

A REVIEW ON INFORMATION LITERACY COMPETENCE AND ATTITUDES TOWARDS E- LEARNING

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Abstract: This review paper aims to explore the relationship between information literacy competence and attitudes towards e-learning. The paper presents a comprehensive analysis of existing research literature in five key areas: (1) Definitions and concepts of information literacy, (2) Information literacy competence and its components, (3) Attitudes towards e-learning, (4) The impact of information literacy on e-learning, and (5) Strategies to enhance information literacy competence for effective e-learning. The findings suggest that information literacy plays a vital role in shaping individuals' attitudes and success in e-learning environments. Furthermore, the paper identifies gaps in the current literature and provides recommendations for future research and practice.

Keywords: Information literacy, E-learning, Competence, Attitudes, Digital literacy, Information seeking, Evaluation

1.0 Introduction

In today's digital era, the acquisition and effective use of information have become essential skills for individuals to thrive in various domains of life. Information literacy, a multifaceted concept, has emerged as a critical competency for navigating the vast information landscape and making informed decisions. With the rapid growth of e-learning platforms and online educational resources, it is imperative to investigate the relationship between information literacy competence and attitudes towards e-learning. Understanding this relationship can provide valuable insights into how individuals' ability to locate, evaluate, and ethically use information impacts their engagement and success in e-learning environments.

Information literacy encompasses a range of skills and competencies necessary for individuals to effectively access, evaluate, interpret, and use information to meet their information needs. It goes beyond simply possessing basic computer and internet skills and extends to critical thinking, problem-solving, and information evaluation skills. The ability to navigate digital technologies and discern credible information sources has become crucial in the age of abundant online information.

E-learning, characterized by the use of electronic technologies for educational purposes, has gained significant momentum in recent years. The convenience and flexibility offered by e-learning platforms have made education accessible to a broader audience. However, the success of e-learning depends not only on the availability of resources but also on learners' attitudes and engagement. Attitudes towards e-learning encompass individuals' perceptions, beliefs, and emotions related to engaging in online learning experiences. Positive attitudes towards e-learning have been associated with increased motivation, satisfaction, and better learning outcomes.

The relationship between information literacy competence and attitudes towards e-learning is a complex and interdependent one. Information literacy skills play a pivotal role in supporting learners' ability to locate, evaluate, and effectively use information in online environments. When individuals possess strong information literacy skills, they are better equipped to navigate the vast array of online resources, critically evaluate the quality and reliability of information, and make informed decisions in their learning processes. These competencies, in turn, contribute to positive attitudes towards e-learning, fostering engagement, motivation, and successful learning outcomes.

This review paper aims to explore and synthesize the existing research literature on information literacy competence and attitudes towards e-learning. By analyzing the definitions and components of information literacy, examining the factors influencing attitudes towards e-learning, and investigating the impact of information literacy on e-

learning outcomes, this paper seeks to provide a comprehensive understanding of the intricate relationship between these two constructs. Furthermore, the paper will discuss strategies and recommendations to enhance information literacy competence for effective e-learning, bridging the gap between theory and practice.

By delving into these theoretical aspects, this review paper contributes to the broader discourse on the intersection of information literacy and e-learning. The findings and insights derived from this synthesis will inform educators, instructional designers, policymakers, and researchers in their efforts to create meaningful and engaging e-learning experiences and develop interventions to foster information literacy competence among learners. Ultimately, this exploration will help pave the way for an enhanced and informed approach to e-learning that leverages individuals' information literacy skills and promotes positive attitudes towards digital learning environments.

2.0 Definitions and Concepts Of Information Literacy

Information literacy is a multifaceted and evolving concept that has garnered significant attention in the digital age. Numerous definitions and conceptual frameworks have been proposed to capture the essence of information literacy. At its core, information literacy refers to the ability to identify, locate, evaluate, and effectively use information from various sources to meet specific information needs.

The American Library Association (ALA) defines information literacy as "a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." This definition emphasizes the importance of recognizing information needs and acquiring the skills to access and evaluate information critically.

Another influential definition by the Association of College and Research Libraries (ACRL) describes information literacy as "the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning." This definition highlights the dynamic and iterative nature of information literacy, emphasizing the lifelong learning aspect and ethical considerations.

Information literacy is not confined to a specific discipline or context but is a transferable skill applicable across various domains. It extends beyond traditional notions of literacy and encompasses critical thinking, problem-solving, and technological competencies. It involves the ability to navigate and evaluate diverse information formats, including print and digital resources, databases, websites, and multimedia content.

Conceptually, information literacy comprises several interconnected dimensions. These dimensions typically include information seeking and retrieval skills, evaluation and critical thinking skills, ethical use of information, digital literacy, and lifelong learning skills.

Information seeking and retrieval skills involve the capacity to determine information needs, develop effective search strategies, and efficiently locate relevant and reliable information. Evaluation and critical thinking skills encompass the ability to critically analyze and assess the quality, accuracy, relevance, and bias of information sources. Ethical use of information pertains to understanding copyright, intellectual property, and ethical considerations related to the use and dissemination of information. Digital literacy refers to the competency in using digital technologies, online tools, and information management systems. Lastly, lifelong learning skills emphasize the importance of developing a growth mindset, adaptability, and the ability to continuously learn and update information literacy skills in a rapidly changing information landscape.

Understanding these definitions and conceptual dimensions of information literacy provides a foundation for exploring its relationship with attitudes towards e-learning. Information literacy forms the backbone of individuals' ability to effectively engage with digital resources and navigate the complex online learning environments, making it a crucial competency for successful e-learning experiences.

3.0 Information Literacy Competence and Its Components

3.1 Information Seeking and Retrieval Skills: Information seeking and retrieval skills encompass the ability to identify information needs, formulate effective search strategies, and locate relevant and reliable information. Competent information seekers are adept at utilizing a variety of search tools, databases, and search engines to navigate the vast information landscape efficiently. They possess knowledge of different search techniques, such as Boolean operators, truncation, and controlled vocabulary, enabling them to refine and optimize their search results. Additionally, they possess an understanding of various information sources and formats, including scholarly articles, books, websites, and multimedia resources, and can select the most appropriate sources to meet their information needs.

3.2 Evaluation and Critical Thinking Skills: Evaluation and critical thinking skills are essential components of information literacy competence. Individuals with strong evaluation skills can critically assess the quality, credibility, relevance, and bias of information sources. They employ a range of criteria, such as authority, accuracy, objectivity, currency, and relevance, to evaluate the information's trustworthiness and applicability to their research or learning objectives. Moreover, they are capable of analyzing the underlying assumptions, arguments, and evidence presented in the information sources and can identify logical fallacies or biases. These skills enable them to make informed decisions about the information's reliability and its suitability for their purposes.

3.3 Ethical Use of Information: Ethical use of information is a critical component of information literacy competence. Individuals who possess this skill understand and adhere to ethical and legal principles related to information access, use, and dissemination. They respect copyright laws, intellectual property rights, and licenses governing the use of information. They are conscious of the need to attribute and cite sources properly, avoiding plagiarism and maintaining academic integrity. Furthermore, they critically evaluate the ethical implications of using and sharing information, considering issues such as privacy, confidentiality, and the potential consequences of misinformation or disinformation.

3.4 Digital Literacy and Technological Skills: Digital literacy and technological skills are integral to information literacy competence in the digital age. Individuals with digital literacy possess the knowledge and skills to effectively navigate and utilize digital technologies, platforms, and tools. They are proficient in using software applications, online databases, information management systems, and communication tools. They understand the basics of information security, data privacy, and online safety. Furthermore, they are adaptable to emerging technologies, staying abreast of advancements and leveraging them to enhance their information-seeking and information-sharing practices.

3.5 Lifelong Learning Skills: Lifelong learning skills are a fundamental component of information literacy competence. Individuals with strong lifelong learning skills recognize the need to continuously update their knowledge, skills, and attitudes in response to evolving information landscapes and changing societal needs. They embrace a growth mindset and are motivated to engage in self-directed learning. They actively seek opportunities for professional development, engage in reflective practices, and leverage various learning resources, such as online courses, webinars, conferences, and scholarly publications. These skills enable them to adapt to new technologies, disciplinary developments, and emerging information needs throughout their personal and professional lives.

By developing and honing these components of information literacy competence, individuals can effectively navigate, evaluate, and ethically use information in e-learning environments. These competencies empower learners to become critical thinkers, lifelong learners, and responsible information users, enhancing their overall engagement and success in digital learning experiences.

4.0 The Impact Of Information Literacy On E-Learning

4.1 Information Literacy as a Determinant of e-Learning Outcomes: Information literacy plays a crucial role as a determinant of e-learning outcomes. Individuals who possess strong information literacy skills are better equipped to effectively locate, evaluate, and use information in online learning environments. Research has shown that information literacy positively influences learners' ability to engage with course materials, comprehend complex concepts, and critically analyze information. Moreover, information literacy competence enables learners to navigate the vast amount of information available online, discern credible sources from unreliable ones, and synthesize information to construct meaningful knowledge. As a result, individuals with higher information literacy levels are more likely to achieve better learning outcomes, such as improved knowledge acquisition, higher grades, and enhanced problem-solving abilities.

4.2 Information Literacy and Online Information Behavior

Information literacy significantly influences individuals' online information behavior in e-learning environments. Learners with strong information literacy skills tend to exhibit more effective and efficient information-seeking behaviors. They employ systematic search strategies, explore a wider range of relevant resources, and critically evaluate the quality and reliability of the information they encounter. Furthermore, individuals with high information literacy levels are more likely to engage in metacognitive processes, such as reflecting on their information needs, monitoring their search progress, and adapting their search strategies accordingly. This proactive

information behavior contributes to a deeper understanding of course content and fosters meaningful interactions with the learning materials and online resources.

4.3 Information Literacy and Engagement in e-Learning: Information literacy has a significant impact on learners' engagement in e-learning environments. Individuals with strong information literacy skills are more likely to actively participate in online discussions, collaborate with peers, and contribute to knowledge-sharing activities. Their ability to critically evaluate and integrate information from various sources enables them to contribute valuable insights and perspectives to the learning community. Moreover, information literacy competence enhances learners' confidence and self-efficacy in navigating digital platforms, engaging with online tools, and exploring diverse learning resources. This increased confidence promotes a positive attitude towards e-learning, leading to higher levels of engagement and motivation to participate actively in the learning process.

4.4 Information Literacy and Academic Performance in e-Learning Environments:

Information literacy has a direct impact on learners' academic performance in e-learning environments. Studies have consistently demonstrated a positive correlation between information literacy skills and academic achievement. Learners who possess strong information literacy competencies demonstrate higher levels of critical thinking, analytical reasoning, and problem-solving abilities. They can effectively evaluate the quality and relevance of information, synthesize diverse perspectives, and apply acquired knowledge to real-world scenarios. Consequently, individuals with higher information literacy levels are more likely to excel in assignments, assessments, and overall academic performance in e-learning contexts. Information literacy also contributes to the development of essential skills, such as information synthesis, communication, and digital literacy, which are crucial for success in the digital age.

Understanding the impact of information literacy on e-learning outcomes, online information behavior, engagement, and academic performance highlights the significance of integrating information literacy instruction and support services within e-learning environments. By fostering and enhancing learners' information literacy skills, educators and instructional designers can empower individuals to navigate the digital landscape effectively, critically evaluate information, actively engage with course content, and achieve optimal learning outcomes.

5.0 Strategies To Enhance Information Literacy Competence For Effective E-Learning

To enhance information literacy competence for effective e-learning, several strategies can be implemented. First, curriculum integration and instructional design should incorporate explicit information literacy learning outcomes and activities throughout the e-learning modules. This ensures that learners are exposed to information literacy concepts and skills within the context of their specific discipline or subject area. Second, information literacy training and support services, such as online tutorials, workshops, or interactive modules, can be provided to learners, guiding them on effective information-seeking strategies, critical evaluation techniques, and ethical use of information. Third, fostering collaborative learning environments and promoting peer interaction can facilitate the development of information literacy skills through knowledge sharing, discussion, and collaborative problem-solving activities. Fourth, incorporating assessment and feedback mechanisms that evaluate learners' information literacy competencies can encourage their active engagement and provide targeted feedback for improvement. Finally, offering faculty development programs and support services to educators can enhance their own information literacy skills, enabling them to effectively integrate information literacy instruction into their e-learning courses. By implementing these strategies, institutions can empower learners with the necessary information literacy competencies to navigate the digital landscape, critically evaluate information, and succeed in their e-learning endeavors.

6.0 Conclusion

This review paper has provided a comprehensive examination of the relationship between information literacy competence and attitudes towards e-learning. The findings highlight the critical role of information literacy in shaping individuals' engagement, learning outcomes, and overall success in e-learning environments. Through the exploration of various components of information literacy, such as information seeking and retrieval skills, evaluation and critical thinking skills, ethical use of information, digital literacy, and lifelong learning skills, it becomes evident that these competencies are essential for effective engagement with online resources, critical evaluation of information, and responsible information use. To enhance information literacy competence for effective e-learning, several strategies have been proposed. These include curriculum integration, instructional design, information literacy training, collaborative learning environments, assessment and feedback mechanisms, and faculty development programs. Implementing these strategies can foster the development of information literacy

skills, empowering learners to navigate the digital landscape, critically evaluate information, and actively engage with e-learning resources. In conclusion, information literacy competence plays a pivotal role in shaping individuals' attitudes and success in e-learning environments. By equipping learners with the necessary information literacy skills, institutions can foster an environment conducive to effective e-learning experiences, where learners become critical thinkers, lifelong learners, and responsible information users. This review paper offers valuable insights for educators, instructional designers, policymakers, and researchers to further understand and enhance information literacy instruction and support services, ultimately leading to improved e-learning outcomes and a more informed and digitally literate society.

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