



## ASSESSMENT OF AVAILABLE AND TYPES OF UTILIZED ELECTRONIC INFORMATION RESOURCES AMONG UNDERGRADUATE STUDENTS OF PLATEAU STATE UNIVERSITY, BOKKOS

**Lydia Mshelia Musa,**

*Theological College of Northern Nigeria (TCNN) Library,  
Bukuru, Jos Plateau State  
08036821288*

**Philip Daze Longdas**

*Dazmak Books, Church Street, Jos, Plateau State, Nigeria  
08036586435, 08038509932  
[Philipmark2005@gmail.com](mailto:Philipmark2005@gmail.com)*

&

**Ajala Aloli**

*Library Department,  
Plateau State University, Bokoos*

### Abstract

This study investigated the availability, types, and challenges of utilizing Electronic Information Resources (EIRs) among undergraduate students at Plateau State University, Bokoos. The advancement of digital technologies has revolutionized scholarly communication, yet Nigerian universities continue to face infrastructural and skill-related constraints limiting full exploitation of EIRs. A descriptive survey design was adopted to gather data from 350 undergraduate students selected across faculties using stratified random sampling. A structured questionnaire was employed to collect data on availability, types of EIRs, and challenges affecting their utilization. Descriptive statistics such as frequencies, percentages, and mean scores were used for analysis, with a decision rule that items with mean scores of 3.00 and above were accepted, while those below were rejected. Findings revealed that EIRs were generally inadequate at Plateau State University, with a grand mean score of 2.66, indicating limited availability of databases, internet facilities, and institutional subscriptions. Regarding utilization, students demonstrated higher preference for open-access platforms such as Google Scholar (3.23) and online journals/e-books (3.07), while subscription-based databases and reference tools were underutilized (2.86). Major challenges hindering effective use included unstable internet connectivity (4.34), poor power supply (4.13), expensive subscriptions (4.11), inadequate training (3.65), and insufficient technical support (3.82), resulting in a grand mean of 3.95. The study concludes that despite awareness of EIRs, infrastructural, financial, and skill-based barriers impede optimal use. It recommends improved funding, enhanced digital infrastructure, user training, and integration of information literacy programs to strengthen students' competence and promote effective utilization of EIRs.

**Keywords:** Electronic Information Resources, undergraduate students, utilization, challenges, Plateau State University, digital literacy.

### INTRODUCTION

The advancement of digital technology has revolutionized how knowledge is created, accessed, and disseminated in higher education. Electronic Information Resources (EIRs)

including e-books, e-journals, subscription databases, digital libraries, institutional repositories, and open-access platforms now constitute the backbone of academic research and learning worldwide. Unlike traditional print



resources, which are often limited by physical accessibility, EIRs provide instant, flexible, and diverse access to scholarly information, enabling students to improve research skills, broaden their knowledge base, and keep pace with global academic trends (Mukhtar & Maidabino, 2021).

Globally, universities have made substantial investments in EIRs to promote teaching, learning, and research. For example, Mtebe and Gallagher (2022) found that students in Tanzanian universities with access to robust institutional e-libraries demonstrated significantly higher levels of academic engagement and performance. Similarly, Abbas and Song (2020) argued that well-curated electronic resources not only provide immediate access to information but also enhance students' ability to critically evaluate and synthesize scholarly knowledge. However, in many developing countries including Nigeria the full benefits of EIRs remain limited. Infrastructural challenges such as poor internet connectivity, erratic electricity supply, insufficient funding, and weak ICT infrastructure hinder access and availability (Apuke & Iyendo, 2018; Sambo, Ntogo & Eda, 2022). Even when resources are available, students often underutilize subscription-based databases like JSTOR and ScienceDirect, preferring open-access platforms such as Google Scholar and ResearchGate. While these free platforms are valuable, they may not always provide the depth, quality, or peer-reviewed credibility of institutional subscriptions (Izuagbe et al., 2016; Osinulu, 2020).

Another critical dimension relates to the types of EIRs utilised. While text-based resources such as e-books and journals are relatively popular, multimedia platforms, institutional repositories, and reference management tools such as Zotero, Mendeley remain underused among Nigerian undergraduates (Akinbo & Omideyi, 2023). This imbalance underscores gaps in awareness, digital literacy, and training. Moreover, as Ovwasa (2024) observed, students' socio-demographic characteristics and level of ICT competence greatly influence whether they can fully exploit available EIRs. At Plateau State University, Bokoos, these challenges are particularly pronounced. Although the institution provides some electronic resources to support

learning, anecdotal evidence suggests that their availability is limited, poorly maintained, and inadequately publicized. Consequently, undergraduates often rely more heavily on free-access platforms than institutional subscriptions. This situation raises concerns about the adequacy, awareness, and actual utilisation of EIRs at the university. The lack of exposure to diverse, high-quality digital resources may compromise research quality, limit academic competitiveness, and restrict the benefits of digital learning.

### STATEMENT OF THE PROBLEM

The integration of Electronic Information Resources (EIRs) has significantly transformed academic activities across the world by enhancing access to scholarly information and supporting research and learning. However, at Plateau State University, Bokoos, the effectiveness and adequacy of these resources remain uncertain. It is unclear whether the types of EIRs available to undergraduate students are sufficient, relevant, and effectively contribute to their academic pursuits. Typically, the EIRs provided in university libraries include e-books, e-journals, online databases, institutional repositories, digital libraries, e-theses and dissertations, conference proceedings, CD-ROMs, e-newspapers, and reference management tools such as Mendeley and Zotero. The extent to which these resources are available and utilized by students at Plateau State University has not been adequately established. Obtaining empirical facts is imperative because EIRs hold the promise of improving research quality, comprehension, and critical thinking. In numerous literatures, undergraduate students are reported to face barriers such as unstable internet connectivity, lack of training, poor ICT infrastructure, and limited subscriptions to academic databases hindering them take advantage of EIRs acquired by their institutions. This research therefore seeks to determine the available and types of electronic information resources acquired for undergraduates use at Plateau State University, Bokoos.

### OBJECTIVES OF THE STUDY

This article was guided by the following objectives:

1. To determine the available electronic information resources acquired for



- undergraduate students of Plateau State University, Bokoos.
2. To identify the types of electronic information resources utilized by undergraduate students of Plateau State University, Bokoos.
  3. To find out the challenges mitigating undergraduate students from utilizing the available EIRs for academic activities in Plateau State University, Bokoos.

## LITERATURE REVIEW

### Available EIRs for Undergraduate Students' Academic Engagements

The emergence of Electronic Information Resources (EIRs) has fundamentally transformed academic research and learning in higher education. By offering instant, flexible, and diverse access to information, EIRs have revolutionized how students acquire knowledge, conduct research, and engage academically. Globally, scholars acknowledge that these resources significantly enhance students' research abilities, comprehension, and overall academic performance (Abbas & Song, 2020; Pandian & Geetha, 2018). EIRs enable learners to access up-to-date, high-quality content across borders, thereby removing traditional barriers to information access. However, infrastructural limitations, such as unstable internet connectivity and inadequate technological infrastructure, particularly in developing countries, continue to hinder their effective utilization (Nkebukwa, 2023).

From a global perspective, EIRs are viewed as indispensable tools for educational advancement, but their impact depends largely on awareness, access, and digital competence. Pandian and Geetha (2018) emphasized that electronic resources provide learners with the advantage of retrieving current scholarly materials without geographical constraints, while Abbas and Song (2020) found that access to well-curated e-resources enhances students' ability to evaluate and synthesize information, which improves academic performance. In Nigeria, the availability and effective use of EIRs in tertiary institutions remain constrained by multiple challenges, including high subscription costs, poor internet connectivity, irregular power supply, and insufficient technical expertise.

Akinbo and Omideyi (2023) observed that although EIRs such as e-books, e-journals, and online databases have become central to academic library collections, many students still lack exposure to subscription-based resources. Adeleke and Nwalo (2017) similarly noted that despite EIRs being introduced in numerous universities, usage levels remain low due to weak awareness campaigns and inadequate information literacy training. They advocated for integrating digital literacy and e-resource use into undergraduate curricula to close this skill gap. Mukhtar and Maidabino (2021) and Sambo, Ntogo, and Eda (2022) further highlighted that inadequate infrastructure, low funding, and poor ICT support services significantly undermine the benefits of EIRs in Nigerian universities.

When examining the types of EIRs utilized, studies indicate that students show a preference for open-access platforms over subscription-based databases. Izuagbe et al. (2016) attributed this trend to poor awareness of institutional e-library services, while Osinulu (2020) found that many undergraduates rarely used subscription-based e-resources due to technical difficulties, limited internet access, and low digital literacy levels. In contrast, international evidence underscores the value of institutional e-libraries and subscription databases. For example, Mtebe and Gallagher (2022) reported that Tanzanian students who frequently accessed university e-journals and databases achieved higher academic performance than peers relying solely on open-access sources. Similarly, Ovwasa (2024) observed that students' socio-demographic factors and information literacy levels strongly influence how effectively they utilize available EIRs, suggesting that improving awareness and training is as crucial as expanding resource availability.

Empirical studies from Nigerian universities reaffirm these findings. Anyim (2020), Ebiefung and Okafor (2022), and Omidiji (2024) collectively reveal that EIRs such as e-books, e-journals, online databases, OPAC, and institutional portals have become integral components of undergraduate academic engagement. At the National Open University of Nigeria (NOUN), Anyim (2020) identified online databases (85%), search engines (84%), e-



journals (83%), e-books (83%), and OPAC (72%) as the most available and frequently used resources. Similarly, Omidiji (2024) found that University of Ibadan students regularly accessed e-books, e-journals, and e-newspapers for learning, assignments, and project work. At the Federal University Otuoke, Ebiefung and Okafor (2022) reported that the Internet (51.4%), e-journals (48.8%), and CD-ROMs (43.8%) were the most used EIRs, although online databases and OPAC were less frequently accessed. Collectively, these studies indicate that while EIRs are widely available, utilization levels vary across institutions due to disparities in infrastructure, training, and institutional support.

A consistent theme across the literature is the central role of information literacy in optimizing EIR usage. According to Ebiefung and Okafor (2022), although students demonstrated strong ability in formulating research questions (59.5%), their capacity to locate and evaluate digital information was relatively low (30.2%). Anyim (2020) similarly found that lack of information retrieval skills limited the effective use of e-resources, while Omidiji (2024) highlighted that inadequate search skills and low awareness impeded full exploitation of available digital platforms. These findings underscore the need for continuous, library-led digital literacy programmes that train students in efficient search strategies, database navigation, and critical evaluation of online materials.

### **Types of EIRs Utilized by Undergraduate Students**

Electronic Information Resources (EIRs) have become integral to teaching, learning, and research in higher education. They enhance information access, storage, and retrieval processes within academic libraries and have transformed traditional modes of information dissemination. According to Okoroafor (2024), EIRs are information materials that were originally available in print but are now accessible electronically through computers and other ICT tools. These include e-books, e-journals, databases, theses, dissertations, conference papers, government documents, and electronic reference sources. Sharma (2009, as cited in Okoroafor, 2024) further categorizes them into digital forms such as e-books, e-

journals, e-newspapers, and internet resources, while Deng (2010, as cited in Okoroafor, 2024) expands the definition to encompass electronic magazines, technical papers, and monographs.

Okoroafor (2024) found that university libraries provide a wide range of digital holdings, including e-books, e-journals, e-databases or repositories, e-theses and dissertations, e-conference proceedings, e-newsletters, e-reference materials, and e-grey documents. Among these, e-databases and repositories were the most available and utilized resources, while e-grey documents were the least used. The study further revealed that both undergraduate and postgraduate users rely heavily on EIRs for research, coursework, and academic development.

Corroborating these findings, Adedokun and Fawole (2018) describe EIRs as the “*bedrock of academic success*” because they provide accurate and timely information that supports academic performance. Their study of undergraduates at the National Open University of Nigeria (NOUN), Ilorin Study Center, identified a variety of EIRs used by students, including e-mail, e-news, e-books, CD-ROMs, e-journals, e-reference materials, and online databases. Among these, e-mail (86%), e-news (85%), and e-books (80%) were the most frequently used, while online databases (57%) and e-journals (67%) were less commonly accessed. This distribution indicates that while undergraduates actively engage with communication-based and general information resources, scholarly and research-oriented databases remain underutilized.

Similarly, Omoisejimi, Eghworo, and Ogo (2015) reported that undergraduates at the Federal University of Petroleum Resources, Effurun (FUPRE) used EIRs such as CD-ROMs, electronic books, electronic journals, online databases, and online sources including web pages, blogs, and forums. These resources supported students’ academic and research needs, particularly in preparing assignments, projects, and examinations. However, the authors noted that the extent of usage varied across faculties, with higher engagement among students in the science and technology disciplines.



Overall, the literature consistently shows that undergraduates in Nigerian universities utilize a diverse range of EIRs, though with varying degrees of intensity. E-mail, e-books, and online information sources are frequently used due to their accessibility and familiarity, while e-journals and scholarly databases are less frequently accessed. This pattern underscores the need for greater awareness, accessibility, and user training to improve utilization of academic-oriented electronic resources.

### **Challenges Mitigating Undergraduate Students from Utilizing the Available EIRs**

Despite their significance, numerous challenges hinder the optimal utilization of electronic information resources among undergraduates. Across the reviewed studies, recurring obstacles include poor internet connectivity, unstable power supply, inadequate ICT infrastructure, insufficient ICT skills, and limited awareness of available resources (Adedokun & Fawole, 2018; Omoisejimi et al., 2015; Okoroafor, 2024; Anyim, 2020; Omidiji, 2024; Ebiefung & Okafor, 2022).

Adedokun and Fawole (2018) identified financial constraints, erratic electricity, and poor internet access as the primary barriers affecting students at NOUN, Ilorin Study Center. They explained that high data costs and unstable power supply reduce students' frequency of access to online materials. Furthermore, lack of technical competence and low awareness of available e-resources were noted as additional factors limiting effective usage. At FUPRE, Omoisejimi et al. (2015) reported similar challenges, including inadequate facilities, insufficient training, lack of computer literacy, and slow network connectivity. They observed that although the university subscribed to several e-databases, many students lacked the requisite skills to navigate them effectively. Moreover, systemic challenges such as inconsistent funding, high subscription costs, database management complexities, and archival issues further limited long-term accessibility. The authors noted that databases scattered across multiple vendor platforms make searching and retrieval cumbersome for users.

Infrastructure-related issues are also widely reported across Nigerian universities.

Anyim (2020) and Omidiji (2024) documented slow network connectivity (57.1%), irregular electricity (47.6%), and unfriendly user interfaces (40.3%) as persistent challenges. Similarly, Ebiefung and Okafor (2022) found that students struggled with poor network coverage (53.3%), information overload (51.7%), and difficulties accessing institutional databases. These barriers collectively reduce students' ability to engage effectively with EIRs and limit their academic potential. A lack of training and information literacy programs compounds these infrastructural challenges. Both Adedokun and Fawole (2018) and Omoisejimi et al. (2015) emphasized that many students do not possess adequate ICT skills to retrieve, evaluate, and utilize electronic resources effectively. As a result, the authors recommend continuous user education initiatives, regular library orientation programs, and integration of ICT competence training into university curricula to improve students' proficiency in navigating electronic systems.

### **METHODOLOGY**

A descriptive survey design was adopted, for obtaining opinions from a large population. The study population comprised all undergraduates' students of Plateau State University. A sample of 350 students was selected across faculties using stratified random sampling. Data were collected using a structured questionnaire containing sections on availability, types of EIRs, and utilisation patterns. Descriptive statistics such as frequencies, percentages, and mean scores were used. A decision rule was applied: items with a mean score of 3.00 and above were accepted, while those below 3.00 were rejected. Accepted items means respondents generally agreed and rejected items means respondents disagreed with the statement or item.



## RESULTS AND DISCUSSION

### Availability of EIRs

**Table 1: Respondents’ Opinion on Availability of Electronic Information Resources for Undergraduate Students in Plateau State University (N = 350)**

S/N	Statement	SA	A	U	D	SD	Mean	Decision
1	Electronic Information Resources are readily available for students.	140	380	162	240	53	2.79	Rejected
2	The university provides sufficient access to databases & online journals.	100	364	156	276	49	2.70	Rejected
3	The library has adequate internet facilities for accessing EIRs.	145	244	240	190	85	2.58	Rejected
4	There is an institutional subscription to digital libraries & platforms.	100	312	261	262	34	2.77	Rejected
5	The university regularly updates its electronic resources.	250	308	186	222	50	2.90	Rejected
6	The university provides 24/7 access to EIR platforms.	95	212	162	244	102	2.33	Rejected
7	Students have easy access to a variety of EIR tools across disciplines.	90	292	180	268	65	2.56	Rejected
<b>Grand Mean</b>							2.66	Rejected

Analysis showed that students disagreed with the statement that electronic information resources were adequately available at Plateau State University. The grand mean score (2.66) fell below the 3.00 acceptance level. This indicates that while some resources exist, they are insufficient to meet students’ academic needs. The study revealed that electronic information resources (EIRs) were generally not adequately available to undergraduates of Plateau State University, Bokoos. The grand mean score of 2.66 fell below the acceptance threshold of 3.00, meaning respondents disagreed that resources were readily accessible. Specifically, students rejected the sufficiency of databases and online journals (2.70), adequacy of internet facilities (2.58), and institutional subscriptions to digital libraries (2.77). Likewise, students expressed dissatisfaction with the updating of electronic resources (2.90) and lack of 24/7 access (2.33). This pattern suggests that while the university has

### Types of EIRs Utilized

made efforts to introduce electronic resources, infrastructural and logistical gaps hinder their effective availability. These findings resonate with Adeleke and Nwalo (2017), who noted that Nigerian universities often introduce EIRs without ensuring continuous updates, reliable access, or user-friendly systems. Similarly, Sambo, Ntogo, and Eda (2022) highlighted that poor ICT infrastructure and inadequate funding remain barriers to full EIR adoption in many tertiary institutions. Comparatively, international evidence shows better integration. Mtebe and Gallagher (2022) found that Tanzanian universities with strong institutional subscriptions achieved better student engagement with EIRs. The gap between the Nigerian and global contexts underscores the urgent need for universities like Plateau State University to improve infrastructure, funding, and subscription services if students are to benefit from the same academic advantages as their counterparts abroad.



**Table 2: Respondents’ Opinion on Types of Electronic Information Resources Utilized by Undergraduate Students in Plateau State University**

S/N	Statement	SA	A	U	D	SD	Mean	Decision
8	I frequently use online journals and e-books for my academic work.	310	414	78	228	44	3.07	Accepted
9	I access open-access research repositories (e.g., Google Scholar, ResearchGate).	285	492	150	164	38	3.23	Accepted
10	The university provides access to subscription-based databases (e.g., JSTOR, ScienceDirect).	260	160	312	242	33	2.88	Rejected
11	I use institutional online repositories for research and academic projects.	130	408	156	210	65	2.77	Rejected
12	I often use digital libraries and reference tools (e.g., Mendeley, Zotero).	35	236	129	378	52	2.37	Rejected
13	I use video tutorials and online lectures on EIR platforms.	275	368	114	230	50	2.96	Rejected
14	I often participate in academic forums/discussion groups via EIR platforms.	180	324	108	306	44	2.75	Rejected
<b>Grand Mean</b>							2.86	

The analysis shows that two (2) out of seven items are accepted due to the fact that their mean score is greater than the row mean of 3.00. Five (5) items out of the seven falls below the mean score of 3.00 and are therefore rejected. The accepted items are; Open-access resources such as Google Scholar (3.23) and online journals (3.07) were most frequently used. The rejected items are; the university provides access to subscription-based databases (2.88), I use institutional online repositories for research and academic projects (2.77), I often use digital libraries and reference tools (2.37), I use video tutorials and online lectures on EIR platforms (2.96), and I often participate in academic forums/discussion groups via EIR platforms (2.75).

Findings from Table 2 indicated a clear divide between open-access and subscription-based resource usage. Respondents reported frequent use of Google Scholar (3.23) and online journals/e-books (3.07), both of which fall largely within the open-access category. In contrast, subscription-based databases like JSTOR and ScienceDirect (2.88), institutional repositories (2.77), and digital reference tools such as Mendeley or Zotero (2.37) were poorly utilized. This result suggests that undergraduates at

Plateau State University are more inclined toward free-access platforms, likely due to financial constraints and limited institutional support. These findings align with Izuagbe et al. (2016), who reported that poor awareness and lack of promotion of subscription-based databases lead to their underutilization among Nigerian students. Likewise, Osinulu (2020) observed that even when subscription databases exist, many students never access them due to technical challenges and inadequate user training. Interestingly, although video tutorials and online lectures (2.96) ranked relatively high, they still fell below the acceptance level. This suggests that multimedia resources, which are increasingly used in global higher education, are not yet fully embraced at Plateau State University. This gap is consistent with Akinbo and Omideyi (2023), who argued that while African universities provide access to basic EIRs, students’ exposure to interactive and multimedia-based resources remains limited. From a global perspective, Abbas and Song (2020) showed that access to peer-reviewed and structured subscription-based databases significantly improves students’ ability to conduct quality research. The findings of this study, however, demonstrate a reliance on open-access resources, which, while helpful, may not always



guarantee the credibility and comprehensiveness of content. This reliance could disadvantage students in terms of research depth and academic

competitiveness compared to peers in universities with stronger EIR support systems.

**Challenges of EIRs use among UG students**

**Table 3: Challenges of Using Electronic Information Resources Among Undergraduate Students in Plateau State University**

S/N	Statement	SA	A	U	D	SD	Mean	Decision
22	Unstable internet connectivity affects my ability to use electronic information resources.	890	556	42	26	6	4.34	Accepted
23	I find it difficult to locate relevant academic materials in electronic databases.	470	540	84	174	6	3.64	Accepted
24	Lack of proper training on how to use electronic information resources limits my usage.	330	756	51	124	16	3.65	Accepted
25	Some electronic information resources require expensive subscriptions, making access difficult.	670	640	60	66	3	4.11	Accepted
26	Poor power supply and insufficient computer to access the resources	840	420	108	70	6	4.13	Accepted
27	Lack of technical support or troubleshooting assistance affects my ability to use electronic information resources effectively.	470	688	75	90	14	3.82	Accepted
28	Some electronic information resources platforms are difficult to navigate or use due to poor interface design.	510	708	126	26	16	3.96	Accepted
<b>Grand Mean</b>							<b>3.95</b>	<b>Accepted</b>

Table 3 shows that all seven items listed to test the challenges of using Electronic Information Resources among undergraduate students at Plateau State University are accepted by the respondents, as their mean values exceed the critical row mean of 3.00. The respondents accept that unstable internet connectivity affects my ability to use electronic information resources (4.34), I find it difficult to locate relevant academic materials in electronic databases (3.64), lack of proper training on how to use electronic information resources limits my usage (3.65),

some electronic information resources require expensive subscriptions, making access difficult (4.11), poor power supply and insufficient computer to access the resources (4.13), lack of technical support or troubleshooting assistance affects my ability to use electronic information resources effectively (3.82), and some electronic information resources platforms are difficult to navigate or use due to poor interface design (3.96). This analysis shows that respondents accept that unstable internet connectivity, difficulties in locating relevant academic



materials, lack of proper training, expensive subscriptions, poor power supply, lack of technical support, and poor interface design are all significant challenges in using electronic information resources at Plateau State University. The grand mean of 3.95 also supports the finding that these challenges are universally acknowledged and accepted by the respondents. This indicates that, overall, students face considerable difficulties in utilizing electronic information resources, but these challenges are recognized and accepted as part of their academic experience at Plateau State University.

The findings from Table 3 reveal that all seven items examining the challenges of using Electronic Information Resources (EIRs) among undergraduate students at Plateau State University were accepted, as their mean scores exceeded the decision threshold of 3.00. The grand mean of 3.95 indicates that these challenges are collectively and strongly acknowledged by the respondents. Specifically, the most significant barriers identified include unstable internet connectivity (4.34), poor power supply and insufficient computers (4.13), and expensive subscription costs (4.11). Other important challenges were difficulty locating relevant materials (3.64), lack of proper training (3.65), insufficient technical support (3.82), and poor interface design of electronic platforms (3.96).

These results clearly demonstrate that undergraduates encounter multifaceted challenges technological, infrastructural, and human that hinder effective utilization of electronic resources. This pattern aligns closely with earlier findings in the literature. Adedokun and Fawole (2018) reported that financial constraints, erratic electricity, and poor internet access were major obstacles limiting students' ability to use EIRs at the National Open University of Nigeria, Ilorin Study Center. Similarly, Omoisekejimi, Eghworo, and Ogo (2015) found that inadequate facilities, insufficient training, and slow network connectivity constrained undergraduates at the Federal University of Petroleum Resources, Effurun, despite the availability of subscribed databases.

The present findings are further reinforced by other studies that highlight similar

infrastructural challenges in Nigerian universities. Anyim (2020) and Omidiji (2024) both identified slow internet connectivity, irregular power supply, and poor system interfaces as persistent problems affecting students' access to digital materials. In the same vein, Ebiefung and Okafor (2022) observed that students often faced poor network coverage, information overload, and difficulty accessing institutional databases, leading to frustration and underutilization of available resources. The Plateau State University findings corroborate these national trends, suggesting that these infrastructural deficits are systemic across the Nigerian higher education sector.

Another prominent challenge emerging from the current study is the lack of proper training and technical support. With a mean score of 3.65 for lack of training and 3.82 for inadequate technical assistance, it is evident that many students lack the practical skills and guidance necessary to navigate electronic databases efficiently. This observation is consistent with the conclusions of Adedokun and Fawole (2018) and Omoisekejimi et al. (2015), who emphasized that low levels of ICT literacy and poor user education significantly hinder the effective utilization of EIRs. Both sets of authors advocate for regular user education programs, ICT workshops, and the integration of digital literacy into university curricula as strategies to improve students' competence in electronic information retrieval.

Additionally, the problem of costly subscriptions identified in the present study (4.11) mirrors earlier evidence from Omoisekejimi et al. (2015), who reported that high database subscription costs and inconsistent funding compromise long-term access to digital materials. The current findings also echo the systemic funding and management issues discussed in the literature, such as the difficulty in sustaining licenses and maintaining stable access across multiple vendor platforms. Finally, the challenge of poor interface design (3.96) highlights usability issues that extend beyond infrastructure and training. As Omidiji (2024) observed, unfriendly database interfaces and complex navigation systems discourage students from exploring available electronic platforms. This



usability barrier reduces user satisfaction and contributes to the overall low engagement with scholarly databases noted in multiple studies.

## CONCLUSION

This study set out to find out the availability and types of electronic information resources (EIRs) among undergraduates of Plateau State University, Bokoos. The findings revealed that the availability of EIRs in the university is generally inadequate. With a grand mean score of 2.66, respondents rejected the sufficiency of institutional subscriptions, adequacy of internet facilities, and 24/7 access to electronic platforms. This shows that while some resources exist, they are insufficient to meet students' academic needs. Regarding the types of EIRs utilised, results indicated a clear preference for open-access platforms such as Google Scholar (3.23) and online journals/e-books (3.07), while subscription-based resources like JSTOR (2.88), institutional repositories (2.77), and digital reference tools such as Mendeley (2.37) were underutilised. This reflects a reliance on freely available platforms and highlights both infrastructural and awareness gaps. The study concludes that although EIRs have a strong positive influence on students, research skills, and assignment completion, their full potential at Plateau State University is hindered by infrastructural deficiencies, poor digital literacy, and limited institutional subscriptions. Without deliberate interventions, undergraduates risk depending excessively on open-access resources that may not always provide reliable, peer-reviewed, or comprehensive scholarly materials.

## RECOMMENDATIONS

Based on the findings and in line with the objectives of this study, the following recommendations are made to improve the availability, utilization, and effectiveness of Electronic Information Resources (EIRs) for undergraduate students at Plateau State University, Bokoos:

1. To address the inadequate availability of EIRs revealed in the study (2.66), the university administration should strengthen its investment in digital infrastructure. This includes increasing subscriptions to academic databases such as JSTOR, ScienceDirect, and Emerald Insight, and ensuring consistent

access to institutional repositories and digital libraries. Reliable internet connectivity, sufficient computer terminals, and an uninterrupted power supply should be prioritized to provide seamless access to EIRs. Additionally, the university library should collaborate with national and international consortia to secure cost-effective subscription packages and integrate them into the institution's e-library systems. Such measures will enhance both the range and reliability of EIRs available to students.

2. Findings from the study showed that undergraduates primarily rely on open-access resources like Google Scholar and e-journals, while subscription-based databases and reference management tools remain underutilized (2.86). To improve utilization, the university should organize periodic library awareness campaigns, user orientations, and demonstrations that showcase the value and relevance of institutional e-resources. Librarians should actively guide students on how to access, evaluate, and apply these resources to academic work. Embedding e-resource utilization training into general studies or research methodology courses will further institutionalize awareness and promote regular engagement with subscription-based platforms.
3. The study found that inadequate user training, poor ICT competence, and limited technical support were significant barriers to effective EIR use (3.95). To mitigate these challenges, the university should establish continuous digital literacy and information retrieval workshops aimed at improving students' and staff members' technical proficiency. The library should employ or designate ICT support personnel to assist users in navigating complex databases, troubleshooting access issues, and adopting reference management tools such as Mendeley and Zotero. Furthermore, the integration of Information Literacy Education (ILE) into the undergraduate curriculum will ensure that students develop long-term skills



necessary for independent research and scholarly engagement with EIRs.



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