

DIGITAL INFORMATION LITERACY SKILLS IN SOCIAL SCIENCE ACADEMIC CONTEXTS: A COMPREHENSIVE REVIEW

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Abstract: The academic world demands digital information literacy (DIL) as a fundamental ability because students must effectively use and evaluate digital material in social sciences. This article examines the relationship between DIL competencies and social science fields and scholarly achievement by reviewing literature in a systematic manner. This paper reviews conceptual models and data collection methods while exploring DIL research outcomes within social science disciplines to assess academic challenges and institutional backing and academic performance levels. The research paper offers curriculum integration advice for DIL into social science education along with methods for future exploration.

Keywords: Digital Information, Literacy Skills, Social Science, Academic

1.0 Introduction

Importance of Competitive Differential: The newfound technological era of accessing, processing, as well as delivering information has significantly reshaped learning, which is why DLI is indispensable when it comes to achieving academic excellence. DIL is particularly important in social sciences that include sociology, psychology, anthropology, as well as political science because it helps to interpret large data collected from various sources. They include critical thinking, research, analysis, and values, all of which are relevant to the DIL competencies. These factors include the disruptions through information overload, possibility of conveying the wrong information, and sometimes the difference in IT literacy when it comes to integrating DIL into social science education. This paper aims at examining the prospect of DIL in social science academic context, including the underlying theory, practice and its significance in teaching and learning process.

2.0 Conceptual Framework of Digital Information Literacy

This mainly includes competencies such as finding, assessing, using ethically, and communicating digital information. According to the Association of College and Research Libraries (ACRL), there are six frames of information literacy for higher education as espoused in the Framework for Information Literacy for Higher Education, 2016. These are particularly important in human and social sciences since students study various points of view and interact with diffused information sources.

In social sciences, DIL is positioned within critical literacy models, stressing the ways of questioning the social power relations in information processes. Critics such as the feminism and post colonialist researchers acknowledge LACK of inclusion of social justice and equity by DIL's proposed suggestions, similar to social sciences' objective.

2.1 Definitions

- Shapiro and Hughes (1996) proposed a multidimensional framework, including tool literacy, resource literacy, social-structural literacy, research literacy, and critical literacy, relevant to social sciences' societal focus.
- Koltay (2011) argues for a "media and information literacy" approach, combining DIL with media literacy to address digital content's social implications.
- Lloyd (2017) introduces "information literacy as a sociocultural practice," emphasizing community and cultural contexts in social science research.

3.0 Review of Literature

Tibor Koltay's (2011) article, "The media and information literacy" provides a clear understanding of how the two concepts are related and why are they important in the current world. Koltay identifies how both assist people to analyze and utilize information in their thinking, and affirms that these should be taught jointly. The paper presents reasonable information that can be helpful to teachers and librarians although it lacks real-life instances or data to support the concepts proposed. Yet, it might provide more information regarding how the use of these skills is approached. Nevertheless, it can be suggested that this book has its advantages for studying these matters; therefore, I give it 4 out of 5 points.

Gross and Latham (2012) also demonstrated an interesting study done with the undergraduate students with the purpose of investigating their perceptions regarding the information literacy and the results obtained have shown a huge disparity between the students' perception about them as being highly skilled in information literacy and their actual ability to do a particular task in this aspect. The authors of the paper administer surveys and conduct interviews to ascertain that students overestimate their abilities to navigate, assess, and apply information; they are unaware of their shortcomings. Proscribing these perceptions, the study reveals that these perceptions were influenced by the academic context, prior library instruction, and self-efficacy; this overwhelms the argument that student with low skills may seek help. While this paper offers good knowledge on the existing gap between perception and reality to information literacy, the study has limitations of the institutional level of analysis limiting generalization. Altogether, this situation underlines the importance of library instruction sessions and integration of information literacy into learning programs to meet these needs.

Jacobson and Mackey (2013) present a quite plausible model, one could hardly disagree with their viewpoint regarding Metaliteracy as the extension of information literacy in the growing world of digital and participatory content. According to the authors, metaliteracy incorporates more than just the basic skills of literacy in terms of critical thinking, collaborative, and ethical use and production of information on social sites such as social media. Since the theories of media, visual, and cyber literacy are integrated in the model, the learner is proactive, conscious and actively participates in the information processes. Compared with many types of the current papers of this field the paper has a strong theoretical background, and the ideas of an interdisciplinary approach are relatively innovative; however, it offers fewer results of empirical refinements or application examples, which could illustrate how successfully the model has been applied to the educational environment. Although they are published in an earlier academic community, it provides a progressive view that is still valuable in the transformative approach to information literacy.

Secker and Coonan (2013) explain an innovative strategy to practice information literacy through implementation the ANCIL (A New Curriculum for Information Literacy). It is an advocacy for a shift from traditional subject-based course approaches whereby information literacy is taught and used in an integrated, learner-centered way in an effort to enable teaching for thinking and learning for a lifetime. In the light of challenges that characterize the learning process in the faculty, librarians and academics recognize the importance of information literacy as the key strategy for integrating it across disciplines as per modern learning demands. A minor weakness of the paper is its focus on applying the framework to and generating intervention strategies from a UK higher education context. Nevertheless, it can be considered as a ground breaking study that contributed to the shifts in understanding of information literacy as one of the key academic skills marker.

Pinto et al., (2016), authors have considerable attention to the importance of information literacy in humanities and social sciences education for research. The authors touch upon the issues enclosed in the peculiarities of the given disciplines, for instance, the differences in sources and method approaches, and offer an outline of information literacy implementation into curriculum. Using both questionnaires and case studies, they describe deficiencies within students' competencies as well as educate about appropriate instructional approaches. Although the work specifically explores specific disciplines, it is not very generalizable to other contexts, and further examination of the trends in the digital literacy could have enriched it. In general, it can be stated that it is quite useful for educators and especially for librarians who are interested in improving critical reading skills.

Julien et al., (2018) the focus is on the topic of IL within sociology curriculum and the importance of it in developing students' research abilities. This paper discusses IL training practices in several institutions and reveals the strength which includes scaffolder assignment as well as the Librarian-faculty and the weakness which includes the issue of Integrated Librarianship implementation and students' preparedness. The authors provide evidence from surveys and case studies based on the method showing that students' critical thinking improves when a specific IL intervention is applied to help students develop higher order thinking skills that would help them select appropriate sources to complete evidence-based arguments, however, the authors pointed at a lack of standardisation of the available IL frameworks. This carefully researched paper contains a set of suggestions relevant for the educators and librarians striving to build up IL in the social sciences, although the author concentrates on sociology.

Arch and Gilman (2019) detail the flow of information literacy faced by first generation college students and the various barriers that affect first generation students which include minimal familiarization with academic libraries research environment as compared with other students. The authors then employ survey and focus group questionnaires with samples from a large public university to obtain responses from first-generation college students, many of whom they find lack efficient bibliographic reading and problematic use of library databases but also high levels of perseverance to learn. The paper also identifies the elements of teaching and library outreach/education to be directed by this research as likely to close the gaps because it calls for future research into sustainable intervention strategies. Due to the preponderance of students at one institution, however, the study's external validity is somewhat restricted, and therefore the study is a helpful but institution-specific addition to a body of literature that examines academic librarians and student success.

Kim and Yang (2019) examines the correlation of information literacy skills and the quality of the undergraduate theses so that insights into how such abilities affect performance can be acquired. The authors survey students and analyze their thesis and establish that there is a significant positive linear relationship between students' information literacy skills involving source evaluation as well as citation and reference and higher thesis scores. The study brings out the importance of library instruction in the improvement of research skills and acknowledge the weaknesses in the study which includes the fact that it was conducted on a single institution and the response given was self-administered. Thus, it makes a significant contribution to the library and education research by presenting a rationale for effective implementation of informational competence initiatives in learning institutions to enhance research performance.

Breakstone et al.(2020),writing in *Educational Researcher* discuss on students' Civic online reasoning with the authors arguing that today's middle and high school students lack adequate ways of evaluating information properly online (Breakstone et al., 2020). The authors show through a number of diagnostic studies that students are very weak in being able to evaluate the accuracy of various sources of information especially when using the internet. Overall, the study makes it rather clear why there should be a precise educational emphasis on improving digital literacy especially when it comes to issues of citizen's complexity. Despite this, the work would have been more valuable for educators and policymakers if more specific recommendations with reference to teaching practices have also been included , thus making the call for this study slightly more prescriptive than descriptive.

Amy Folk (2021), strongly advocates for using peer-to-peer approach in the teaching of information literacy particularly among the undergraduate students. The described Folk examine student-led sessions to indicate their effectiveness in the teaching and learning processes, as well as embracing the principles of student participation as opposed to the more authoritative nature of the librarian-led sessions. Analyzing the qualitative data collected from the participants and the facilitators of the workshop, the authors show that the concepts of peer-shadowing do not

only enhance students' abilities in using the library as a research tool, but also increase students' self-confidence and interest into the library. However, it hastens to point out the course weaknesses, for example, origins of an adequate training for peer facilitators and quality problems that may crop up in a given workshop. Although the study is situational, Folk's study is illuminating for the academic libraries to implement fresh approaches of information literacy instruction with the students.

Lee et al. (2022), present understanding on how the SEM 2: Scholarship as Conversation model will improve information literacy approaches in social science educations. The authors affirm that the proposed view of scholarship as a conversation enhances critical disposition as well as participation of students within the academic community. From the analysis of interpersonal and small-group interventions in the classroom, this study shows how dialogic approaches can help in teaching students how to engage in a critical evaluation of sources to develop arguments. Because the paper is based on social sciences students, its application to a broader sphere is somewhat limited, yet the guidelines offered by the author regarding the potential use of conversational approach in the library sessions is helpful for educators. It can be stated that owing to their clear methodology and compliance with the existing standards of information literacy, it can be regarded as a solid research; however, more extensive research could support the authors' conclusions.

Martinez and Torres's (2023) understand and analyse how misinformation influences and distorts argumentation practices within political science as an educator and political science as a discipline. Abstract: The authors focus on the process of how fake stories enter research and social discussions, and the use of mental heuristics and information technology in this process. Political science educators believe that students should learn how to resist false information, and they suggested such techniques as source analysis and an approach based on debate. Despite the paper's strengths of connecting theory with practice and proposing interventions, the lack experience or research to support the interventions may be considered a weakness of the paper. Nonetheless, it also provides a useful heuristic for researchers and practitioners who are interested in addressing the issue of misinformation and political argumentation.

4.0 Methodology

This paper aims at identifying the status of digital information literacy skills among users in social science academic environment, using qualitative method of systematic literature review. These include: This paper aims at answering the following four research questions: what the main elements of these skills are, how these skills are incorporated into curricula and how they are evaluated and the current state of research and literature once. The keywords used included "digital information literacy" OR "information literacy" AND "social sciences" AND "skills"; and sources included peer reviewed articles, conference papers, and book chapters that were published between the years 2010 and 2023 were sourced from Scopus, the Web of Science, ERIC, JSTOR, and Google Scholar.

5.0 Findings

5.1 Key findings include:

- i. Development of the Concept: Whereas, initially DIL has been defined in terms of technical skills, over the years, it has embraced critical, ethical and sociocultural dimensions. According to the social scientists, there is a need to focus on how bias works in the digital sphere.
- ii. This is because the major challenges students face includes: information over-load; misinformation; digitive divides; and, more so, students' weak ability as far as the evaluation of sources is concerned. There are invariably problems facing social science students whereby social media and open-access platforms are concerned.
- iii. Even though libraries and faculty engagements are important, there is lack of consistency in their implementation as well as inadequate resources. Some forms of more engaging methods present their opportunities: alternative approaches and peer-facilitated presentations.

- iv. Teaching Methodologies are: DIL – Integrating the course into the lesson plan, active student participation, and scaffolding the lesson. Specialization measures of integration facilitate the application of DIL to correlate with the social science research practices.
- v. The aimed beneficiaries include: Academic impact: DIL improve the quality of resources, learnt thinking, and academic achievement but has limitation on student's equal opportunity to train.

6.0 Discussion

The literature review extended in this paper highlights how DIL can be critical in the process and product of social science education. The teachers also prefer sociocultural and critical approaches, which correspond to the complexity of digital environments that ask students to critically analyze sources of information. Issues such as access to information, and general inequality, demand specific measures that would help children in need, especially learners.

Libraries are essential in such a process but that is if faculty involvement is being considered as well. Research has shown that integrating good models such as; collaborative and game-based approach as well as peer learning improves the integration of DIL. The effect of DIL on the academic performance raises it to the level of a competency education standard while finding ways to make it more accessible for all.

New technologies that are increasingly being adopted in organizations such as Artificial Intelligence in information systems may pose new challenges in DIL that would need to Ascilla et al., (2014). The approach of social sciences to embrace social justice is a good chance to apply DIL with ethical and cultural engagement, which will be useful for students both in academic and social life.

7.0 Recommendations

- **Enhanced Practical Application:** Use DIL specifically in selected social science courses with relevant content-related instances (example in political science: policy analysis; in sociology: micro-blogging).
- Support faculty-librarian collaboration to work together in the planning of DIL activities, encouraged through professional development.
- **Digital Equity:** Provide training for minorities and organizations that can help support these populations for reducing these gaps.
- **Application:** Trying to be more innovative, it would be wise to incorporate rewards in the form of point systems and rewards, problem-solving approach and open-source toolkits in the process of educating students.
- **Evaluation:** The evaluation can be done through creating faculty-developed rubrics that fit within the guidelines of the ACRL Framework.

Further Research: Perform analysis on the long-term effects of DIL on the career front and on using AI in the Development of Innovative Learning.

8.0 Conclusion

It is crucial that students of social sciences engage in the use and management of digital information with the view of effectively participating in the scholarly works of the world. These sources further elaborate on what DIL is and remain constant hence focus among others: misinformation and inequalities. People-centered strategies shall enhance relations and co-operation because these strategies will foster production and independent selection of information for and by students. In light of these changes, it is clear that emerging research as well as education advancements will continue being relevant in the social science world assisting DIL.

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