

## **Mastering online Search Skills: Unlocking the Power of Information and User Experience in Academic libraries in Nigeria**

**By**

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### **Abstract**

*Mastering search skills is essential for everyone seeking knowledge, conducting research, enhancing user experience, driving academic success or solving problems. However, effective search strategies enable users to efficiently locate relevant sources, evaluate quality information, and synthesize knowledge. Nigerian academic libraries can bridge the information gap by prioritizing online search skills training, workshops, and digital literacy programs. By doing so, they can empower users to harness the potential of online resources, foster innovation, and contribute to national development. Moreover, mastering online search skills enhances user experience, promoting autonomy, confidence, and self-directed learning. For this to be accomplished, academic libraries should collaborate with faculty and IT departments to integrate digital literacy into curricula. Librarians can develop tailored training programs, focusing on search strategies, database navigation, and critical thinking. By investing in online search skills development, Nigerian academic libraries can enhance research quality and productivity, foster a culture of innovation and entrepreneurship, support national development initiatives, and empower users for lifelong learning*

**Keyword:** Online Search Skills, Power of Information, User Experience, Academic libraries, Nigeria.

### **Introduction**

In today's digital age, information is abundant and readily accessible. The ability to effectively navigate and retrieve relevant information from the vast sea of data is becoming increasingly crucial. Developing strong search skills is the key to unlocking Information's power and maximizing productivity in both personal and professional endeavors. In this article, we will examine the significance of search skills, discuss essential strategies, and provide practical ideas to assist you become a proficient searcher. A successful search begins with an extensive

understanding of the information needs. Academic librarians should engage with users to ascertain their research objectives, topic areas, and specific requirements. This step helps in formulating effective search queries and narrowing down search results (Saidu 2023).

Information search skills play an important part in academic lives, as they enable them to find and evaluate pertinent information about a particular subject of their interest. These skills include conducting research, evaluating information critically, and developing solutions to particular problems. Academics value search skills and benefit workers in every role. Possessing these abilities are essential to developing your career, because they have a direct bearing on your capacity to acquire understanding and motivate others to take action. For information seekers, search skills are essential for a number of reasons, including enabling individuals to discover the problems that hinder performance or task completion, Provide practical solutions to identified problems, Evaluate online information resources and The best approach to utilize them is to promote increased efficiency, Emerge with novel services or products, Identify the needs of a target customer and Enhancing these needs through products and services, Time management, Stay updated with vital trends and lastly Learn new techniques to adjust and change to meet information needs.

Online Information search skills involve a series of activities and capabilities that an individual adopts to locate where information is, its types and formats, and ways of accessing the information. It additionally encompasses ways of retrieving, evaluating, and utilizing information. In line with the Library Guide (2021), information search skills are viewed as consisting of a series of activities aimed at finding information to address challenges. In a study by Saidu (2023) have explained taxonomy of three different information search skills: search engine skills, browsing skills, and direct access skills. Search engine skills consist of six different types: keyword search skills, wide search definition, and complex search, use of general knowledge, computer convention, and Boolean search. Browsing skills consist of two techniques: the directory," which means browsing through a directory or catalog; such an approach can be found on the Yahoo Website; and the "specific portal," which is related to the subject of interest. Direct access skills are direct typing, where participants simply type the address of the known URL to access information on the topic to be explored. According to Saidu (2023) Information search skills extend into realms of critical thinking and ethical usage of information which are:

**Evaluating sources:** Assessing reliability, credibility, and bias

**Analyzing information:** Identifying inconsistencies, relationships, and patterns

**Synthesizing information:** Combining multiple sources to form a comprehensive understanding

**Avoiding misinformation:** Recognizing and rejecting false or misleading information

Ahmad (2022) Information search skills are the driving force behind information retrieval. However, with all the importance of information search skills, several Research examines how individuals engage in search tasks or define their decisions and behaviours in the information retrieval process. Further, a perceived lack of time, poor infrastructural facilities, technophobia, equipment, funding, training, inappropriate software, coupled with lack of knowledge and skills among staff and students, insufficient technical support, and the risks associated with implementing innovations in teaching/learning were reported as the most prohibiting barriers to

students and staff's application of electronic information sources in their teaching and learning (Saidu 2023)

Furthermore, search skills have become an essential tool for navigating and making sense of the vast ocean of information available to us. Whether we are researching a topic, troubleshooting a problem, or simply seeking answers to our questions, our ability to effectively search for and retrieve the information we need is crucial. In this article, we will explore the importance of search skills and provide practical strategies to help you become a proficient and efficient searcher.

In olden days, students and academicians relied solely on printed sources, However, they are currently using print in addition to electronic information resources. This advancement was made feasible due to advancements in the field of communication and information technologies and the Internet, which has changed how we obtain and utilize information., which was unimaginable a decade ago. Proficiency in digital technology and online communications become crucial skills for conducting evidence-based research in all realms, including medicine, public health, and higher education. Internet users encounter new difficulties as daily life becomes more digitalized due to information overload, which creates Users of information are anxious about how to find and search for information online. However, students, researchers and academics are information seekers, which always tend to employ weak online search skills that may negatively affect the quality of their search results. In addition to poor online search skills, the results they get have a strong effect on their decision-making.

### **The Significance of Search Skills**

With the exponential growth of online content, search engines have become our primary gateway to information. Whether you are a student conducting research, a professional seeking industry-specific knowledge, or an individual looking for answers to everyday questions, the ability to conduct effective searches is essential. Strong search skills can save time, enhance critical thinking, improve decision-making, and empower individuals to stay up-to-date in an ever-evolving world.

### **Essential Strategies for Effective Searching:**

According to Saidu (2023) Search strategies are series of processes, techniques and ways in which researchers adopt are as follows:

- i. Define Your Objective: Clearly articulate what you are looking for to refine your search. Use specific keywords or phrases that accurately represent your query. Consider using Boolean operators (AND, OR, NOT) to refine and narrow down your search results.
- ii. Choose the Right Search Engine: Not all search engines are created equal. While Google remains the most popular choice, alternative search engines like Bing, DuckDuckGo, or specialized databases may yield different results. Experiment with different search engines to find the best fit for your needs.
- iii. Utilize Advanced Search Techniques: Most search engines offer advanced search features that can help you refine your results. These features include options to search within specific websites,

limit results by date or region, or use specific file types. Familiarize yourself with these advanced techniques to enhance your search capabilities.

iv. Evaluate and Verify Sources: With the proliferation of misinformation, it is crucial to critically evaluate the credibility and reliability of sources. Assess the expertise of the author, verify the accuracy of the information, and cross-reference multiple sources to ensure the information is trustworthy and up-to-date.

v. Utilize Search Operators: Search operators can help you construct more specific queries. For instance, using quotation marks (" ") around a phrase will search for exact matches, while using a hyphen (-) before a word will exclude it from the search results. Understanding and utilizing these operators can significantly enhance your search precision.

vi. Understanding Information Needs: A successful search begins with a clear understanding of the information needs. Academic librarians should engage with users to ascertain their research objectives, topic areas, and specific requirements. This step helps in formulating effective search queries and narrowing down search results.

vi. Library Catalogs and Databases: Academic libraries in North Western Nigeria typically provide access to extensive catalogs and databases. Familiarize yourself with the available resources, including the library's online catalog, electronic databases, and specialized academic search engines. Learn how to navigate these systems efficiently and exploit their advanced search features.

vii. Boolean Operators: Boolean operators, such as AND, OR, and NOT, are fundamental tools for constructing search queries. Understanding how to combine these operators allows for more precise and targeted searches. For instance, using "AND" between keywords narrows the search by requiring both terms to be present in the results.

viii. Controlled Vocabulary and Subject Headings: Many Academic libraries in North Western Nigeria use controlled vocabularies or subject headings to organize and classify resources. Familiarize yourself with the specific controlled vocabulary employed by your library, such as Library of Congress Subject Headings (LCSH) or Medical Subject Headings (MeSH). Using subject headings can significantly enhance the accuracy and relevance of search results.

ix. Search Filters and Advanced Features: Most library catalogs and databases offer advanced search options and filters. These features enable users to refine their searches based on criteria like publication date, language, format, or peer-reviewed status. Understanding how to utilize these filters can save time and improve the precision of search results.

x. Citation Chaining and Bibliographies: When conducting academic research, exploring the bibliographies and reference lists of relevant sources can lead to valuable additional materials. This technique, known as citation chaining, allows you to trace the lineage of ideas and uncover key works in a particular field.

xi. Information Evaluation: Developing critical evaluation skills is vital for assessing the relevance, reliability, and credibility of information sources. Academic libraries in North Western Nigeria provide access to a wide range of resources, including scholarly articles, books, conference

papers, and more. Understanding the differences between popular and scholarly sources, peer-reviewed articles, and different publication types will aid in selecting the most appropriate sources for research.

xi. Information Literacy Instruction: Academic libraries in North Western Nigeria often offer information literacy instruction programs to help users develop effective search skills. These programs may include workshops, tutorials, or online guides. Take advantage of these resources to enhance your search abilities and stay updated on the latest research tools and techniques.

xii. Keeping Abreast of New Tools and Technologies: The field of information retrieval is continually evolving. Keep up with emerging technology, search tools, and trends in Nigerian academic libraries. To figure out about the latest developments and best practices, take part in online communities, attend conferences, and to become involved with professional associations. Users of academic libraries can maximize their research results and access the large amount of material they need by becoming proficient in search techniques. Academic librarians are essential in helping users improve these abilities and ensuring a seamless and effective information-seeking process..

Granite School District (2022) determined a variety of online information search skills, including the ability to think before searching, to keep things simple, to be exact, to capitalize, to spell and punctuate, and to focus search results..

In addition to the definition given above, Xie (2010) observes that search skills are a systematic collection of several techniques that consider both situational and planned factors. However, One could compare search techniques to a plan applied by the information seeker to complete his academic research activities. Search strategies are a set of procedures, methods, and approaches that researchers use to find information, as well as its types, formats, and methods of access. It also involves ways of retrieving, evaluating, and utilizing information. These methods are updated regularly to keep pace with the speeding growth of the information volume. Search tools are equipped with facilities with which users should be familiar if they are to make the best use of them. Searching strategies differ from one tool to another. But in general, all of them have common characteristics, an understanding of which is important for the user's effective application of such systems. According to Life Pacific University LPU (2019), " the seven most commonly used online searching techniques are as follows: Boolean Searching; Phrase Searching; Proximity Searching; Field Searching; Truncation; Parenthesis; Synonyms.. According to Life Pacific University, LPU Boolean Searching involves a structured search process that allows the user to insert words or phrases such as AND, OR, and NOT to limit, broaden, and define the search results. Phrase searching narrows the search results by allowing you to define precisely how you want the words to appear. Proximity searching includes searching with keywords that the user wants to be adjacent to each other, Field Searching: This search term limits the search to a specific field. Also, Saidu, (2023) discovered that by the age of 23–30, the ability to search for information increases. In other words, younger information seekers were found to be more skilled in online and offline information searches. Sife (2013) further discovered that middle-aged users have problems searching and accessing the online databases.

### **Practical Tips for Improving Search Skills**

1. Refine your keyword selection: Experiment with different variations and synonyms to broaden or narrow your search results. Consider using long-tail keywords for more specific results. Keywords are the key to successful searches. Begin by brainstorming and identifying the most relevant terms related to your topic. Consider synonyms, acronyms, and alternative phrasings that others might use when discussing the subject matter. Be specific but avoid using overly technical jargon that might limit your results. Experiment with different combinations of keywords to refine your search and find the most relevant information.

2. Use search suggestions: Take advantage of search engine suggestions as you type. These suggestions can provide insights into popular search queries, helping you refine your search or discover related topics. Search engines are the gateway to information on the internet, and understanding how they work is fundamental to developing effective search skills. Google, Bing, and other search engines utilize complex algorithms to analyze and rank web pages based on relevance and authority. Familiarize yourself with the basic features of search engines, such as advanced search operators, filters, and settings, to refine your searches and obtain more accurate results.

### **Evaluating Sources**

In an era of misinformation, developing critical evaluation skills is crucial. When conducting searches, pay attention to the credibility and reliability of the sources you encounter. Consider the author's expertise, the publication's reputation, and the presence of references or citations. Cross-referencing information from multiple sources can help you validate the accuracy and reliability of the information you find.

### **Utilizing Advanced Search Techniques**

In the same vein, Saidu (2023) discussed the utilization of advanced search techniques

1. To enhance your search skills, it's essential to go beyond basic keyword searches. Familiarize yourself with advanced search techniques, such as using quotation marks to search for exact phrases, using the minus sign to exclude certain terms, or using the "site:" operator to search within a specific domain. These techniques allow you to narrow down your results and find more precise information.

2. Explore alternative search formats: Beyond traditional web searches, explore other search formats such as image search, video search, or news search depending on your specific requirements. Furthermore, while search engines like Google dominate the landscape, there are numerous alternative search tools and databases available that cater to specific needs. For academic research, resources like Google Scholar, JSTOR, or PubMed can offer more specialized and scholarly content. Industry-specific databases, forums, or Social media sites could potentially provide valuable insights within specific niches. Expanding your search toolkit and exploring alternative Platforms may greatly improve your search skills.

3. Utilize search bookmarks and history: Save useful search results or bookmark relevant websites for future reference. Regularly review your search history to identify patterns or refine your search strategy.

4. Stay updated with search engine features: Search engines are always updating their algorithms and introduce new features. Stay up-to-date with these changes to leverage the full potential of search engines and improve your search efficiency. Search engines continually evolve, and staying up to date with the latest search trends and features can give you an edge in finding information quickly and efficiently. Subscribe to technology news outlets, follow industry experts, and explore search engine blogs or forums to learn about new search algorithms, updates, and features. By staying informed, you can adapt your search strategies to leverage the most effective techniques and tools.

### **Conclusion:**

Developing strong search skills is a useful asset in today's information-driven society. By employing effective search strategies, utilizing advanced techniques, and mastering search skills is essential for everyone seeking knowledge, conducting research, or solving problems. By understanding search engines, choosing the right keywords, utilizing advanced search techniques, evaluating sources critically, exploring alternative search tools, and staying abreast of search trends, the entire potential of information retrieval can be unlocked. Enhancing your search skills will not only save you time but also empower you to make excellent result.

### **Way forward**

1. Libraries should organize workshops for students and researchers on how to effectively search online information resources with different types of online information search strategies such as Boolean operators, truncation, proximity search, parenthesis, and wildcards. Furthermore, more awareness should be created about accessing and utilizing online information resources for students, academics and other researchers.
2. Libraries should take a leading role in creating more training programs among academics on online information searches skills such as the ability to narrow the search, ability to use punctuation, ability to apply filters, ability to search by subject, ability to search by standard number, and ability to search by title.
3. Libraries should create a website and link it to different databases, both open access and subscribed, to be among the 21st-century libraries. This will enhance the institution teaching and research operations. Furthermore, the Libraries should provide internet connectivity (LAN or wireless) to each lecturer's office to enable the library to offer them internet services from the convenience of their offices.

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