

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

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Abstract

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, one can unlock the full potential of information retrieval. Enhancing your search skills will not only save you time but also empower you to make good result. However, Search skills are crucial for unlocking the power of information and enhancing the user experience in academic libraries. Academic libraries serve as essential repositories of knowledge, housing vast collections of books, journals, databases, and other resources. However, accessing and utilizing these resources effectively requires proficiency in Online search techniques and strategies.

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

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 the power of information and maximizing productivity in both personal and professional endeavors. In this article, we will explore the importance of search skills, discuss essential strategies, and provide practical tips to help you become a proficient searcher. 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.

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, but now they are using print as well as electronic information resources. This development was made possible due to advancements in information and communication technology and the Internet and has changed the way we access and use 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. As everyday life becomes increasingly digitized, Internet users face new challenges due to information overload, which creates anxiety among information users about how to seek 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. Therefore, search skills have a direct correlation with their searching of online information for the retrieval of specialized information resources.

According to Ahmad (2022), research has found that information search skills are the driving force behind information retrieval. However, with all the importance of information search skills, few studies investigate how people engage in search tasks or define their decisions and behaviors in the information retrieval process. Further, a perceived lack of time, poor infrastructural facilities, technophobia, equipment, funding, training, inappropriate software, coupled with a lack of knowledge and skills among staff, insufficient technical support, and the risks associated with implementing innovations in teaching were reported as the most prohibiting barriers to academic staff's use of electronic information resources in their teaching. Ahmad, (2013) identified limited time and a lack of effective information retrieval skills as factors affecting user access to electronic information.

Information search skills involve a series of activities and capabilities that an individual adopts in order to locate where information is, its types and formats, and ways of accessing the information. It also involves ways of retrieving, evaluating, and utilizing information. According to the Library Guide (2021), view information search skills as consisting of a series of activities aimed at finding solutions to problems. Nachiamas and Gilad (2016) 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.

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:

- 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 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 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 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 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. Stay informed about new search tools, technologies, and trends in academic libraries. Follow professional associations, attend conferences, and engage with online

communities to learn about the latest advancements and best practices. By mastering search skills, academic library users can unlock the vast wealth of information available to them and optimize their research outcomes. Academic librarians play a crucial role in assisting users in developing these skills and ensuring a seamless and fruitful information-seeking experience.

Granite School District (2022) identified the types of online information search skills as follows:

Ability to think before searching. Think about the topic or question you would like to search for. Think about how you would describe the topic, build a focused search to find relevant information on the topic, and choose 3 or 4 keywords.

Ability to keep it simple. Describe what you want in as few words as possible.

Ability to be specific. The more precise your search terms are, the more precise your search results will be. Avoid general or common words.

Imagine how the webpage you are hoping to find will be written. Use words that are likely to appear on that page. capitalize, ability to capitalize, Ability to punctuate and spell Don't really matter. In most cases, search engines will ignore capitalization and punctuation in a search and will generally auto-correct your spelling mistakes.

Ability to narrow search results there are several ways to help you narrow your search results to find exactly what you're looking for.

In addition to the above definition, Xie (2010) sees that search skills comprise a systematic set of different approaches that take into account both planned and situational elements. However, one could relate search skills to a plan that the information seeker employed to achieve his academic

research activities. Also, Mehrad & Rahimi (2019) and Sit (2013) 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. Sit 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:

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 platforms may also provide valuable insights within specific niches. Expanding your search toolkit and exploring alternative platforms can significantly enhance 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 continuously update 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 valuable asset in today's information-driven society. By employing effective search strategies, utilizing advanced techniques, and In today's information-driven world, 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, you can unlock the full potential of information retrieval. Enhancing your search skills will not only save you time but also empower you to make excellent result.

Recommendations

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.

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