



## PROFESSIONAL DIGITAL INFORMATION LITERACY SKILLS FOR RESEARCH SCHOLARS: A STUDY

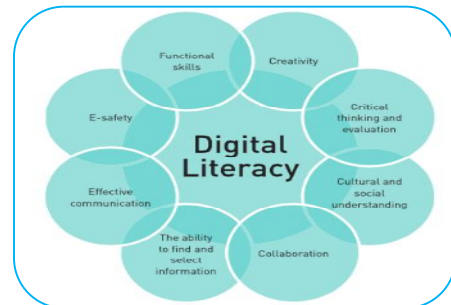
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### ABSTRACT :

In today's society, when technology is critical, the way we receive and use information has shifted dramatically. Research scholars play an important role in expanding knowledge, thus they must have good digital information literacy abilities to traverse the huge diversity of internet resources efficiently. Thus, the purpose of this paper is to investigate the significance of digital information literacy among research academics and describe how it can improve research productivity, cultivate critical thinking, promote academic integrity, and facilitate scholarly communication. This paper also investigates options for incorporating digital information literacy into research education programs to prepare research scholars for success in the digital age.



**KEY WORDS:** Digital information literacy, research scholars, research productivity, critical thinking, academic integrity, scholarly communication.

### INTRODUCTION:

The current era is characterized by remarkable technological advancements that have revolutionized how information is acquired and utilized. The digital revolution has brought about significant changes in the way knowledge is accessed, analyzed, and shared, presenting both opportunities and challenges for research scholars. In this digital age, having strong digital information literacy skills is essential and beneficial for scholars who aim to make notable contributions in their respective fields.

This paper explores the crucial significance of digital information literacy for research scholars. It sheds light on the multiple benefits of possessing this skill, such as boosting research productivity, fostering critical thinking abilities, maintaining academic integrity, and facilitating seamless scholarly communication. With the ever-increasing amount and variety of digital resources available, the ability to navigate this vast array of information effectively has become increasingly essential. We will explore the importance of digital information literacy in research in greater detail. Our goal is to emphasize the crucial role digital information literacy plays in shaping the future of research scholarship in the digital era.

### Defining Digital Information Literacy

Digital Information Literacy (DIL) refers to the ability to access, evaluate, and effectively use digital information in various formats, such as text, images, audio, and video, to fulfill information needs and achieve specific goals in an increasingly digital society (American Library Association, 2013).

Digital Information Literacy (DIL) encompasses a set of skills, attitudes, and knowledge that enable individuals to navigate, critically evaluate, create, and communicate information effectively in digital environments. It involves competencies such as understanding how information is produced, organized, and disseminated online, as well as the ability to assess the credibility, relevance, and ethical implications of digital sources (Hilton, 2019).

Digital Information Literacy (DIL) is a multifaceted concept encompassing the ability to locate, assess, interpret, and apply digital information effectively in various contexts. It involves understanding how to search for information efficiently using digital tools, critically evaluating the credibility and relevance of online sources, and ethically using and citing digital information in academic and professional settings (Lau & Cortez, 2019).

### Reviews of Literature Related to Digital Function Professionals Skills

With regarding digital literacy' there various authors and scholars, belonging to various streams have given their objective and subjective views on this issue. All these views are reviewed as follows:

**Ali, M.Y. and Richardson, J. (2018)**, the paper "Workplace information literacy skills: Library professionals' competency at university libraries in Karachi, Pakistan" by M.Y. Ali and J. Richardson offers a thorough investigation into the information literacy skills of library professionals in Karachi's university libraries. Through a robust survey methodology, the authors gather data on various aspects of information literacy, including information seeking behavior, evaluation, and management. The findings highlight both strengths and areas for improvement among library professionals in Karachi, providing valuable insights into their competency levels. The discussion section effectively contextualizes these findings within existing literature, contributing to the broader understanding of information literacy in library settings. Overall, the paper is well-written, logically structured, and supported by sound methodology, making it a valuable resource for researchers, practitioners, and policymakers interested in enhancing information literacy and library management practices in academic environments.

**ChinweAnunobi&et. al (2014)** conducted an analysis of competency issues in computer literacy among professionals and students across diverse fields. Exploratory research methods were employed to fulfil the study's objectives, aiming to delineate the components of information competency: knowledge, skill, and attitude development. The study addressed various challenges in information literacy and revealed that the interchangeable use of terms like computer literacy competency and information literacy skills lacks consistency. The findings underscored that Digital Information Literacy goes beyond mere skills—it entails knowledge acquisition, skill enhancement, and a shift in mindset and attitude towards understanding the when and why of information needs, as well as where to locate, evaluate, and ethically and legally utilize and manage it. This comprehensive approach has proven instrumental in fostering discourse among scholars, enriching the understanding of Digital Information Literacy skills and their implications for users.

**Giangrande, and et. al (2021)**"Faculty perceptions of information literacy skills: an investigation at the Florence University Campus of Social Sciences," presents a thorough exploration of faculty perspectives on students' information literacy competencies. Through a well-structured empirical study combining qualitative and quantitative methods, the authors offer valuable insights into the perceptions held by faculty members at the Florence University Campus of Social Sciences. The paper's empirical approach provides a solid foundation for understanding the nuances of faculty perceptions, potentially informing educational policies and practices aimed at improving information literacy instruction. While the study's focus on a specific academic institution adds contextual richness to the findings, a more extensive discussion on the implications for academia and information literacy

instruction, as well as exploration of factors influencing faculty perceptions, could enhance the depth of the analysis.

**Mulla, K.R. (2014)** emphasized the critical role of Digital Information Literacy (DIL) for both students and educators. Mulla underscores that addressing information literacy should be integrated across various stages of education. Students who possess information literacy skills demonstrate enhanced abilities to navigate information resources effectively. Recognizing the impossibility of mastering all knowledge within their respective fields, students benefit from acquiring data acquisition skills, which empower them to become self-directed lifelong learners. Simultaneously, educators and researchers are tasked with defining and fostering standards and competencies pertinent to data acquisition. They must innovate new strategies to engage learners effectively and assess the outcomes and impacts of such learning endeavors. In the Indian educational landscape, when educators encourage students to conduct their own research, students assume greater ownership of their learning journey and retain acquired knowledge more effectively. This approach fosters a sense of responsibility towards learning, nurturing dynamic thinkers capable of creativity, analysis, and efficiency, rather than mere recites of information.

**Patricia A. Carney & et. al (2016)** shed light on the tools necessary for evaluating behavior and social science competencies in medical education. The focus of their research is on the essential requirements for delivering high-quality healthcare. However, the study notes a significant gap: the lack of psychometrically validated measures to assess these competencies, which are crucial for effective healthcare provision. Specifically, these measures have not been effectively integrated into existing frameworks, such as those established by the Larian Committee on Medical Education. To address this gap, the authors conducted an extensive review utilizing databases including OVID, CINAHL, PubMed, ERIC, and R&D. Through psychometric and other validity/reliability testing methodologies, they aimed to identify tools that align with the objectives of their study. Their findings reveal that only 29 percent of the examined tools demonstrate strong evidence supporting their effectiveness in assessing communication skills, cultural competencies, empathy/compassion, and behavioral health counseling in medical education.

**Singh, Rajesh & Shalender Kumar (2018)** examine Digital Information Literacy for the researchers; who belonged to different streams. To get the desired objections of the study. The authors made use of ACRL with 50 questions of varied natures. The authors also discussed periodic research on Digital Information Literacy in terms of varied standards; laid by the professionals. The basis of various findings shows that the respondents gave different responses to their varied levels of satisfaction; given by different stratified samples taken for the study. The testing hypotheses show that there is an insignificant different difference between the competency of information competency levels of new researchers and the researchers, who registered for two or three years.

### **Assistances of Digital Literacy Skills among Research Scholars Enhancing Research Productivity**

Proficiency in digital information literacy is crucial for researchers to navigate the vast digital landscape effectively, saving valuable time and effort. With these skills, researchers can access various digital resources, including databases, online repositories, and academic journals, with ease. It also equips them to critically evaluate the credibility and significance of digital sources, ensuring that they depend on accurate and trustworthy information. Effective data management skills are also necessary, as researchers must securely store, organize, and share data. Proficiency in utilizing digital tools and technologies further boosts productivity by facilitating tasks such as data analysis, literature review, and manuscript preparation.

Digital platforms have revolutionized the way researchers collaborate and communicate with each other. They facilitate seamless interdisciplinary exchanges and peer feedback, making research more efficient. In today's fast-paced world, keeping updated with emerging trends is crucial, and digital information literacy empowers researchers to monitor new publications, conferences, and discussions in their fields effectively. It is equally important to understand ethical and legal considerations related

to digital research, ensuring that researchers maintain integrity and follow established standards. Therefore, digital information literacy has become an essential skill for modern researchers, equipping them with the knowledge and expertise to conduct high-quality research effectively in the digital age.

### **Development Critical Thinking**

Developing critical thinking is essential for empowering individuals to navigate an increasingly complex world. It involves the promotion of the ability to analyze, evaluate, and synthesize information to make informed decisions and judgments. One effective strategy is to encourage questioning, prompting students to ask about the source, credibility, and relevance of information they encounter. Additionally, teaching them to assess evidence critically, recognize biases, and distinguish between fact and opinion is crucial. By providing opportunities for problem-solving, collaborative learning, and reflection, educators can help students develop the skills needed to analyze complex issues and construct sound arguments. Ultimately, fostering critical thinking equips individuals with the tools to navigate uncertainty, challenge assumptions, and make well-informed decisions in various aspects of their lives.

### **Promoting Academic Integrity**

Digital information literacy is an essential skill for promoting academic integrity. It equips students with the necessary skills to critically evaluate information, distinguish between reliable and unreliable sources, and avoid using incorrect or biased information. Furthermore, it teaches students how to appropriately attribute sources, cite references, and avoid plagiarism, ensuring that they accurately credit the ideas and work of others.

Moreover, digital information literacy promotes the ethical use of information by educating students on copyright laws, fair use policies, and intellectual property rights. It also encourages the development of critical thinking and analysis skills, empowering students to engage with academic material thoughtfully and independently. By emphasizing the importance of original work and raising awareness of the consequences of academic dishonesty, digital information literacy contributes to a culture of integrity and responsibility in academia, ultimately supporting the academic success and ethical development of students.

### **Helping Scholarly Communication**

Digital literacy is crucial in advancing scholarly communication as it equips scholars with the necessary skills and tools to navigate the digital landscape effectively. One of the primary benefits of digital literacy is that it enhances access to information. Scholars who possess digital literacy skills are proficient in searching vast digital libraries, databases, and online repositories. This proficiency enables them to retrieve, critically evaluate, and utilize information from diverse digital sources, including scholarly journals and academic databases. Moreover, digital literacy equips scholars with the necessary research skills to conduct comprehensive and efficient investigations. They can utilize advanced search techniques, bibliographic management tools, and assess the credibility and reliability of online sources, thus contributing to the production of high-quality research outputs.

Digital platforms also facilitate collaboration and networking among scholars on a global scale. Through social media, academic networking sites, and online collaboration tools, scholars can connect with peers, share ideas, collaborate on research projects, and engage in interdisciplinary discourse, transcending geographical barriers.

Furthermore, digital literacy enables scholars to publish and disseminate their research findings effectively. They can leverage various digital platforms, including academic journals, institutional repositories, preprint servers, and personal websites, to communicate their research to diverse audiences. By embracing multimedia formats such as videos and interactive data visualizations, scholars can enhance the accessibility and impact of their research outputs, contributing to the advancement of open access and open science initiatives.

## Strategies for Integrating Digital Information Literacy into Research Education

Integrating digital information literacy into research education is essential in today's digital landscape where vast information is readily available. One effective strategy involves incorporating digital literacy skills into the curriculum across subjects and grade levels, ensuring a gradual learning path from foundational to advanced skills. Collaborative teaching between subject teachers, librarians, and technology specialists facilitates seamless integration of digital literacy skills. Librarians can offer expertise in finding and evaluating digital resources, while subject teachers contextualize these skills within their disciplines. Additionally, hands-on workshops or training sessions provide practical guidance on searching, evaluating, and utilizing digital information, covering essential tools like search engines, databases, and citation management systems, as well as critical evaluation of online sources.

## Challenges and Future Directions

Digital literacy is a crucial skill for research scholars, who must navigate a digital landscape fraught with challenges. One of the biggest obstacles they face is the overwhelming amount of information available, which makes it difficult to distinguish between credible sources and misinformation. Additionally, scholars often work with sensitive data and intellectual property, making it crucial for them to understand cyber security protocols to protect their digital privacy. The ever-expanding array of digital tools and platforms further adds to the complexity, as scholars must be able to select and use appropriate resources effectively. Effective digital communication is also critical, but it can lack the nuances of face-to-face interactions, making proficiency in written and oral communication in digital contexts essential. Furthermore, the digital divide exacerbates inequalities and hinders access to resources for scholars from marginalized communities. To overcome these challenges, concerted efforts are required to improve digital literacy among research scholars, ensuring their success in an increasingly digitalized academic landscape.

## CONCLUSION

In today's rapidly evolving digital landscape, the imperative for research scholars to possess robust digital information literacy skills cannot be overstated. These skills are not just advantageous; they are indispensable. With the exponential growth of digital resources and the proliferation of information channels, the ability to navigate, critically evaluate, and ethically utilize digital information has become a fundamental aspect of scholarly competence. Digital information literacy empowers scholars to sift through vast amounts of data, discerning between credible sources and misinformation. It cultivates a discerning eye, fostering critical thinking abilities that are essential for synthesizing complex information and making informed decisions. Moreover, in an era where the dissemination of knowledge is instantaneous and ubiquitous, digital information literacy ensures academic integrity by guiding scholars in proper source attribution and guarding against the perils of plagiarism. Beyond its role in individual scholarship, digital information literacy plays a pivotal role in scholarly communication. By equipping researchers with the skills to effectively navigate digital platforms and disseminate their findings, it facilitates the exchange of ideas, fosters collaboration, and accelerates the pace of discovery. In essence, it is the cornerstone upon which the edifice of modern academic discourse is built. Of course, integrating digital information literacy into research education programs is not without its challenges. The deluge of information confronting scholars can be overwhelming, and concerns regarding digital security loom large. However, these obstacles pale in comparison to the imperative of preparing scholars to thrive in the digital age. By embedding digital information literacy into the fabric of research education, institutions can empower scholars to navigate the complexities of the digital landscape with confidence and competence. In conclusion, digital information literacy is not merely a desirable skill; it is an essential competency for 21st-century scholars. As stewards of knowledge, researchers must embrace the digital tools at their disposal, leveraging them to push the boundaries of discovery and innovation. By investing in digital information literacy, we invest in the future of scholarship, ensuring that it remains vibrant, rigorous, and relevant in the digital age.

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