users''. (Participant 12)

The users in the college will be keeping up-to-date in their areas of research and will find out current research and be able to solve any research problem in learning. It will also allow users to acquire quality resources and be able to graduate with quality results.

Theme 4: Challenges

Considering the impact of digital inclusion in library services, the participants also described the challenges mitigating on the inclusion of digital services in college library.

4.1 Poor Power Supply

Electricity is very importance in every aspect of activities especially electronic services that dealt with electricity. In the FCET Gusau there is constant power outage which has frustrated effective provision of digital services. One of the participants stated that:

''First of all, the library is having poor power supply and, cannot be able to do it all the times due to problem of bad power supply in the state''. (Participant 6)

Another participant pointed that: *''Our problem in this college is poor power supply''* (Participant 8)

The library is providing the digital services but due to the problems highlighted by the respondents need to be considered. The library should provide a back-up alternative to strengthening its services adequately.

4.2 Poor Internet Network

Internet network is a wide area network that can be able to connect with thousands of computers or devices. It is one of the fundamental services need to be considered. If the library chose to use services that requires network they should make sure that the network is stable and available all the time. One of the participants stated that:

''Network may not be stable, we have network problem some-times''. (Participant 1) Another participant described that: *The library can choose to subscribe high bandwidth to avoid poor services or network*''. (Participant 3)

Therefore, the library may liaise with good services subscribers to allow the users to access internet effectively and efficiently.

4.3 Infrastructure

The infrastructure is the computers and other ICT resources that can only be used to access the resources. Absent or poor provision and maintenance of the infrastructure is a barrier to digital resources. One of the participants stated that:

''The library need to provide enough computers for us so that we can be able to surf the resources adequately without waiting for other users''. (Participant 3)

The library should provide adequate computers to aid the services adequately.

4.4 Access to information for all

Digital inclusion in libraries ensures accessibility features for users with disabilities, such as screen readers, text-to-speech functionalities, and adjustable font sizes, making studying more inclusive for all. The resources available actually does not in conformity with disability and other courses provided in the school. One of the participants stated that:

''Some of the materials are in English language; we have students from various courses that their subjects are not offering in English like Hausa, Arabic, and so on. Sometimes to get the information is difficult or not available.''. (Participant 10)

Therefore, if the library is to include all the subjects and their users in the provision digital services, the users will be appreciated and fully patronized.

4.5 Digital literacy

College library is offering digital inclusion and usually providing training and workshops on digital literacy, equipping users with essential skills for navigating digital resources effectively, which is very important to users. One of the participants stated that:

"We need at least practical training not only lecture, because library only give orientation and lectures without giving the digital training on how to access their resources electronically". (Participant 4)

Other participants stated that*: "Most of the students admitted in to this school they are very poor in computer and internet, therefore we need practical training on how to search information electronically".* (Participant 2)

College library should provide digital training to all its users so that the information available and services will be fully aware and provided to the users.

Conclusion

Utilisation of digital services has brought a significant change to users and library in the college. The users enhanced access, research and communication to various information sources. This means that digital services become very useful tool in whose mission is to support teaching, learning and research. However, to ensure seamless access to these services, the college library must prioritize consistent internet provision, guaranteeing uninterrupted access for users at all times. Additionally, there's a critical need to ensure comprehensive training and inclusion of all users within their service framework. Failure to inclusively incorporate all users in the digital realm risks denying certain individuals the right to access essential information within the college library.

References

American Library Association (ALA). (2018). Digital inclusion survey. Retrieved from https://www.ala.org/tools/research/digitalinclusion

Carvalho, L., & Rodrigues, M. (2019). Digital inclusion in education: Equitable access and effective use of digital tools. *Journal of Educational Technology*, 41(2), 245-260.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014*). Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method*: Wiley

Dunlosky, J. (2013). Improving students' learning with effective learning techniques: promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest*, 14(1), 4–58.

Kang, S. H. K. (2016). Spaced repetition promotes efficient and effective learning: policy implications for instruction. *Policy Insights from the Behavioral and Brain Sciences,* 3(1), 12–19.

Lazar, J., Feng, J. H., & Hochheiser, H. (2017). *Research methods in human-computer interaction*: Morgan Kaufmann

Matarazzo, J. M., & Pearlstein, T. (2019). *The customer-centric library: Re-imagining library service through active user engagement*. New Library World.

Norris, P. (2021). *Digital divide: civic engagement, information poverty, and the internet worldwide*. Cambridge University Press.

Prince, M. (2004). Does active learning work? a review of the research. *Journal of Engineering Education*, 93(3), 223–231.

Rubin, R. E. (2019). *Foundations of library and information science*. Neal-Schuman Publishers.

Van Dijk, J. (2023). *The deepening divide: inequality in the information society*. Sage Publications.

Warschauer, M. (2022). *Technology and social inclusion: rethinking the digital divide.* The MIT Press.