

INFLUENCE OF INFORMATION LITERACY ON USER EDUCATION IN UNIVERSITY LIBRARIES IN DELTA STATE, NIGERIA

BY

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ABSTRACT

This study explored the influence of information literacy on user education in university libraries in Delta State, Nigeria. In the context of rapidly evolving digital technologies and the increasing importance of information literacy, the research aimed to assess how these factors impact the methods and effectiveness of user education. A quantitative approach was employed, utilizing descriptive and correlational designs, with data collected through a structured questionnaire administered to librarians in the four-state government-owned universities in Delta State. The findings revealed that user education primarily serves to teach students how to access and utilize information resources, familiarize them with library services, and enforce library rules and regulations. Various methods such as lectures, workshops, and guided library tours were found to be extensively used in delivering user education. The study also affirmed that librarians demonstrate a high level of information literacy proficiency in the user education process. Significant relationships were identified between information literacy, and the methods of delivering user education, highlighting the interconnected influence of these factors on the educational strategies employed in libraries. This study contributes to the knowledge of library services by emphasizing the role of information literacy in optimizing educational delivery.

Keywords: Artificial intelligence, Information literacy, University libraries, User education.

1. INTRODUCTION

1.1 *Background to the Study*

The global acknowledgment of library as a vital unit that provides information resources and services to support teaching, learning and research in university has been documented in the literature. Ensuring effective use of library by students requires organising user education programmes to assist the students to get information they need, and develop the skills to make independent and apt use of the resources of the library. A well organised and executed user education programme significantly guarantees the realisation of the objective of the library. User education is aimed at developing readers' consciousness of all the general information resources available to them, developing skills required for retrieving needed resources, developing comprehensive knowledge of information resources in readers' subject areas, and creating a constructive attitude to information searching thereby stimulating the user to use the information resources available in the library (Anene *et al.*, 2020).

As libraries are becoming more complex as a result of information explosion, the necessity for user education as a way to use library information resources and services is becoming highly vital (Lyakurwa & Luambano, 2019). Library users are generally people of diverse ages, disciplines, educational qualifications, and genders. If user education programmes are not implemented to make library users information literate, users will not be able to make adequate and effective use of the information resources in the libraries. As such there is a need for information literacy through which library users develop skills to use information resources in libraries.

Likewise, technologies have transformed all spheres of life and revolutionized information transmission and storage thereby bringing the world to the doorsteps of people (Adekoya, 2018).

There is scarcity of literature on influence of information literacy on user education among first-year students in universities. In the current era of information and communication technology (ICT) in which there is massive deployment of ICT in performing functions and rendering library services, it is believed that information literacy can be used in user education programmes. More so that information literacy can be massively used in enhancing user education in libraries, this study therefore intends to establish in the literature the influence of information literacy on user education among university students.

1.2 *Statement of the Problem*

Amazing rise in the quantity of and the subsequent complexity of libraries and the approaches of organising and disseminating literature occasions user education. User education plays a significant role in stimulating the utilisation of library resources and services by users. A broad and appropriately planned user

education programmes increase patronage, access, use and status of libraries. However, despite the acknowledgement of the vital role of user education in facilitating the use of libraries for learning, research and increasing the frontier of knowledge of the users, there has not been corresponding increase in the number of library users. The condition becomes bothersome as user education has developed across the globe to be an accentuated and usual practice in libraries but with little outcomes.

Observation and pilot enquiry by the researchers reveal the same condition in libraries in Delta State, Nigeria. This may be because of low level of information literacy among the librarians to facilitate user education. Meanwhile, the use of conventional approaches for facilitating user education in the era of ICT may not yield the expected result. This study therefore intends to explore the influence of information literacy on user education in university libraries in Delta State, Nigeria.

1.3 *Objectives*

The objectives of the study are to:

1. Find out the purpose of user education in university libraries in Delta State;
2. explore the methods of delivering user education;
3. determine the level of information literacy education among librarians in Delta State;

1.4 *Hypothesis*

The null hypothesis was tested at a 0.05 level of significance:

1. There is no significant relationship between information literacy and the methods of delivering user education.

2. LITERATURE REVIEW

2.1 *Purpose of User Education*

Libraries are repository of knowledge encumbered with the tasks of recognising the information needs of users; selecting pertinent information; and acquiring, authenticating, categorising, arranging and making information resources and services available for easy access and retrieval to satisfy the users' needs (Onyeke *et al.*, 2023; Ogbomo & Adekoya, 2019). The major focus for library collections is the usage. As such, effective use of library resources and services requires that the users are sufficiently oriented, hence the need to make user education very vital in libraries. User education programmes are prearranged in universities to ease the work of librarians and lessen the time it takes user to get and utilise library resources (Adeyemo, 2018). As a way of supporting the learning, teaching and research in universities, libraries ensure that users take the advantage of using information sources, resources, and services to increase their frontier of knowledge and advance their understanding (Uwakwe *et al.*, 2016).

User education is a premeditated practice and method used to equip library users with the rudimentary skills needed to utilize the information resources in the libraries. User education provides knowledge required for using novel information skills in search of information entrenched in book catalogues, databases, CD ROMs, the Internet, e-books and other new media requiring technical skills of common people (Gbuushi & Ubwa, 2018).). This indicates that user education has to be planned in a manner that the required knowledge and capabilities that can afford every user to maximally utilise information resources and services are seamlessly conveyed on them. Users and information resources cannot be properly connected if the users have no appropriate user education. This is because the knowledge and skills acquired through user education are required in developing logical, creative and critical thinking (Odu & Edam-Agbor, 2018).

Library users' 'education is among the significant responsibilities of academic library arranged from time to time to familiarise students with the different available library resources and services they can access in the library. User education is an academic programme arranged by academic libraries to instruct their users, notably new students on the way they can effectively utilise library resources and services. Onyeke (2023) defined user education as instruction offered to readers to assist them in making the best use of the library. User education is targeted at developing bibliographic skills of library users to effectively utilise the library and its information resources. Through user education, library users get information they need and develop the skills to make independent and suitable use the resources of the library (Uwakwe *et al.*, 2016; Aladeniyi & Owokole, 2018).

Through user education, library users acquire and develop the required skills to make the best use of the library resources. A well-thought-out and executed user education programme significantly make certain the realisation of the objectives of the library. Use education is aimed at developing readers cognizance of all the general information resources available to them, developing skills required for retrieving needed information resources, developing thorough knowledge of information resources in the subject areas of readers, developing skills in presenting bibliographic references, developing skills needed in making advanced studies, and creating a constructive attitude to information searching for stimulating users to use the resources available in diverse libraries (Anene, 2020).

The core of user education is to familiarize library users with diverse services of the university libraries to the users. These services include lending services inter-library lending, referral service, reservation services, current awareness service (CAS) selective dissemination of information (SDI), translation service, reprographic services, among others that the users must be acquainted with through user education programme. With the rapid development in ICTs, accessing and retrieval of information from libraries is becoming complex (Adekoya, 2018). Inability to find necessary information delays research or decisions. Inadequate or

lack of information leads to duplication of efforts. It therefore behooves on libraries and information professionals to educate library users (students) on how to locate needed resources bearing in mind that they come from different cultural background and they have varying levels of library skills (Bem-Bura, 2015).

Students' perception of a library orientation programme in Benue State University Makurdi was explored by Bem-Bura (2015). A case study research design was used for the study. A simple random sampling technique was used for the study, with a sample size of one-hundred students. Data collected with the use questionnaire were analysed using frequencies and mean. The results were presented in tables. It was found that the students gained from the events of the programme which include rules and regulations guiding the library. The programme facilitated and introduced students to the information resources available in the library. The study similarly testified that the students acknowledge the library orientation programme as a programme that transmitted knowledge and information search skills.

The influence of user education on use of law library among law students in Imo State University, Owerri was investigated by Uwakwe *et al.* (2016). A questionnaire was used to collect data for the survey. All the registered users of faculty of law library formed the population of the study. The study found that the law students understand the concept of user education. The study equally found that user education programme has positive effect on the use of law library by the students. Over population, lack of infrastructure, inadequate and trained personnel, lack of instructional materials, limited time allocated to the programme, uncondusive environment and inadequate space were identified as the factors inhibiting the use of law library among the students.

User education is intended to increase the users' knowledge of the library collections and services and to be an inspiring element for patronage, attitudinal change, enhanced usage and more requests on the library. It involves methodical determinations to impart a set of principles or search strategies that relate to the library, its collections or services using prearranged approaches to achieve stated objectives.

According to Olaniyi (2024), user education has the capacity to inspire and change library users from dependent learners into independent, self-directed, and lifelong learners. It assists people to make instant and lifelong use of information, encourage independent use of information, critical thinking and assessment, search skills, knowledge and retrieval skills, and information literacy competence. User education aims at transmitting competence and skills required for appropriate use of knowledge and learning resources. That is why Folorunso and Njoku (2016) encouraged university libraries to have plans to which can adequately guarantee a robust and enduring relationship with users to ensure day-to-day intellectual information search to increase the frontier of knowledge.

2.2 *Methods of Delivering User Education*

The effectiveness of user education depends on the methods user education is delivered. Diverse methods are employed in delivering library user education. These include lecture presentation, workshop, demonstration, conduct of book fair, orientation of new student, guided library tour, etc. (Adeyemo, 2018; Uwakwe *et al.*, 2016). Oluyomi and Njoku (2016) examined the impact of library environment and user education on students' use of library at the University of Ibadan, Nigeria. The population of the study was 18,034 regular undergraduates in ten faculties in the university. Proportionate and simple random sampling techniques were used to select a sample size of 360 students from the population. A self-developed questionnaire was used for data collection. Frequency distribution, percentages, mean, and standard deviation regression were used for data analysis. It was found that the methods of delivering user education in the library include library orientation for new students, use of library course, and guided library tour.

Anene *et al.* (2020) carried out a study on application of information and communication technologies (ICTs) for effective user education programmes in federal university libraries in South-east, Nigeria. The descriptive study covered all the ninety-six librarians working in libraries of Nnamdi Azikiwe University, Awka; University of Nigeria, Nsukka; and Federal University of Technology, Owerri. The study adopted purposive sampling technique. Due to the manageable size of the population, the entire population was considered as the sample size for the study. Observation checklist and questionnaire were used for data collection. Descriptive statistics (frequency count, percentage, mean and standard deviation) were used for data analysis. It was found that user education programmes used in the library are seminars, lectures, demonstrations, virtual tours, orientations, and guides, etc. this implies that diverse methods are used in library user education in Nigeria.

2.3 *Information Literacy*

Information is a key element behind the national and global advancement (Nhendo & Musemburi, 2016). Economic, social, political and technological development of a society require heavy invest in information. Investment in information, to a vast degree, necessitates acknowledging library services as a vital component of socio-economic development of a nation and the overall enhancement of the quality of life (Lyakurwa & Luambano, 2019). Part of the responsibilities of libraries is to create an information literate society by imparting information literacy skills on the broader society. Libraries are saddled with the responsibility of providing apt, correct, recent, and dependable information to satisfy the information needs of the users (Edewor, 2016).

In everyday learning activities of students, there is wide use of information for decision, educational purposes and task completion. However, not all information is relevant, correct, and dependable for information requirements of

students. Information literacy accounts for most of the variations encountered in the use of information resources and services (Lorver, 2020). Information literacy bears diverse interpretations and conceptual meanings. Information literacy consists of the competencies to identify health information needs and to situate, appraise, apply and generate information within cultural and social context. Information literacy is a set of capabilities that a person should in order to know the need for information as well as having the potentials and skills to locate, evaluate and effectively use the health information ethically and legally (Friday et al., 2019). Information literacy is a set of capabilities students need to recognize, retrieve, appraise and utilize information to solve health problems (Medley, 2014).

According to Friday *et al.* (2019), information literacy refers to personal characteristics and communal resources necessary for people and communities to use, understand and evaluate information and services for decision making. This involves the ability to communicate, assert and carry out decisions (Dodson *et al.*, 2014). Literacy is the use of wide variety of skills that enhance the proficiency of people to take action on information (Ekoko, 2020). These skills include numeracy, reading, writing, speaking listening, critical analysis, and communication and interaction skills (Femi & Oyinade, 2017). The central objective of information literacy is creation of the capability to acquire, process and understand information to make informed decisions. Information literacy refers to skill-based processes needed to identify and translate information into knowledge (Ekoko, 2020).

Information literacy competencies encompass library literacy, computer literacy, media literacy, technological literacy, critical thinking, ethics and communication that allow information users to become independent lifelong learners (Singh, 2014). With this, information users will be able to know the need for information and the time diverse types of information are required. Information literacy competencies offer users of information resources with approaches to use to handle large volume of information that emanate from diverse directions, via diverse ranges of information sources. It means therefore that librarians need information literacy competencies to effectively utilise information resources for productive research.

Information literacy is necessary to make the best use of the available information. Among the information literacy required of university students is computer/ICT literacy. The expectation is that effectiveness of classroom teaching will be enhanced through Microsoft power point presentation which will expedite learning among students Robinson-Bassey and Edet (2015). Similarly, the use of open-source application which includes e-learning tools, graphical illustrations and interactive video technology make learning more practical, attractive and more impactful. Computer/ICT literacy makes the teaching resources abundantly attractive, thus facilitating the students to be more engaged and focused. For instance, the use of multimedia instruction together with visuals, animations and

audio assists in achieving this effect. The use video is largely valued in teaching engineering and science subjects. It gives learners an abundant understanding of the real engineering and scientific conditions. Learning through video improves recall by students. However, the wealth of information is not in itself sufficient to build the information society. In the present world in which there is information overload, undergraduates need to be information literate in order to cope with independent learning. With this, they will be able to extract the required information from the sea of information within a short time (Santharoban, 2016).

Integration of information literacy instruction into university curricula enhances the confidence of students (Shorten *et al.*, 2015). Perrin *et al.* (2018) supported entrenching information literacy programmes into curricula. Aghauche *et al.* (2019) explored information literacy skills of undergraduates in Paul University Awka and found that the view of undergraduates toward health information literacy is positive, even though they face various hitches about information skill acquisition. They are of the opinion that students with positive view towards information literacy are more information-literate than ones with negative view.

Issa *et al.*, (2015) examined information literacy skills of undergraduate students of the University of Ilorin, Kwara State, Nigeria and found that most of the students have difficulty in recognising appropriate information resources. A similar study was done by Ilogho (2014) on information search skills of students in universities in Ogun State, Nigeria. The study found that most of students are lacking in identification of information resources needed. A similar study by Dorvlo and Dadzie (2015) found that the level of information literacy of students of Ghana University is low. The students examined do not have satisfactory level of information evaluation skills. Likewise, the respondents are inept in search strategies and search tools.

3. METHODOLOGY

The research employed a descriptive survey design of the correlational type. This was as a result of the quantitative nature of the study. The population of the study is 72 librarians in the four State government owned universities in Delta State, Nigeria. A total enumeration sampling technique was employed for the study.

A questionnaire was used as the instrument of data collection. The questionnaire was divided into three sections (Sections A–C). Section A is on Purposes your university library organises user education for students was analysed using frequencies. Section B on Methods of Delivering User Education and Section C on the Level of AI used in user education were analysed using statistical mean and standard deviation. Pearson's Product Moment Correlation Coefficient was used to test hypothesis at 0.05 level of significance.

4. RESULTS

Table 1 : Questionnaire Response Rate

| Number of copies of the Questionnaire Administered | Number of Questionnaires Returned | Percentage of Questionnaire Returned |
|--|-----------------------------------|--------------------------------------|
| 72 | 65 | 100% |

Seventy-two (72) copies of the questionnaire were distributed and 65(90%) returned. The response rate of 90% is considered adequate for the study because the standard and acceptable response rate for most studies is 60%.

Answers to the Research Questions

1. What are the purposes for which your university library organizes user education for you as a student?

Table 2: Purposes for User Education

| S/N | Purpose | Agree | | Disagree | |
|-----|---|-------|------|----------|------|
| | | No. | % | No. | % |
| i | Familiarization of students with information sources and services | 60 | 92.3 | 5 | 7.7 |
| ii | Provision of information search skills | 55 | 84.6 | 10 | 15.4 |
| iii | Facilitation of independent information search skills among students | 55 | 84.6 | 10 | 15.4 |
| iv | Preparation of students to make immediate and lifelong use of information | 40 | 61.5 | 25 | 38.5 |

| S/N | Purpose | Agree | | Disagree | |
|-----|--|-------|------|----------|------|
| | | No. | % | No. | % |
| v | Development of capability to differentiate the value of books for critical decision making | 45 | 69.2 | 20 | 30.8 |
| vi | Provision of information literacy to students | 48 | 73.8 | 17 | 26.2 |
| vii | Provide students with search knowledge and retrieval skills | 39 | 60.0 | 26 | 40.0 |

| | | | | | |
|------|--|----|------|----|------|
| viii | Training students to effectively utilise a broad series of resources across disciplines | 55 | 84.6 | 10 | 15.4 |
| ix | Instill in students the rules and regulations governing the use of information sources and services in libraries | 60 | 92.3 | 5 | 7.7 |
| x | Educate students on how to access information resources in the libraries | 62 | 95.4 | 3 | 4.6 |

The data reveals the various purposes for which university libraries organize user education for their students. A significant majority, 62 respondents (95.4%), agreed that one of the primary purposes is to educate students on how to access library information resources. Additionally, 60 respondents (92.3%) agreed on the importance of familiarizing students with information sources and services and instilling the rules and regulations governing the use of these resources in libraries. Furthermore, 55 respondents (84.6%) agreed on providing information search skills, facilitating independent search skills among students, and training students to utilize resources across disciplines. A slightly lower percentage, 48 respondents (73.8%), agreed that user education aims to provide information literacy to students. Meanwhile, 45 respondents (69.2%) supported developing the capability to differentiate the value of books for critical decision-making. In conclusion, the respondents placed more emphasis on educating students on how to access information resources, familiarizing students with library resources, and instilling in students the rules and regulations governing the use of information sources and services in libraries.

2. To what extent does your library use various methods to deliver user education?

Table 3: The Extent of Use of Various Methods to Deliver User Education

| S/N | Methods | VHE | HE | ME | LE | VLE | - | Std. Dev. |
|-----|------------------------|-----|----|----|----|-----|------|-----------|
| i | Lecture Presentation | 10 | 55 | 0 | 0 | 0 | 4.15 | 0.36 |
| ii | Workshop | 20 | 45 | 0 | 0 | 0 | 4.31 | 0.47 |
| iii | Demonstration | 10 | 55 | 0 | 0 | 0 | 4.15 | 0.36 |
| iv | Display of new arrival | 42 | 23 | 0 | 0 | 0 | 4.65 | 0.48 |
| v | Conduct of book fair | 10 | 55 | 0 | 0 | 0 | 4.15 | 0.36 |

| | | | | | | | | |
|-----------------------------------|------------------------------------|----|----|---|---|---|------|------|
| vi | Library handbook | 60 | 5 | 0 | 0 | 0 | 4.92 | 0.27 |
| vii | Orientation of new student | 65 | 0 | 0 | 0 | 0 | 5.00 | 0.00 |
| viii | Staff guidance | 45 | 20 | 0 | 0 | 0 | 4.69 | 0.47 |
| ix | Guided library tour | 5 | 60 | 0 | 0 | 0 | 4.08 | 0.27 |
| x | One-to-one library use instruction | 10 | 55 | 0 | 0 | 0 | 4.15 | 0.36 |
| xi | Bibliographic Aids and Guide | 5 | 60 | 0 | 0 | 0 | 4.06 | 0.24 |
| xii | Fliers and brochures | 2 | 63 | 0 | 0 | 0 | 4.03 | 0.17 |
| Aggregate Mean/Standard Deviation | | | | | | | 4.36 | 0.32 |
| Criterion Mean | | | | | | | 3.00 | |

The aggregate mean across all methods is 4.36, which is considerably higher than the criterion mean of 3.00. This suggests that, on average, all the methods for delivering user education are utilized to a high extent. The relatively low aggregate standard deviation of 0.32 indicates that there is minimal variation in how these methods are employed.

3. How would you rate the level of information literacy?

Table 4: Level of Information Literacy

| Information Literacy Skills | VHL | HL | ML | LL | VLL | - | Std. Dev. |
|--|-----|----|----|----|-----|------|-----------|
| Skill to identify a necessity for information: | | | | | | | |
| Skills to ascertain a necessity for information | 12 | 28 | 25 | 0 | 0 | 3.80 | 0.73 |
| Skills to describe concepts of a theme for a research work | 10 | 30 | 25 | 0 | 0 | 3.77 | 0.70 |
| Skills to distinguish the manners of information to meet information required | 15 | 15 | 35 | 0 | 0 | 3.69 | 0.83 |
| Skill to find and access information: | | | | | | | |
| Skills to construct keywords and associated terms to search information for research | 30 | 10 | 10 | 10 | 5 | 3.77 | 1.38 |
| Skills to differentiate between primary and | 45 | 15 | 5 | 0 | 0 | 4.62 | 0.63 |

| | | | | | | | |
|---|------------|-----------|-----------|-----------|------------|------|------------------|
| secondary sources of information | | | | | | | |
| Skills to select appropriate electronic resources | 40 | 15 | 10 | 0 | 0 | 4.46 | 0.75 |
| Skill to appraise information: | | | | | | | |
| Skills to choose information resources based on dependability, validity and accuracy | 10 | 20 | 25 | 5 | 5 | 3.42 | 1.12 |
| Information Literacy Skills | VHL | HL | ML | LL | VLL | - | Std. Dev. |
| Skill to sift information resources found from the Internet | 10 | 30 | 25 | 0 | 0 | 3.80 | 0.73 |
| Skills to assess the worth, accuracy and relevance of information resources found on the Internet | 20 | 10 | 30 | 5 | 0 | 3.68 | 1.00 |
| Skills to apply information: | | | | | | | |
| Skills to create new knowledge in research | 15 | 10 | 25 | 5 | 10 | 3.23 | 1.32 |
| Skills to integrate new and existing information to support the use of information resources | 30 | 20 | 15 | 0 | 0 | 4.23 | 0.81 |
| Skills to utilise a series of information technology applications in carrying out an assignment | 10 | 40 | 5 | 5 | 5 | 3.69 | 1.07 |
| Aggregate Mean/Standard Deviation | | | | | | 3.85 | 0.92 |
| Criterion Mean | | | | | | 3.00 | |

The aggregate mean across all information literacy skills is 3.85, which is considerably higher than the criterion mean of 3.00. This suggests that, on average, respondents exhibit a high level of information literacy proficiency. The relatively moderate aggregate standard deviation of 0.92 indicates that there is some variation in the levels of proficiency across different skills, but overall, the respondents demonstrate a strong foundation in information literacy.

Testing of the Hypothesis

1. There is no significant relationship between information literacy and the methods of delivering user education.

Table 5: Relationship Between Information Literacy and the Methods of Delivering User Education

| | | Level of Information Literacy | Methods of Delivering User Education |
|--------------------------------------|---------------------|-------------------------------|--------------------------------------|
| Level of Information Literacy | Pearson Correlation | 1 | .848** |
| | Sig. (2-tailed) | | .000 |
| | N | 65 | 65 |
| Methods of Delivering User Education | Pearson Correlation | .848** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 65 | 65 |

Table 6 shows a Pearson correlation coefficient $r = .848$, indicating a strong positive relationship ($P = 84.8\%$) between information literacy and the methods of delivering user education. The significant value (Sig. 2-tailed) of 0.000 is less than 0.05, suggesting that the relationship between information literacy and the methods of delivering user education is statistically significant. Therefore, it can be concluded that there is a significant relationship between information literacy and the methods of delivering user education in the university. The null hypothesis, which states that there is no significant relationship between information literacy and the methods of delivering user education, is thus rejected.

5. DISCUSSION

The study found that the primary purposes of user education in libraries in Delta State include educating students on how to access information resources, familiarizing them with library resources, and instilling rules and regulations governing library use. This finding emphasizes the importance of providing students with practical skills and knowledge essential for effective library use. These findings are consistent with the literature on user education. According to Anene (2020), user education aims to develop users' awareness of available resources, enhance their skills in retrieving information, and instill a constructive attitude towards information searching. Similarly, Bem-Bura (2015) highlighted that user orientation programmes are crucial for introducing students to library rules and resources, aligning with the current study's emphasis on familiarizing students with library systems and regulations. The current finding alignment with previous

studies suggests a shared understanding of user education's objectives across different contexts.

The study found that various methods for delivering user education are utilized to a high extent in libraries in Delta State. These methods include lectures, workshops, demonstrations, orientation for new students, and guided library tours. This suggests a comprehensive approach to user education aimed at maximizing effectiveness. The finding is consistent with earlier research that emphasizes the importance of employing diverse methods in user education. Adeyemo (2018) and Uwakwe *et al.* (2016) highlighted similar methods, including lectures and orientations, as effective strategies for delivering user education. Oluyomi and Njoku (2016) also found that methods such as library orientation and guided tours are frequently used, reinforcing the current study's findings. The consistency with previous research reflects a shared understanding of the need for varied approaches to user education. Employing multiple methods allows libraries to address different learning styles and preferences, enhancing the overall effectiveness of user education programmes.

The study found that respondents demonstrate a high level of information literacy proficiency. This finding suggests that users possess the skills required to effectively identify, evaluate, and utilize information resources. The finding aligns with research by Ekoko (2020) and Singh (2014), which emphasize that information literacy encompasses a set of skills crucial for effective information handling. Specifically, the respondents' high proficiency reflects capabilities in library literacy, computer literacy, media literacy, technological literacy, and critical thinking, all of which are central to information literacy. The congruence with previous studies suggests that respondents are well-equipped with the competencies necessary for navigating and utilizing information resources. This high level of proficiency likely results from effective user education programmes and the integration of information literacy into academic curricula, as supported by Perrin *et al.* (2018) and Shorten *et al.* (2015). The study's finding of high information literacy proficiency supports the view that integrating information literacy instruction into university curricula enhances students' skills and confidence. According to Shorten *et al.* (2015) and Aghauche *et al.* (2019), embedding information literacy into academic programmes improves students' capabilities and positive attitudes towards information handling.

The finding however contrasts with studies such as those by Issa *et al.* (2015) and Ilogho (2014), which reported difficulties among students in recognizing appropriate information resources and employing effective search strategies. The high proficiency observed in the current study suggests that the respondents may have benefitted from enhanced user education and curriculum integration, which may not have been the case for students in the studies reporting lower information literacy levels.

The finding indicates that information literacy is significantly related to the methods used to deliver user education in universities. This suggests that the effectiveness of user education programs may be influenced by the integration of information literacy principles and practices. This finding aligns with several studies that underscore the importance of integrating information literacy into user education programmes. For instance, Ayoku and Okafor (2015) and Joseph and Theophilus (2018) highlight that both information literacy and user education equip library users with essential skills for navigating the digital information landscape. Similarly, Chen and Lin (2011) view information literacy as a key component of user education programs, reflecting its integral role in developing users' information-seeking capabilities. The relationship between information literacy and user education methods may be attributed to the shared goal of both approaches: enhancing users' ability to find, evaluate, and use information effectively. Information literacy programmes often include elements of user education, such as teaching search strategies and resource utilization, which contribute to the overall effectiveness of user education (Chiya & Onyacha, 2024; Moyane & Dube, 2015). By incorporating information literacy principles into user education, libraries can better address users' diverse needs and improve their information-handling skills.

The significant relationship between information literacy and user education methods underscores the importance of aligning library instruction with information literacy objectives. Libraries should strive to integrate information literacy principles into their user education programs to enhance users' information-handling skills and overall educational outcomes. The finding supports recommendations from Chiya and Onyacha (2024) and other scholars advocating for the evaluation and enhancement of user education programmes. Effective integration of information literacy into user education can lead to improved user outcomes, including better research skills and increased independence in information retrieval. Libraries should consider incorporating ongoing evaluations and updates to their user education programmes to ensure they meet users' needs and support their information literacy development.

Conclusion

In conclusion, the study demonstrates that while university libraries in Delta State effectively promote user education through various methods and have a high level of information literacy among librarians. The significant connections between information literacy and the methods of delivering user education suggest that leveraging digital technologies could further enhance the learning experience.

References

Adekoya, C. O. (2018). Research skills, ICT application and sustainable library development. *Library Philosophy and Practice*. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5131&context=libphilprac>

Adeyemo, O. O. (2018). Who examines user education in academic libraries and the information seeking behavior of users. *International Journal of Academic Library and Information Science*, 6(3), 57-62.

Aghauche, E. E., Nkamnebe, C. B., & Nkamnebe, E. C. (2019). Information literacy skills of undergraduates in Paul University Awka, Anambra State. *UNIZIK Journal of Research in Library and Information Science*, 4(1), 94-109.

Aladeniyi, F. R., & Owokole, T. S. (2018). Utilization of library information resources by undergraduate students of University of Medical Science Ondo, Ondo State, Nigeria. (4), 92-99.

Anene, I. A., Achebe, N. E., & Uzoechina, C. E. (2020). Application of information communication technologies (ICT) for effective user education programme in federal university libraries in Southeast, Nigeria. *International Journal of Library and Information Science*, 12(1), 16-30.

Bem-Bura, M. D. (2015). Students' perception of library orientation programme in Benue State University, Makurdi. *International Journal of Innovative Research and Development*, 4(3), 77-83.

Dorvlo, S. S., & Dadzie, P. (2016). Information literacy among postgraduate students of the University of Ghana. *Library of Philosophy and Practices*. <https://digitalcommon.unl.edu/libphilosophyAct/1392>

Edewor, N. (2016). Marketing library and information services in selected University libraries in Africa. *Journal of Advanced Library and Information Science*, 4(1), 291-300.

Ekoko, O. N. (2020). An assessment of health information literacy among rural women in Delta State. Nigeria. *Library Philosophy and Practice*. <https://digitalcommons.unl.edu/libphilprac/3533>

Femi, A. & Oyinade, T. (2017). Health care information literacy the role of librarians. *International Journal of Advanced Scientific Research & Development (IJASRD)*, 114-121.

Folorunso, O., & Njoku, E. (2016). Influence of library environment and user education on undergraduates' use of library at the University of Ibadan, Nigeria. *European Scientific Journal*, 12(19), 288-304.

Friday, J., Joshua, M., & Yusuf, S. (2019). Assessment of information literacy competency among students of College of Nursing and Midwifery,

Kafanchan, Kaduna State, Nigeria. *International Journal of Library and Information Science*, 11(5), 58-65.

Gbuushi, J. A., & Ubwa, T. T. (2018). Impact of library user education program on undergraduate students in Benue State University, Makurdi, Nigeria. *European Scientific Journal*, 14(7), 126- 138.

Ilogho, J. N. C. (2014). Information search skills of students in the selected private universities in Ogun State, Nigeria: A Survey. *Library philosophy and practice*.
<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2513&context=libphilprac>.

Issa, A. O., Amusan, B. B., Olarongbe, S. A., Igwe, K. N., & Oguntayo, S. A. (2015). An assessment of IL. Competence of undergraduate students at the University of Ilori, KwaraState. *Annals of Library and Information Studies*, 62, 68-76.

Lorver, T. R. (2020). Assessment of utilization of health information resources by diabetic patients in Benue State, Nigeria. *Library Philosophy and Practice*.
<https://digitalcommons.unl.edu/libphilprac/4390>

Lyakurwa, B. & Luambano, I. (2019). The state of information literacy and user education programmes in public libraries in Tanzania: A case of National Central Library (NCL) and Kibaha Public Library. *University of Dar es Salaam Library Journal*, 14(1), 38-52.

Medley, A. E. (2014). Assessing the connectivity between information literacy instructions an undergraduate students' success. *Library Philosophy and Practice*. <https://digitalcommons.unl.edu/libphilprac/4390>

Nhendo C. & Musemburi, D. (2016). Information literacy in Zimbabwean public libraries: Towards information literate community.
http://www.liasanew.org.za/wpcontent/uploads/2016/10/darlington_muse_mburi_collin_nhendo.pdf

Odu, J. O., & Edam-Agbor, I. B. (2018). Library use instruction and the pattern of utilization of library services by undergraduates in the University of Calabar, Nigeria. *Global Journal of Educational Research*, 17, 87-95.

Ogbomo, M. O., & Adekoya, C. O. (2019). Influence of academic workload on research productivity of librarians in Southwest, Nigeria. *African Journal of Studies in Education*, 14(3), 69-79.

Olaniyi, S. A. (2014). Influence of user education on library information resources and services use among engineering undergraduates of private universities in Oyo State, Nigeria. *IJELICT*, 1(1), 22-33.

Onyeke, O. E., Ibeh, L. I., & Omale, A. I. (2023). User education as tool for utilization of library information resources by 300 level students of law, University of Jos. *Journal of Applied Information Science and Technology*, 16(1), 1-9.

Robinson-Bassey, G. C., & Edet, O. B. (2015). Nursing informatics education and use: Challenges and prospects in Nigeria. *Global Journal of Pure and Applied Sciences*, 21, 171-179.

Santharooban, S. (2016) Analyzing the level of IL skills of medical undergraduates of Eastern University, Sri Lanka. *Journal of the University Librarian Association of Sri Lanka*, 19(2), 27-50.

Shorten, A., Wallace, C., & Crookes, P. A. (2015). Developing information literacy: A key to evidence-based nursing. *International Nursing Review*, 48(2), 86-92.

Singh, N. (2014). Attaining information literacy: An assessment of Indian Agricultural Universities approach to enhancing student's information and research skills. IFLA 2014 LYON. <http://library.ifla.org/1009/1/140-singh-en.pdf>.

Uwakwe, B. S., Onyeneke, C. O., and Njoku, I. N. (2016). Effect of user education on law students' use of the library: A case of the faculty of law library, Imo State University, Owerri, Nigeria. *Journal of Information and Knowledge Management*, 7(1), 70 –85.