

**INFLUENCE OF COMPUTER LITERACY SKILLS AND INSTITUTIONAL  
SUPPORT ON THE USE OF ELECTRONIC RESOURCES AMONG DISTANCE  
LEARNERS IN SOUTH-WEST, NIGERIA**

**BY**

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**Abstract**

The study investigated computer literacy, institutional support, and their impact on the use of electronic resources among distance learners in selected universities in South-West Nigeria. The study was guided by four research questions and two hypotheses tested at 0.05 level of significance. Samples were drawn from the Distance Learning Centre, University of Ibadan, Ibadan and National Open University, Ibadan Study Centre, Oyo State. Questionnaires were used to collect data from two hundred and thirty-eight (238) respondents. Data collected were analyzed using descriptive statistics and inferential statistics to test hypotheses. The findings revealed that distance learners demonstrated a good level of computer literacy, with a weighted mean of 3.35 (SD = 0.79). Regression analysis showed that computer literacy skills and institutional support significantly predicted electronic resource usage ( $F(6, 193) = 23.55$ ;  $R = 0.650$ ;  $R^2 = 0.423$ ;  $p < 0.05$ ). Furthermore, there is a significant joint contribution of computer literacy and institutional support in the prediction of the use of electronic resources among distance learners in South-west Nigeria. The study underscores the importance of enhancing institutional frameworks and support systems to bridge existing gaps and foster more effective utilization of available resources by distance learners.

**Keywords:** Distance learning, Computer literacy skills, Institutional support, Electronic resources.

**Introduction**

The rapid advancement of digital technologies has significantly transformed higher education particularly for distance learning programmes. Electronic resources, such as e-books, academic databases, and digital libraries have become integral to distance learners' academic success. However, their effective utilization is contingent on computer literacy skills and institutional support. Computer literacy skills encompass the ability to operate digital devices, navigate online databases, and utilize academic software efficiently. Research has shown that students who

possess knowledge of advanced computer literacy are more adept at retrieving and analyzing information, which enhances their academic performance (Itasanmi, 2023). In addition to basic computer skills, proficiency in computer usage is essential for advanced searches of electronic resources. According to Pontoh, Purisamya, and Sarifudin (2023), competence in computer usage allows students to access digital resources seamlessly, fostering independent learning and research capabilities.

Similarly, institutional support plays a pivotal role in facilitating distance learners' access to electronic resources. Technical assistance, online training, and access to digital libraries are essential components that enhance the learning experience (Rahim, 2022). Studies indicate that students with adequate institutional support, including digital training programs and 24/7 technical assistance, exhibit higher engagement levels with electronic resources (Cross et al., 2023). In contrast, inadequate support structures, such as limited internet access and lack of technical assistance, hinder resource utilization and learning efficiency (Nuseir, Aljumah, & Ghaleb, 2022). Enhancing computer literacy abilities among distance learners and strengthening institutional frameworks will improve their capacity to access pertinent electronic resources, mostly academic materials, hence enriching the academic experience of distant learners.

### **Problem Statement**

Distance learners face challenges in navigating and using electronic resources due to their lack of computer literacy skills and inadequate institutional support. Observation and preliminary investigation into the use of electronic resources among distance learners reveal that in spite of the provision of virtual libraries in centers for distance learning and subscription to databases by institutions, these electronic resources are increasingly underutilized. The underutilization is attributable to insufficient computer literacy skills and inadequate institutional support in providing the necessary resources. This study aims to investigate the relationship between computer literacy skills, institutional support, and electronic resource utilization among distance learners in South-West Nigeria.

### **Research Questions**

The following research questions guided the study:

1. What is the level of computer literacy skills of distance learners in south-west Nigeria?
2. What institutional support is provided for distance learners in the two universities?
3. What is the purpose of distance learners using electronic resources in southwest Nigeria?
4. What is the frequency of use of electronic resources by distance learners in South-west Nigeria?

### **Hypotheses**

The following hypotheses were tested at 0.05 level of significance:

**HO1:** There is no joint influence between computer literacy skills and institutional support on the use of electronic resources by distance learners in South-west Nigeria.

**HO2:** There are no significant relative contributions of computer literacy and institutional support in the prediction of the use of electronic resources among distance learners in South-west Nigeria.

### **Literature Review**

#### **Computer Literacy Skills of Distance Learners and Use of Electronic Resources**

Distance learners can access electronic resources using electronic gadgets, internet, databases, and search engines. This implies that distance learners need to acquire adequate computer literacy skills to fully engage in academic activities. Computer literacy skills refer to the proficiency of distance learners in employing computers to electronically search, retrieve, save, or download the necessary information. Computer knowledge is a fundamental aspect of computer literacy skill which is crucial to enhancing distant learners' overall efficiency and academic success in a virtual learning environment. Computer knowledge encompasses the skills acquired through computer usage, from basic tasks such as system booting and keyboard usage to more complex tasks like online searching, software usage, programming, and data storage. Computer knowledge is a prerequisite to academic performance, facilitating access to electronic resources that enhance course materials for distance learners.

Distance learners acquire knowledge and competence through the frequent use of computers for information needs. Competence in the use of computers is a progression from basic computer use

to proficiency in the use of database software for retrieving electronic resources, knowledge of computer terminology, and skills in various programming activities. Abubakar and Adetimirin (2015) declared that computer literacy skills comprise a variety of complex skills (which include: booting a computer, how to use a keyboard, editing work, retrieving information from computers, sending and receiving e-mails, etc.). According to studies, more computer knowledge corresponds with better academic performance and the ability to utilize electronic resources more effectively (Pontoh et al., 2023). According to a study conducted by Itasanmi (2022), students who possessed advanced computer literacy skills were more inclined to effectively navigate online learning platforms.

Competence with computers also includes the understanding of computer language/vocabulary which is an essential computer literacy skill required for distance learning students to use electronic resources. Understanding terms like "bandwidth," "server," "cloud storage," and "encryption" will assist students in troubleshooting problems and accessing interactive learning tools. Zhan et al. (2023) posited that a clear understanding of this technical vocabulary empowers learners to become more independent and resourceful when accessing and utilizing electronic resources. Popoola and Olajide (2021) discovered that higher computer literacy markedly enhanced students' confidence in utilizing academic databases, which provide access to pertinent electronic resources. However, students with low computer literacy encountered difficulties with search and retrieval activities, which adversely impacted their capacity to access digital academic resources.

### **Institutional Support in Distance Education**

Nuseir et al. (2022) revealed that institutional support plays a critical role in moderating the relationship between distance learning modes and students' academic success. Distance education cannot be fully effective without formidable institutional support such as technical support for students based on the nature of the educational system. Also, institutional support systems enhance learner autonomy and improve students' readiness for digital learning (Antara et al., 2023), nevertheless, some institutions lack adequate assistance.

Technical support is crucial not solely only in providing access to electronic resources but also in training students with the necessary skills and confidence to effectively utilize them. Distance education students require sufficient online technical support to access resources access that have been provided by their institutions. Cross et al. (2023) confirmed that institutional support enables distance learners to access relevant materials and complete their assessments with minimal impediments. Granting distance learners access to resources such as subscribed databases is a means of enriching them with academic resources. To prevent underutilization of resources, online training programs can be set up to demonstrate to distant learners how to use the electronic resources that their institution has made available.

Rahim (2022) discovered that among Malaysian distance learners, student resource usage was influenced by training programs which were strengthened by institutional training programs. Conversely, Ajegbomogun Achigbue and Diyaolu (2022) found that institutional characteristics and computer literacy abilities were not important determinants of electronic resource use.

### **Use of Electronic Resources by Distance Learners in Nigeria**

Electronic resources are the electronic representation of information that can be accessed in a digital format. Ankamah et al. (2022) define electronic resources as tools that are extensively utilized in the academic community to support research activities, such as Google, Wikipedia, ScienceDirect, and PubMed, in addition to academic databases. It can be used for a variety of purposes, including reading for examinations, assignments, research, and knowledge acquisition. The retrieved information becomes 'just in time' information which can be downloaded, printed, or saved for future purposes. The frequency with which distance learners use electronic resources varies across disciplines and levels of study. According to a study by Mabawonku et al. (2023), 62.5% of Babcock University undergraduate students used e-theses and dissertations, and 90.7% of them reported frequently consulting e-journals.

However, just 1.9% of specialized e-databases were used, which indicates a gap in the use of more sophisticated resources. How frequently distance learners use electronic resources for various information purposes helps to improve their level of use of the resources. Most distant learners use electronic resources primarily for academic purposes. The various purposes for which these electronic resources are used by distance learners include; preparation for

examinations, assignments, term paper writing, research studies, awareness of current information, and personal development. Ankamah et al. (2022) point out that Ghanaian health and medical students make substantial use of e-resources, including Google, ScienceDirect, and PubMed, for research and learning. For distant learners, the utilization of diverse electronic resources such as electronic books, journals, reference sources, and indexes is invaluable.

Successful distance education is rooted in the competencies of students to utilize academic materials electronically and the readiness of educational institutions in the provision of sustainable institutional support. The inclusion of distance education into the educational system underscores the need for robust institutional support that enables students to access, utilize, and benefit from electronic resources.

### **Methodology**

The population of this study consisted of undergraduates of the Distance Learning Centre, University of Ibadan, and National Open University of Nigeria, Ibadan Study Centre. According to the data collected from the institutions, the study population consisted 16,683 of distance learning students from the Distance Learning Centre, University of Ibadan, and 2,484 distance learning students from the National Open University of Nigeria, Ibadan Study Centre, Oyo state. The entire population for this study is 19,167. The sampling population from the Distance Learning Centre, University of Ibadan is 138 students, and 100 students from the National Open University of Nigeria, Ibadan Study Centre. The sampled population is 238 students. The descriptive survey design was adopted in this study, using simple random sampling technique. This is due to the nature of the distance learning programme, which is based on short-time of availability at the study centres for interactive sessions and examinations. Descriptive statistics was used to analyse the data collected using frequency counts, tables, mean, and standard deviation used to answer the research questions while inferential statistics such as the regression analysis was used for hypothesis 1 and Pearson Product Moment Correlation Coefficient was used to test hypothesis 2.

### **Results and Discussion**

#### **Questionnaire administration and response rate**

There were two hundred and thirty-eight (238) respondents, one hundred (100) from the National Open University (NOUN), Ibadan and one hundred and thirty-eight (138) from Distance Learning Centre, University of Ibadan who accepted to fill the administered questionnaire within the period of two (2) weeks. Two hundred (200) questionnaires were found usable for analysis.

**Research Question One:** What is the level of computer literacy skills of distance learners in South-west Nigeria?

**Table 1: Level of Computer Literacy Skills of Distance Learners in South-West Nigeria**

Items	SA	A	D	SD	Mean	Std Dev
I know how to access information related to learning on the computer.	110 (55%)	75 (37%)	10 (5%)	5 (3%)	3.45	0.70
I can perform basic computer operations like using a keyboard, and mouse, launching browsers, etc.	131 (65%)	60 (30%)	5 (3%)	4 (2%)	3.59	0.64
I can use a personal computer to retrieve electronic resources.	112 (56%)	62 (31%)	19 (9%)	7 (4%)	3.40	0.80
I know how to get information from databases online.	96 (48%)	80 (40%)	15 (7%)	9 (5%)	3.32	0.79
I can confidently use computers for the following purposes: refresh, reboot, reload, stop, forward, etc.	117 (59%)	61 (30%)	16 (8%)	6 (3%)	3.45	0.77
I can use a computer to access electronic resources to perform tasks related to learning efficiently.	102 (51%)	65 (32%)	24 (12%)	9 (5%)	3.30	0.85
I am proficient in the use of a computer to browse the Internet.	127 (64%)	56 (27%)	10 (5%)	8 (4%)	3.51	0.77
I know how to copy from CD ROM.	80 (40%)	60 (30%)	49 (24%)	11 (6%)	3.05	0.93
I am proficient in the use of electronic resources to carry out my research.	103 (52%)	71 (35%)	16 (8%)	10 (5%)	3.34	0.83
I can confidently use the computer facilities to find needed information	113 (56%)	64 (32%)	16	7	3.42	0.79

			(8%)	(4%)		
I understand all the terms relating to online databases	61 (30%)	89 (45%)	39 (19%)	11 (6%)	3.00	0.85
I know the uses of computer terminologies such as: boot, browse, CD ROM,, e-book, E-mail, www, hotspot etc.	108 (54%)	62 (31%)	23 (11%)	7 (4%)	3.36	0.82
I can use back and forward to move between pages.	107 (53%)	78 (39%)	9 (5%)//	6 (3%)	3.43	0.72
I can use “save as” when appropriate	114 (57%)	66 (33%)	10 (5%)	10 (5%)	3,42	0.80
<b>Weighted Mean</b>					<b>3.35</b>	<b>0.79</b>

Table 1 reveals the level of computer literacy skills of distance learners in South-west Nigeria. The result shows that the level of computer literacy skills of distance learners in South-west Nigeria is good as ten (10) out of the fourteen (14) items used to measure distance learners' computer literacy have a mean greater or equal to the predetermined benchmark (3.35). It could be deduced from the findings that the computer literacy level of distance learners is good because of the number of items with individual mean equal to and above the weighted mean. This is in line with Itasanmi (2022) that students who possessed advanced computer literacy were more inclined to effectively navigate online learning platforms, interact with educational resources, and actively participate in virtual debates.

**Research Question Two:** What is the institutional support provided for distance learners in South-west Nigeria?

**Table 2: Institutional Support Provided for Distance Learners in South-West Nigeria**

Items	SA	A	D	SD	Mean	Std Dev
Technical staff area available to attend to distance learners when faced with the challenge of accessing electronic resources.	74 (37%)	91 (46%)	18 (9%)	17 (8%)	3.11	8.90
There is provision to communicate technical staff through electronic mail.	75 (38%)	95 (47%)	12 (6%)	18 (9%)	3.14	0.88
There is provision of a toll-free number for students to contact technical support staff.	63 (32%)	79 (39%)	34 (17%)	24 (12%)	2.91	0.98



Technical issues in accessing electronic resources are resolved quickly and effectively	55 (28%)	88 (44%)	33 (16%)	24 (12%)	2.97	0.95
There is a provision for feedback on the quality assurance of technical support service rendered.	58 (29%)	100 (50%)	22 (11%)	20 (10%)	2.98	0.89
There is provision of online library facilities to access electronic resources to distance learners.	82 (41%)	75 (38%)	23 (11%)	20 (10%)	3.10	0.96
I have unhindered access to online-library facilitated at my institution.	52 (26%)	84 (42%)	40 (20%)	24 (12%)	2.82	0.96
There are online links made available to access online electronic resources.	83 (42%)	79 (39%)	23 (12%)	15 (7%)	3.15	0.90
There is a constant electricity/power supply within the study Centre to the Library.	59 (30%)	68 (34%)	32 (16%)	41 (20%)	2.73	1.09
There is the provision of internet access to access the online Library within the study Centre.	57 (29%)	59 (29%)	38 (19%)	46 (23%)	2.64	1.13
There is provision of offline access to digital learning materials for distance learners.	71 (36%)	70 (35%)	26 (13%)	33 (16%)	2.90	1.07
My institution organizes digital literacy training on how to access electronic resources for fresh students.	72 (36%)	60 (30%)	30 (15%)	38 (19%)	2.83	1.12
I participated in Asynchronous online training by my institution.	62 (31%)	51 (26%)	38 (19%)	49 (24%)	2.63	1.16
I had the privilege of Real-Time Interactive Training organized by my institution.	61 (31%)	69 (34%)	27 (14%)	43 (21%)	2.74	1.11
I have been exposed to cellular network-based training by my institution.	49 (25%)	72 (36%)	39 (19%)	40 (20%)	2.65	1.06
I was trained in a computer-based global information system.	45 (22%)	75 (38%)	40 (20%)	40 (20%)	2.63	1.04
I attended training on computer-based systems organized by my institution.	55 (28%)	49 (24%)	45 (23%)	51 (25%)	2.54	1.15
<b>Weighted Mean</b>					<b>2.85</b>	<b>1.49</b>

Table 2 shows the institutional support provided for distance learners in South-west Nigeria. The result reveals that the level of institutional support provided for distance learners in South-west Nigeria is fair as only eight (8) out of the seventeen (17) items used to measure institutional support provided for distance learners have a mean greater or equal to the predetermined benchmark (2.85). There are online links made available to access online electronic resources ( $\bar{x}$  = 3.15), ranks highest while there is a provision of offline access to digital learning materials for distance learners ( $\bar{x}$  = 2.90) ranks lowest. This is in consonance with finding Rahim (2022) discovery among Malaysian distance learners; student resource usage was influenced by training programs which were strengthened by institutional training programmes.

**Research Question Three:** What is the purpose of using electronic resources by distance learners in South-west Nigeria?

**Table 3: Purpose of Use of Electronic Resources by Distance Learners in South-west Nigeria**

Items	SA	A	D	SD	Mean	Std Dev
Reading for Examination	121 (61%)	55 (27%)	12 (6%)	12 (6%)	3.43	0.85
Article Write-up/Assignment	103 (51%)	76 (38%)	9 (5%)	12 (6%)	3.35	0.83
Project Writing	100 (50%)	70 (35%)	15 (7%)	15 (7%)	3.28	0.89
Knowledge/Learning	115 (58%)	64 (32%)	6 (3%)	15 (7%)	3.40	0.87
Information exchange	104 (52%)	74 (37%)	7 (4%)	15 (7%)	3.34	0.86
Group Discussion	104 (52%)	69 (35%)	14 (7%)	13 (6%)	3.32	0.87
Consulting references sources	82 (41%)	83 (42%)	19 (9%)	16 (8%)	3.16	0.89
Personal reading	116 (58%)	61 (30%)	8 (4%)	15 (8%)	3.39	0.88
Others	84 (42%)	55 (27%)	9 (5%)	52(26%)	2.86	1.22
<b>Weighted Mean</b>					<b>3.28</b>	<b>0.91</b>

Table 3 reveals the purpose of the use of electronic resources by distance learners in South-west Nigeria. The finding reveals that the common purpose of electronic resources usage among the respondents are reading for examination ( $\bar{x} = 3.43$ ), which ranks highest. However, the mean of consulting references sources and other purposes apart from the highlighted few are below the weighted mean (3.28). The outcome agrees with Ankamah et al. (2022) that electronic resources are used for a variety of purposes, including reading for examinations, assignments, research, and knowledge acquisition.

**Research Question Four:** What is the frequency use of electronic resources by distance learners in South-west Nigeria?

**Table 4: Frequency of Use of Electronic Resources by Distance Learners in South-West Nigeria**

Items		Daily	Weekly	Monthly	Twice Month	A	Occasio nally	Never	Mean	Std Dev
CD-ROM		24	25	47	7 (4%)		62	35	3.19	1.67
Databases		(12%)	(13%)	(23%)			(31%)	(17%)		
Electronic books and texts		66	28	37	5 (3%)		45	19	4.04	1.80
		(33%)	(14%)	(18%)			(23%)	(9%)		
Electronic		37	34	42	5		56	26	3.57	1.75

Journals	(18%)	(17%)	(21%)	(3%)	(28%)	(13%)		
Electronic	32	27	42	7	64	28	3.38	1.72
Indexes	(16%)	(13%)	(21%)	(4%)	(32%)	(14%)		
Electronic	30	26	53	7	58	26	3.43	1.67
abstracts	(15%)	(13%)	(26%)	(4%)	(29%)	(13%)		
Online database	57	39	39	7	35	23	4.04	1.77
	(28%)	(20%)	(20%)	(4%)	(17%)	(11%)		
Electronic image	47	39	41	12	39	22	3.89	1.72
databases	(23%)	(19%)	(21%)	(6%)	(20%)	(11%)		
Statistical sources	19	36	60	8	49	28	3.42	1.59
	(9%)	(18%)	(30%)	(4%)	(25%)	(14%)		
References	29	40	43	14	50	24	3.56	1.66
sources	(14%)	(20%)	(22%)	(7%)	(25%)	(12%)		
Research guides	41	33	38	8	52	28	3.60	1.79
	(20%)	(17%)	(19%)	(4%)	(26%)	(14%)		
<b>Weighted Mean</b>							<b>3.61</b>	<b>1.71</b>

Table 4 indicates the frequency of use of electronic resources by distance learners in South-West Nigeria. Comparing the weighted mean with the individual mean it can be observed that electronic books and texts (**4.04**), online databases (**4.04**), and electronic image databases (**3.89**) are commonly used as they have individual means greater than the weighted mean. This conforms to Mabawonku et al. (2023), that undergraduates frequently consulted electronic resources.

### Hypotheses

**H<sub>01</sub>:** There is no significant joint contribution of computer literacy and institutional support in the prediction of the use of electronic resources among distance learners in South-west Nigeria.

**Table 5: Regression Summary and ANOVA of Computer Literacy and Institutional Support in the Prediction of Use of Electronic Resources among Distance Learners in South-West Nigeria.**

**Multiple R = 0.650**

**R Square = 0.423**

**Adjusted R Square = 0.405**

**Standard Error = 4.95**

Analysis of Variance					
Source of Variance	Sum of Square	Df	Mean Square	F	Sig.
Regression	3465.87	6	577.65	23.55	.000

<b>Residual</b>	4734.13	193	24.53
<b>Total</b>	<b>8200.00</b>	<b>199</b>	

*Significant at  $p < 0.05$ .*

Table 5 indicates that there is a significant joint contribution of computer literacy (computer knowledge, competence in the use of computers, understanding computer vocabulary language) and institutional support (technical support, resource access support, and training support) in the prediction of the use of electronic resources among distance learners in South-west Nigeria ( $F(6, 193) = 23.55$ ;  $R = 0.650$ ,  $R^2 = 0.423$ ;  $p < 0.05$ ). This implies that when computer literacy and institutional support are taken together, the variables jointly relate to the use of electronic resources among distance learners in South-west Nigeria. The finding implies that there is a significant joint contribution of computer literacy and institutional support in the prediction of the use of electronic resources among distance learners in South-west Nigeria. Therefore, the null hypothesis is rejected. This is contrary to the finding of Ajegbomogun, Achigbue, and Diyaolu (2022) that computer literacy skills and institutional factors have no combined significant effect on postgraduates' use of electronic resources.

**H<sub>02</sub>:** There is no significant relative contributions of computer literacy and institutional support in the prediction of the use of electronic resources among distance learners in South-west Nigeria.

**Table 6: Relative Contributions of Computer Literacy and Institutional Support in the Prediction of Use of Electronic Resources among Distance Learners in South-West Nigeria**

Variables	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
	B	Std. Error			
(Constant)	4.056	2.548		1.592	0.113
Computer knowledge	0.548	0.203	0.208	2.700	0.008
Competence in the use of Computer	0.322	0.170	0.199	1.889	0.060
Understanding Computer Vocabulary Lang	0.210	0.228	0.085	0.921	0.358
Technical Support	0.888	0.138	0.506	6.426	0.000
Resource Access Support	0.142	0.144	0.091	0.990	0.323
Training Support	0.097	0.079	0.086	1.221	0.224

Table 6 indicates that there were significant relative contributions of the components independent variable: computer literacy (Computer knowledge) and institutional support (technical support) on the use of electronic resources among distance learners in South-west Nigeria. For instance, computer knowledge ( $\beta = 0.208$ ;  $t = 2.700$ ;  $p > 0.05$ ) contributed significantly to the use of electronic resources among distance learners. Technical support ( $\beta = 0.506$ ;  $t = 6.426$ ;  $p < 0.05$ ) contributed significantly to the use of electronic resources among distance learners. However, competence in the use of computers ( $\beta = 0.199$ ;  $t = 1.889$ ;  $p > 0.05$ ) relates positively but did not contribute significantly to the use of electronic resources among distance learners. Besides, understanding computer vocabulary language ( $\beta = 0.085$ ;  $t = 0.921$ ;  $p > 0.05$ ) relates positively but did not contribute significantly to the use of electronic resources among distance learners. Resource access support ( $\beta = 0.091$ ;  $t = 0.990$ ;  $p > 0.05$ ) related positively but did not contribute significantly to the use of electronic resources among distance learners. Furthermore, training support ( $\beta = 0.086$ ;  $t = 1.221$ ;  $p > 0.05$ ) relates positively but did not contribute significantly to the use of electronic resources among distance learners. This implies that computer knowledge and technical support as components of computer literacy and institutional support made independent contributions of 21%, and 51% respectively in the prediction of the use of electronic resources among distance learners in South-west Nigeria which makes these components the most influential in the model. Therefore, the null hypothesis is rejected. This negates Ajegbomogun Achigbue & Diyaolu (2022) finding that computer literacy skills and institutional factors were not significant as critical factors for determining the use of electronic resources.

### Conclusion

The study underscores the importance of enhancing institutional frameworks and support systems to bridge existing gaps and foster more effective utilization of available resources by distance learners. Findings reveal that the computer literacy level of the learners is generally good, Institutional support for these learners, however, is assessed as fair, with significant room for improvement in areas such as technical support, access to online libraries, and training initiatives. In terms of electronic resource usage, the results show a high frequency of use. These improvements would contribute significantly to the academic success and overall learning experience of this group.

## Recommendations

Based on the findings the study recommends that:

1. Institutions should expand their digital resource subscriptions to include a broader range of academic materials.
2. Heads of tertiary institutions should increase their institutional support to enhance learners' use of electronic resources.
3. Distance learning institutions should strengthen technical support by offering 24/7 assistance through help desks, toll-free numbers, and email. Regular feedback mechanisms should be established to assess the effectiveness of these services.
4. Periodic virtual workshops should be organized to train students on advanced database searches and research methodologies.
5. University administrators should partner with technology companies to provide students with subsidized digital devices and software.
6. The heads of tertiary institutions should provide more institutional supports in improving the computer literacy skills of distance learners in Nigeria.

## References

- Abubakar, D. and Adetimirin, A. 2015. Influence of Computer Literacy on Postgraduates' Use of E-Resources in Nigerian University Libraries Adamawa State, Nigeria. *Library Philosophy and Practice*, 2-10. Retrieved on 6th June, 2016 from <http://unllib.unl.edu/LPP>
- Ajebomogun, F. O., Achigbue, E., & Diyaolu, B. O. (2022). Computer literacy skills and institutional factors as determinants of electronic resources use by postgraduates in a Nigerian university. *Ghana Library Journal*, 27(1), 104–115. <https://doi.org/10.4314/glj.v27i1.9>
- Amuda, H. O., & Tella, A. (2019). The role of academic libraries in supporting open and distance learning in Nigeria universities. *Department of Science Education, Al-Hikmah University, Ilorin, Nigeria*. file:///C:/Users/fedpa/Downloads/18-Article%20Text-30-2-10-20210321.pdf
- Ankamah, S., Kwesi G., & Amponsah, V. (2022). Use of electronic resources in research and learning in a health sciences library in Ghana: An analysis of awareness and perception of users. *Information Development*, 026666692211073-026666692211073. <https://doi.org/10.1177/02666669221107378>

- Antara P.A., Wayan I, Komang S, I Made Teguh, & Made Aryawan Adijaya. (2023). The Effect of Learner Autonomy and Institutional Support System on Agile Learners, Independence, and Work Readiness of Students Participating in the Merdeka Belajar Kampus Merdeka Program. *Journal of Higher Education Theory and Practice*, 23(15). <https://doi.org/10.33423/jhetp.v23i15.6432>
- Caratiquit, L. J., & Caratiquit, K. (2022). Influence of Technical Support on Technology Acceptance Model to Examine the Project PAIR E-Learning System in Distance Learning Modality. *Participatory Educational Research*, 9(5), 467–485. <https://doi.org/10.17275/per.22.124.9.5>
- Cross, S., Aristeidou, M., Cross, S., Wood, C., & Brasher, A. (2023). Impact of Online Exams on the Quality of Distance Learners' Exam and Exam Revision Experience: Perspectives from The Open University UK. *Online Learning*, 27(2). <https://doi.org/10.24059/olj.v27i2.3761>
- Eduwen, F. O., & Osagie-Obazee, G. E. (2016). Teacher Education: A Panacea for National Development in Nigeria. *African Research Review*, 10(4), 106. <https://doi.org/10.4314/afrrrev.v10i4.8>
- Eya, P., & Oluyode, O. (2018). Increasing access to higher education through ICT-enabled distance education in Nigeria. *Education, Computer Science*. Conference Proceedings.
- Hossain M. Tanvir, Nishu N., Jahan, N., Halimatus S., Mahfuza Z., Quazi M., & Mohammed Z. (2022). Challenges of Participating in Online Education/Distance Learning Amidst the COVID-19 Pandemic in Bangladesh. *Advances in Educational Marketing, Administration, and Leadership Book Series*, 254–281. <https://doi.org/10.4018/978-1-7998-8402-6.ch015>
- Itasanmi, S. A. (2023). Determinants of the Behavioural Intention of Open Distance Learning Students to Use Digital Tools and Resources for Learning in Nigeria. *Journal of Adult and Continuing Education*, 29(1), 147797142211356. <https://doi.org/10.1177/14779714221135655>
- Kwafoa, P. N. Imoro O., Osman; and Afful-Arthur, P. (2014), Assessment of The Use Of Electronic Resources Among Administrators And Faculty In The University Of Cape Coast. *Library Philosophy and Practice* (e-journal). 1094. <http://digitalcommons.unl.edu/libphilprac/1094>
- Mabawonku T., Adekunmisi S., Oyedipe W., & Francis O. (2023). Influence of computer literacy skills on the use of library electronic resources among Babcock University undergraduates, Ilisan-Remo, Ogun State. *Library and Information Perspectives and Research*, 5(3), 30–43. <https://doi.org/10.47524/lipr.v5i3.31>
- Mukh, Y. N., & Tateer, S. (2021). The sudden shift in distance education in palestinian



- universities: technical support and professional qualification. *International Journal of Humanities and Educational Research*, 03(06), 429–438. <https://doi.org/10.47832/2757-5403.6-3.31>
- Nuseir, M. T., Ahmad Ibrahim Aljumah, & Ghaleb, A. E. R. (2022). The Influence of E-learning, M-learning, and D-learning on the Student Performance: Moderating Role of Institutional Support. *2022 International Arab Conference on Information Technology (ACIT)*. Semantic scholar. <https://doi.org/10.1109/acit57182.2022.9994193>
- Omosekejimi, A., Eghworo, O and Ogo, E. 2015. Usage of Electronic Information Resources (EIRs) by Undergraduate Students of Federal University of Petroleum Resources Effurun. *Information and Knowledge Management*. 5(4):2-10. Retrieved on 6<sup>th</sup> December, 2016 from [www.iiste.org](http://www.iiste.org).
- Pontoh G., Purisamya A., & Sarifudin E. (2023). Pengaruh computer knowledge, training, dan computer self-efficacy terhadap efektifitas sistem keuangan desa. *Journal BPPK Badan Pendidikan Dan Pelatihan Keuangan*, 16(1), 14–24. <https://doi.org/10.48108/jurnalbppk.v16i1.713>
- Popoola, S. O., & Olajide, O. O. (2021). Influence of Library Anxiety and Computer Literacy Skills on Use of Library Information Resources by Undergraduates in Private Universities in Southwest Nigeria. *International Information & Library Review*, 1–19. <https://doi.org/10.1080/10572317.2021.1873051>
- Rahim, B. N. (2022). The interaction between teaching competencies and self-efficacy in fostering engagement amongst distance learners: a path analysis approach. *Malaysian Journal of Learning and Instruction*, 19(1), 31–57. <https://doi.org/10.32890/mjli2022.19.1.2>
- Rohmah D. & Joni, S. (2023). Pengaruh Pemahaman Akuntansi Perusahaan Dagang dan Computer Self-Efficacy terhadap Hasil Belajar Komputer Akuntansi dengan Computer Knowledge Sebagai Variabel Moderasi. *Jurnal Ilmiah Profesi Pendidikan*, 8(3), 1671–1683. <https://doi.org/10.29303/jipp.v8i3.1487>
- Shamoon-Pour, M., Light, C. J., & Fegley, M. (2022). Keeping Students Connected and Engaged in a Wet-Lab Research Experience during a Time of Social Distancing via Mobile Devices and Video Conferencing Software. *Journal of Microbiology & Biology Education*, 23(1). <https://doi.org/10.1128/jmbe.00225-21>
- Zhan, X., Li, S., Tang, S., Zhang, M., Lu, C., & Hu, G. (2023). Structural Modeling Based on Human–Computer Knowledge Interaction. *Applied Geophysics*. <https://doi.org/10.1007/s11770-023-1017-z>

## Acknowledgement



The authors acknowledge the financial support received from Tertiary Education Trust Fund (TETFUND), under the Ministry of Education, Nigeria, in carrying out this Institutional Based Research (IBR) through Federal Polytechnic Ayede, Oyo State.