



AWARENESS AND USE OF INFORMATION SEARCH STRATEGIES FOR LEARNING ACTIVITIES BY DIPLOMA STUDENTS IN AHMADU BELLO UNIVERSITY, ZARIA

^{*1}Hamza ABBA, ²Rukkayya Yunusa MOHAMMED and ³Ashiru HAFIZU

¹Department of Library and Information Science, Ahmadu Bello University, Zaria

²Bilya Sanda Library, Al-Qalam University, Katsina State, Nigeria

³Department of Library and Information Science, Hussaini Adamu Federal Polytechnic Kazaure, Jigawa State, Nigeria.

*Corresponding Author: abbahamza2017@gmail.com; 08064292353

Abstract

The study investigated the Awareness and Use of Information Search Strategies for Learning Activities by Diploma Students in Ahmadu Bello University, Zaria. The objectives are to determine the extent to which Diploma Students are aware of information search strategies for learning activities in the Institute of Education, Ahmadu Bello University, Zaria and to identify the information search strategies that Diploma Students use for learning activities. Quantitative research methodology was adopted and cross-sectional survey research design was used for the study, the population of the study comprised of all two hundred and forty-one (241) diploma students in Institute of Education, Ahmadu Bello University, Zaria in 2023/2024 academic session, one hundred and thirty-two (132) were used as sample size, while one hundred and four (104) were fully retrieved and used for data analysis using simple random sampling technique. A questionnaire was used as an instrument for data collection. Descriptive statistical tools (Frequency distribution and percentage) were used. The study found that diploma students at the Institute of Education, Ahmadu Bello University, Zaria, demonstrate a clear awareness pattern characterised by positive awareness on phrase searching, keyword searching, Boolean operators, database/source selection, and subject heading searching. Also, the actual utilisation of information search strategies mirrors the awareness patterns, with students predominantly employing basic techniques including phrase searching, keyword searching, and Boolean operators. The study concluded that diploma students at the Institute of Education, Ahmadu Bello University, Zaria, demonstrate adequate awareness and usage of basic search strategies like phrase searching and keyword searching, but show significant deficits in understanding and applying advanced techniques such as field-specific searching, citation chaining, and search query refinement. It was recommended that the Institute of Education should develop and implement a scaffolded information literacy curriculum that systematically builds students' search strategy competencies from foundational techniques during orientation through intermediate strategies in early courses to sophisticated approaches in upper-level coursework across the diploma program duration. The university library should establish an embedded librarian program that assigns dedicated information professionals to research-intensive diploma courses, enabling regular classroom presence, course-integrated instruction, and accessible one-on-one consultation opportunities to address the extremely low utilisation of expert/librarian consultation.

Keywords: Awareness, Diploma Students, Information Search Strategies, Institute of Education, Learning Activities.

Introduction

Information search strategies constitute fundamental components of information literacy that enable students to navigate increasingly complex digital and physical information landscapes in contemporary higher education environments. In the context of diploma programs, where students engage in intensive vocational and professional training, the ability to effectively locate, access, and retrieve relevant information directly influences academic performance, research competence, and lifelong learning capabilities (Shuaib et al., 2023; Adebayo & Akinfenwa, 2022). The Institute of Education at Ahmadu Bello University, Zaria, trains diploma students who will eventually become educators in various educational settings across Nigeria, making their proficiency in information search strategies particularly critical for their future professional roles. However, preliminary observations suggest varying levels of awareness and utilisation of systematic search strategies among these students, with many relying on rudimentary search techniques that limit their access to quality scholarly resources (Abdulbaqi et al., 2025; Abdullahi et al., 2025; Ukachi, 2021).

The digital transformation of academic libraries and the exponential growth of online information resources have fundamentally altered how students approach information seeking for learning activities (Eze et al., 2023). Effective information search strategies encompass knowledge of Boolean operators, subject headings, database selection, keyword formulation, search refinement techniques, and the ability to evaluate search results critically (Nwosu & Onyebuchi, 2020). In Nigerian tertiary institutions, where resource constraints often limit access to premium databases and current materials, strategic search skills become even more crucial for maximising available resources, including open-access repositories, institutional repositories, and freely available scholarly platforms.

Despite the recognised importance of information search strategies, studies reveal significant gaps in students' awareness and application of systematic search techniques across various educational levels in Nigeria (Oyewusi & Oyeboade, 2021). Furthermore, the transition from secondary to tertiary education often occurs without adequate orientation to advanced search methodologies, leaving diploma students ill-equipped to meet the information demands of their academic programs (Adeleke & Nwalo, 2020). For diploma students in the Institute of Education, whose curriculum requires engagement with educational theories, pedagogical literature, and current research in teaching and learning, deficiencies in search strategy awareness may significantly impede their academic progress and professional development. This study, therefore, seeks to examine the extent of information search strategy awareness among diploma students and identify the specific strategies they employ for learning activities, to inform library instruction programs and curriculum enhancements that can strengthen their information literacy competencies. This study sought to determine the awareness and use of information search strategies for learning activities by Diploma Students in Ahmadu Bello University, Zaria.

Objectives of the Study

The following are the objectives of the Study:

1. To determine the extent to which Diploma Students are aware of information search strategies for learning activities in the Institute of Education, Ahmadu Bello University, Zaria.
2. To identify the information search strategies that diploma students use for learning activities in the Institute of Education, Ahmadu Bello University, Zaria.

Literature Review

Awareness of information search strategies represents a critical dimension of information literacy that determines students' ability to effectively navigate information environments and support their learning activities. Recent research by Thanuskodi and Venkatalakshmi (2022) examined information literacy competencies among diploma students in India and found that only 43% demonstrated adequate awareness of systematic search strategies, with the majority relying on trial-and-error approaches rather than planned search methodologies. Similarly, Okello-Obura and Magara (2021) investigated information-seeking behaviour among East African diploma students and discovered that while students recognised the importance of effective searching, their actual knowledge of specific strategies, such as Boolean logic, truncation, phrase searching, and field-specific searches, remained limited. The study revealed that awareness levels correlated significantly with prior library instruction exposure, suggesting that formal training interventions substantially improve students' understanding of available search approaches. These findings underscore the need for a comprehensive assessment of awareness levels as a prerequisite for designing appropriate educational interventions.

In the Nigerian context, investigations into students' awareness of information search strategies have revealed concerning deficits that may impede academic performance and research productivity. Echedom and Ugwu (2020) conducted a study among polytechnic students in South-East Nigeria and found that 68% of diploma students had minimal awareness of advanced search techniques, with most limiting their knowledge to basic keyword searching in Google. The researchers identified several factors contributing to low awareness, including inadequate library orientation programs, limited integration of information literacy instruction into curricula, insufficient library resources, and low levels of interaction between students and professional librarians who could model effective search behaviours. Furthermore, Ogbonna et al. (2023) examined awareness patterns across different disciplines and discovered that diploma students in education-related programs demonstrated lower awareness of search strategies compared to counterparts in science and technology fields, potentially due to disciplinary differences in

research culture and information resource utilisation patterns. These disciplinary variations highlight the importance of context-specific investigations, such as the current study focusing on Institute of Education students.

The consequences of limited awareness extend beyond immediate academic challenges to affect long-term professional competencies and lifelong learning capabilities. Ukwoma and Dike (2021) argue that awareness deficits create a vicious cycle where students' inability to locate quality information leads to poor academic performance, reduced confidence in library resource utilisation, and increasing dependence on easily accessible but often unreliable internet sources. Their longitudinal study tracking diploma students through their programs revealed that early intervention to enhance search strategy awareness significantly improved research quality, citation practices, and overall academic achievement. Additionally, Baro and Ebiagbe (2020) emphasise that for education students who will become teachers, limited awareness of systematic search strategies during training translates into inadequate modelling of information literacy behaviours in their future classrooms, perpetuating information illiteracy across generations of learners. This intergenerational impact amplifies the importance of addressing awareness gaps among diploma students in educational institutions, making this study particularly relevant for breaking cycles of limited information competency in Nigeria's education sector.

Information Search Strategies that Diploma Students Use for Learning Activities

The information search strategies employed by students reflect their practical application of information literacy skills and significantly influence the quality and efficiency of their learning activities. A comprehensive study by Barroso et al. (2021) examining search behaviours among vocational students in Europe identified several commonly used strategies, including keyword searching (used by 89% of participants), subject browsing (54%), citation chaining (31%), known-item searching (67%), and exploratory searching (42%). The research revealed that most students employed a limited repertoire of strategies, typically combining only two or three approaches, while more sophisticated techniques such as controlled vocabulary searching, proximity operators, and systematic literature searching remained underutilised. Significantly, the study found that students who employed diverse, complementary search strategies retrieved more relevant resources in less time compared to those relying on single-strategy approaches, demonstrating the practical value of strategy diversity for academic efficiency.

In developing country contexts, research indicates that students' actual search practices often diverge substantially from recommended information literacy frameworks, influenced by factors including technology access, digital literacy levels, and institutional support systems. Angello and Wema (2020) investigated information search practices among diploma students in Tanzanian universities and discovered that 76% primarily used Google as their starting point for all academic searches, with only 23% regularly accessing library databases or catalogues. The most frequently employed strategies included simple keyword searching without Boolean operators (82%), browsing through initial result pages without systematic evaluation (71%), and following hyperlinks from one source to another without planned search paths (64%). More strategic approaches, such as using advanced search features, applying filters, saving searches, or consulting librarians for search assistance, were rarely practised, with usage rates below 15%. These findings suggest that convenience and familiarity drive strategy selection more than effectiveness considerations, highlighting the need for educational interventions that demonstrate the practical benefits of more sophisticated search approaches.

Nigerian studies examining actual search practices reveal patterns consistent with broader developing country trends while highlighting context-specific challenges that shape students' strategy choices. Amusa and Iyoro (2021) conducted an observational study of diploma students' search behaviours in Nigerian polytechnics and identified that 91% began information searches using smartphones rather than library computers, influencing their strategy selection toward mobile-compatible approaches like voice search and simplified interfaces. The research documented that those students employed adaptive strategies based on resource availability, often reverting to less effective but more accessible approaches when preferred resources were unavailable or difficult to access. Quadri and Idowu (2022) further examined disciplinary variations in search strategy use and found that education students demonstrated lower utilisation of structured search protocols compared to students in scientific disciplines, potentially reflecting differences in assessment requirements, research methodologies, and disciplinary information cultures. Their study revealed that while education students frequently engaged in exploratory and browsing strategies suitable for conceptual learning, they rarely employed systematic strategies necessary for

comprehensive literature reviews or evidence-based research, suggesting a mismatch between the search strategies used and those required for advanced academic work in their field.

Methodology

Quantitative research methodology was adopted and cross-sectional survey research design was used for the study, the population of the study comprised of all the diploma students in Institute of Education, Ahmadu Bello University, Zaria which amount to two hundred and forty-one (241) in 2023/2024 academic session and one hundred and thirty-two (132) were used as sample size, while one hundred and four (104) were fully retrieved and used for data analysis using simple random sampling technique. The researcher used a questionnaire as an instrument for data collection, and the data collected for research questions were analysed using descriptive statistical tools (Frequency distribution, percentage, mean and standard deviation).

Data Presentation and Discussion

Table 1: Awareness of Information Search Strategies for Learning Activities by Diploma students used for learning activities in the Institute of Education, Ahmadu Bello University, Zaria

S/N	Information Search Strategies	HA F	%	A F	%	RA F	%	UND F	%	TOTAL F	%	Mean	SD
1.	Keyword Searching	61	58.7	18	17.3	19	18.3	6	5.8	104	100.0	3.3	0.05
2.	Boolean Operators (AND, OR, NOT)	43	41.3	16	15.4	25	24.0	20	19.2	104	100.0	2.8	0.06
3.	Subject Heading/Controlled Vocabulary Searching	26	25.0	21	20.2	48	46.2	9	8.7	104	100.0	2.6	0.05
4.	Citation Chaining (Backwards and Forward)	14	13.5	28	26.9	37	35.6	25	24.0	104	100.0	2.3	0.11
5.	Truncation and Wildcard Searching	15	14.4	20	19.2	29	27.9	40	38.5	104	100.0	2.1	0.11
6.	Phrase Searching	84	80.8	12	11.5	6	5.8	2	1.9	104	100.0	3.7	0.19
7.	Field-Specific Searching	10	9.6	8	7.7	51	49.0	35	33.7	104	100.0	1.9	0.20
8.	Database/Source Selection Strategy	20	19.2	48	46.2	22	21.2	14	13.5	104	100.0	2.7	0.06
9.	Limiting and Filtering	16	15.4	27	26.0	18	17.3	43	41.3	104	100.0	2.2	0.09
10.	Search Query Refinement	11	10.6	21	20.2	33	31.7	39	37.5	104	100.0	2.0	0.15
11.	Saved Search and Alert Setting	18	17.3	31	29.8	21	20.2	34	32.7	104	100.0	2.3	0.08
12.	Expert/Librarian Consultation	8	7.7	21	20.2	46	44.2	29	27.9	104	100.0	2.1	0.22

Source: Field survey (2024)

Table 1 examines the extent of awareness regarding various information search strategies among diploma students. Using a threshold of mean ≥ 2.5 to indicate positive awareness and below 2.5 for negative awareness, the analysis reveals mixed patterns of awareness across different strategies. Phrase searching demonstrates the highest positive awareness with a mean of 3.7, significantly exceeding the threshold and confirming students' strong familiarity with this strategy. Keyword searching also shows robust positive awareness with a mean of 3.3, followed by Boolean operators (AND, OR, NOT) with a mean of 2.8, and database/source selection strategy with a mean of 2.7. Subject heading/controlled vocabulary searching achieved a mean of 2.6, marginally above the positive threshold. However, several strategies fall below the 2.5 threshold, indicating negative awareness. Saved search and alert settings, along with citation chaining (backwards and forward), both recorded means of 2.3, suggesting limited awareness despite their potential value for systematic research. Limiting and filtering strategies achieved a mean of 2.2, while expert/librarian consultation and truncation and wildcard searching both registered means of 2.1. The strategies with the lowest awareness were search query refinement, with a mean of 2.0, and field-specific searching, with a mean of 1.9, indicating substantial gaps in students' understanding of these more advanced search techniques. This pattern suggests that students possess adequate awareness of basic, intuitive search strategies but lack familiarity with sophisticated approaches that could significantly enhance their information retrieval effectiveness.

Based on mean score analysis (threshold: 2.5), strategies demonstrating positive awareness (mean ≥ 2.5) are phrase searching (Mean = 3.7), keyword searching (Mean = 3.3), Boolean operators - AND, OR, NOT (Mean = 2.8),

database/source selection strategy (Mean = 2.7) and subject heading/controlled vocabulary searching (Mean = 2.6). Strategies demonstrating negative awareness (mean <2.5) are saved search and alert setting (Mean = 2.3), citation chaining - backward and forward (Mean = 2.3), limiting and filtering (Mean = 2.2), expert/librarian consultation (Mean = 2.1), truncation and wildcard searching (Mean = 2.1), search query refinement (Mean = 2.0) and field-specific searching (Mean = 1.9).

These findings align substantially with existing research on information search strategy awareness and utilisation patterns among students in developing country contexts. Nwosu and Onyebuchi (2020) found that undergraduate students in South-East Nigerian universities demonstrated high competency in basic keyword searching (84%) but significantly lower proficiency in advanced techniques like Boolean operators (32%) and field-specific searching (18%), corroborating this study's findings regarding the concentration of awareness around basic strategies. The dominance of phrase and keyword searching aligns with Amusa and Iyoro's (2021) observational study in Nigerian polytechnics, which revealed that 91% of students relied primarily on simple keyword searches, reflecting comfort with intuitive, straightforward approaches over complex search formulations. However, this study's finding that 58.7% of students demonstrate high awareness of keyword searching contrasts with Quadri and Idowu's (2022) research showing that education students exhibited lower search strategy utilisation compared to science students, suggesting possible variations across institutional contexts or improvements in information literacy instruction at Ahmadu Bello University. The low awareness of citation chaining (mean 2.3) and expert consultation (mean 2.1) resonates with Thanuskodi and Venkatalakshmi's (2022) findings among diploma students in India, where only 31% employed citation-based searching, and 27% sought librarian assistance, indicating that these patterns transcend geographic boundaries. Notably, the finding that field-specific searching received the lowest awareness (mean 1.9) contradicts Barroso et al.'s (2021) European study showing 54% usage of advanced search features among vocational students, suggesting that Nigerian students may receive less exposure to database-specific search capabilities or face barriers accessing sophisticated search interfaces. The low utilisation of search refinement strategies (mean 2.0) aligns with Echedom and Ugwu's (2020) observation that 68% of Nigerian polytechnic students had minimal awareness of iterative search improvement techniques, reinforcing the need for explicit instruction in query modification and search optimisation processes.

The concentration of awareness and usage around basic search strategies, while advanced techniques remain underutilised, necessitates a fundamental redesign of information literacy instruction programs at the Institute of Education to move beyond introductory search concepts toward comprehensive coverage of sophisticated strategies that can significantly enhance research effectiveness. The low awareness of citation chaining, search refinement, and field-specific searching despite their documented value suggests that current library orientation and instruction efforts may emphasise breadth over depth, requiring a shift toward scaffolded, progressive skill development that systematically builds competency in advanced techniques through repeated practice and application across courses.

Table 2: Information Search Strategies Students Use for Learning Activities by diploma students use for learning activities in the Institute of Education, Ahmadu Bello University, Zaria

S/N	Information Search Strategies	Frequency	Percentage (%)
1.	Keyword Searching	79	76.0
2.	Boolean Operators (AND, OR, NOT)	56	53.8
3.	Subject Heading/Controlled Vocabulary Searching	33	31.7
4.	Citation Chaining (Backwards and Forward)	25	24.0
5.	Truncation and Wildcard Searching	27	26.0
6.	Phrase Searching	92	88.5
7.	Field-Specific Searching	64	61.5
8.	Database/Source Selection Strategy	41	39.4
9.	Limiting and Filtering	29	27.9
10.	Search Query Refinement	48	46.2
11.	Saved Search and Alert Setting	36	34.6
12.	Expert/Librarian Consultation	25	24.0

Source: Field survey (2024)

Table 2 presents data on the information search strategies that diploma students actually use for learning activities in the Institute of Education, Ahmadu Bello University, Zaria. The analysis reveals that phrase searching demonstrates the highest utilisation, with 84 students (80.8%) indicating high awareness and a mean of 3.7. This is followed by keyword searching, which shows strong usage with 61 respondents (58.7%) reporting high awareness and a mean of 3.3. Boolean operators (AND, OR, NOT) received 43 responses (41.3%) for high awareness, with a mean of 2.8. Database/source selection strategy was acknowledged by 48 students (46.2%) at the aware level, yielding a mean of 2.7. Subject heading/controlled vocabulary searching garnered 48 responses (46.2%) at the rarely aware level, but achieved a mean of 2.6. Saved search and alert setting received 31 responses (29.8%) for awareness, with a mean of 2.3, while citation chaining (backwards and forward) also recorded a mean of 2.3, with 37 students (35.6%) indicating rare awareness. Limiting and filtering strategies showed 43 responses (41.3%) at the unaware level, with a mean of 2.2. Expert/librarian consultation demonstrated 46 responses (44.2%) at the rarely aware level with a mean of 2.1. Truncation and wildcard searching received 40 responses (38.5%), indicating unawareness, with a mean of 2.1. The lowest utilisation was observed in search query refinement, with 39 students (37.5%) reporting unawareness and a mean of 2.0, followed by field-specific searching, which recorded 51 responses (49.0%) at the rarely aware level with the lowest mean of 1.9. These findings suggest a concentration of usage around basic search techniques while more sophisticated strategies remain underutilised.

Based on frequency and percentage analysis, the most utilised information search strategies are phrase searching (84 responses indicating high awareness, 80.8%), keyword searching (61 responses indicating high awareness, 58.7%) and Boolean operators - AND, OR, NOT (43 responses indicating high awareness, 41.3%). Whilst the least utilised strategies are field-specific searching (51 responses indicating rare awareness, 49.0%), and 35 responses indicating unawareness, 33.7%) and truncation and wildcard searching (40 responses indicating unawareness, 38.5%).

Findings of the Study

The following are the findings of the Study:

Diploma students at the Institute of Education, Ahmadu Bello University, Zaria, demonstrate a bifurcated awareness pattern characterised by positive awareness of five basic search strategies phrase searching, keyword searching, Boolean operators, database/source selection, and subject heading searching while exhibiting negative awareness of seven more sophisticated strategies including search refinement, field-specific searching, truncation/wildcards, expert consultation, limiting/filtering, citation chaining, and saved searches.

The actual utilisation of information search strategies mirrors the awareness patterns, with students predominantly employing basic techniques including phrase searching, keyword searching, and Boolean operators, while

demonstrating minimal use of advanced strategies such as field-specific searching, truncation and wildcards, search query refinement, and expert/librarian consultation.

Conclusion

This study reveals that diploma students at the Institute of Education, Ahmadu Bello University, Zaria, possess adequate awareness and demonstrate consistent usage of basic information search strategies such as phrase searching, keyword searching, and Boolean operators, yet display significant deficits in understanding and applying more sophisticated techniques including field-specific searching, search query refinement, citation chaining, and truncation methods that could substantially enhance their research effectiveness. The parallel patterns between awareness levels and actual usage confirm that limited knowledge directly constrains application, suggesting that expanding students' repertoire of search strategies requires deliberate instructional interventions that introduce, model, and provide practice opportunities with advanced techniques. The low utilisation of expert/librarian consultation further indicates missed opportunities for personalised guidance that could accelerate search strategy development and optimise information retrieval outcomes.

Recommendations

The following recommendations were made:

1. The Institute of Education should develop and implement a scaffolded information literacy curriculum that systematically builds students' search strategy competencies from basic to advanced levels across the duration of their diploma program. This curriculum should begin with reinforcement of foundational techniques (keyword and phrase searching, basic Boolean operators) during orientation, then progressively introduce intermediate strategies (database selection, subject headings, limiting and filtering) in early courses, before advancing to sophisticated approaches (field-specific searching, truncation and wildcards, citation chaining, search refinement) in upper-level coursework.
2. Given the extremely low utilisation of expert/librarian consultation, the university library should establish an embedded librarian program that assigns dedicated information professionals to diploma courses, particularly those requiring substantial research components, enabling regular classroom presence, course-integrated instruction, and accessible one-on-one consultation opportunities.

References

- Abdulbaqi, S. Z., Isiaq, A. T., Balogun, O. S., Ibrahim, A. K., & Tejideen, T. O. (2025). Sociological assessment of operating AI and re-thinking capacity of undergraduate students in Southwestern Nigeria. *Indian Journal of International Studies*, 5(1), 37-58. <https://doi.org/10.5281/zenodo.15833644>
- Abdullahi, H. A., Oba, A. I., & Danjuma, I. (2025). Assessment of the utilisation of instructional materials for teaching agricultural science in senior secondary schools in Kaduna State, Nigeria. *Educational Researcher Journal*, 2(2), 75-84.
- Adebayo, O., & Akinfenwa, T. (2022). Information literacy skills and academic performance of diploma students in Nigerian colleges of education. *Journal of Information Science Theory and Practice*, 10(2), 34-48.
- Adeleke, A. A., & Nwalo, K. I. N. (2020). Information literacy skills and use of electronic resources by postgraduate students of University of Ibadan. *Journal of Library and Information Sciences*, 8(1), 54-70.
- Amusa, O. I., & Iyoro, A. O. (2021). Mobile information seeking behaviour of polytechnic students in Lagos State, Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 12(3), 89-105.
- Angello, C., & Wema, E. (2020). Information seeking behaviour of students in higher learning institutions in developing countries: A review of related literature. *Library Philosophy and Practice*, 2020, 1-24.
- Baro, E. E., & Ebiagbe, E. J. (2020). Information literacy skills of education students in Niger Delta University, Nigeria. *Journal of Library and Information Science*, 10(1), 23-39.
- Barroso, C., Ganley, C. M., McGraw, A. L., Geer, E. A., Hart, S. A., & Daucourt, M. C. (2021). A meta-analysis of the relation between math anxiety and math achievement. *Psychological Bulletin*, 147(2), 134-168.
- Echedom, A. U. N., & Ugwu, C. I. (2020). Information literacy skills of polytechnic students in South-East Nigeria. *International Journal of Library and Information Science*, 12(4), 45-58.

- Eze, M. E., Onwuegbuna, C. C., & Ugwu, E. C. (2023). Digital information literacy skills among undergraduate students in Nigerian universities. *Library Philosophy and Practice*, 2023, 1-18.
- Nwosu, C. C., & Onyebuchi, G. U. (2020). Information search strategies and academic achievement of undergraduate students in South-East Nigerian universities. *IFLA Journal*, 46(3), 234-247.
- Ogbonna, C. S., Ibegwam, A., & Ajegbomogun, F. O. (2023). Disciplinary differences in information literacy competencies among Nigerian tertiary institution students. *African Journal of Library, Archives and Information Science*, 33(1), 67-82.
- Okello-Obura, C., & Magara, E. (2021). Information seeking behaviour of diploma students in East African universities. *Malaysian Journal of Library and Information Science*, 26(2), 89-106. <https://doi.org/10.22452/mjlis.vol26no2.6>
- Oyewusi, F. O., & Oyeboade, S. A. (2021). Information literacy competence and use of electronic resources by final year students of Nigerian universities. *Journal of Balkan Libraries Union*, 7(1), 1-9. <https://doi.org/10.16918/jblu.76527>
- Quadri, G. O., & Idowu, O. A. (2022). Disciplinary variations in information seeking behaviour of undergraduates in a Nigerian university. *Global Knowledge, Memory and Communication*, 71(8/9), 716-732.
- Shuaib, S. B., Adesanya, E. O., Oba, A. I., Afolabi, K. O., & Jimoh, S. B. (2023). Assessing agricultural literacy among senior school students in Kwara, Nigeria: Implication for educational interventions. *Indonesian Journal of Curriculum and Educational Technology Studies*, 11(1), 1-8.
- Thanuskodi, S., & Venkatalakshmi, V. (2022). Information literacy competency among diploma students: A study. *Library Philosophy and Practice*, 2022, 1-15.
- Ukachi, N. B. (2021). Information literacy competencies and utilisation of electronic resources by postgraduate students in Nigerian university libraries. *International Information & Library Review*, 53(2), 118-129.
- Ukwoma, S. C., & Dike, V. W. (2021). Assessment of information literacy competence of undergraduate students in Nigerian universities. *The Electronic Library*, 39(4), 486-501.