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Editors: S. Špiranec, S. Kurbanoğlu, D. Kos, J. Boustany, F. Franke

Abstracts

The Ninth European Conference on Information Literacy (ECIL)

September 22nd-25th, 2025, Bamberg, Germany

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Foreword

Dear participants of ECIL 2025, dear colleagues and friends,

It is our pleasure to welcome you to the Ninth European Conference on Information Literacy (ECIL), taking place in the historic city of Bamberg, Germany. We are delighted to present this Book of Abstracts, which reflects the remarkable breadth and depth of research, practice, and critical reflection that continue to define our community.

The theme of this year's conference, "Information Literacy in an AI-driven World," could hardly be more timely. The rapid development and adoption of generative artificial intelligence have reshaped the information landscape, introducing new opportunities and new challenges. At the heart of this transformation lie questions of access, ethics, academic integrity, political and economic influence, and, above all, our shared responsibility to cultivate the literacies necessary for navigating an AI-shaped future.

We are honored to feature distinguished keynote speakers who address these issues from complementary perspectives. Andrew Cox (University of Sheffield, UK) highlights the critical role of information professionals in promoting AI literacy, with attention to the societal and ethical implications of algorithmic systems. Ute Schmid (University of Bamberg, Germany) demonstrates why a basic understanding of AI methods is indispensable for the safe, efficient, and reflective use of AI tools. David White (University of the Arts London, UK) explores how personal agency must remain central to what it means to be literate in an era where provenance and authorship of information are increasingly opaque. Together, their contributions set the stage for a rich and challenging discussion.

The scope of work presented this year is impressive. From health and legal education to libraries, data management, and pedagogy, the abstracts gathered here show the diverse ways in which scholars and practitioners are interrogating the intersections of AI, information, and literacy. They range from empirical studies on generative AI in higher education, to workshops on ethical AI use in research, to explorations of critical thinking, inclusivity, and sustainability. Altogether, they underscore the vitality of our field and its ability to adapt to rapidly changing contexts.

This year, we received 223 submissions, of which 147 were accepted for presentation and are included in these proceedings. The program encompasses 72 papers and five doctoral forum contributions, 30 best practices, 14 workshops, 16 posters, 6 PechaKucha sessions, and four panels.

None of this would have been possible without the commitment and dedication of our colleagues on the Standing, Programme, and Local Organizing Committees, the dedicated work of our reviewers, and language editors, and of course the enthusiastic participation of our international community. ECIL thrives because of the spirit of collaboration, generosity, and critical inquiry that you bring to it.

On behalf of the Organizing Committee, we warmly thank you for your contributions, and we look forward to the conversations, debates, and new friendships that ECIL 2025 will surely inspire.

We wish you an engaging, thought-provoking, and memorable conference experience in Bamberg.

With collegial regards,

On behalf of the Organizing Committee

Denis Kos and Sonja Špiranec

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The Dimensions of AI Literacy

Andrew Cox
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Information professionals have a vital role today to promote algorithmic and AI literacy. Given the pervasive impact of AI on our information culture and the weaknesses of AI governance in many parts of the world, it is essential for everyone as citizens and workers to have some level of AI literacy. This is much more than just about teaching prompt engineering or even awareness of the inaccuracies inherent in AI as a source of information. It is also about promoting reflection about the impacts of AI on experiences, and awareness of wider, often hidden ethical and societal impacts. However, there are many aspects of the task of promoting AI literacy that are challenging: such as AI's complex and changing nature, commercial interests in opacity and the difficulty of designing a message that recognises AI's benefits and attractions, while giving appropriate warnings.

Keywords: *AI literacy, information professionals, ethical implications of AI*

AI Literacy – Why Basic Understanding of AI Methods is Relevant for Save, Efficient, and Reflected Use of AI-Tools

Ute Schmid
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With the growing number of AI-Tools in many domains, AI literacy is essential for their save, efficient and reflected use. Often, AI literacy has a focus on the usage of tools. In my talk, I will argue why a theoretical understanding of basic principles of AI methods is an important prerequisite for tool use as well as for critical reflections of effects of AI technologies on society and environment. The major challenge in communicating AI concepts to laypeople is to convey technically correct information that is at the same time didactically tailored to the target group. In the talk, I will introduce basic AI concepts together with illustrations how these concepts can be taught. Furthermore, I will point out typical pitfalls for misjudgments that are based on an inadmissible anthropomorphization of AI.

Keywords: *AI literacy, explainable AI, anthropomorphism in AI*

What is Even Real Anymore? – The Case for Personal Agency Being at the Forefront of What it Means to be Literate

David White
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In the context of information seeking AI can be thought of as an amplification of the 'Wikipedia problem' which caused academic distress a few years ago. When a believable answer requires no effort (or thinking) to find, what has been learned? The information literacy response to this is to teach the mechanism by which the answer was generated, to critically deconstruct the validity of the answer. However, we are now entering an AI era where most answers have no discernible provenance. There is very little 'tracking back' with AI because it is based on probability and not on cross-checking with reality. In this talk I will suggest that we need to amplify the importance of personal agency in our concept of literacy. Fundamentally we should be asking students and staff to seriously consider what they are cognitively offloading and what they must hold onto to retain their agency as citizens, students and researchers. I will explore frameworks such as the 'AI Learning Gambit' and approaches to teaching which highlight the importance of personal agency in the AI era.

Keywords: *personal agency, AI literacy, critical thinking*

INVITED SPEECHES

Rethinking Space and Services – Academic Libraries as Learning Hubs

Christine Gläser
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This talk explores the transformation of academic libraries to dynamic learning environments. With the shift from Teaching Libraries to Learning Libraries, higher education institutions are reimagining library spaces to support hybrid learning models, digital and information literacy, and self-directed learning. This talk will examine key trends in library-based competence development, the integration of digital and physical learning environments, and the evolving role of academic libraries as service-oriented learning hubs.

Key discussion points:

- The impact of digitalization on academic libraries and their role in higher education.
- The role of libraries in fostering digital and information literacy skills.
- Strategies for designing learning spaces that integrate physical and digital learning needs.
- Case studies of successful library transformations in higher education.

Keywords: *learning spaces, digital literacy, information literacy, academic libraries*

The Information Literacy Landscape in Germany – Challenges, Best Practices, and Trends

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Germany's information literacy (IL) landscape across academic and public libraries is characterized by a variety of stakeholders collaborating under a shared commitment to foster critical, reflective, and ethical information practices.

In 2001, two studies significantly impacted education in Germany: PISA revealed weaknesses in German students' performance while the SteFi study (Klatt, 2021) showed knowledge gaps in students' electronic information use. This led to a rethinking of educational policy and a reorientation of library training. The subsequent developments have faced challenges: Due to the German federal structure, many initiatives started quickly and primarily locally before bundling their activities into regional networks. Integration into curricula and degree courses was negotiated in various ways and through many individual efforts. The use of standards often remained limited. In 2012, the *Gemeinsame Kommission Informationskompetenz von dbv und VDB* brought libraries' IL activities together at a federal level. In 2016, it adopted the Referenzrahmen Informationskompetenz (DBV, 2016) and in 2021, it translated the Framework for Information Literacy. While the initial focus on IL in library education was modest, it has now become part of the curriculum in all library and information science degree programs. Fundamental research remains marginal, with publications limited to field reports and handbooks. Even though IL and the teaching library is considered a fundamental task in German libraries today, a study conducted in 2023 revealed a pronounced heterogeneity in the governance structures of IL instruction in library organizations (Franke, Knab & Werr 2024).

Despite challenges, the community developed best practices, including centralized IL Statistics on IL training in German libraries. Librarians exchange information on issues and trends annually at the Information Literacy Round Table. Lighthouse projects are recognized through the annual Best Practice Competition. Current global issues and trends such as fake news and fake science, digital and AI literacy, data protection, new teaching formats and gamification are also incorporated into the training offered by German libraries. In the future, exchange within and beyond the IL community and cooperation between public and academic libraries will play a major role in establishing libraries as partners of all educational institutions.

Our contribution, based on selected papers, positions, IL statistics, and illustrative examples across German libraries provides a meta-perspective of how IL is organized and coordinated in Germany, highlighting key topics, challenges and trends, best practices, and future directions. The aim is to show how the diversity of activities in all German federal states are an opportunity to open up new activities and effectively anchor IL in the digital age.

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Keywords: *Germany, information literacy landscape, cooperation*

PAPERS

Data Literacy in Focus: Using the Learning Objective Matrix to teach Research Data Management

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Learning objectives must accurately describe the learning gain to ensure skills transfer. For this purpose, the "Learning Objective Matrix (LOM) for the teaching of Research Data Management (RDM)" was developed. The matrix formulates learning topics and objectives for RDM-relevant skills for four different target groups: undergraduates, graduates, early career researchers, and Data Stewards.

Driven by a spirit of collaboration, the LOM has continually advanced since its 2022 inception (Petersen et al., 2023). An extensive 2024 revision, spurred by an RDM community meeting involving the German National Research Data Infrastructure (NFDI), exemplifies the LOM's dedication to community-led enhancement.

The LOM has benefited enormously from the collaboration between different interest groups and stakeholders. The reception in the community is also reflected in the number of publications referring to the LOM both in the context of academic libraries like Grunwald-Eckhardt et al. (2022), but also in the broader academic context (Slowig et al., 2023). Besides, the LOM has been decisive for the development of subject-specific RDM-training programs e. g. for Engineering NFDI4ING (Hastik, Canan et al., 2023) or for History (Döring et al., 2024).

For version 3, upcoming in March 2025, in addition to new and revised content and learning objectives, accompanying material has been developed including application scenarios, a how-to-use-guide, and a glossary which is presented with SKOS labeling to enable controlled, structured and machine-readable access for the semantic web.

The presentation will highlight the LOM's application in planning RDM training for academic libraries, specifically addressing stakeholder advantages and the targeting of learning objectives. The LOM thrives on the further development of RDM competence with the participation of academic libraries.

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Keywords: *data literacy, research data management, training, didactics*

Exploring the Intersection of AI and Data Literacy among Graduate Researchers: A Mixed Methods Study

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Background & Objective

In the rapidly evolving landscape of academia, where data-driven research and artificial intelligence (AI) applications are becoming increasingly prevalent, the intersection of AI and data literacy among graduate researchers is a complex and underexplored domain. Despite its significance, existing studies suggest that artificial intelligence (AI) literacy and data literacy (DL) have not been explicitly examined in the literature (Koltay, 2024; Schüller et al., 2023). Also, less is known about the graduate research students' current state of AI and data literacy competencies. Therefore, there is a pressing need to assess the current state of AI literacy and data literacy (in terms of awareness, knowledge, skills, and attitude), and what are the data-related challenges faced by them. The current study addresses this gap. In the era of data-driven research and artificial intelligence advancements, graduate researchers play a crucial role in shaping the future of academic inquiry and innovation. Understanding and effectively utilizing both AI and data are essential skills for graduate researchers. This research proposal aims to investigate the intersection of AI literacy and data literacy among graduate researchers.

Methodology

Guided by the nature of the research problem the current study will employ mixed-methods techniques to attain research objectives. The study will use a quantitative survey technique to investigate the current state of AI & data literacy among graduate researchers (university students), as well as to identify collaborations and dependencies between AI literacy and data literacy in the research process. The study will use statistical tools to identify quantitative data by measuring AI literacy and data literacy levels among graduate researchers, and furthermore, identify correlations with research quality, innovation, and interdisciplinary collaboration. Furthermore, qualitative interviews will be conducted to undercover the data-related challenges faced by graduate researchers and to propose recommendations for integrated AI and data literacy education tailored to the needs of graduate researchers. The qualitative interview data will be analysed through thematic analysis.

Expected Outcomes

The expected results of the study will provide useful insights into the current state of AI and data literacy competencies of graduate researchers and will identify their existing knowledge and skills-related gaps and challenges. The study will provide recommendations to improve the quality of data literacy education. The findings hold significant implications for academia. By bridging the gap between AI and data literacy, this study will contribute to enhance research quality, foster interdisciplinary collaboration, and inform graduate education.

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Keywords: *artificial intelligence literacy, data literacy, graduate researchers*

Validating Design Principles for Teaching Information Problem Solving in Higher Education: A Library Professionals' Perspective

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Introduction

In the digital age, the ability to effectively navigate and use online information, known as Information Problem Solving (IPS) competence, is crucial for academic success (e.g., Rowe et al., 2021) and addressing complex societal issues. However, higher education students often lack the necessary skills for effective information retrieval and analysis, leading to reliance on inaccurate or biased sources (e.g., Rosman et al., 2015; Zhou & Lam, 2019). While previous research has identified various instructional approaches, there is no widely accepted framework for designing IPS learning environments in higher education. This study aims to validate a set of seven evidence-based design principles for teaching IPS, derived from a systematic literature review, through the lens of library professionals.

Methods

Iemployed a mixed-methods approach using the Technology Acceptance Model (TAM) framework (Davis, 1989), combining quantitative surveys and focus group discussions with 63 information specialists from Dutch research libraries and higher education institutions. The design principles under validation encompassed: (1) Learning Task, (2) Instruction, (3) Learning Activities, (4) Modeling, (5) Support, (6) Practice, and (7) Feedback. Participants evaluated these principles based on Perceived Ease of Use (PEU), Perceived Usefulness (PU), and Actual Use (AU).

Results

Results reveal significant variations in the applicability and implementation of these principles across different institutional contexts. While active learning activities were widely adopted, principles requiring sustained student engagement, such as practice and feedback, proved challenging to implement in traditional one-shot library instruction sessions. Information specialists embedded in the curriculum reported greater success in implementing authentic tasks and providing targeted support than those delivering standalone sessions. The study identified several systemic barriers, including limited curriculum integration opportunities, large class sizes, and time constraints.

Implications

The findings emphasize the need for systemic changes in integrating IPS instruction into higher education curricula. Recommendations include strengthening librarian-faculty collaboration, developing hybrid delivery models that combine in-person and online instruction, and investing in librarian professional development. This research bridges theory and practice by validating design principles with practitioners, contributing to evidence-informed strategies for IPS teaching and learning in higher education.

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Keywords: *information literacy, design principles, higher education, library instruction, educational design*

Fostering Reflective Learning through Visual Search Stories

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Information Literacy (IL) does not only comprise conceptual knowledge that can be acquired through direct instruction (*content frame*; Bruce et al., 2006), but also a set of complex competences that includes different ways of solving information problems (*relational frame*) and that requires instruction focused on reflection and individualized feedback (Peter et al., 2017; Corrall, 2017). Nonetheless, the nature of IL makes process-oriented feedback difficult, because search processes are usually invisible (Botturi et al., in press). Teachers can usually only rely on the output (e.g., report) for assessment and feedback, and cannot observe the full search process, including the use of search engines, keyword selection, and reading strategies. The ROSE (Reflective Online Search Education) project, and its forerunner LOIS (Late-teenagers Online Information Search), both funded by the Swiss National Research Foundation, explored means to capture and visualize *search stories* (see definition below) to support effective IL education in secondary schools, with a focus on online search skills. This paper illustrates the development of data-based real-time search process visualizations, describes their integration into IL education, and discusses feedback provided by students and teachers. During an online search, users generate navigation data, which are coded in the browser history. Through an *ad hoc* browser extension, we can capture such data, anonymize, clean and tag it, and generate a machine-readable data format called *search story* (Botturi et al., 2024). At first, search stories were used to research online search behavior (Botturi et al., in press). Now, we explore opportunities to use them as learning stimuli for self-reflection, embarking on a visual design journey to make search stories readable for humans as both graphics and web-based interactive visualizations. In collaboration with teachers from Switzerland and Germany, we developed a tool to visualize online search processes as a timeline. Search actions (i.e., navigation on search engine pages) are distinguished from result actions (i.e., navigation on other web domains) by rows; colors (hue and brightness, also tested for color-blindness) distinguish new and reused queries as well as new and revisited pages. The timeline allows students and teachers to immediately assess several indicators, including the number of queries, the proportion of time spent in selecting links and in interacting with content, and the number of pages visited on a single website. In addition, we developed two visualizations for comparing different search stories (e.g., by pupils in one class). The ROSE visuals support process-oriented feedback and foster self-reflection as well as constructive teacher and peer interactions; for example, students with different search behaviors can compare their search process and results. The ROSE platform also provides adaptive canned-text feedback that includes individualized suggestions based on evidence-based rules (adaptive recommendations are under development). The ROSE visualizations are currently being refined in studies with different secondary and higher education classes. By the time of the conference, we will be able to present (a) student quantitative feedback about usability and perceived usefulness and (b) teacher qualitative feedback on acceptance and integration in learning activities.

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Keywords: *IL education, process-oriented feedback, visualization, personalized learning, reflective learning, secondary education*

Empowering Information Literacy through Learning Nuggets on Toolification of Scientific Workflows

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"Learning Nuggets" – compact, thematically focused learning units addressing specific academic needs – serve as a cornerstone of information literacy initiatives within university libraries. As academic environments increasingly depend on digital tools and methodologies, universities face the challenge of equipping students and researchers with essential competencies to thrive in this evolving landscape. Libraries play a pivotal role by providing tailored resources and training, bridging gaps in digital literacy and academic competence.

These nuggets encompass diverse formats, including videos, infographics, quizzes, and short tutorials, enabling learners to efficiently develop key academic and technical skills (Samala et al., 2023). Beyond traditional topics like literature research, citation standards and data management, Learning Nuggets integrate advanced learning experience design and emphasize the toolification of scientific workflows. This includes instruction on reference management systems such as Zotero, collaborative platforms and Artificial Intelligence (AI)-driven tools for research automation. Additionally, they provide insights into digitalization and AI applications in research contexts.

The design of Learning Nuggets draws upon principles of microlearning, gamification, and active learning, promoting engagement and retention. Short, interactive modules cater to varied learning styles, allowing participants to customize their learning journey. Depending on content, Learning Nuggets can stand alone or be integrated within longer learning paths (Kadhem, 2017). By merging technical proficiency and academic skill-building, Learning Nuggets empower users to navigate the increasingly tool-dependent scholarly landscape. Their modular structure promotes independent, self-regulated learning, strengthening the library's central role in academic teaching and research.

Employing a single case study methodology, this study presents the design and implementation of Learning Nuggets and toolification training at a Technical University's scientific library. Leveraging educational-design research (McKenney & Reeves, 2014) and principles of learning experience design (Tawfik et al., 2022), the study identifies best practices for integrating modular, tool-focused content into library services. Findings offer actionable insights into resource allocation, user engagement, ongoing support, and iterative improvements, ensuring Learning Nuggets remain accessible, effective, and aligned with diverse user goals and skill levels.

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Keywords: *learning nuggets, information literacy, toolification, artificial intelligence, academic skills, scientific workflows*

Epistemic and Emotional Trust in the Social Framing of ChatGPT

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Introduction

As ChatGPT continues to shape understandings of agency, trust, and emotional intelligence, much of the existing research centres on its role in industry settings. However, fewer studies have explored how individuals develop emotional and relational connections with digital AI tools and the broader implications for trust. This paper adopts a critical posthumanist perspective (Herbrechter et al., 2022) and challenges the framing of AI as a passive instrument, instead positioning it as an agentic presence embedded within sociotechnical networks that actively shape and are shaped by human interactions. These shifts have implications not only for human-AI relationality but also for information literacy, as ChatGPT functions both as a source of knowledge (Acosta-Enriquez et al., 2024) and as an interactive social presence (Kavitha et al., 2024). TikTok's participatory culture make it a space for examining these entanglements, particularly among younger users who contribute to the co-construction of AI's social roles (Barta & Andalibi, 2021). This engagement reveals perceptions of AI's social and epistemic roles. Research on relational agents suggests that forming emotional bonds with AI can lead to increased epistemic trust, as users are more likely to accept and internalize information from systems they perceive as socially and emotionally responsive (Bickmore & Picard, 2005). Within TikTok's highly interactive and affective environment, these dynamics may be amplified and may reinforce ChatGPT's role as both a relational and informational authority.

Objective

This study draws on critical posthumanist thought and social epistemology (Fricker et al., 2021) to examine how TikTok users construct narratives around ChatGPT's social roles, framing the platform as a trusted, relational system where AI is engaged with not just as an information source but as a relational and epistemic agent. It further explores the implications of this dynamic for information literacy and explores how emotional trust in AI can shape knowledge construction, critical evaluation, and dependency.

Findings

Findings indicate that ChatGPT is often positioned as a friend, confidant, therapist, and even a superior social presence due to specific "more-than-human" affordances. Many users emphasize its enhanced memory, perceived neutrality, and constant availability further contribute to a trusted social positioning, with some users seeing it as a more reliable emotional and intellectual presence than human counterparts. These perceptions raise critical questions about social and epistemic trust and how AI-mediated interactions shape not only emotional engagement but also information-seeking practices. The blurring of social and epistemic trust may have significant implications for information literacy, as reliance on AI as both a source for relationality and knowledge may discourage verification and reshape how authority and credibility are constructed in digital environments. These affordances may contribute to patterns of overreliance, as some users attribute social and epistemic capacities to ChatGPT that exceed its designed function. The findings suggest that information literacy frameworks should account for both relational and epistemic dynamics with AI.

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Keywords: *human-computer-interaction, social media, TikTok, trust, relationality*

Exploring Games for Learning Transliteracy: TLIT4U Project Findings

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Background

Transliteracy focuses on mapping meaning across different media, rather than developing separate literacies for each medium. Transliteracy in this approach is not about learning text literacy, visual literacy, and digital literacy in isolation but rather about the interaction and integration of these literacies. It emphasizes the process of inquiry, critical thinking, and creative thinking. This presentation explores the role of gamification and serious games in fostering transliteracy skills. Serious games are increasingly recognized as powerful tools for engaging students in learning across various educational contexts (Holmes & Gee, 2016). They incorporate key educational theories, such as Bloom's taxonomy and Vygotsky's zone of proximal development, providing an interactive and immersive way for students to engage with curriculum content through gameplay (Becker, 2008; Vygotsky, 1978). The integration of serious games in educational settings has the potential to transform the learning experience by moving away from traditional lecture-based models toward more immersive, emotionally engaging, and collaborative approaches (Ning et al., 2022; Cardona et al., 2023).

Methodology, Aim and Objectives

The goal of the TLIT4U game selection tool is to help students develop an understanding of research as a continuous process of inquiry (Kuhlthau, 2004; Stripling, 2008), rather than as a straightforward task of gathering and evaluating information on a given topic. The core principle of transliteracy is the ability to critically create and analyze content, rather than simply using technology. Transliteracy encompasses a continuum of digital fluency that extends beyond merely searching for and retrieving information. By incorporating serious games, which actively engage students in their own learning process, educators and digital humanities scholars can reimagine their teaching methodologies and data sources in innovative ways. The project has started its activities identifying the needs of graduate students in the partner universities. The goal of this survey has been to understand the "big picture" of transliteracy and how the games based learning approach fits with this.

Findings

The selection of games was conducted through a systematic review of the scientific literature on serious games related to both hard and soft transliteracy skills. The review encompassed peer-reviewed journal articles, international conference proceedings, and other academic contributions such as scholarly blogs. Literature review was done to ensure a comprehensive geographical perspective. During a three-year international project, 20 serious games were identified as particularly effective for developing transliteracy-related skills. This article presents an analysis of the most popular games, highlighting their impact on learning and applications in the educational field. A kit has been prepared to facilitate teachers in applying gamification. The project as a final result has designed a game called LEA that guides the inquiry process to learn AI literacy.

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Keywords: *games-based learning, transliteracy, inquiry process, critical thinking*

Empowering Students Through Digital Learning: Developing a Library e-Text for Information Literacy

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Online learning is central to modern education, with many on-campus students enrolling in online courses. Libraries play a vital role in helping students succeed in these environments. To support this, the Library 101 e-text was created as an asynchronous resource to introduce students to library resources and research skills.

Objectives

This presentation examines the development, implementation, and evaluation of a library e-text designed to introduce students to library resources and essential research skills. The e-text supports learners regardless of their location, discipline, or library experience and ensures all have equal access to resources. Created as an asynchronous, standalone resource, the e-text empowers students to explore the library at their own pace. Providing the e-text in a non-course-specific setting aims to reduce library anxiety and combat feelings of imposter syndrome. The e-text promotes information literacy by integrating interactive content, inclusive design principles, and instructional strategies.

Methodology

The development of the e-text was grounded in Universal Design for Learning, which emphasizes flexible learning environments that accommodate diverse needs, and Backward Design, which focuses on identifying learning outcomes and then creating assessments and instruction to achieve those outcomes. By applying these instructional design theories, the eLearning Librarian identified essential information students needed to know about the library. Feedback was collected from librarians, students, and faculty during the design process to guide its development and ensure it met academic needs while promoting accessibility and inclusivity.

The e-text is available to all students through the University's Center for Teaching and Learning. It was developed as part of a series of e-texts to enhance the college learning experience. This series is utilized in many first-year introduction to college courses across the University's campus. These courses include assignments that require students to complete an e-text of their choice. After two years, over a thousand students have completed the Library 101 e-text.

Assessment data was gathered from an optional three-question survey at the end of the e-text. It asked users about their experience using the e-text: what they liked, what else they wanted to know about the library, and what feedback they had. The survey produced more than 1000 student responses, and highlight the e-text's effect on enhancing research confidence, resource navigation, and critical evaluation skills.

Outcomes

This presentation illustrates how the Library 101 e-Text enhances information literacy, supports online learning, and promotes equitable access to resources. This project emphasizes libraries' roles in tackling issues like library anxiety and provides strategies for improving online initiatives. Attendees will gain insights into creating scalable, inclusive online learning tools for library instruction and practical assessment methods to evaluate their effectiveness.

Keywords: *online learning, information literacy, OER, accessibility*

Repositioning Public Libraries to Meet the Demands of the AI Era

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The integration of artificial intelligence (AI) into services offered by public libraries presents unprecedented challenges and opportunities. Libraries must adopt proactive strategies to reposition themselves as dynamic centers of community engagement and knowledge dissemination (Smith & Johnson, 2025). In this paper I critically assessed the role of public libraries in Romania within SHIFT: MetamorphoSis of cultural Heritage Into augmented hypermedia assets. For enhanced accessibility and inclusion project, funded under the Horizon 2021-2027 programme. I explored how libraries act as "partnership brokers" from the perspective of public libraries in Romania starting from the experience of the National Association of Public Librarians and Libraries of Romania (ANBPR). I confirmed the importance of public libraries in activating community networks, expand their reach, and ensure their continued relevance. ANBPR's experience offered valuable insights and best practices for other libraries seeking to adapt and thrive. This approach emphasized the importance of collaboration and knowledge sharing. At the heart of this study was the concept of partnership brokering (Crihană, 2015) where libraries facilitate collaborations between diverse stakeholders—government agencies, educational institutions, businesses, NGOs, and community groups—to improve their services and outreach (Miller & Green, 2021). Methodologically, I used surveys and direct observations to explore how AI technologies from the SHIFT project can improve accessibility to cultural heritage assets (Jones, Patel & Williams, 2020), highlighting the role of ANBPR in piloting these innovations in its extensive network of over 2800 libraries. In addition, I examined the monetization strategies of SHIFT technological solutions, including subscription-based models, licensing agreements and partnerships with technology providers (Taylor, 2023). ANBPR's active engagement with vulnerable user groups provides guarantees that these solutions are adapted to meet the diverse needs of users. I used a methodology based on structured surveys and direct observation to analyze the integration and monetization of AI solutions from the SHIFT project in public libraries in Romania. Myquestions targeted public libraries' approach to adopt operational plans, monetization strategies, and commercial products while addressing collaboration opportunities within and outside the consortium, and future operating scenarios. I used direct observation to probes user interaction with SHIFT technologies in pilot libraries. My research highlights the experiences and best practices of ANBPR and the essential role of collaboration and innovation in redefining the relevance of public libraries (Brown, 2023). Early findings provide valuable insights for libraries around the world seeking to adapt and thrive. The SHIFT project, with the active involvement of ANBPR, demonstrates immense potential to transform the accessibility of cultural heritage in libraries through cutting-edge AI-based technological solutions and the constant cultivation of partnerships. By focusing on users' needs and demands and exploring sustainable monetization strategies, the SHIFT project ensures that these innovative solutions reach a wide audience and thus strengthen a more inclusive and accessible cultural landscape for all.

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Keywords: *partnership brokering, leveraging technical solutions, monetization strategies, SHIFT use case, public libraries repositioning*

Generative AI Literacy among Economics Students: Experiences, Attitudes, and Academic Librarian Support

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AI literacy is the capability to identify, understand, utilize, and critically evaluate artificial intelligence technologies and their effects (Jones, 2024). As artificial intelligence (AI) continues to transform industries (Wagner, 2021), including economics and business, equipping students with AI literacy has become a critical component of higher education (Adendorff, 2024). It is essential for students to thrive in an increasingly digital and data-driven world (Mansoor et al., 2024).

This study investigates the current state of AI literacy among university students in economics and business while exploring the potential role of academic librarians in fostering this literacy through resource provision, training, and collaborative initiatives. The research aims to address three key objectives: (1) assessing students' current levels of AI knowledge, skills, and ethical awareness; (2) identifying barriers to AI adoption and application in academic and professional contexts; and (3) proposing actionable strategies for academic librarians to support AI literacy development. A mixed-methods approach was employed, combining quantitative and qualitative data collection through a structured questionnaire. The questionnaire was divided into six sections: demographic information, knowledge and awareness of AI, skills and application of AI tools, ethical and critical thinking, attitudes toward AI, and the role of academic librarians. It included Likert-scale items, multiple-choice questions, and open-ended responses to capture both measurable trends and nuanced insights.

The survey was conducted using convenience sampling among students at the Faculty of Economics and Business at the University of Zagreb. Expected results indicate that students possess better practical skills in using AI tools (e.g., ChatGPT), while their theoretical knowledge is more limited. Additionally, it is expected that ethical awareness and critical thinking about AI-related issues, such as bias and transparency, will be areas requiring further development. This research aims to explore the role of academic librarians in AI literacy, anticipating that students may be willing to engage with librarian-led initiatives to enhance their understanding and application of AI.

The outcomes of this research contribute to both academic and practical domains. Academically, it adds to the growing body of literature on AI literacy in higher education, particularly in the context of economics and business. Practically, it provides actionable recommendations for universities, librarians, and educators to enhance AI readiness among students. Key recommendations include integrating AI literacy modules into the curriculum, developing librarian-led training programs, and fostering collaboration between librarians, faculty, and students to create a supportive ecosystem for AI learning. By empowering students with AI literacy, this research underscores the transformative role librarians can play in preparing the next generation of professionals for the challenges and opportunities of the digital economy.

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Keywords: *AI literacy, economics and business education, academic librarians, digital skills, higher education innovation*

Enhancing Health Literacy through Expert Collaboration: A Community Engagement Approach

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The Knowledge Centre for Health Ghent (KCGG) is experiencing a growing demand from the community for guidance on finding and using reliable (health) information. Health literacy is a key determinant of public health, influencing healthcare utilization, costs, and individual behaviours. Improved health literacy leads to greater participation in public health programs and supports more equitable and sustainable interventions (Sørensen et al., 2012). As Rondia et al. (2019) highlight, promoting health literacy is a shared responsibility of both individuals and healthcare systems. Addressing this societal need requires collaborative training programs involving academic medical libraries and healthcare institutions (Vassilakaki & Moniarou-Papaconstaninou, 2023).

Community outreach is an integral part of the Knowledge Centre's mission. The Knowledge Centre partners with public libraries, local governments and patient organizations to enhance health literacy among citizens, healthcare professionals, patients and even public librarians. This initiative is particularly novel in Belgium, as information specialists collaborate with content experts from various health sciences fields. These experts value the opportunity to extend their knowledge beyond academia through community engagement in information literacy. Through interviews, the authors were able to capture the advantages and challenges of this collaboration. To engage a wide audience and create a recognizable identity, the sessions titled "Dr. Google: seeking reliable health information" were developed. These sessions ensure that complex innovations are made accessible and actionable. The sessions are tailored to specific target groups and can address current issues such as "How reliable are AI tools for skin cancer detection?", "Which health applications are suitable for my needs?", and "What can I do to sleep better?". Such collaborative efforts, driven by knowledge-sharing and transparency, are crucial in aligning technological advancements with public health needs, ensuring equitable access to reliable information and fostering informed decision-making. This paper does not present research-based evidence but aims to inspire medical information professionals to develop health literacy through expert collaborations. Drawing on both literature and firsthand experience, the authors offer practical guidelines for effectively managing community engagement projects that promote health literacy.

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Keywords: *information literacy community engagement, health literacy, societal outreach, artificial intelligence, public health, information specialist, collaboration, knowledge centre*

A Pedagogy of Transparency: The Potential of the Transparency in Learning and Teaching Framework

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Information literacy instruction continually evolves through interactions with different pedagogies and approaches to teaching. An emerging pedagogical framework called Transparency in Learning and Teaching (TILT) is increasingly being utilized and researched by instructors across a variety of teaching contexts and disciplines; however, TILT is notably absent in information literacy instruction literature. This paper aims to introduce the TILT framework and its underlying principles, provide an in-depth literature review on its application and impact on student learning, and conceptualize ways it can be applied in the context of information literacy instruction.

TILT is an educational framework that encourages teachers to communicate to and with their students about the learning process with a particular focus on developing transparent practices around assignment design and in-class learning activities (Winkelmes et al., 2019). TILT structures learning in a manner that increases conversations between teachers and students on how students are learning, frames the application of learning to real-world situations, and demystifies to students the pedagogical decisions and learning experiences developed by instructors through four primary principles: Purpose, Task, Criteria, Student Feedback (Winkelmes et al., 2019). These principles aim to help an instructor explicitly state the goal of an assignment to students, provide the steps necessary to complete the assignment, explain what success looks like, and give space for students to provide feedback and questions about the assignment. Additionally, practitioners argue that TILT increases student-led learning, promotes accessible teaching practices, impacts student success metrics such as sense of belonging and confidence, and takes an equitable approach to student learning (Winkelmes et al, 2019).

TILT literature focuses primarily on either method of application or impact on student learning. Impact on student learning literature varies with some studies suggesting a positive impact on student learning (LeJeune, 2023; Cronmiller et al., 2022; Peplow et al., 2021) with others unable to replicate positive impacts (Cotter et al., 2023). Methods of application literature is deeper, spanning a variety of teaching contexts; however, there is little evidence of information literacy instructors using TILT creating an opening for a new area of pedagogical exploration.

The four principles of TILT and the diversity of teaching applications suggest that TILT is conceptually compatible and applicable to the context of information literacy instruction. This paper will outline different possibilities that the steps Purpose, Task, Criteria, and Student Feedback could be applied by information literacy instructors. Possible conceptual applications will be presented at both the micro and macro level as well as across multiple contexts common to information literacy instruction, including one-shot instruction, semester long courses, librarian and course instructor interactions, instructional design, and individual research consultations.

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Keywords: *pedagogy, information literacy instruction, transparency in learning and teaching, library instruction*

Digital Competence and Information Literacy for Librarians in Europe: NEDLib Project Results

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Background

The paper presents the results of the first phase of the Erasmus+ project NEDLib: Digital Competence and Information Literacy for Librarians (NEDLib, 2023). It addresses essential objectives set for implementation by the European Commission (EC) that are considered paramount with regard to the development of an information competent society. Information literacy is the first of the five key components of digital competences defined by DIGCOMP, the European Digital Competence Framework (DIGCOMP, 2022).

Objectives

The NEDLib project included the development of four teaching modules for training librarians and library users. Module 1 (Information Literacy) teaches how to determine the extent to which the information is needed; how to access the necessary information; and how to evaluate information and its sources critically. Module 2 (Media Literacy) covers a set of competencies on how to access media, analyse media content, create new media messages, reflect on existing media content, and take action with media (Kellner & Share, 2019). The objective of Module 3 (Fake News and Disinformation) is to emphasize critical thinking about the news, and create exercises that will help librarians and users develop and implement a personal strategy to make informed opinions about current topics. Module 4 (Gamification in Libraries) supports librarians and users in adopting different points of view to identify fake news through a gamification approach (Encheva, Tammaro & Kumanova, 2020).

Methodology

University professors from two Departments of Library Sciences in Bulgaria and Greece developed theoretical training modules in four areas. Before developing the modules, a number of library managers and librarians from more than 15 European countries completed an online survey during the April 2024 EBLIDA conference. The survey was also distributed to selected key libraries in the NEDLib project. The 98 survey respondents provided their opinions on whether the planned modules met the needs of modern library knowledge in different regions of Europe, as well as whether the envisaged trainings would satisfy the needs of librarians at different stages of their profession.

Findings

The professors trained sixty-five librarians from Bulgaria, Greece, Portugal, Romania, and Latvia. These librarians had previous experience as trainers and came from the largest libraries. Subsequently, these librarians were expected to train two additional target groups in regional training centres (libraries): librarians from smaller public libraries and different of library users (students, young professionals, senior citizens). The end result was provision of practice-oriented learning materials available through the NEDLib e-learning platform hosted by the Public Library of Braila in Romania. The library will continue maintaining the platform after the official end of NEDLib in September 2026. Content of the teaching modules will be continuously updated. The project is unique among other Erasmus+ projects due to the successful mutual work of teachers in Library and Information Sciences and large number of participating public librarians.

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Keywords: *information literacy, digital competence, LIS departments, training activities, public librarians, library users, gamification in libraries*

The Bulgarian Academic Librarians Perspectives on Mis/Disinformation

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Background

Library policies on information dissemination should include dealing with misinformation and disinformation. Policies must outline how libraries can help users critically evaluate the information they encounter, including providing access to fact-checking tools, offering media literacy programs, and curating resources that teach users how to discern credible information. (Cooke, 2018). The paper presents the specifics of the experiences of Bulgarian academic librarians in addressing these topics in information literacy (IL) training sessions for library users. The survey follows the structure of a questionnaire developed by Joumana Boustany and Laura Saunders in 2024 for project DisMis.

Objectives

Our goal was to monitor to what extent academic librarians empowered library users to critically evaluate information, recognize mis/disinformation, and navigate the digital landscape effectively. Results identified game-based learning as a possible measure to strengthen the connection with faculty members. Serious games are increasingly recognized as powerful tools for engaging students in learning across various educational contexts (Holmes & Gee, 2016), including the topic of disinformation and fake news.

Methodology

We translated the questionnaire developed by the DisMis project into Bulgarian and distributed it to all fifty-four academic libraries in the country. We collected data from September–December 2024. Forty libraries responded to the survey, answering questions about librarians' perspectives on various aspects of mis- and disinformation and stressing their role as instructors in IL sessions. We analyed the data through a statistical data processing program.

Findings

We found that Bulgarian librarians did not emphasise issues of mis- and disinformation enough in IL training sessions. Although librarians said they had sufficient educational materials on these issues, they needed to customize content according to national specifics. This required substantial effort and permanent support from university professors. The focus in library training sessions was in direct relation to the willingness of educators to support the librarians. In some cases, the librarians lacked support from the library managers. The librarians could offer their expertise by co-teaching classes, providing resources, and developing lesson plans that align with educational standards. Joint initiatives might involve organizing media literacy weeks, hosting guest lectures, or creating collaborative projects where students critically assess media content. Such partnerships not only enhance the educational experience but also reinforce the importance of media literacy as an essential skill. Results made clear the need for Bulgarian academic librarians to be creative, innovative, and inspiring. Librarians could motivate young people to recognise the academic library as a preferred learning environment if they make a direct link to serious gaming in identifying and avoiding fake information. The future directions of our research include comparison of the Bulgarian academic librarians' perspectives on mis/disinformation with the perceptions of academic librarians from the countries in Eastern Europe participating in DisMis in order to establish a common platform for learning and exchange of ideas.

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Keywords: *misinformation, disinformation, academic libraries, Bulgaria, DisMis project, information literacy training sessions, collaboration between librarians and educators*

Bridging the Gap: How Information Practices Shape Students' Help-Seeking Strategies

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Introduction

In today's learning environment, students must employ effective self-regulation strategies when seeking academic sources of help (Karabenick & Newman, 2009; Fong, Gonzales, Hill-Troglin Cox, & Shinn, 2023). Completing academic assignments typically requires both formal and informal sources of support (Karabenick & Knapp, 1988) as well as engagement in the information search process (Kuhlthau, 1991). Both the information search and help-seeking models focus on bridging knowledge gaps and guiding decision-making (Giblin, Stefaniak, Eckhoff, & Luo, 2021).

Objectives

In this study I examined the information searching habits of Czech undergraduate and graduate students in STEM fields. I included an analysis of reported help-seeking behaviors at the point where students started writing their required theses. The main objective of this study was to gather initial data on how students' information behaviors influenced their decision-making processes when seeking the academic help in 2020, during the COVID crisis.

Methodology

I conducted a quantitative analysis of data gathered in a 2020 questionnaire survey conducted at NTK (Firsova, Millerová, Martinová, Chodounská, & Šátková, 2022). The dataset for this study included responses from 697 undergraduate and graduate students from various public universities in the Czech Republic. I applied several statistical methods, including binomial logistic regression, to estimate the likelihood of seeking specific sources of academic help. I analyzed the differences in the results for different student characteristics such as level of study and affiliation.

Outcomes

The results indicated that students' information seeking practices directly influenced their help-seeking behaviors. Students accustomed to using high-quality information sources were more likely to seek formal help and less likely to rely on informal peer support. These results indicated that systematically developing the habit of using reliable information sources likely contributes to more effective help-seeking strategies for Czech undergraduate and graduate students.

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Keywords: *student, information searching behavior, academic help-seeking*

Crossing Information Literacy Thresholds: A New Model for Bridging the Novice-Expert Research Gap

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Information literacy is more than being able to find an answer to a question. This is especially true in postsecondary education, in which many students are asked to consider ill-structured problems, or problems that do not have a simple right or wrong answer. Students are asked to form arguments and then find evidence to support their claims. Students are not simply consuming information; they are interacting with knowledge with the intent to create knowledge. As such, students' relationships and beliefs about knowledge are important for how they seek out, evaluate, select, and use knowledge, as well as if and how they position themselves as knowledge creators. Conceptualizations of information literacy have evolved to incorporate more complex understandings of information literacy, and the *ACRL Framework for Information Literacy for Higher Education* is an example of this. However, as a profession, we have not deeply examined the relationship between information literacy and epistemological development. The connection between epistemological development and information literacy is not new (Anderson & Johnston, 2016; Jackson, 2007; Matteson et al., 2021; Swanson, 2006; Whitmire, 2004). However, there has not been significant exploration between epistemological development and the threshold concepts articulated in the *Framework*. The threshold concepts and their attendant knowledge practices and dispositions represent expert ways of engaging with information and knowledge, aside from a few mentions of what novice learners might be able to do. The *Framework* does not provide scaffolding that supports movement from novice to expert – it only presents the end goal. How do we assess learners' readiness to engage in expert ways of thinking and knowing? In this paper, I discuss the second phase of a multi-phase study exploring the relationship between the information literacy threshold concepts and two epistemological development models - the Reflective Judgement Model (King & Kitchener, 1994) and the Epistemological Reflection Model (Baxter Magolda, 1992) (see also Folk, 2025). I will share a draft of a new model called the Crossing Information Literacy Thresholds model, which is intended to help library professionals who teach information literacy to reflect on where learners might be in terms of epistemological beliefs and what that might mean for information literacy-related learning outcomes, learning activities, and learning assessment. This four-stage model considers learners' beliefs about the nature of knowledge, sources of knowledge, relationship to knowledge, and how they perceive expectations related to learning in academic and disciplinary contexts, as well as providing examples of what this might look like in practice. In addition, the model creates scaffolding across the four stages for key themes in each of the six *Framework* threshold concepts. The Crossing Information Literacy Thresholds model introduces a more nuanced approach to helping leaners cross these conceptual thresholds and is intended to provide a foundation for understanding how we can support learners movement from a passive, consumer-oriented relationship to knowledge within the context of higher education to one that is active, engaged, and empowered.

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Keywords: *epistemological development, higher education, threshold concepts, qualitative research, novice-expert gap*

Cancer Patients' Shared Experiences: A Study of Social Media Posts

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Most cancer patients seek information actively (Elkefi & Matthews, 2024) and these activities serve as a crucial coping mechanism: patients gain a sense of control, a better understanding of their condition, and find support resources (Petersen et al., 2021). The preferred information sources may change over time as the patient is diagnosed and treated. In the initial diagnosis phase health care professionals are often the preferred information source whereas during recovery the experiences of other cancer patients can be useful (Jensen et. al., 2022). This study explores the posts shared on social media and how other patients, caregivers, and healthcare professionals benefit from these discussions. We focus on X, as it is an active platform for sharing health related information and experiences (Martinez, 2025). Posts were identified using a set of keywords related to the subjective experiences of cancer patients with different aspects of the disease. The keywords are identified through a qualitative study (Jensen et al., 2022) and are carefully selected to ensure a comprehensive capture of relevant posts. Overall, we collected 118112 Tweets from 1 Jan 2023 until 4 Nov 2024. The posts were analyzed using Continuous Bag of Words (CBOW) models (Church, 2017) and topic modeling (Blei, 2012), to unveil topics and experiences users were exchanging information and resources about. Our preliminary results show that users touched upon a wide range of relevant topics including early detection, side effects, as well as practical suggestions. Moreover, we also found that despite an informed and targeted search, some wild cards and non-relevant discussions were picked up (e.g. water signs). Figure 1 provides a visual representation of our CBOW model.

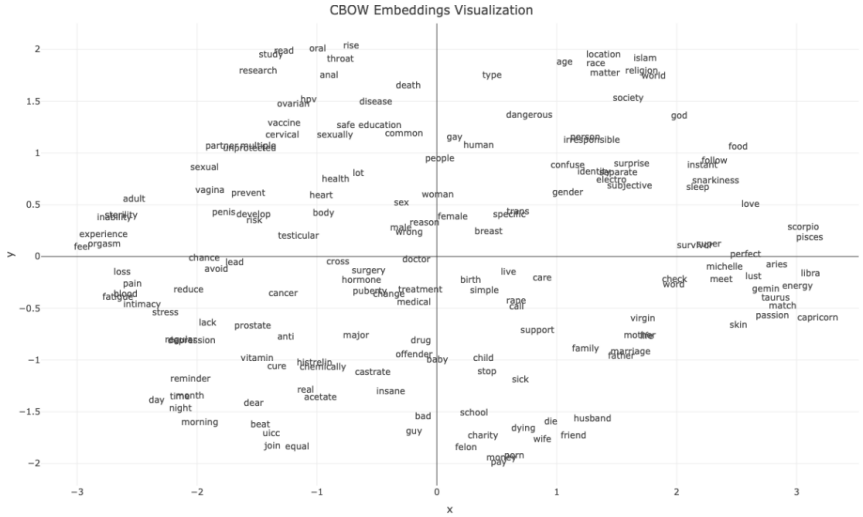

Figure 1. CBOW model

In conclusion, this study supports earlier findings that social media can be overwhelming even when looking for targeted information. However, we also find that applying methodological filters can provide cancer patients, relatives and health professionals with firsthand experiences and practical advice in the recovery phase.

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Keywords: *health information literacy, social media, topic modeling, cancer patients*

Global Publication Patterns in Information Literacy Research, 2020-2024

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Bibliometrics is the study of bibliographic data to identify trends in publications, often examined within a particular discipline or geographic area. For example, an ongoing study of publication patterns of United States academic librarians spanning the years 1993 to 2017 has set the standard for library and information science (LIS) bibliometric studies of author characteristics and productivity in the United States, including rankings of institutions by productivity (Wiberley, Blecic, De Groote & Schultz, 2023). Another study of trends in LIS publishing across European countries between 2003 and 2012 found that English was the most widely used language followed by German, Spanish and French, with researchers in the United Kingdom, Spain and Germany producing the highest number of papers (Olmeda-Gómez & de Moya-Anegón, 2015). A study of LIS research in the 22 countries of the Arab League from 1951 to 2021 found a trend of increased research productivity among these countries, particularly from 2018 (Siddique, Rehman, Ahmad, Abbas & Khan, 2021). These studies provide insight to authors regarding expectations around individual and institutional productivity across the discipline, help authors identify potential publication venues for future research, and provide opportunities for institutional benchmarking.

The current study seeks to add to the international literature of bibliometric studies by emphasizing information literacy research, rather than the broader category of LIS research, and expanding to include a broader geographic range. This study examines global publication patterns of scholarly articles related to information literacy in the five-year period from 2020 through 2024. Multiple bibliometric indicators are examined for insight into researcher productivity and journal characteristics among those journals consistently publishing information literacy research, as well as identifying information literacy themes among published research. Article metadata was retrieved from the Web of Science platform and supplemented with metadata from the Scopus platform. In order to be included in this study, journals must be peer-reviewed and must have published ten or more articles related to information literacy from 2020 to 2024. The authors retrieved article metadata for individual articles meeting the search criteria and performed title and abstract screening to confirm that each article met the inclusion criteria, namely that the article was an original scholarly article and that the content and topic were relevant to information literacy. More than 1000 articles by close to 2000 unique authors were identified for bibliometric and thematic analysis. Specific variables studied include productivity (by country and institution), journal characteristics (such as language, country, and publishing model), author characteristics (such as country and institutional affiliation), characteristics of author collaborations, and information literacy subthemes. Initial results reinforce the dominance of publications based in the United Kingdom and United States of America in information literacy publishing; however, highly productive authors are producing information literacy research from multiple additional countries. This study will highlight geographic disparities and emerging areas of research, as well as inform authors' strategic decisions about researching and publishing on information literacy topics.

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Keywords: *bibliometrics, scholarly productivity, information literacy research*

Law Students' Knowledge Practices: Construction of Cognitive Authority in Challenging Digital and AI Environment

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Based on the ACRL's Framework for Information Literacy for Higher Education (2016) vision of information literacy (IL) as a set of abilities that enables students to both consume and produce information effectively, this study aims to investigate law students' knowledge practices in digital and AI information environments. The specialised nature of legal information and the dynamic legal environment pose new demands on Croatian law students, legal scholars, and practitioners in terms of understanding, interpreting, and applying the law. In parallel, the development of ICT and digital technologies and the emergence and use of AI tools in legal research present additional challenges for law students. They face an enormous volume of legal information and the rapid spread of misinformation, which can create uncertainty and inaccuracies in finding and applying credible legal information, potentially leading to incorrect law applications. Additionally, studying in such an environment can instil trust in technology, leading to the belief that information obtained using, for instance, AI tools is authoritative and accurate without engaging in critical evaluation of the legal information (Callister, 2024). Therefore, during their education, law students must learn to identify, select, and use trustful legal sources (Kim-Prieto & Kahvecioğlu, 2014). Sources of information are typically chosen and used based on their perceived reliability and trustworthiness (Savolainen, 2007). Trust in information sources is embodied in cognitive authority, which refers to the sources considered competent and trustworthy (Wilson, 1983). While previous studies have examined young people's trust in information sources more broadly (Karim & Widen, 2023), little empirical research has been done on how law students specifically engage with, evaluate, and construct the cognitive authority of legal information sources in digital and AI-driven environments. This study provides a novel contribution to legal IL by addressing a research gap in understanding Croatian law students' trust in legal information sources. The research answers the following questions: (1) What knowledge practices do law students use in the context of research assignments? (2) How do law students construct the cognitive authority they attach to the information sources they use?

The study employed a qualitative research method as part of a case study at the Faculty of Law in Rijeka. The phenomenographic interviews combined with a think-aloud method with students sought a holistic description of a phenomenon under study. The sample was intentional and included 12 students. The interviews were conducted until saturation was reached (Yates et al., 2012).

Preliminary results reveal that students engage with various information sources, assigning them varying levels of trust. The results indicate students' cautious approach to law AI-based sources, echoing Callister's (2024) warning about whether AI can be a trusted, credible, and reliable legal source. Students primarily consult AI for informational purposes and idea development but do not consider it a cognitive authority; instead, they prioritise legal databases. This research contributes to a better understanding of cognitive authority and how it is constructed in the digital and AI information environment, as well as improved IL programmes at law faculties.

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Keywords: *law students, information literacy, cognitive authority, trust, information sources*

Co-producing Research Priorities for Health Literacy with Marginalised Communities

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This paper reports on a project that aimed to develop partnerships with marginalised communities in Sheffield to co-produce research priorities for Health Literacy (HL). HL refers to the capacity people have to obtain, process and understand information related to their health and use it to make informed choices, reduce risks and improve their quality of life (Martzoukou & Abdi, 2017). However, low HL is a severe problem in marginalised communities and leads to a range of undesirable outcomes, including poor health and reduced use of preventative healthcare (Stormacq et al., 2020). Community-led interventions to develop HL are empowering and co-creating health information and can help address structural and systemic barriers to health (De Wit et al., 2018). This project engaged members of the Roma, Yemeni and Somali communities in Sheffield, UK. These communities have low levels of English, many are recent immigrants to the UK and are generally recognised as marginalised. Community centres recruited members to participate in co-production workshops. Cycle 1 workshops with 48 participants in total explored perceptions of trustworthy health information sources, and the barriers experienced in gathering suitable health information. Cycle 2 workshops with 20 participants in total focused on potential research foci, methods, and how community members could contribute to data collection and analysis. The workshops featured participatory image-based activities that were designed to be accessible to all.

Despite the unique linguistic and cultural backgrounds of the communities, a number of common themes emerged. The community centre is a trusted social source of health information, and community centre staff play a valuable role in interpreting and mediating health information and services. Participants reported a range of systemic and structural barriers to accessing health information and communicating with health professionals, particularly related to language and the use of interpreters. Digital exclusion was a barrier to engaging with "digital first" services such as the UK's National Health Service app, and many participants lacked broadband access. Health information was sought and shared in social networks, and "expert" community members with better English provided HL support to others. Despite these challenges, participants demonstrated criticality in evaluating health information, recognising that health information encountered online or through social networks may not be accurate.

Community members expressed a strong desire to be involved in the design and delivery of future HL research. Research priorities focused on building interactive and critical HL (Nutbeam & Lloyd, 2021), such as improving information exchange between communities and the health service, community involvement in training health staff, and co-creating health information resources, for example, videos and leaflets. There was a preference for qualitative research methods, and for community members to be trained as researchers to collect and analyse data. In conclusion, we reflect on the valuable role played by community centre staff acting as information intermediaries (Buchanan et al. 2019) in this information landscape and the need for health service providers to partner with communities to improve information communication, reduce organisational complexity and address social determinants of health (Nutbeam & Lloyd 2021).

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Keywords: *health literacy, marginalised communities, co-production, digital exclusion, participatory methods*

Information Literacy and Artificial Intelligence: A Library and Information Science Perspective on Effects, Research Questions, Challenges and Opportunities

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This article addresses the opportunities and challenges of artificial intelligence (AI) for information behavior and the promotion of information literacy. It summarizes the results of a workshop on information literacy and AI held in September 2024 in Hildesheim, Germany. In the workshop, thirteen librarians and information scientists who had previously written a position paper discussed three questions.

1. What impact does AI have on existing concepts of information literacy?
2. What questions arise from AI for information science research in the field of information literacy?
3. What challenges and opportunities arise in the promotion of information literacy through AI?

The position papers and results of the workshop have been published in German in Dreisiebner et al. (2024). However, the authors believe that the findings should also be presented and discussed on an international level. The main results are outlined below.

Regarding the first question, the spread of generative artificial intelligence (AI) is seen as transforming information markets by influencing the way information is provided and used. Search services and sources are expected to become less important, leading to both new opportunities and challenges in assessing information quality and transparency. AI can foster open science, reduce transaction costs, and change the role of users from consumers to producers of information. At the same time, there is a need for new literacy standards to address AI, especially in scientific work. Digital ethics and AI data analysis skills should be emphasized more in education.

Concerning the second question, several issues were discussed, including: How does user behavior in information markets change when AI generates new services and business models? How can the quality of AI-generated content be assessed, and its reliability ensured? Are labeling requirements and standards effective tools for AI regulation? How can bias be mitigated, and data protection and transparency ensured? How can AI skills and lifelong learning be promoted? Does the use of AI in research and teaching affect the quality of outcomes?

Finally, with respect to the third question, social responsibility and the role of users were identified as central themes. The opportunities of AI include automating routine tasks, supporting learning processes, and developing effective concepts for teaching information literacy. AI is expected to serve as a tutor or coach, helping learners develop a more critical approach to information. However, challenges arise from a lack of transparency, inadequate labeling, and legal uncertainties. Promoting information literacy requires interdisciplinary programs and well-trained educators. Users must critically assess AI to protect their autonomy. While the idea of an AI tutor was discussed, concerns were raised about loss of control and diminished intrinsic motivation.

In conclusion, it is clear that the spread of AI has a significant impact on information markets and information behavior, with profound implications for the concept and promotion of information literacy. The workshop represents a contribution from information science to foster understanding of how AI affects users, educational processes, and society. It not only identified key research areas but also highlighted the political need for education and regulation, discussing potential solutions.

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Keywords: *artificial intelligence, information literacy, library and information science*

Combining Information Literacy and Metaliteracy to Advance Transnational Group Learning about AI. Learning Process and Learning Outcomes, Results from a Case Study

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This article discusses the learning process and outcomes of the most recent iteration of the project *"Intercultural Perspectives on Information Literacy and Metaliteracy"* (IPILM) during the winter term of 2024–2025. IPILM is a discourse-oriented learning environment that brings together students from diverse cultural backgrounds to engage in collaborative knowledge construction. Its primary goal is to promote intercultural learning, information literacy and metaliteracy while exploring topics related to current developments in information behavior and information environments in transnational teams (Griesbaum et al. 2023). The topical focus of the course in 2024-2025 was on cultural, societal, educational and ethical dimensions of artificial intelligence (AI).

This presentation will address two primary research questions: RQ1: What is the feasibility and acceptance of the IPILM concept? RQ2: What is the learning success of the students?

IPILM realizes a unique learning environment with a low participation threshold. Based on our observations over several years of teaching this course, we have found that students and instructors are predominantly enthusiastic about the project. This tentative assessment indicates that IPILM is a worthwhile initiative and may also serve as a model for similar Virtual Exchange and Collaborative Online International Learning (COIL) initiatives in the information literacy community and even beyond. As part of our current research, we are interested in moving beyond anecdotal evidence presented in Griesbaum et al. (2023). For that purpose, a research instrument is developed. We enthusiastically seek feedback from the ECIL community to expand our research project to the next level and to share the collaborative strategies we have developed to engage students with AI.

For the study, a combination of data collection methods is employed. Student perspectives were captured through pre- and post-course surveys on perceived learning achievements. Additionally, students' written reflections are analyzed to gauge their interest, enjoyment, perceived competence, effort, and sense of social interdependence. Observations and evaluations from instructors further contribute insights, particularly regarding group conflicts, conflict resolution, and the academic, media, and legal quality of the knowledge produced. Overall, the evaluation uncovers the educational value of IPILM in depth. Possible weak points and options for improvement are identified. The findings highlight the potential of transnational groups to foster intercultural learning, information literacy, and metaliteracy. Simultaneously, the evaluation provides valuable data to refine the IPILM concept further.

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Keywords: *information literacy, metaliteracy, intercultural exchange, collaborative learning*

Visualizing Information Literacy

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Information literacy is important for students as well as teachers (ACRL, 2015; AASL, 2018) and is a key competency for learners (Ranschaert, 2020). It has been found that classroom teachers do not have skills to meet their own information needs (Virkus & Mathieson, 2019) and have a limited understanding of information literacy instruction (Shonfeld, Aharony, & Nadel-Kritz, 2021). Botturi and Bretta (2022) tasked pre-service teachers with developing video instruction on how to conduct a search for credible information and found participants leaned on technical search skills. The current, in-progress study builds on this research by seeking to understand information-seeking behaviors of graduate students seeking state certification in school librarianship and asks:

1. Does direct instruction of information literacy strategies impact ability to teach the skill?
2. Do students show understanding of critical elements of information-seeking?
3. Does video quality differ between in- and pre-service school librarians?

Participants created a three- to five- minute video tutorial using screencasting software demonstrating search strategies to find credible information. Videos were submitted through a learning management system and will be analyzed using Ring & Brahm's (2022) Rating Framework for the Quality of Video Explanations. Researchers hypothesize that graduate students are still developing advanced information-seeking skills and may rely on technical skills and known resources. The results of this study will inform and guide the practice of school librarianship graduate programs in developing curriculum that offers multiple opportunities to practice and scaffold skill development and demonstration.

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Keywords: *information literacy instruction, information literacy, information need, library science students*

Educational Futures on Social Media

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This paper investigates educational futures in so far as they constitute more general projections and vision of the general future (Urry, 2016). Data analyses concerning the future have typically been concerned with prediction of financial markets and crime. Not concerned with prediction, the objective of this paper is to investigate sentiments concerning the future of education. Futures have historically been studied in business and policy-making and is currently gaining traction in design.

Educational futures have been concerned with unbundling of services, human enhancement and AI, among other things (Bayne & Gallagher, 2021). In addition to topics that shape different futures, the schism between pessimism and optimism remains entrenched in discussions of technologies and the future (Roderick, 2016). Sentiment analysis is particularly suitable to help us understand this aspect of futures.

We harvested data from X, which continues to be an active channel for individuals to share their thoughts and opinions (Sancho Ortiz, 2025), by accessing the applicable streaming API using R. Data collection was based on a set of hashtags and search terms that specifically address the future of education and resulted in 429.807 Tweets from the 1st of July 2022 through to the 16th of November, 2023. We applied methods and techniques from educational data science to study conversations about futures on social media. We first applied opinion mining, focusing on time orientation, then conducted sentiment analysis (Liu, 2012), and used social network analyses to identify underlying communication structures (McLevey & Scott, 2023). This approach allowed us to get a better understanding of whether individuals organize in communities to discuss different types of futures and what sentiment they had.

Our preliminary results indicate that while users predominantly talked about the present, they clearly indicated a curiosity about the future. This curiosity seemed to be driven by anxiety (e.g. feeling overwhelmed) and anger about the current situation. Furthermore, additional semantic categories and units, provided even more nuanced insights into how individuals talked about futures. Our SNA then revealed that some communities, particularly the largest ones, seemed to incorporate more words with negative connotations in their communication.

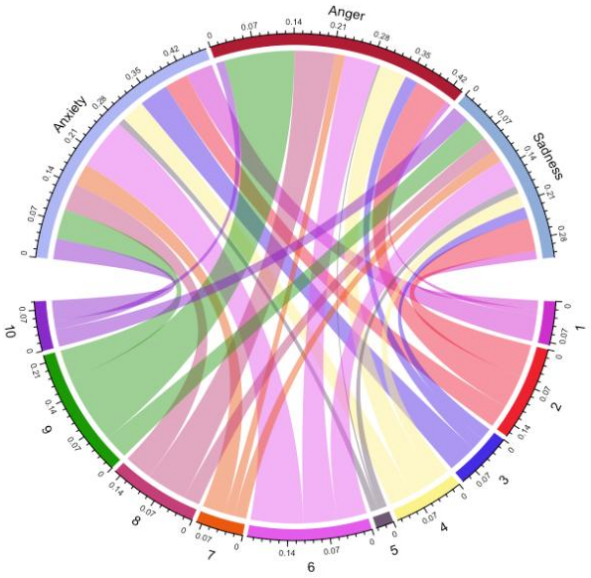

Figure 1.

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Keywords: *futures, social media, natural language processing, sentiment analysi, educational data science*

AI Taxonomies for Research Writing: Information Literacy in Prompt Engineering

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Imagine a university student, stuck on a writing assignment, turning to a Generative Artificial Intelligence (GenAI) tool like ChatGPT or Copilot out of frustration. As the student types: "Write a paper about..." before the student finishes typing the sentence a helpful pop-up on the side of the chat box reads: "Need some ideas? Try the following prompts?" The pop-up then suggests three prompts that correspond to common learning objectives as stated in writing courses like "provide a list of pivotal authors on this topic," "identify some gaps in the research on this topic," or "help me plan my research." The student will then be reminded of a classroom lecture about prompt engineering in which the instructor discussed which kinds of AI prompts are acceptable and which are not. While some institutions of higher education have initiated policies that allow the use of GenAI in some capacity, training instructors and students on its use for educational purposes is still in its infancy. Some instructors of writing intensive courses fear that student use of GenAI tools will undermine the writing process and students' ability to achieve the course learning outcomes and even lead to the downfall of creative human expression, the redefining of authorship, and the elimination of professions that involve writing (Baron, 2023). These fears are not unfounded as there have been increasing incidents of university students relying on GenAI in ways that do not help them achieve learning outcomes and stretch the boundaries of academic integrity (Goel & Nelson, 2024; Sweeney, 2023). Other authors have argued that aspects of writing pedagogy and assessment should be re-evaluated and updated to circumvent writing tasks that can be easily produced by GenAI software (Lodge, Thompson, & Corrin, 2023; Shah, 2023; Walter, 2024). In this paper, the authors take the position that writing pedagogy and assessment must change to adapt to the current environment in which students use GenAI to assist in their writing tasks. However, they contend that the creation of a tool such as the one described above, as well as instructor training on the usefulness of GenAI, requires the creation of a new learning taxonomy similar to that of Bloom's Taxonomy. This new taxonomy should be redefined for the current technological age and should incorporate information literacy skills that have been advanced by librarians since the coming of the information age. As information specialists in higher education, the authors will design a framework for a prompt engineering taxonomy that can be used to train instructors and students alike. This presentation will outline their rationale, approach, and share the findings of their preliminary research.

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Keywords: *generative artificial intelligence, taxonomy, research writing, higher education, information literacy, prompt engineering*

Trust in Chatbot-Generated Health Information: A User Perspective

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Introduction

Chatbots are artificial intelligence programs designed to simulate human conversation using natural language processing (Dobbala & Lingolu, 2024). Recently, chatbots have gained popularity due to their ability to reduce response times and handle repetitive tasks efficiently. These tools are widely used in education, healthcare, financial management and other fields. A notable advancement in this area is ChatGPT, which is very popular for its ability to generate coherent and realistic responses across various topics (Lund et al., 2023). With the increasing use of chatbots, many online searches are shifting from traditional search-engines to chatbot-based queries. One significant application is in healthcare where chatbots even provide basic health advice based on user input.

Research suggests that people perceive chatbots as knowledgeable and efficient, offering quick answers, a more human-like user experience, and easy interaction through natural language (LV et al., 2022; Li et al., 2023). These factors contribute to user trust in chatbots as information sources. However, several challenges remain. Trust in medical information is very crucial, since incorrect or misleading information can have serious health consequences. Therefore, understanding the factors that influence users' trust in chatbot-provided health information is essential. Therefore, this study explored users' perspectives on trust in chatbot-generated health information compared to traditional search engines.

Methodology

We used a qualitative approach including observations and interviews with participants selected through purposeful sampling from library and information science (LIS) students who had prior experience with ChatGPT for health-related queries. Participants first completed two health-related tasks using the ChatGPT and Google (with counterbalancing to avoid order effects) and then assessed their satisfaction and trust levels through a brief questionnaire. Then, they participated in an interview to further explore their perceptions of trust in the ChatGPT's responses compared to Google as a search engine.

Results

Through content analysis of user feedback, our study aimed to understand trust levels, key influencing factors, and differences in how students evaluate and trust chatbot-based searches compared to search engines results. The final results offer insights into the evolving trust dynamics in AI-powered health information retrieval.

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Keywords: *ChatGPT, chatbots, Google, health-information, information seeking, trust*

RAG in Research: Evaluating AI-Driven Literature Search Tools

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In recent years, numerous AI assistant tools have entered the market. These tools aim to integrate generative AI's ability to process natural language prompts with real-time database searches. The goal is to mitigate AI hallucinations by incorporating verified academic sources while maintaining the convenience of natural language prompting. Such tools are often referred to as retrieval-augmented generation (RAG) systems.

In the fall of 2024, we tested four such tools: Scite, Scopus AI, Web of Science Research Assistant, and Primo Research Assistant. Our aim was to evaluate the usefulness of these tools, considering both ease of use and relevance of search results. The evaluation included a survey and a series of workshops with researchers at KTH Royal Institute of Technology, as well as additional tests conducted by library staff following a structured search protocol.

Our findings suggest that, at this stage, these tools cannot replace traditional systematic database searches. However, they are valuable for identifying supplementary sources that may be difficult to find using conventional search techniques. They are also useful for researchers exploring unfamiliar fields. Notable differences emerged in the ease of use and quality of search results among the tested tools. These results align with similar observations reported by others.

A key weakness of these tools is the lack of context provided with the search results. These tools often generate results even when little relevant information exists, potentially misleading users into believing that research on a given topic is more extensive than it actually is. Often, an AI's response provides little or no indication that the requested information does not exist or is very limited. Other tools, such as Undermind.ai, appear to address this weakness and will be included in future studies.

The results of this study help inform us when these tools are useful, or perhaps harmful, for students and researchers. Drawing from both experience and research literature, we propose some guiding principles for evaluating when different search tools would be appropriate to use. Use cases might include lookup searches, exploratory searches, and searching for the purposes of a systematic review. One important guiding principle can be stated as saying that the more systematic a search, the higher the need for transparency of search tool. While AI tools will continue to evolve, these principles are expected to remain relevant in the foreseeable future.

Keywords: *academic libraries, AI literacy, RAG, research assistant, literature search*

Fostering Information Literacy in Multicultural Classrooms: A Case Study from Athens

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In today's digital age, information literacy (IL) has become a fundamental skill for students, enabling them to navigate the vast landscape of information effectively and responsibly. More particular, fostering IL among students from diverse cultural backgrounds, including immigrants or refugees, empowers their academic success and social integration.

This study presents the design, implementation, and assessment of a ten-session IL course at a multicultural middle school in Athens, Greece. The course aimed to equip students' critical thinking and improve their skills in information seeking, retrieval, evaluation, and ethical use, while addressing language barriers and varying levels of comprehension. The program was structured around interactive, student-centered learning methodologies, incorporating multilingual resources, culturally relevant examples, and digital tools to enhance engagement. In studying the course, we employed a mixed-methods approach, utilizing pre- and post-course assessments, classroom observations, and student interviews to measure learning outcomes and identify challenges. The purpose of the assessment was to determine the degree to which the initiative enhanced students' critical thinking, equiped them with the ability to evaluate and use information ethically, and promoted digital citizenship in an inclusive learning environment.

Findings indicated that students demonstrated significant improvement in their ability to critically assess online sources, identify misinformation, and apply ethical guidelines in information usage. However, language proficiency and digital access disparities emerged as key challenges. The study underscores the importance of adaptive pedagogical strategies and inclusive information literacy initiatives in multicultural educational settings.

This project contributes to the broader discourse on IL education by providing insights into best practices for fostering critical thinking and information literacy in diverse classrooms. The findings hold implications for educators, policymakers, and researchers striving to develop inclusive IL frameworks across Europe and beyond.

Keywords: *information literacy, multicultural education, critical thinking, middle school, inclusive pedagogy*

Librarians Attitudes Towards AI: AI-enhanced Metadata Creation and Management as New Challenges in Workplace Information Literacy

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AI applications are widely anticipated to enhance metadata creation, extraction, and management (Cox, 2023; Mannheimer et al., 2024). However, as with any advanced technology, users' skills and attitudes play a pivotal role in determining the final quality of the output. Librarians often emphasize the need for training (Hervieu & Wheatley, 2021), including those dedicated explicitly to AI tools (Cox, Pinfield & Rutter, 2019; Cox, 2023; Kautonen & Gasparini, 2024; Grote, Faber & Gasparini, 2024). They perceive understanding AI's potential and limitations, evaluation of its quality, bias, and ethics, and its critical application (Lo, 2024) as crucial elements of AI training.

This study aims to examine Polish librarians' attitudes toward AI applications, focusing on the selected information literacy skills deemed necessary to produce high-quality metadata. Do library and information professionals consider themselves prepared to critically assess information sources, that is, AI-generated metadata for accuracy, relevance, and bias, or do they believe additional training is essential to grasp and utilize AI systems fully? How do they envision the future role of librarians? Will critical thinking and expert judgment remain indispensable metadata creation and management skills, or will advanced AI mechanisms render such oversight unnecessary?

The answers to these questions will be based on data gathered through a survey conducted by the DCMI Education Committee. The survey explored the potential impact of AI on metadata creation and management within library and information services. The survey collected the opinions of library and information professionals worldwide in 14 languages, including 90 responses from information professionals in Poland (December 2024 and January 2025). R was used for statistical analysis of the results, supplemented by qualitative analysis of comments, using LLMs (llama3.1 and deepseek-r1 series), validated by human oversights.

By presenting findings from a survey of Polish librarians and comparing them with results obtained from librarians in other countries, this study aims to shed light on these questions as a critical step prior to developing competencies and implementing AI tools on a broader scale. Our study provides professionals with a voice in expressing their concerns and anticipation about the potential of AI-supported metadata creation, management, and processing. The use of this tool also requires new types of skills, information literacy, and proficiency (Widén & Teixeira, 2023). The responses indicated a high level of respondents' awareness of this topic, with the highest evaluation for *Understanding how AI tools function and their limitations* (4,67) and *Evaluating AI-generated metadata for accuracy, relevance, and bias critically* (4,63).

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Keywords: *AI, metadata, librarians, information literacy*

French University Library “AI Explorers”: A Longitudinal Study of The Process of Integrating AI into Information Literacy Initiatives

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This paper explores ways French academic librarians prepare for their role as mediators of emerging generative AI technologies. Having identified four « AI librarian-explorer » profiles (Favel-Kapoian, Kovacs, 2025) in the first phase of our research, we provided results of the second phase of analysis. We focus on the knowledge construction, network building, and pedagogical practices of a group of French university librarians involved in developing AI training sessions in the Lyon area for undergraduate and graduate students.

Objectives

We analysed librarians’ emerging positions in their role as GenAI mediators and trainers. Our goal was to understand how university librarians developed individual and collective frameworks for approaching AI in their everyday information practices and professional interactions (Licoppe, 2008; Garfinkel, 2020). We charted the creation and stabilisation of local and national ecosystems whereby librarians developed their knowledge and competencies while making choices about which IL competencies to prioritize when addressing generative AI issues in student training.

Methodology

We followed Winkin’s (1998) anthropological paradigm by considering librarians’ appropriation of AI tools within their professional activities (Delcambre, 2016). This led us to develop a qualitative methodological protocol (Paillé, Mucchielli, 2016) featuring semi-structured ethnographic interviews (Kaufman, 2016) with four librarians whom we previously interviewed. We added five interviewees and conducted content analysis of documents created for use by student participants in online AI sessions offered by librarians in the context of IL training.

Outcomes

Our results showed that librarians remained prudent about their role as AI mediators, tending to address AI by means of the IL issues with which they feel the most legitimate: dangers of plagiarism, use of AI for document searching. AI has become part of a regular agenda of internal discussion among library staff in order to promote a sense of “readiness” for future phases of IL course development. Certain “AI explorer” initiatives have however entered into a phase of relative stasis, a phenomenon which we attribute to the nature of the professional environment and the role of the library within the institution.

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Keywords: *generative AI, university librarian, higher education, information monitoring practices, information literacy course, acculturation, knowledge construction*

Information Literacy as a Collaborative Process: Evaluating a Journalist in Residence Program in Two French Public Libraries

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Information literacy (IL) programs are often multi-partner initiatives by which different actors come together in formal or informal networks to promote types of IL serving specific publics (Schreiber, 2016). Studying the design process as well as the experiences during program implementation can help us better understand the ways in which contributing actors' motivations interact.

Objectives

We studied the interactions between librarians and professional journalists in the design and implementation of a 2025 journalist in residence program in two public libraries in the Lyon area. We sought to determine how these interactions, and the organisational context in which they occurred, influenced project objectives. We explored ways such interactions addressed two types of tensions (Kervella et al., 2021; Corroy & Froissart, 2018): the tension between creative and competency-based programs and the tension between media-oriented and information-oriented programs.

Methodology

We chose a qualitative protocol with discourse analysis of the journalists' application dossiers; semi-structured qualitative interviews and informal exchanges with library staff and journalists; and ethnographic observations of the events over the three-month long program.

Outcomes

Analysis of the dossiers showed strong attachment to promoting the journalist's professional practice whereas librarians were concerned with developing competencies in areas such as disinformation. Interactions between librarians and journalists allowed for some interprofessional discussion. IL sessions for librarians and for the public organized by the documentary film maker centered on visual writing techniques linked to local identity. The press-radio reporter, used a more universal literacy-oriented approach, encouraging librarians to adapt resources to their own needs and publics. More generally, results showed that time and organizational constraints remained obstacles to addressing the need for substantive exchange between journalists and librarians. These obstaclestended to hinder reflexivity and to promote an event-based approach to IL during the residence program.

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Keywords: *media and information literacy, France, public policy, public library, journalist, residence program, knowledge circulation*

From Action to Awareness: Ethical AI Literacy in Higher Education

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Objectives

The integration of generative AI tools in academia raises ethical challenges in information literacy. This study examines students' use of ChatGPT for information retrieval and creative tasks, focusing on ethical awareness, alignment with the globally recognized ACRL (2015) Framework for Information Literacy, particularly in attribution, source evaluation, and responsible use, as well as strategies for integrating AI literacy into higher education curricula. Given its widespread adoption in academic information literacy education, the ACRL Framework provides a relevant foundation for assessing ethical engagement with AI tools. This research highlights the need to prepare students for responsible interaction with AI.

Approach and Methodology

This study employs a mixed-methods approach, combining literature analysis, case study methodology, thematic analysis, and comparative analysis. It examines 84 library and information science (LIS) students from Jagiellonian University, who completed ethically complex tasks using ChatGPT. After providing consent, participants assessed information retrieval, content evaluation, and authorship attribution under anonymized conditions. Thematic analysis, supported by MAXQDA, identified patterns in ethical awareness, prompt engineering, and AI literacy, offering insights into students' engagement with AI technologies in academic settings.

Results and Discussion

Significant disparities exist in students' ethical engagement with AI tools. Many found ChatGPT outputs useful, yet few critically assessed accuracy or bias. Ethical concerns, including proper attribution and misinformation recognition (AI hallucinations), were inconsistently addressed. Despite the ACRL Framework's emphasis on ethical information use, students demonstrated limited application of its principles, revealing AI literacy gaps. These findings highlight the need to expand the ACRL Framework to include AI-specific competencies, such as recognizing algorithmic bias, employing thoughtful prompt engineering, and critically evaluating AI-generated content (Carroll & Borycz, 2024; Kizhakkethil & Perryman, 2024; Ndungu, 2024). While findings are not directly generalizable, they reveal barriers, skill gaps, and pedagogical shortcomings in LIS education that inform further research on AI ethics in academia. This study contributes to knowledge on responsible AI use in higher education and provides actionable recommendations for integrating AI ethics into information literacy curricula. It underscores the need for systematic, ethically grounded AI literacy training in LIS programs, equipping students with competencies for critical and ethical AI engagement.

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Keywords: *ACRL Framework, AI literacy, ethics in information use, generative AI, higher education, information ethics, prompt engineering*

Measuring Teacher Educators' Information Problem Solving: A Situational Judgement Test

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Introduction

In today's digital age, the ability to effectively search for and process online information is crucial, especially in higher education. Teacher educators play a key role in developing these skills in students, who will, in turn, teach them to their future pupils. However, there is a lack of validated instruments to measure the online information skills of teacher educators themselves.

Objectives

This study aims to develop and validate a Situational Judgement Test (SJT) to measure information problem-solving (IPS) skills among teacher educators. Unlike existing SJTs targeting IPS in domains like psychology (e.g., Rosman et al., 2014), this study emphasizes measuring them specific to the professional educational context. SJTs are particularly suitable as they present realistic, job-related scenarios that requiring practical application of knowledge and decision-making. This approach allows for the assessment of practical application of knowledge and decision-making processes, which are critical for effective IPS.

Methodology

Garcia et al.'s (2020) Spanish language SJT called 'Procedural Information-seeking Knowledge Evaluation-Education (PIKE-E) test', was translated and adapted to the Dutch context. The translation process included initial translation and cultural adaptation. Feedback from teacher educators and experts refined the test, resulting in a 17-item version aligned with the Information Problem Solving using the Internet (IPS-I) model (Brand-Gruwel et al., 2009). The test items were linked to a familiar scenario for teacher educators, focusing on 'the impact of robotics.' The final version was administered to 39 teacher educators from various disciplines. Quantitative data were analyzed using item-total correlations and factor analysis to assess construct validity.

Results

Teacher educators performed well in tasks related to information selection and processing but struggled with search-related tasks and critical evaluation. Item-total correlations highlighted variability, indicating a need for further refinement of certain items. Construct validity was partially supported, while content validity was strengthened by expert feedback and contextual alignment of test items.

Conclusions and Discussion

This contribution is significant as it provides a reliable instrument to assess and improve the information problem-solving skills of teacher educators, ultimately enhancing the quality of education. Future research should focus on test-retest reliability and expanding the sample size to improve generalizability. Additionally, qualitative methods could provide deeper insights into the test items' interpretation and inform further refinements.

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Keywords: *information problem solving, situational judgement test, teacher educators, PIKE-E Test*

AI as a Gamechanger in Norwegian HEI – How are the Institutions Coping?

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Debates on the integration of digital technologies in higher education in Norway have been going on for some time, but still, the launch of ChatGPT in November 2022 was considered by many as something fundamentally different from the earlier developments. In this paper we will investigate the institutional responses to the emerging artificial intelligences in Norwegian academia. Recent research from the Nordic Institute for Studies of Innovation, research and education (NIFU) funded by the Directorate for higher education and skills (HK-dir) will be calibrated and compared with document studies from the web-sites of selected Norwegian universities and University colleges, and with results from a report by HK-dir . (HK-dir, 2025) - HK-dir | HK-dir.

While the studies from NIFU indicate that the higher education institutions' initial perceptions of AI were as a regulatory issue that needed to be controlled, these studies were coupled with a lack of technological competence to fully consider the kind of transformation that artificial intelligence technology potentially represents. This, along with the sense of artificial intelligence being a "moving target", "led higher education institutions to an initial state of organizational paralysis, in turn adopting a "wait and see" strategy." (Korseberg & Eiken, 2024).

Further research from NIFU "shows that while the first phase after the launch was characterized by a lot of uncertainty and fear, the institutions are experiencing a change in mood among employees and students. At the same time, the rapid development and lack of knowledge and expertise about what generative artificial intelligence can and cannot do have made it challenging for institutions to develop concrete measures." (Korseberg & Drange, 2024).

However, despite this call for regulations and the initial uncertainty and fear, the institutions have started responding. In this paper we provide examples of how HEIs now are developing both regulations and materials for teaching staff about AI. We do this by searching the web-pages from select institutions to find what kind of information and regulations they are providing for their teaching staff. We look for opportunities given for better pedagogical practices, workshops and university leadership support. We will also be interested in uncovering potential dissimilarities among institutions, where the focus of AI-trainings are found. Is it among the leadership, the teaching staff or the administrators? Where and how are the students' perspective found?

In conclusion, our study will show the situation with AI in Norwegian HEIs at a moment in time. It will describe the measures taken by some institutions, and the concerns of the university sector.

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Keywords: *Norway, AI in higher education, ChatGPT*

Enhancing Museum Education and Widening Inclusion through Emerging Technologies

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Our article examines the potential of integrating emerging technologies, particularly telepresence robots (TPRs), into museum education. TPRs are mobile wheeled devices manipulated from a distance, equipped with a range of interactive functionalities including cameras, speakers, microphones, screens, and sensor-assisted motion control, all of which enhance seamless communication and support collaboration from remote locations (Virkus et al., 2024). This paper explores pre-school, basic and secondary education teachers' expectations regarding museum activities that foster digital literacy and future competencies. By focusing on the integration of emerging technologies, our research assesses how these technologies can enrich museum programs and evaluates the preparedness of information professionals to adopt new digital skills in their educational practices. Out findings contribute to a broader understanding of how emerging technologies can support inclusive and future-oriented museum education.

Research Questions and Methodology

We were guided by the following research questions: 1) What are the potential challenges and limitations of using emerging technologies, including TPRs, in museum environments? 2) How can TPRs improve access to cultural and educational resources in museums? 3) What are the expectations of teachers and educators regarding the use of new technologies and TPRs in museum education? We aimed to assess museums' readiness to integrate TPRs and to understand teachers' expectations for museum programs in fostering future competencies. We employed mixed-methods approach, combining qualitative and quantitative data collection methods. We conducted surveys with teachers to evaluate their preparedness for using TPRs in museum settings, their ability to integrate digital tools, and their perspectives on developing future competencies through museum learning. Through interviews with museum educators and information professionals we explored their perceptions of future competencies and their experiences with the integration of TPRs into museum education.

Results

Our study identified significant potential for integrating TPRs, artificial intelligence (AI), and virtual reality (VR) applications into museum education to enhance learning experiences. However, findings also highlighted the need for further development to better align museum programs with teachers' expectations for fostering future competencies. Emerging technologies will help guide users through the museum's collections and programs, providing introductions to the services, and enabling the various services for learners with disabilities.

Museum educators identified critical thinking, collaboration, creativity, and digital literacy as essential future skills. While they recognized the importance of incorporating these competencies into educational programs, the adoption of digital tools, particularly AI, remains inconsistent. Teachers expressed clear expectations for museum education, stressing the need to create accessibility for learners with special educational needs, where TPRs present significant potential. Additionally, they exoressed strong interest in a range of digital learning tools such as VR-based games, virtual classrooms, interactive activities, animations, tasks with immediate feedback, and robotics. This interest highlighted the broader potential for incorporating digital technologies into museums to create more engaging and inclusive learning experiences.

In conclusion, our research underscores the significant potential for integrating TPRs and AI into museum education. A targeted approach, including community-based learning with digital tools, can enhance the effectiveness of educational programs. Both museum educators and teachers see the value in evolving museum learning environments to meet the demands of future skill development, but more strategic efforts are needed to realize this potential.

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Keywords: *digital transformation, digital museum, telepresence robots, museum learning, digital competencies, digital technologies, future competences, digital access, virtual reality, artificial intelligence*

OSINT and Literacies: Towards a Political and Technical Vision of Information and Media Literacies

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Open Source Intelligence (OSINT) has gained significant visibility in recent years, particularly following the war in Ukraine, which highlighted its role beyond intelligence services. OSINT has become essential in investigative journalism and for organizations such as Bellingcat and Forensic Architecture. Its methodologies and tools are now widely adopted by enthusiasts, developers, and fact-checkers, raising questions about its integration into media and information literacy education.

This study builds on several research projects in France, including interviews with OSINT professionals (n=25) and the analysis of open source investigations (n=150) ranging from reactive to proactive approaches (Roumanos, 2022). More recently, we have explored the integration of artificial intelligence into OSINT methodologies. Rather than considering OSINT as a separate literacy, this article proposes to incorporate its competencies into existing educational frameworks.

1. Coupling Established and Emerging Competencies

OSINT requires technical, ethical, and analytical skills. Information retrieval, verification, and prioritization are fundamental, demanding awareness of social and geopolitical contexts. These align with information literacy but extend to broader sources and new investigative techniques, similar to those in data journalism.

Enhancing information retrieval skills also raises awareness about students' digital footprints. Training should encourage critical reflection on personal data exposure and online traces. Additionally, studying high-quality audiovisual investigations can improve media literacy by demonstrating rigorous journalistic practices rather than solely addressing disinformation.

2. Developing Advanced Investigative Competencies

Search Engine Literacy emphasizes that finding information is not only about relevance but also about understanding search engine filtering mechanisms. OSINT-related literacies require both technical expertise in investigative tools and critical awareness of their biases, especially when integrating artificial intelligence (Deuze & Beckett, 2022).

Moreover, strong analytical reasoning is essential for hypothesis-driven investigations, often following forensic inquiry models. This advanced expertise enables structured argumentation based on robust evidence. Consequently, OSINT education should train students to engage with complex investigative narratives requiring sustained attention, far beyond the fragmented consumption of information on platforms like Instagram or TikTok.

Moving Beyond Pragmatism: Building a Political and Technical Culture of Information

The most rigorous OSINT investigations rely on extensive documentation and hyperdocumentation principles (Le Deuff, 2020), ensuring transparency by making data and collected evidence accessible.

Education must transcend reactive fact-checking to foster a deeper investigative culture. Projects like Forensic Architecture and The New York Times' investigative reports illustrate how OSINT methodologies contribute to historical and judicial documentation. By integrating OSINT into education, we aim to cultivate a robust technical and political understanding of information in contemporary society.

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Keywords: *OSINT investigation, open-source investigations, AI literacy*

Health Literacy among Patients in Romania and the Need for Future Involvement of Libraries

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Introduction

Health literacy has become essential to access, evaluate, and use health information. Efforts to improve health literacy levels of the population are significant, but vary depending on the country, with libraries and education institutions being involved to various extents. In Romania, the actions of libraries and information specialists to enhance the health literacy of the population have been marginal in comparison with the UK, for example, where library services and health education institutions have been very active and have developed a series of tools and courses over the years. Starting with 2009, a series of studies were conducted in Romania regarding information literacy, health literacy and library involvement in teaching the necessary skills, which could empower people to be active in decisions influencing their life and well-being. The aim of this study is to analyse findings of different research conducted in the past years and provide an overview of the health literacy level among patients in Romania and then compare it to the health literacy level of patients in other countries as well as an overview of the challenges patients face when navigating the healthcare system.

Methodology and Outcomes

Research synthesis was used in this study. By analysing and comparing the results of studies regarding health literacy, we intended to uncover new insights and create a better understanding of the current state of health literacy among patients in Romania and future needs for its improvement. The selection of studies aimed to cover various types of patients and the evolution over time of this issue.

Research conducted over the years among patients in Romania, especially surgical and cancer patients, has highlighted a moderate level of health literacy. Proposals and initiatives for the development and implementation of various information literacy programmes by the medical universities in Cluj and Bucharest or by their libraries and isolated actions of some public libraries have proved these institutions are interested and open for a greater involvement in improving health literacy among their communities. However, joint efforts from different institutions, organisations and authorities are needed for successful programmes that could reach all categories of population in society.

Conclusion

Health literacy has proved to play a significant role in the patients' experience during their disease, leading to a more active engagement in the decision-making process and the entire care process. Until now, libraries' involvement in health literacy programmes could be considered small, or modest, sometimes even invisible. However, there is potential for a better collaboration between libraries which could contribute to an improvement of health literacy level. Focus on the training of librarians in Romania to support health literacy initiatives and designing a national strategy to involve as many people as possible in health literacy programmes, especially marginalized communities, are necessary steps in the future.

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Keywords: *health literacy, surgical patients, cancer patients, libraries, Romania*

Information and Media Education (IME) in the Age of Generative Artificial Intelligence: Challenges and Perspectives

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Recent advancements in artificial intelligence (AI), such as ChatGPT, DeepSeek and other generative AI technologies, have significantly transformed the information landscape, bringing both opportunities and challenges in everyday life as in education. These tools, capable of performing complex tasks and creating new content (e.g., generating human-like text, audio, images), have provoked mixed reactions among educators. Some of them see these developments as a chance to innovate and enhance teaching methods, creating a more dynamic, creative, and interactive learning environment Others are concerned about their impact on academic integrity and the possible decline of human creativity and critical thinking. With their improper use they can be used to produce misleading or malicious information, leading to the spread of fake news and harmful information (Trust, 2023).

Given this evolving information landscape, UNESCO (2025, 2022) considers that AI "holds great promise for education, but only if it is deployed in a safe and ethical way". The organization is focused on providing support and resources to ensure that teachers and students acquire the essential skills needed to navigate this ever-changing information landscape so that AI can benefit everyone, everywhere.

In this way, these necessary skills and knowledge are gradually being integrated into standards and curricula, even though, as Michael Flierl (2024) notes, existing information and media education (IME) does not seem adequately equipped to address the challenges posed by new developments in AI. IME is defined as a pluralistic education that takes into account all forms of information and media, whatever the technology used, and all forms of access to information, including librariesand the Internet (Maury, 2017).

Should the response be to tegulate, promote, or protect? What about in the French school context?

To introduce this conceptual and reflexive paper, we will first review the recent literature on AI, in particular conversational and generative AI in terms of its opportunities and risks (perceived or experienced) in education. We will then put this into perspective with institutional reference texts and identify guidance documents such as programs, accompanying texts, productions of digital thematic groups (#GTnum), and extracts from reports. Such documents inform the content and implementation methods of IME in curricula.

An analytical reading of the data should make it possible to identify how and to what extent the choices made. Specifically, a close reading helps identify the areas and issues to be addressed by teachers and teacher librarians who may contribute to solving the "problems" mentioned above. Such an analysis will help clarify what content is missing, thus opening up perspectives for the future of IME.

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Keywords: *artificial intelligence, information and media education, misinformation, ethics, empowerment, creativity, critical thinking*

“Of course, I can do it – I just don’t want to!”: An Emotional and Structural AI Readiness Scale

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As a new technological and social phenomenon, Generative Artificial Intelligence amazes us with human-like features that set it apart from earlier information technologies. Among others, it offers more advanced conversationality (with emotional and phatic elements), which can appear during searching, evaluating, and selecting results and at other stages of information practices (defining information needs, communicating outcomes, creatively applying those outcomes to research and learning). The effective use of AI as a tool can be influenced by the level of information literacy but also—quite significantly—by trust and critical stance regarding this technology. This trust often depends on the users’ emotional stance, as they are not always able (e.g., due to information overload) to verify the responses they receive. The first tools to measure the declarative level of AI literacy (e.g., Lee & Park, 2024) are currently in development. However, we propose an approach that precedes AI literacy measurement: **an instrument and a model for diagnosing readiness to use AI**, which includes not only AI proficiency skills but also attitudes toward this technology.

This paper aims to investigate the readiness to use AI. The activities undertaken are based on three theoretical frameworks: 1) due to the novelty of AI as a technological solution being introduced into social use: the **technology acceptance model** (e.g., Venkatesh, 2000); 2) due to the information competencies necessary for using this solution: the theory of **critical information literacy** (Tewell, 2018); 3) due to the specificity of the tool (its conversational nature and the significant affective factor in using it): studies identifying **users’ emotions and satisfaction as factors strongly influencing information behavio**r (Savolainen, 1995).

Methodologically, the study is oriented toward factor analysis. First, based on the existing literature, we have created a measurement instrument to test and validate it as an AI Readiness scale on a selected research sample (faculty members representing different disciplines). Second, we used a Multiple Indicators and Multiple Causes model to define institutional and personal reasons for using AI. The reasons considered are external and internal factors. The measurement indicators draw on previously available resources: AI literacy scales (e.g. Lee & Park, 2024; Ng et al., 2024) and IL scales (e.g., Pinto & Sales, 2010; Kurbanoglu, Akkoyunlu, & Umay, 2006) —as inspiration for designing components to evaluate four aspects of AI readiness: cognitive, behavioral, affective, and ethical.

Knowledge about a given group’s readiness—or lack thereof—to use AI will be valuable in educational practice and in efforts to protect unprepared individuals who are particularly susceptible and vulnerable to the negative consequences of improper or unethical use of emerging technologies. This concern also extends to professional groups that are expected to adopt these technologies at an early stage, including the academic community. Accordingly, we have chosen to dedicate our model to the members of this group.

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Keywords: *AI literacy, artificial intelligence, information literacy, multiple indicators and multiple causes model*

Self-Assessment of the Polish Students' Artificial Intelligence Literacy in the Context of AI-Generated Content Detection

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Introduction

Most research on AI-generated content detection focuses on technological tools (Bellini et al., 2024; Elkhatat et al., 2023; Weber-Wulff et al., 2023), with less attention to users' ability to distinguish AI from human-created material (Frank et al., 2024). Studies suggest that users struggle with this task, particularly when AI content is high quality (Boutadjine et al., 2024; Nguyen & Barrot, 2024). Developing AI literacy in content recognition is therefore crucial for educators. A key step in this process is self-assessment, which helps users identify gaps in their discernment skills. This study addresses identified research gaps by examining Polish students' perceptions of their AI literacy, particularly their confidence in identifying AI-generated text, images, and videos.

Method

A survey with a 5-point Likert scale was conducted among undergraduate students (n=350). Participants assessed 32 statements on AI tool usage, exposure to AI-generated content, recognition ability, and online information evaluation. Data were analyzed quantitatively using Google Forms.

Results

Over 80% of respondents reported encountering AI-generated content in the media, and more than 70% felt confident in recognizing AI-generated videos. Despite this, students rarely use verification tools, suggesting a possible overestimation of their abilities. This overconfidence may stem from cognitive bias, as research indicates distinguishing AI-generated from human-created content is highly challenging. Most respondents also support labeling AI-generated content, recognizing the difficulty of distinguishing it from human-created material.

Conclusion

Students express high confidence in detecting AI-generated content, yet their actual ability remains uncertain. Given the difficulty of distinguishing AI from human-created material, this confidence warrants further investigation. Future research will compare self-assessments with empirical tests to assess users' actual competency and potential causes of high confidence in discernment skills.

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Keywords: *AI-generated content detection, artificial intelligence, artificial intelligence literacy, information literacy*

Chatbots and Information Literacy: Comparing Two Groups of Teacher Education Students

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Objectives

This study investigates the usage and perceptions of artificial intelligence (AI) chatbots among students in the Faculty of Teacher Education at the University of Inland Norway (INN). The research focuses on differences between preschool teacher education students (PREs) and primary and secondary school teacher education students (STEs). Results provide insight into differences in the student groups' technological competence, pedagogical methods and motivation in their roles as both college students and as future teachers for different age groups.

Existing literature highlights the potential benefits and challenges of chatbots in higher education. However, specific studies on how teacher education students engage with these technologies are limited. This study seeks to fill this gap.

Methodology

Our online survey, targeting all bachelor's and master's teacher education students at INN, was distributed in October 2024. The survey ensured anonymity and required informed consent. It included Likert-scale items and closed-ended questions regarding the extent to which students use chatbots in their studies, how they use them, ethical issues related to their use, and how they may affect students' learning, critical thinking, and future careers. Several questions related to information literacy, such as the degree to which chatbots may reduce critical thinking skills, whether they are used to find information sources, and the extent to which students consider AI-generated texts reliable.

Outcomes

The survey received 492 responses, with nearly equal numbers of PREs (n=184) and STEs (n=182). Most respondents were first-year students, and a large majority were female. Analyses revealed several significant differences between PREs and STEs in terms of chatbot use and perceptions.

STEs reported higher knowledge levels of chatbots than PREs. In terms of usage, while 75% of STEs had employed chatbots in their studies, only 34% of PREs had done so. Compared to PREs, more STEs believe that there is widespread use of chatbots among their fellow students. A larger proportion of STEs report feeling an increased addiction to chatbots than PREs. Additionally, more STEs believe that the use of chatbots should not be forbidden in higher education, and that its use should be permitted in graded assignments and home exams. PREs reported increased interest in their studies due to the use of chatbots to a greater extent than STEs, while STEs anticipated a greater impact of chatbots on their learning and future careers than PREs.

For questions related to information literacy, there were two notable differences between the student groups. Firstly, PREs believe to a greater extent than STEs that their critical thinking abilities will be reduced by chatbot use. Secondly, more STEs use chatbots to find relevant information sources than PREs. Similarities between the two groups include their beliefs about the reliability of information generated by chatbots; the extent to which copy/paste from chatbots represents plagiarism; and how worried they would be about being accused of plagiarizing if they used AI-generated texts.

Keywords: *chatbots, teacher education, preschool teacher education, artificial intelligence, survey*

Humanities, Humanism and Ethics in a Digital Context: Challenges for Digital Literacy Research and Learning

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Building on the collaborative efforts between Universidade Aberta and Universidade Nova de Lisboa, within the Lisbon Region Consortium of the Universities Portugal – Connecting Knowledge Project (2023), this communication focuses on critical reflections in Information Science. Special attention is given to four emerging research and learning areas related to Digital Literacy (DL):

1. Synergies between Information Science and Digital Humanities: strengthening cooperation between Information Science and Digital Humanities enhances access to management of information and data for research purposes. This synergy supports the broader strategy of digital convergence, fostering interdisciplinary collaboration and innovation.
2. The rise of Digital Humanism and Human-Centered Artificial Intelligence: inspired by the Digital Humanism movement (Werthner, 2020), this research explores the need for an Artificial Intelligence framework grounded in human rights and sustainable information practices (Werthner, Prem, Lee, and Ghezzi, 2022). Digital Humanism is defined as an approach that "describes, analyzes, and, most importantly, influences the complex interplay of technology and humankind for a better society and life, fully respecting universal human rights" (p. 124). This perspective emphasizes the ethical challenges of digitalization, automation, and robotization.
3. The Cross-Cutting Role of Digital Ethics: Digital Ethics is increasingly critical in evaluating whether traditional ethical principles remain relevant and effective in addressing the opportunities and risks of digital transformation. Emerging forms of technological dependency demand robust ethical governance frameworks to ensure responsible innovation and safeguard societal values (Malheiro et al., 2024).
4. Evolving Frameworks of Digital Literacy in Educational Contexts: Digital Literacy continues to evolve within dynamic communication and learning environments. Recognizing its situated nature, recent approaches advocate for promoting digital fluency as a collective competence in higher education, fostering more effective integration of digital skills into academic contexts (Marín and Castañeda, 2023).

This paper seeks to answer the question: "What challenges arise at the intersection of Humanities transformation and digital literacy research and learning?" It will share insights from two years of strategic and critical reflection between the collaborating institutions, discussing integration of Digital Literacy into learning environments.

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Keywords: *digital literacy research, digital humanities, digital humanism, digital ethics, Universidade Aberta, Universidade Nova, Portugal*

How to Promote Everyday Information Literacy Differently?

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Current phenomena such as information overload, disinformation and mistrust in media and governmental institutions highlight the significance of comprehensive information literacy promotion. Critical thinking and awareness of one's own information behavior are therefore fundamental for democratic societies and social participation. The presented research evolved in the context of a recently finished PhD-project. It examined everyday information behavior of people living in one district in northern Germany, particularly looking at deficient patterns and possible ways for compensation. The overarching aim is to gain a deeper understanding of main issues in the information process while evaluating possible educational concepts. Therefore, the thesis used a multi-stage research process with mixed methods to answer the successive research questions. The first and second research questions elaborate which information needs and sources were used in everyday situations and which difficulties arose within those information processes. The third research question addresses the user perspective asking for didactical measures and mediating approaches that could help address the identified deficits. The fourth research question seeks to integrate and transfer previously collected results with literature insights to elaborate how a methodological intervention needs to be conceptualized in order to support the (self-)reflection to use information and sources. The research methods were chosen according to the research question at present. A quantiative user survey (N=495) was conducted to answer RQ1 and RQ2, qualitative virtual semi-structured guided interviews (N=22) to answer RQ2 and RQ3. Focus groups (N=3) gathered data for RQ2 and RQ3, while semi-structred interviews (N=20) adressed RQ5. The data were collected from November 2020 until August 2024. The theoretical basis is formed by the ACRL-framework published by *Association of College & Research Libraries* (ACRL 2016*)* and the Metaliteracy by Mackey & Jacobson (2022). Educational concepts such as Transformative Learning (Koller 2018) or Playful Learning (Heidari-Shahreza 2024) complement the interdisciplinary approach. Further, the Information Horizons Interview technique by Sonnenwald (2005) and the subsequent Information Source Horizon Interview by Savolainen (2021) are two important concepts of visual-based methodologies for the creation of the final learning concept. As the results of the quantitative user survey (N=495), qualitative virtual semi-structured guided interviews (N=22) and focus groups (N=3) showed, the main difficulties in the process of information search arise in the evaluation of information and sources as well as in the identification of disinformation (RQ2). There is a need for low-threshold learning measures to allow for self-realization of one's own information behavior (RQ3). In short, three guiding questions supported by two visualization schemes help to infer desired behavior in future informational contexts (RQ4). The concepts evaluation with semi-structured interviews (N=20) showed meaningful results (RQ5). Non-judgmental discourses can be beneficial to further integrate and deepen the experience. Learners can compare and discuss their information landscapes, their approach on credibility assessment as well as potential discrepancies and implications for future search behaviors. The concept can be adapted to many educational settings and institutions for media and political education. Employee trainings to integrate the methodology into educational courses are already happening.

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Keywords: *information literacy promotion, everyday information literacy, lifelong learning, self-reflection, learning intervention*

Decentering Whiteness in Information Literacy through Critical Theories and Methods

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While the library profession has prioritized values such as equity, diversity, and inclusion (EDI), "discourses of racelessness" still dominate (Hudson, 2017, p. 17). Some may believe that being "colorblind" is a virtue, that ignoring race will lead to the elimination of racism (Bonilla-Silva, 2018). Instead, this leads to the erasure of the very real ways in which systemic, structural, and institutional racism influence the lives of those who have been marginalized based on racial or ethnic identity. Furthermore, there has been an absence of a consideration of race in information literacy, and several scholars have critiqued the ACRL *Framework for Information Literacy for Higher Education* for its racelessness and lack of a justice orientation (Battista et al., 2015; Rapchak, 2019). Despite growing interest in inclusive, antiracist, critical, and liberatory pedagogies and the increasing acknowledgement of the sociocultural nature of information literacy, there is scant scholarship that seeks to center the voices and experiences of people of color related to information literacy conceptualizations and practices.

In this paper, we provide an overview of previous scholarship highlighting the racelessness of information literacy as a concept and as a practice. Then, we discuss how we are using critical methodologies and theories, such as critical race theory and critical whiteness theory, to center the experiences and voices of Black and African American students through an exploration of research assignment experiences in secondary and postsecondary education. Research assignments are "literacy events," which require students to know "the codes used by the community and the customs and conventions in play" (Elmborg, 2006, p. 195). In other words, they are sociocultural practices in which students demonstrate and are assessed on their understanding of information literacy in the higher education context. To do this, we use a modification of phenomenological interviewing (Seidman, 2013) to explore the participants' experiences with research assignments and how they make sense of these experiences, especially as students of color in predominantly white institutions. Specifically, we ask students how they selected topics for these assignments and made decisions about finding and using information, as well as how their teachers supported or pushed back on their research interests. Were they allowed or encouraged to explore topics that are relevant to their identities and might be considered racial in nature? Were they allowed or encouraged to approach knowledge creation from perspectives other than white, Euro-Western epistemological values? What is it like to do research as a person of color in a predominantly white context, especially when someone else will be assigning a grade to that work? Through this exploration, we hope to uncover if research assignments reify white normativity and share counterstories that can be used to begin to dismantle the whiteness of information literacy and where it might manifest in postsecondary research experiences.

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Keywords: *critical race theory, critical methodology, qualitative research, secondary education, postsecondary education, research assignments*

Emotional Labour in the Classroom: A Scoping Review of Instruction in Academic Libraries

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Emotional labour has gained recognition in librarianship in recent years. Every day, librarians work with angry, stressed or distraught patrons who are striving to meet deadlines, struggling to find the information sources that they need, or battling with writing and publishing. Reseach consultations with library users and encounters with overworked coworkers and leadership can all require us to manage our emotions to achieve a desired result. Arlie Hochschild (1983) defined emotional labour as "the management of feeling to create a publicly observable facial and bodily display" (p. 7). Teaching librarians engage in emotional labour on a regular basis (Julien & Genius, 2009). We encourage, support, persuade, comfort, empower and embolden students and researchers through teaching and tutoring. We also strive to make material that we may have been teaching for years seem fresh and exciting for each new audience. Adding AI resources and methods to our instruction can add another source of emotional labour to our work as both library users and teaching librarians may have emotions to manage around the role these tools play in our practice (Ringnes et al., 2024).

Understanding the emotional labour involved in teaching information literacy can help librarians do this work both more effectively and more sustainably, decreasing risk of burnout.

Purpose

Our purpose is threefold: to increase the awareness of how emotional labour affects academic librarians in their teaching roles; to inspire teaching librarians to think critically about situations that require emotional labour; and to provide evidence-based management strategies.

Methodology

The presentation seeks to present findings from a scoping review about emotional labour for teaching librarians. The review work is in process. The review is based on the framework by Arksey & O'Malley (2005).

Outcome

Emotional labour can negatively impact teaching librarians' mental and physical health, and several studies have linked emotional labour to burnout and low morale among library workers (Benjes-Small, 2023; Kendrick, 2017; Matteson & Miller, 2013). It is therefore important that teaching librarians understand the concepts of emotional labour, and have strategies to deal with it. The paper addresses the particular experience of emotional labour among teaching librarians and the presentation will give an overview of findings as well as practical tips for doing emotional labour in a more sustainable way.

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Keywords: emotional labour, information literacy, teaching librarians, academic librarians

Students' Self-Efficacy in Information Creation: Insights from AI Management and Strategic Literacy Integration

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Based on the ACRL Framework (2015), this study focuses on assessing students' self-efficacy regarding certain aspects of the "Information Creation" frame to determine their ability to evaluate the processes involved in creating information, as well as their effectiveness in meeting information needs by verifying the authenticity and quality of sources. In this regard, the following research questions are addressed:

- RQ1: To what extent do students believe they are capable of evaluating the process of creating a documentary product?
- RQ2: Does AI management influence students' perceived self-efficacy in the information creation process?

The study included a sample of 230 Education students from the University of Granada. A quantitative methodology was implemented using an ad hoc questionnaire. Participants reported an overall self-efficacy score in content creation above 7.3 points (SD=1.36) on a Likert scale from 1 to 10. Regarding the items, students felt highly competent in "Recognizing that information can be perceived differently depending on its format (docx, pdf, jpeg, mp4, mov, avi, xlsx, etc.)," with an average self-efficacy score above 8 points but were less confident in "Verifying the authenticity of shared and consumed information, regardless of the format or medium" and in "Using editing tools to create data-driven content (Excel, SPSS, R, Stata, etc.)," with an average self-efficacy score just above 6 points. It is worth noting that 70.9% of participants admit to using artificial intelligence (AI) to create content, with ChatGPT being their preferred platform (68.3%). Additionally, 42.2% say they share information in a restricted manner, with Instagram being the most used social network (95.7%).

In conclusion, on the one hand, there is evidence of a gap in students' perceived self-efficacy regarding certain aspects related to information creation (formats, media, data) that are more characteristic of media and data literacy. On the other hand, there is a significant impact of AI management on students' perceived self-efficacy in the information creation process. Both findings reinforce the need to integrate three types of literacies (information, media, and data) into a holistic framework, which is essential for the education of university students in today's digital society, characterized by the massive use of data and the resulting misinformation and fake news.

Keywords: *information creation, student's perception, ACRL Framerwork, education, ChatGPT*

The Use of ChatGPT by University Students as a Tool for Self-Training in Information Literacy

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This study examines the relationship between Information Literacy (IL) and the use of Artificial Intelligence (AI), specifically ChatGPT, in the teaching-learning processes of university students in Social Sciences, particularly in Education, and Information and Documentation. The study involved a sample of final-year undergraduate students (N=45) from the University of Granada. A qualitative-descriptive methodology was employed, utilizing a focus group with think-aloud techniques and semi-structured interviews, complemented by a quantitative questionnaire based on a Likert scale, developed ad hoc.

Both quantitative and qualitative results were compared to verify the consistency of the information provided by students. The findings reveal the following: first, AI is becoming increasingly widespread in university teaching-learning processes; second, students use ChatGPT primarily as a tool for information retrieval but often without clearly defining their questions or information needs, nor thoroughly verifying the obtained results; third, students find ChatGPT useful for processing information, such as summarizing texts, selecting keywords, categorizing, and relating content, yet they sometimes struggle with managing references, finding it confusing and inaccurate; fourth, there appears to be a correlation between increased use of ChatGPT and a decline in students' critical attitude and evaluation of information sources, particularly regarding content reliability. Lastly, students use ChatGPT to assist in communicating information, particularly in structuring, writing, and styling class assignments and reports, yet they rarely verify the validity or reliability of bibliographic sources. The use of AI has clear implications for university faculty and librarians, as it necessitates training initiatives that support adaptation to new tools.

In conclusion, students express a strong need for more training in AI tools, proper use of ChatGPT, and faculty familiarization with this technology for its integration into teaching-learning processes, particularly in the development of information literacy competencies.

Keywords: *ChatGPT, IL, university students, qualitative research, quantitative analysis*

Intellectual Property Rights and AI-Generated Patents: Romania vs. Norway

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Abstract Objectives

This study investigates the perceptions and practices of Romanian specialists regarding inventor rights for patents generated with artificial intelligence (AI), emphasizing comparative insights with the Norwegian patent system. It seeks to identify AI-driven innovations' legal and ethical challenges and their impact on existing intellectual property (IP) frameworks.

Methodology

Using a qualitative research design, we conducted in-depth interviews with five Romanian experts and analyzed their perspectives alongside relevant Norwegian policies and practices. This dual approach provides a foundation for exploring how cultural and systemic differences influence approaches to AI inventorship.

Outcomes

Our findings reveal tensions between AI technologies and traditional definitions of inventorship, the need for adaptive legal reforms, and the role of information literacy in navigating these complexities. Comparative insights from the Norwegian model highlight potential pathways for reforming Romania's IP system to better address AI innovations.

Contribution

This research enriches the discourse on intellectual property in the digital age, emphasizing the need for informed and flexible policies to manage AI-generated patents. By integrating a comparative analysis of Romania and Norway, it offers actionable recommendations to modernize IP frameworks and aligns them with global technological advancements.

Keywords: *information literacy, industrial property, qualitative research, patents, artificial intelligence*

A Rapid Literature Review on Generative AI, Misinformation and the Need for Media, Information and AI Literacy

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The rapid advancement of generative AI technologies has significantly altered the information landscape, creating both opportunities and challenges. This paper, which builds on chapter 5, Skills and attitudes for new information landscapes," in OECD Skills Outlook 2023, explores the cognitive, educational, and societal implications of misinformation generated by AI and the role of media, information, and AI literacy in addressing these challenges. Through a rapid literature review and thematic analysis, three key themes are identified: (1) cognitive responses to AI-generated misinformation, focusing on the heuristics and biases that influence trust and perception of generative AI; (2) AI literacy as an essential digital competency, emphasizing its importance in fostering critical thinking and digital citizenship; and (3) the integration of media, information, and AI literacy in educational interventions to enhance critical evaluation skills related to AI-generated content.

The findings over the past two years are limited, suggesting that the scientific community may not yet? view generative AI as a factor necessitating a fundamental transformation in media and information literacy needs. Instead, the current? literature seems to view the influence of generative AI seems to be more incremental, primarily affecting the modalities through which misinformation is disseminated and engaged with. This research gap complicates efforts to draw broad conclusions on the topic, highlighting the need for further study.

The literature also found that, while AI literacy is widely acknowledged as a critical digital skill, it is typically treated as an isolated competency rather than being integrated into established media and information literacy frameworks. This fragmented approach is a potential limitation when equipping policy makers and educators with the tools they need to create interventions and programs to make the public capable of handling the 21st century information landscape. Based on its findings, this paper advocates for a more holistic integration of AI literacy within broader educational and societal frameworks to prepare diverse populations to engage responsibly with generative AI. This paper helps provide an overview of the changes that the development of new generative AI tools has caused in the field of false information and media, information and AI literacy, and provides suggestions for future research in order to get a more complete overview of the field.

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Keywords: *rapid literature review, information literacy, AI literacy, media literacy, generative AI*

Academic Librarians Enhancing Information Literacy through the use of Contemplative Pedagogies

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Background

In recent years, contemplative pedagogy (CP) has gained traction as an instructional approach that fosters deepened awareness, concentration, and insight through contemplative practices. These practices integrate the body, mind, and emotional states, offer alternative ways of knowing and are particularly relevant in addressing the heightened stress and anxiety among college students and educators, exacerbated by the COVID-19 pandemic and current societal issues. Evidence suggests that CP enhances student experiences and encourages critical reflection on librarianship, promoting inclusivity and challenging systems of oppression (Moniz & Slutzky, 2016; Charney & Colvin, 2018), encouraging librarians to be inclusive and to consider how conventional approaches to instruction have played a role in supporting systems of oppression, power, and privilege, all while enhancing metacognitive processing. This paper will present the findings of a recent study conducted by the speaker on the contemplative pedagogical practices of librarians in Canada and the United States, undertaken in the Fall of 2024. Based on the study's findings, the author will provide a high-level overview of how librarians can enrich their professional practices in the realm of information literacy and support both educators and students in navigating today's complex educational landscape through the integration of contemplative practices.

Methodology and Discussion

The study used a mixed methods approach that included an extensive survey focused on the integration of contemplative practices of librarians into their information literacy interventions, as well as the role of institutional supports, along with interviews with librarians willing to share their experiences and practices in this area. The study amplifies the benefits of CP, as well as revealing common integration methods and their perceived impact on educational experiences. The author provides an overview of how librarians can enhance their professional practices in information literacy through CP, supported by the study's data. The discussion includes library and institutional support for CP, motivations, and benefits for both librarians and students, professional development opportunities, and the application of CP in navigating emerging AI tools.

Learning Outcomes

Participants will gain an understanding of various contemplative practices, their impact on students, and the necessary library and institutional supports for implementing CP to ameliorate student experiences.

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Keywords: *contemplative pedagogies, contemplative practices, information literacy, emerging pedagogies*

Students' Perceptions of Information Literacy Skills: New Perspectives through a Portuguese Experience with PILS

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The contemporary information ecosystem is increasingly complex, requiring individuals to navigate vast amounts of information across multiple media platforms while distinguishing reliable sources from misinformation and disinformation. The prevalence of disinformation highlights the need for proactive measures, including public awareness campaigns and comprehensive educational strategies. The literature emphasizes the necessity of enhancing critical evaluation skills, fostering analytical thinking, and reinforcing civic engagement, autonomy, and creativity. Moreover, policymakers stress the importance of integrating validated information literacy strategies into education to cultivate critical thinkers (European Commission, 2016). While academic libraries have undertaken initiatives to counter disinformation (Antunes et al., 2021), further research is required to assess their effectiveness. Addressing this challenge necessitates recognizing the centrality of information literacy in higher education. Students must not only navigate the stages of information retrieval but also critically assess their own competencies in this domain. This study investigated university students' perceptions of their information literacy skills using the Student Perceptions of Information Literacy Skills (PILS) test (Doyle et al., 2019; Foster et al., 2018).

We translated the instrument into European Portuguese and validated it with students across various academic disciplines and levels. We adopted a mixed-methods approach, combining quantitative statistical analyses of survey responses with qualitative thematic analysis of open-ended reflections. Our study examined students perceived ability to engage with the information and disinformation landscape, drawing on the conceptual knowledge, skills, and dispositions outlined in the Framework for Information Literacy in Higher Education (Association of College and Research Libraries, 2016). Beyond identifying key challenges, we discussed practical strategies for integrating information literacy within curricula, the role of faculty in fostering critical engagement and the potential for collaboration between academic libraries and educators. Additionally, we emphasized the need for long-term evaluation mechanisms to measure the sustained impact of information literacy initiatives. Given the rapidly evolving digital landscape and the increasing sophistication of online misinformation, this study contributed to contemporary debates on digital literacy, advocating for interdisciplinary and adaptive approaches. Based on its findings, we proposed recommendations to strengthen information literacy instruction and the role of academic libraries in fostering students' critical engagement with information. This research is particularly relevant in higher education, serving as a foundation for enhancing pedagogical practices, especially in the Portuguese context.

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Keywords: *information literacy, disinformation, PILS, academic students, perception, assessment, Portugal*

Promoting Academic Writing: An Investigation into Pedagogical Practices of University Teachers

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Students in higher education, particularly at the master's and doctoral levels, are expected to engage in reading, critical thinking, discussion, and writing as part of their academic development. These processes require structured guidance from faculty members, particularly in their role as supervisors, to support the progression of early-career researchers (Carter & Laurs, 2018). Therefore, academic writing is an integral part of university education. It is a skill to be developed and a learning process that requires the attention of university professors (Côrte Vitória, 2018). Previous research has addressed the importance of practical experience in academic writing for the development of information literacy (IL) skills (Sanches et al., 2019) with further evidence advocating for the benefits of integrating IL into the teaching of academic writing (Veach, 2019). Limited research in Portugal has focused on the pedagogical role of faculty in this area (Caels et al., 2019), a process that has been studied primarily from the perspective of students and their experiences (Geng & Yu, 2022; Graham et al., 2020).

Therefore, the present study aims to analyze the actions and strategies implemented by university teachers to promote academic writing. It will examine how professors have addressed the issue of writing skills and how they have promoted their development within the academic community, particularly among their students. The study is grounded in frameworks that outline the requirements for the IL promotion (Association of College and Research Libraries, 2016) and academic writing in higher education (Council of Writing Program Administrators National Council of Teachers of English National Writing Project, 2011). We observed, particularly in terms of empowering students, developing academic writing and fostering academic skills in this context, the intersection of teaching IL and promoting academic writing.

The responses from approximately 70 professors reveal encouraging perspectives. Practices that integrate IL skills into academic writing classes are already a reality. Furthermore, student-centered pedagogical practices adoption emerges as a key aspect in this context. This highlights the critical role of university teachers in tailoring their approaches to meet students' learning needs and actively supporting their academic development.

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Keywords: *academic writing, information literacy, higher education, pedagogical practices, teachers, Portugal*

Mindful Data Stewardship – Concepts, Implementation, and Return of Experience

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This paper explores the concept of Mindful Data Stewardship, an approach that integrates principles of mindfulness and awareness into data governance practices. While data stewardship traditionally focuses on compliance, data quality, and lifecycle management (Plotkin, 2020), a mindful perspective emphasizes the importance of mindful relationships—the human-centered connections that stewards build with data, stakeholders, and institutional values. Drawing from the broader discourse on mindfulness in librarianship (Moniz et al., 2015) and education (Sherretz, 2011), this approach highlights the role of attentiveness, personal reflection, and relational engagement in data stewardship.

At the core of this approach is the recognition that data stewards are, above all, facilitators. Their primary competence is not only technical expertise but also the ability to foster dialogue, guide processes, and support the diverse needs of researchers and institutions. Facilitation is deeply connected to the skill of listening and particularly mindful listening, which enables stewards to better understand and respond to the needs of their colleagues. Mindfulness practices such as body scans and meditation cultivate this skill by training practitioners to listen—not only to their own thoughts and sensations but also to those of others. By developing a heightened awareness through mindfulness, data stewards can enhance their ability to create responsive and user-centered data services.

The first part of this paper introduces the conceptual foundations of mindful data stewardship, drawing from information science and mindfulness studies. Rather than focusing solely on navigating complex data ecosystems, this section examines how mindfulness can enhance data stewardship as a service-oriented role. Informed by contemplative perspectives on information work (Latham, Hartel, & Gorichanaz, 2020), we argue that data stewards, by cultivating empathy and attentiveness, can design and manage mindful data services that lead to deeper understanding and communication. This aligns with the *Framework for Information Literacy for Higher Education* (ACRL, 2016), which is useful in this context, since it underscores the importance of metacognition and reflective practices in developing expertise.

The second part presents a case study and return of experience based on a workshop designed to integrate mindful practices into the vocational training of future data stewards. The workshop encouraged participants (n = 16) to engage in mindfulness exercises before, during, and after the sessions to cultivate awareness in their daily work. Pre- and post-workshop questionnaires were used to assess participants' attitudes and evaluate the impact of these practices. The findings, which will be presented in the paper, provide insights into the benefits and challenges of embedding mindfulness into data stewardship.

This paper contributes to the discourse on responsible research data management by proposing a relationship-driven, human-centered framework for data stewardship. By incorporating mindfulness into data governance, we advocate for an approach that moves beyond procedural compliance to allow service-oriented engagement. As the field of data stewardship continues to evolve, mindful relationships can serve as a guiding principle for building trust, improving communication, and ensuring that data management practices align with broader human and institutional values.

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Keywords: *data stewardship, vocational training, mindfulness, questionnaires*

AI Literacy in Support of Information Creativity of Doctoral Students

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The objectives of the paper are to determine AI literacy and its relations to human information creativity. It is based on a research project on information creativity in digital environment. The main research question is: In which ways can AI tools enhance human information creativity?

Analyses of related literature proved that the ability of GAI (Generative Artificial Intelligence) to engage in creation of content raised attention of many researchers (Vinchon et al., 2023). The question is, which ways of collaboration of AI and humans are most creative. AI systems process information in such a way that they can adapt to their environment, analyse knowledge and generate "new" content (text, images, video), using deep learning. Studies in the academic or workplace environment compared content production with human creativity, writing digitization, and co-creativity (Zhao et al., 2024, Wingström et al., 2024). Participants appreciated speed and quality of the content; limitations included incorrect information, plagiarism, ethics. Human information creativity is marked by inspiration, personal experience, intuition, curiosity. Information creativity framework (Dahlquist, 2023), reviews and studies of information literacy were analysed (Cox, 2021). AI literacy (Ng et al., 2021) means the abilities to select a tool, prompt engineering skills, interpretation, assessment of bias, verification, cognitive, social and ethical understanding of AI impact.

The methodology is based on a conceptual model and design of a qualitative empirical study of 17 doctoral students in humanities and social sciences at Comenius University in Bratislava. In an online focus group and written essays, students expressed their perception and personal experience with AI tools in creative work.

Results confirmed that most participants used AI tools for inspiration (orientation), combinations (syntheses), transformations (translation), presentation; alongside ethical concerns (verification). A final conceptual model can be used for support of AI literacy related to information creativity of doctoral students and the AI enhanced academic writing. It is based mainly on creative information processing, exploration, assessment, synthesis. In conclusion, we determined relationships of AI literacy and information creativity covering knowledge, skills and values of AI tools (concept maps, collaboration). Co-creativity of humans and AI can enhance products with the use of control, metaphors, creative ecologies. Results can be applied to information design and information literacy theory.

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Keywords: *AI literacy, information creativity, doctoral students, co-creativity*

Seamless Transitions: Enhancing Information Literacy through Collaborative Professional Development

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The greater the divide between high school educators and academic librarians, the more challenging it becomes for students to navigate the transition from secondary education to higher education (Barry, Snyder, and Mathuews, 2021; Burhanna and Jensen, 2006). Despite working in different institutions, we are often serving the same students and it is crucial to recognize that students' journeys extend beyond individual roles. Information literacy (IL) instruction requires scaffolding throughout all levels of a person's educational career (DiGiacomo, Muetterties, and Taylor, 2023; Moore, 2005). By working together, librarians and educators are able to build on each other's instructional offerings. The first step to building scaffolded IL instruction is an open dialogue to discuss shared learning goals, instructional practices, and students' evolving needs.

This paper presents a case study of Utah State University Libraries' (USU) initiative to create an open dialogue through the establishment of the biennial conference "Bridging the Gap". This conference fosters collaboration and professional development among secondary educators and academic librarians, enhancing the continuity of IL instruction.

The conference features three distinct tracks designed to address the diverse needs of educators and students: IL, Primary Source Literacy, and Digital Resources. The IL track focuses on collaborative strategies to enhance IL instruction and address the challenges faced by first-year university students. The Primary Source Literacy track highlights these resources' importance and accessibility. The Digital Resources track explores the integration of digital media and artificial intelligence in education.

Since its inception in 2022, the conference has brought together 101 high school librarians, academic librarians, and teachers from various disciplines, including English, History, and Social Sciences. Feedback surveys show all attendees found the conference useful, with over 70% rating it extremely useful. Educators gained practical takeaways. As one attendee noted, discussions included "research techniques that I can apply directly to my classroom to improve student learning and engagement."

Bridging the Gap highlights the importance of continuous professional development and the need for a cohesive approach to IL instruction across educational levels. This paper offers a model for libraries seeking to host similar dialogues and create connections of their own.

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Keywords: *scaffolding information literacy, collaboration, professional development, transition to higher education*

Artificial Intelligence and Workplace Transformation: A McLuhan Tetrad Analysis

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Artificial intelligence (AI) has had profound effects on society. Although it is rapidly evolving, its use in the workplace is still in its infancy and it is difficult to predict the impact – both beneficial and harmful – it will have on work and workers. Empirical data on the implications of AI are still scarce, with mixed evidence, mostly anecdotal (OECD, 2023). However, understanding how AI affects society and the workplace is imperative in order to capitalize on the opportunities it offers (Brynjolfsson & McAfee, 2014). Is AI a tool of worker empowerment or one of disempowerment?

A useful thought tool for analysing AI and its effects are Marshall McLuhan's tetrads of media effects. A tetrad examines (i) what the new medium enhances or intensifies; (ii) what is rendered obsolete or displaced; (iii) what does it retrieve; and (iv) into what does it 'flip' or 'reverse'? As argued by Turner (2015: 7), "[w]hen all four questions are considered in depth […] we have a better understanding of the medium and can address its negative effects". We suggest that tetrads are still relevant for understanding technologies, the world of work, the nature of consciousness and the significance of self-awareness (George, 2024). McLuhan's theories provide a useful social constructivist reading of society and technology as mutually shaping phenomena and of technology as the output of social processes in which humans (workers) have agency (Balka, 2000: 73). In supplying a critical approach to technology and work, McLuhan's ideas are especially pertinent to critical AI literacy as a framework for understanding the technologies and the questions of (agentic) power, that are a central concern with AI (Hirvonen, 2024). This understanding allows us the possibility to anticipate and (partially) influence the transformative changes that technologies bring, delivering for all not just the few.

The objective of this research is to identify expert perspectives on transformative impact of AI on the workplace and workers' agency to achieve decent work as well as its implications for AI literacy instruction. Qualitative research methodology will be employed. A focus group, with the participation of Croatian trade unionists from sectors where AI is widely adopted and integrated (e.g., healthcare and the creative industries), and interviews with an international pool of trade union experts on AI will be conducted. We will apply McLuhan's tetrads to their experiences and their expectations of the effects of AI in the workplace with a specific focus on transformations of labor practices, workplace equity and workers' rights, as well as information practices and required competencies.

Two research questions arise: RQ1: What social implications can the tetrads indicate about AI influence that unionists identify and consider in terms of workplace transformation?; and RQ2: What lessons can we glean from unionists' responses about the way a critical approach to AI literacy instruction should be structured?

This research will contribute an original approach by applying McLuhan's tetrads to examine the transformation of the workplace under AI, offering alternative perspectives for understanding its impact on worker agency and the future of work.

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Keywords: *artificial intelligence, critical artificial intelligence literacy, Marshall McLuhan, tetrad of effects, workplace, transformation*

Artificial Intelligence in the Workplace: Trade Union Experiences and Perceptions and the Role for Critical Artificial Intelligence Literacy

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Artificial intelligence (AI) is becoming a ubiquitous element in workplaces with profound implications and a transformative impact and potential which is both beneficial and deleterious for workers. While it may be responsible for increased flexibility for workers and a reduction of rote tasks (Brynjolfsson & McAfee, 2014), AI is expected to have a disruptive effect on workers' rights and to increase the loss of decent work (Ponce, 2018). There is a widespread anxiety among workers about the tangible concerns that AI raises: job losses; decreasing wages; work intensification; ethical challenges around data protection and privacy; discrimination and bias; and a lack of autonomy (OECD, 2023).

A central concern with AI is related to agentic power, the power and capacity to act, which also entails new capabilities and resources needed to protect agency (Hirvonen, 2024: 48-49). In the workplace context, this affects workers' ability, and that of trade unions, to curb the deleterious effects of AI and make sure that it delivers for all, not just a few. A key precondition for that is for workers to develop an understanding of the role and the (in)visible impact of AI on work along with a capacity to engage critically with it, thereby to be able to contest its deployment and assert themselves in a rapidly changing work environment (Ponce, 2018). This is where critical information literacy (IL) and critical AI literacy can help to meet the objectives of decent work.

This research aims to identify the extent and the potential deployment of AI to advance workers' rights and to establish a framework for critical AI literacy instruction supportive of a decent work agenda. It seeks to determine to what extent, and in what ways, AI is being used by trade unions to improve the services they provide to their members; what are the benefits experienced, if any; what are the potentials of its future use; what impact will AI have on the world of work and union activity; what are the skills and training that unionists need for using AI to advance workers' rights and for evaluating critically its functioning and outputs; and what should be the role of unions in respect of AI. The research will be conducted using the survey method, with a quantitative online questionnaire comprising 31 mostly closed questions, on a sample of Croatian trade unionists, including union reps, specialists and leaders. The survey will be followed up with qualitative methods, including focus groups and interviews with an international pool of union AI experts, forming the foundation for a more in-depth, practice-based understanding and work.

Drawing on the research outcomes, the framework for critical AI literacy instruction in the workplace will be a practical tool containing guidance for workers and trade unionists, as well as recommendations for employers and relevant advice for collective bargaining, including policy and research recommendations. It will facilitate a well-informed multidisciplinary dialogue on AI which IL theorists and researchers are uniquely positioned to lead (Flierl, 2024). Thus, it is hoped that the outcomes of the research will help resolve a key question for the next decades of IL research, posed by Hirvonen (2024: 50): 'how can we foster IL amid and beyond the AI revolution?'.

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Keywords: *artificial intelligence, critical artificial intelligence literacy, decent work, information literacy, workplace, trade union*

Exploring the Role of Information Literacy Standards in Addressing Well-Being with Digital Detox Practices

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Introduction

In an era of pervasive digital connectivity, individuals face increasing exposure to vast amounts of information, often leading to feelings of digital and information overload, stress, and burnout. This phenomenon has given rise to the practice of digital detox—intentional disconnection from digital devices as a means of restoring mental clarity and balance. However, the reliance on temporary disconnection highlights a deeper issue: a lack of effective strategies for managing digital devices access and information consumption. Information literacy, defined as the ability to locate, evaluate, and use information effectively, is crucial in equipping individuals with the skills to navigate the digital landscape responsibly. By fostering critical thinking and selective engagement with digital devices and digital content, information literacy standards offer a potential solution to mitigate digital overload at its source. This proposal examines how current information literacy frameworks address – or neglect – the challenges of digital saturation and explores their potential to serve as preventive mechanisms that enhance digital wellbeing in academic settings, and the relation with everyday-life competencies.

Methodology and Objectives

This proposal is based on an integrative literature review combined with a document analysis of key frameworks and standards related to information literacy. The literature review will critically analyze journal articles, retrieved from Web of Science, on information literacy, on digital literacy and digital detox, to identify potential connections. Simultaneously, key documents – such as *The SCONUL seven pillars of information literacy: core model for higher education* and *The ACRL Framework for Information Literacy* – will be examined to assess how current standards address or fail to address the challenges of digital saturation.

This research aims to contribute to the academic discourse on sustainable digital media practices, focusing on digital detox practices, through the lens of information literacy. The specific objectives involve a) a literature review to assess if and how information literacy studies address challenges related to excessive digital media consumption, b) a review of if and how information literacy standards address challenges related to excessive digital media consumption, c) to critically analyze gaps within current information literacy frameworks regarding digital well-being and propose possible updates or integrations, and d) to explore the role of information literacy as a preventive or coping mechanism for digital detox practices.

Findings

As this is a work in progress, we cannot outline the results. Based on the research design and the research already accomplished, we expect this paper proposal will provide a structured synthesis of existing knowledge on the relationship between information literacy and digital detox. Based on the preliminary results, gaps within current information literacy frameworks regarding the prevention of digital overload were found, and we expect to be able to formulate recommendations for enhancing information literacy standards to incorporate digital well-being and mindful media consumption strategies. This literature-based work will highlight how information literacy could be positioned to include skills for managing digital habits effectively.

Keywords: *digital well-being, information literacy, information overload, digital disconnection*

Does AI Have Information Literacy Skills? The Relation between Different Categories of Information Literacy

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AI is everywhere, it influences almost every part of our life, especially in the library and information field. According to Cox (2024) artificial intelligence as a general-purpose technology appears in many contexts but looks different in each one. Sometimes it is about turning 'stuff' to data, sometimes finding patterns in such data, sometimes it offers adaptivity and sometimes it seems to be about predicting future behaviour. As a result, it is hard to define AI except at the abstract level in terms of computers doing things we think of humans doing. Without information literacy one cannot cope with artificial intelligence. Information literacy contains those competencies that make the person able to understand the information need, to locate and collect the relevant information, to select, evaluate and organize this information, to make use of it keeping the social and academical rules and ethics. The newest subcategory of information literacy is artificial intelligence literacy. In the literature it is stated that artificial intelligence literacy contains all those competences which are needed to understand how AI works. Without this knowledge one cannot use this new technology.

AI literacy framework (Mills et al., 2024) defines three interconnected modes of engagement:

- Understand: Acquiring basic knowledge of what AI can do and how it works in order to make informed decisions about evaluating and using AI systems and tools.
- Evaluate: Centering human judgment and justice to critically consider the benefits and/or costs of AI to individuals, society, and the environment.
- Use: Interacting, creating, and problem-solving with AI as a progression of use for distinct contexts and purposes.

My research questions are the following, aiming to understand the capacities of AI related to information literacy:

- Can it really understand the information need?
- Can it select the relevant information for us?
- Can it evaluate the information, if it is true or not?
- Can it fulfil the social and ethical rules related to information?
- Can it use the information always according to the ethical norms?

My hypothesis is that AI literacy competences combined with information literacy competences can give the necessary skills for information professionals to apply new technology efficiently.

The research is mainly theoretical, reflecting on the scientific literature. I would like to compare information literacy competences to AI literacy competences, and based on this comparison create a more detailed AI literacy competency standard. AI literacy should be defined as a subset of information literacy. I would like to focus on those competences which are new and important to cope with AI during information related tasks (eg. Algorithmic literacy, prompt engineering, self reflective mindset etc.) (Chiu et al, 2024).

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Keywords: *information literacy, artificial intelligence literacy, competences*

Information Literacy on the Edge: Exploring the Needs of Doctoral Students

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This contribution summarises selected preliminary results of exploratory research to draw attention to the specific educational needs of doctoral students in developing their information literacy. Doctoral students represent a unique group for information literacy education because they combine the needs of both students and academics. We must adapt educational activities to meet these needs if we want them to be effective and attractive, especially when doctoral students may perceive information literacy as supportive, not necessary, in terms of focusing on their specialisation. Although doctoral students represent a group with a high potential impact of information literacy education, research on their information literacy is limited, and research on their needs and requirements for information literacy education is even less frequent. Ateş et al. (2011) offered some general clues for the educational needs of doctoral students, but they did not focus on information literacy. However, it has been proven that a higher level of information literacy positively affects doctoral students: their publication activity, ability to obtain additional scholarships (Oyewo Adetola & Umoh Uwem, 2016), higher confidence in research (Daland, 2013) and, overall, further development of their academic career.

We selected results from broader diary-interview research exploring the copyright behaviour of doctoral students in social sciences and humanities. We focused on ways of finding solutions to information problem situations in their academic activities, as well as expectations, wishes, and experiences for developing competencies in this area. The research sample consisted of nine doctoral students from various study programs at Masaryk University, Czech Republic. The diary phase lasted one semester (spring 2024), and interviews (90-120 minutes) followed one to four weeks after finishing the diaries. We used inductive thematic analysis in Atlas.ti.

Preliminary results showed that the supervisor did not always have a strong position in finding solutions to their information problems. Doctoral students used a more diverse range of resources, among which the faculty library had a significant position. Doctoral students were often aware of their strengths and weaknesses in information literacy (without using this term). However, mainly due to time constraints, they were not interested in a systematic course or material but wanted help with a specific solution at a specific moment. By composing these solutions, they built typical procedures for solving similar situations, where they only slightly specified the procedure. At the same time, they built self-confidence in the given solution and did not revise their procedures. Revisions did not occur even in the case of an inappropriate solution (e.g., not verifying the licensing terms in a journal when publishing an article after experience with complicated understanding) unless there was a significant intervention (e.g., changing the use of AI after the university created a guideline). The presented results will be the basis for defined recommendations on how libraries should deliver the desired information literacy competencies to meet the needs and capabilities of doctoral students.

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Keywords: *doctoral students, information literacy, educational needs, exploratory research, social sciences and humanities*

AI + Age-Friendly Media and Information Literacy: Gerontechnology

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This paper examines the implications for Age Friendly Media and Information Literacy (AFMIL) of society's increased reliance on Artificial Intelligence (AI) and identifies how AI can be put into the hands of older people so that they can shape its use as a gerontechnology. We view AI as an information tool that can be operationalised as part of AFMIL. The WHO (2022) briefing on ageism in AI positions AI within the concept of gerontechnology described as "technological software and devices that meet the needs of older people" (p. 4). This approach contrasts with corporate and government ambitions to exploit AI for economic advantage (e.g. the UK Government's plan for AI, https://tinyurl.com/yvv88p4b) that places the locus of control with investors and politicians, thereby positioning older people as consumers and recipients of AI enabled services with limited agency in design and deployment.

Ageism is negative stereotyping, bias, and discrimination on grounds of age leading to older people's rights and interests being marginalised in politics and media representation (Johnston & Dalziel 2021). We developed a framework for the AFMIL city (Webber & Johnston, 2019), drawing on key international policy documents, identifying three roles for older people (see below). We will use this theoretical framework, in combination with Birkland's (2019) typology of older users of technology, to critique the current situation and identify ways forward.

Role 1: *Older people as portrayed by media, government agencies, and experts: avoiding stereotyping and disinformation*. As AIs are trained using existing works, they are prone to repeating and amplifying systemic biases. including ageism, from the design stage of the development cycle. This has not been given as much attention as stereotyping of those with other protected characteristics (Stypińska, 2023; Johnston, 2025). As noted above, AI narratives focusing on commerce and growth do not attend to these ethical issues. **Role 2:** *Older people as consumers of information and media: taking account of their preferences, practices and life experiences.* Older people are often positioned as passive and unskilled in technology use with their variety of skills and needs not addressed. (Birkland, 2019; Webber & Johnston, 2019). Ryan & Gutman (2023) give the example of using an AI agent to interact with an older person to make them feel engaged with the community, thus potentially removing the older person's agency in genuinely engaging with and shaping their community. **Role 3**: *Older people as MIL creators, innovators, and critics.* This is the most neglected role, both in terms of MIL and in relation to AI: WHO (2022) stress the right of older people to challenge AI-generated information. WHO (2022) and Compagna & Kohlbacher (2015) advocate participative involvement of older people in technological design They criticise the usual, more marginal, involvement.

We conclude by proposing how older people can be involved in all stages of AI development, utilising mechanisms such as citizens' assemblies, thus forming a gerontechnological approach that employs deliberative democracy.

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Keywords: *media and information literacy, ageism, gerontechnology, artificial intelligence*

“Help RobAI Fix Its System Bug”: An Escape Game Assisting Teaching AI Literacy

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Games in learning allow students to be more engaged and autonomous in their learning process, while immersive learning enables students to focus entirely on a topic or activity, free from distractions. Educational escape rooms are increasingly used as collaborative and interactive learning experiences, where participants solve puzzles and embrace a sense of autonomy, fostering a transition to student-centered and self-directed learning (Kim et al., 2024). Nowadays, Generative AI (GenAI) has definitively entered higher education, making it essential to adopt a collective and considered approach for its integration in teaching and learning. As highlighted internationally, this technology can increase efficiency and expand education and information accessibility in several ways, but it is far from a neutral tool (Bozkurt et al., 2024). Therefore, it is important to face the challenges of training educators and students, facilitating meaningful and authentic learning experiences, and ensuring human supervision, which guarantees consideration, ethics, creativity, critical thinking, and empathy.

This study aimed to combine teaching AI literacy with the concept of digital game-based learning (DGBL), more precisely – digital escape games. Our exploratory, qualitative study consisted of two parts: 1) exercises utilising ChatGPT and 2) a digital escape game to enhance students’ awareness of ChatGPT performance. Interactive learning modules can potentially convert traditional instruction into highly engaging experiences (Naik & Naik, 2024). The respondents were students in Lisbon (N=13) and in Warsaw (N=20). The study was run from November 2024 to January 2025. According to Kim et al. (2024), designing an escape room activity typically requires more time and effort than other activities, which is a key reason educators are reluctant to implement it. We used Genially software with ready-to-use templates to develop six exercises and a digital, linear escape game. The exercises aimed to show the students how to use Chat GPT critically and when this tool can be useful for academic purposes. This part enables students to reflect on the experience. Thoughtfully crafted reflection activities offer numerous benefits for student learning. For instance, they encourage students to deeply consider their learning experiences and help them stay aware of what they are doing and experiencing (Motley et al., 2024). The escape game is conceptualized as fixing the robot named RobAI within three missions, aimed at independent learning about more aspects of ChatGPT usage, different from those suggested in the first stage. This part, inspired by the DGBL, included explorations, challenges, and failures. Although many respondents claimed to have used ChatGPT before, the experience they participated in revealed critical insights into Chat’s limitations, such as, the phenomenon of “hallucinations”, citing outdated or non-existent sources, or failing to provide any sources. Students emphasized the importance of precision in prompt-writing and appreciated features like organizing bibliographies and summarizing texts in different languages. The full article will present an in-depth qualitative analysis and a comparative module.

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Keywords: *AI literacy, artificial intelligence, escape game, immersive learning, information literacy, Polish students, Portuguese students*

Media Repertoires and Digital Literacy in Online Safety: A Study of Thai Older Adults

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Advancements in telecommunication technologies have led to both benefits, including convenient financial transactions and real-time communication, and risks, such as a surge in cybercrime and online fraud. In Thailand, cybercrimes caused approximately 77.36 billion THB (2.2 billion EUR) in losses between March 2022 and November 2024 (Prachatai, 2024). Research indicates that digital literacy is crucial in mitigating these risks (Li et al., 2024). Older adults tend to have lower digital literacy levels (Office of the National Digital Economy and Society Commission, 2023), making them particularly vulnerable. Thailand, now an aged society with 20.92% of its population over 60, urgently needs to improve older adults' digital literacy for safe and informed digital technology engagement.

As societal changes lead to more older adults living alone, they increasingly rely on media for information and social connections. Drawing on Medium Theory which posits that a medium's unique characteristics influence user perception and interaction with content (McLuhan, 1967), we investigated the relationship between media consumption patterns and digital literacy in online safety among older adults in Thailand. We hypothesized that older adults with diverse media consumption patterns will exhibit different levels of digital literacy in online safety. Furthermore, media scholars suggest that individuals who integrate multiple media sources into their personal media repertoires tend to develop stronger knowledge and skills, including digital literacy (Hobbs & Frost, 2003). Therefore, we examined whether consuming a variety of media is associated with higher digital literacy in online safety. Finally, to guide effective interventions, our research explored which specific media repertoires were most effective in fostering digital literacy in online safety.

Using a nationally representative dataset (Office of the National Digital Economy and Society Commission, 2023), we analyzed a subsample of 9,748 individuals aged 58-76. We employed an ordered logit regression to examine the relationship between digital literacy and media consumption patterns while controlling for sociodemographic variables. The findings identified effective media combinations to develop policy initiatives that improve digital literacy in older adults. Enhancing digital literacy among older adults is essential not only for reducing cybersecurity risks but also for bridging Thailand's digital divide.

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Keywords: *digital literacy, media repertoires, media consumption, older adults*

Artificial Intelligence and Bulgarian Libraries: Practices, Perceptions, and Opportunities for Optimization

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Libraries are increasingly looking to integrate innovative technologies to improve the efficiency of library services, access to information, and user interaction in a time of accelerated digital transformation. Artificial intelligence (AI) offers a variety of opportunities to optimize library operations, including intelligent searching of digital archives, personalized reader recommendations, text analytics, virtual library assistants, and more. AI has a considerable potential for libraries as it can support in enhancing research and providing personalized recommendations, thus transforming the way people access and interact with information. Implementing AI allows librarians to adapt to technological progress, thus staying devoted to their mission of sharing knowledge and information and making them accessible to everyone. This research examines the application of AI in libraries in Bulgaria. Its main objective is to identify the attitudes of Bulgarian library professionals towards the application of AI in their daily professional activities. The results of our study identified the application of AI by librarians and offers specific suggestions and recommendations for the use of AIto optimize various library work activities. Within this context, we examined issues related to the types of tools, librarians' self-assessed level of familiarity with these technologies, and related challenges and perspectives.

The methodology we followed included study and content analysis, comparative analysis, and synthesis of the obtained information. The study is based on 1. A systematic review of library websites to identify AI technologies already implemented and their functionality; 2. Analysis of data derived from a nationwide survey involving 150 librarians, experts, and practitioners aimed at exploring their perceptions, attitudes, and degree of preparedness regarding the integration of AI into the Bulgarian library sector. The survey sample is drawn from a broad spectrum of library institutions, including community (chitalishte), municipal, regional, and academic libraries.

The paper supports the point of view that AI is crucial for libraries as it ensures that libraries remain innovative and efficient in meeting the evolving needs of their users.

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Keywords: *AI, Bulgarian libraries, library services, library tech, survey*

Being Information Literate or Having Academic Integrity

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The black box approach to algorithms, considered an accepted part of the professional discourse of librarians (Lloyd, 2019), casts them as harmful to the authenticity of information circulating in a society and potentially unknowable. Thus, it may be no surprise that librarians providing programs in information and digital literacies have been wary of the use of algorithmically driven tools and technologies in a professional context. However, university mandates since the end of 2022 mean that they have had to adapt quickly to the introduction of artificial intelligence (AI) tools, which have been actively used by students (JISC, 2024). In this context of rapidly changing technologies, how have librarians teaching information and digital literacies expressed their expertise to students through the products they have developed and to what extent does this expertise differ from that found in existing studies? These questions sit at the intersection of information literacy and information ethics.

Using the tool of the cultural-discursive arrangements of practice architectures (Mahon et al., 2017), this study analyses the Library Guides on AI developed as part of that mandate by Australian university librarians, and available online at the beginning of the academic year in February 2025. LibGuides are a key strategy in information literacy programs. This analysis identifies the approaches taken to AI tools in the context of student learning and information literacy and compares these expressions of professional knowledge with those in previous studies (see e.g. Johnston, 2023; Yerbury and Henninger, 2024). The findings show that, in spite of significant changes brought about by technology, and the movement towards the consideration of academic integrity in some universities, the LibGuides express the expertise of librarians in much the same way as demonstrated in previous studies. The principles emphasized in the LibGuides continue to be those of evaluation, especially identifying the dangers of bias, and of information that lacks authority.

However, a key shift in approach is in the focus of evaluation, now being on the work of the student in the majority of cases rather than on the sources a student might use and identification of mis and disinformation. This has implications for an understanding of the concept of information literacy as well as for policy and practice in the university. While it has always been acknowledged that information literacy has two aspects to it, the evaluation of information found to solve some kind of problem and the use of information technologies to communicate with others, researchers in information literacy have tended to emphasise the first. This study suggests that the dichotomy no longer holds, as the concern is now with the relationship between the information found, the technologies used to find it and the technologies and processes used to communicate it as new knowledge. In the context of the university, the focus may be shifting closer to a notion of academic integrity than to skills in information literacy, influencing the ways that the responsibilities and expertise for developing these knowledges in students is perceived. This could pave the way for a consideration of the relationship between information ethics and information literacy.

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Keywords: *information and digital literacies, university librarians, artificial intelligence, LibGuides*

Beyond AI-literacy. Growing up with an Artificial Lifetime Compeer

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Two years ago, I started to imagine and describe the outlines of an AI-driven system in Hungarian, which *transcends the state of art human-machine interaction models*, integrating all existing and future apps, services, and tools, dedicated to support every kind of individual human need and forms of action in every age, for a lifetime. A primordial framework, which starts to exist when an individual first time interacts with an artificial intelligence entity: without fail, this initiation point will be a cybertoy, and the first human support comes from pre-trained parents.

But from this point, individual and their machine compeer becomes a co-habitation unit. A human and its artificial compeer, mutually shaped by their private interactions. Their growth is simultaneous and interconnected. I call the artificial part of this dual entity *Artificial Lifetime Compeer (ALC).* I am going to provide:

- a brief description of the ALC model, as an English language introduction of the concept
- an overview of ALC-related literacy landscape
- a brave reformulation of the AI-alignment discourse, as an outcome of ALC-based development thinking

ALC: An Ultimate Step to a Personified Artificial Intelligence

ALC is more than a personal digital assistant, an intelligent agent, a digital twin or a collaborative robot. ALC is not a nurse, not a servant, not a secretary, coach, agent, medical doctor, teacher, librarian, broker, or assistant. The contender solutions *to support all these roles* are always attached and interlocked to the basic structure of ALC, which orchestrates the growing „solution reservoir", integrating and customizing every useful product (tools and services), concerning the human's needs.

ALC as an "intelligent superagent" manages all the interface technologies and all the channels, conducted to smart environment. It coordinates the diverse systems of preventive and corrective health monitoring, influences dietary practices. Supports learning and information seeking behaviour. Performs transactions in real/virtual worlds.

The Human Part: Literacies for ALC-Intercompatibility

The human part should nurture a rich literacy complex to simultaneously understand, use and shape its artificial counterpart through the combination of assisted and spontaneous learning, in a mainly gamified environment.

The realistic vision of ALC needs to implement new branches of "teleological" knowledge about this co-evolutionary practice, while developing new skills and abilities in *computer literacy, digital literacy, AI-literacy, algorithmic literacy and coding literacy.*

AI-Alignment: Time to Extend the Horizon

ALC fulfils all the alignment mission in their own field and have a compelling effect on other fields to use ALC as an "alignment anchor", when planning new tools and services. But "human compatible AI", as Russell (2020) names it, only a one third of the alignment horizon. "AI compatible human" is the second part, and "Future-compatible AI-Human Hybrids" are the third. The idea of ALC provides a disquieting first base to reorient the current debates.

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Keywords: *human-machine interaction, AI-literacy, Artificial Lifetime Compeer*

DOCTORAL PAPERS

People's Online Information Habits about Indoor Air Quality (IAQ): A Critical Literature Review

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The study on how individuals search for and use online information about indoor air quality (IAQ) is motivated by the growing concern over health misinformation on social media and the importance of eHealth literacy in public health. This research aims to bridge gaps in understanding how people seek and utilize IAQ information, which is crucial given the significant time spent indoors and the impact of IAQ on health. Researchers such as Nazarnia et al. (2023) came to the conclusion that health misinformation on social media is a persistent public health concern that requires the proper skill set for interpreting and evaluating accurate information. Tesfa et al. (2022) also expressed concern that eHealth literacy is acknowledged as a critical component of public health and Gao et al. (2022) have conducted research which aimed to examine the relationship between residents' health literacy (HL) and their use of and trust in information channels. This review aimed to understand how individuals search for and use online information about indoor air quality, identify key factors influencing this behavior, and highlight gaps in the literature to propose directions for future research. Thematic analysis approach was used for critical literature review, by identifying relevant studies through academic databases (Web of Science, PubMed and Google Scholar) using keywords such as "indoor air quality," "online information-seeking," and "health concerns." Studies were selected based on their relevance to IAQ information-seeking behavior, trust in sources, and the impact on media or events. They were categorized into key themes and analyzed to identify trends, gaps, and limitations in those studies. The findings were then synthesized to provide a cohesive overview of the current state of research. According to Yang (2021), health concerns drive most IAQ-related searches, often reactively, and while users prefer authoritative sources like government agencies (Unni et al., 2022), they frequently rely on social media and forums, which can spread misinformation. A significant portion of online activity focuses on researching IAQ-related products, but users often lack a clear understanding of the technology (Li et al., 2021). Events like wildfires or pandemics significantly increase IAQ-related searches acccording to Google trends, but public health campaigns often fail to translate awareness into action. Previous studies highlight the importance of eHealth literacy in navigating health information effectively. This study extends this by focusing on IAQ, a specific health concern where misinformation can have significant health impacts (Kbaier et al., 2024).

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Keywords: *indoor air quality, information reliability, online information evaluation, online information-seeking*

Mapping the Field of Artificial Intelligence Literacy: A Systematic Literature Review

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As a result of rapid development of generative artificial intelligence tools (AI tools) and their widespread use, ability to effectively communicate, critically evaluate and effectively collaborate with AI has become an essential skill (Long and Magerko, 2020; Ng et al., 2021). Conversely, although AI-based technologies have become pervasive, their users have been left ill-prepared to comprehend, utilize, and critically engage with AI (Wilton et al., 2022). Following the conclusions made by Pinski and Benlian (2024), and Cox (2024), who claim that different AI user groups have different AI literacy requirements, we argue that there is need to address the subject of AI literacy in the higher education context. This paper presents the results of systematical critical literature review and findings uncovered through subsequent comprehensive thematic analysis of selected scientific articles.

Using the PRISMA instrument (Page et al., 2021) for construction of samples for systematic review, we retrieved a sample of 1,590 records by submitting following query (TITLE-ABS-KEY (artificial AND intelligence AND literacy) OR TITLE-ABS-KEY (ai AND literacy) AND TITLE-ABS-KEY (university*)) to three databases: Google Scholar, Scopus, and Web of Science. Out perceived outcomes are: to learn what particular aspects of AI literacy have been researched in higher education context so far and to what extent; to determine possible directions for future AI literacy research in the context of higher education; and, to contribute in establishing a conceptual framework for future AI literacy research.

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Keywords: *artificial intelligence literacy, literature review, university students, higher education*

Information Behavior in the Context of Climate Change: Sociodemographic Aspects Using the RISP Model

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Introduction and Methodology

This paper presents selected results of the ongoing research on information behavior concerning climate change in the Czech Republic based on the Risk Information Seeking and Processing Model (RISPM) created by Griffin et al. (1999). The authors developed the model to complement existing research, which focused mainly on risk communication, exposure, and response, by emphasizing the role of information seeking and processing in shaping individuals' risk perception and behavior. The model is particularly relevant for impersonal risks like climate change (Kahlor et al., 2006). As misinformation often surrounds climate change, it is essential to understand how people seek and process related information to support informed decisions and climate action (Yang et al., 2014).

Prior research suggests that information sufficiency, perceived information gathering capacity, and relevant channel beliefs influence how individuals seek and analyze risk information (Griffin et al., 1999; Kahlor et al., 2006). By examining how gender, age, education, and income relate to key components of RISPM, this study aims to describe information seeking and processing patterns within different demographic groups. A quantitative online survey (n=1,000) was conducted. The data were analyzed using SPSS Statistics, applying t-tests, correlations, and regression models to examine relationships between demographic factors and RISPM components. The sample consisted of 48.8% men and 51.2% women, with the largest age group being 65 years old and older. Most respondents had secondary education. The median monthly net income was 25,001-30,000 CZK (approx. 1,100-1,300 USD).

Results and Conclusion

The results indicate that sociodemographic factors have a limited impact on information sufficiency and the ability to locate and understand climate change information. Gender remains the only variable significantly predicting perceived information sufficiency with women demonstrating higher mean values (M=20.02) than men (M=10.08), a difference confirmed by a t-test ($p<0.001$). Age, education, and income are not key factors and these groups' perceptions of information gathering capacity are consistent. Differences in the evaluation of information channels were observed: where younger and less educated respondents and women assigned greater importance to social networks (M=3.74) and close surroundings (M=5.12) compared to other groups.

The significant gender differences in perceived information sufficiency align with previous research (e.g., Yang et al., 2014), suggesting that women perceive climate change as a more significant threat and seek more information. However, the limited effect of other sociodemographic variables challenges assumptions (e.g., in Kahlor et al., 2006) that age or education strongly determine individuals' ability to locate and process climate-related information, suggesting that other factors may play a more significant role. As part of an ongoing research project, further analyses will explore additional components of RISPM and describe differences in behavior between demographic groups, thus contributing to the ongoing international debate and a new approach to researching environmental issues. These findings also provide valuable insights for climate communication strategies and information literacy programs, emphasizing the need for targeted approaches based on demographic variations in media preferences and perceived information sufficiency.

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Keywords: *RISPM, information sufficiency, information gathering capacity, channel beliefs, climate change*

Large Language Models for the Automated Detection and Classification of Media Bias and Propaganda to Foster Media Literacy among News Audiences

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Media bias is an enduring feature of news dissemination, reflecting the subjective perspectives of its creators across history. From archaic records like "The Victory Stele of Naram-Sin" to contemporary news channels, bias permeates media, influencing political, social, and public health narratives. This study investigated the persistent phenomenon of media bias and the potential of large language models (LLMs) (Kojima et al., 2022) in its detection and classification, in order to deploy publicly available software tools aiming to enhance media literacy among news consumers.Traditionally, media bias served the interests of ruling powers; even with the rise of modern journalism, objectivity is often compromised by commercial pressures and inherent human biases. (Rodrigo-Ginés et al., 2024). As media landscapes evolve, bias continues to shape public opinion, impacting democratic processes and public health perceptions. This wasevident during the COVID-19 pandemic where polarized media narratives swayed public health decisions and fueled misinformation (Recio-Román et al., 2023).Current research on the effects of labeling media bias or propaganda, whether automatically or with human involvement, highlights the complexity of the issue. Depending on different circumstances, labeling can lead to negative outcomes (such as reinforcing filter bubbles by providing means to avoid news with a different perspective), no change in news consumption behavior at all, or, in some cases, an actual improvement in media literacy as intended (Zavolokina et al., 2024).

This research aims to develop a technical solution for the automatic labeling of biased media content, emphasizing several proposals that we hope will lead to a positive effect on media literacy among those presented with the system's assessments. These proposals include using a fine-grained taxonomy of bias types rather than a simple binary left/right labeling. Thus, we focused on detailed explanations for each model decision in natural language, marking bias at the sentence level rather than at the article or publication level. That provided more insights, fine-tuning autoregressive models like GPT-3.5 or Mistral with high-quality examples instead of using "simple" bidirectional models like BERT(Brown et al., 2020) or non-finetuned models, and focusing on the German language, which has not yet been properly explored for such systems.Understanding readers' perceptions when exposed to bias-labeled content is another facet of this research. It explored how bias labeling influences readers' views on credibility and neutrality and whether real-time bias indicators affect news consumption behaviors. As mentioned, practical applications served as a cornerstone of this research. One aim was to implement bias detection systems in real-world settings, such as search engines and news aggregators, to promote balanced information consumption. The development of user tools, like browser extensions highlighting media bias, intends to address public need for transparent information evaluation. In essence, this research contributed to media literacy enhancement by demystifying media bias through advanced computational methods. By refining detection mechanisms, classifying bias more effectively, and implementing practical tools, it aimed to fortify democratic discourse and public understanding, thereby addressing the pervasive influence of media bias in today's interconnected world.

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Keywords: *media bias, large language models, bias detection, natural language processing, journalism, public opinion, taxonomy*

Female Engineering Students' Information Experiences: Preliminary Findings from a PhD Study

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This presentation reports on preliminary results from a PhD study into the information experiences (Gorichanaz, 2020) of female engineering undergraduates in the UK. The study uses a phenomenological approach to examine how the lived experience of being a woman in an engineering classroom interacts with and shapes women's information experiences.

Women make up 20% of undergraduate engineering and technology students in the UK (Higher Education Statistics Authority, 2023). Previous research has suggested that minoritised groups may have unique information experiences compared with the majority (see for example Louvier & Innocenti, 2022; Smeaton et al., 2017). The PhD research from which this presentation is drawn focuses on the information experiences of women engineering undergraduates within their highly masculine learning environment.

The study uses qualitative methods to examine women's information experiences from a reflective lifeworld perspective (Dahlberg et al., 2008). Pilot data was collected from October-December 2024, and the study entered its main data collection phase in January 2025. Data collection methods include multimedia diaries and semi-structured interviews. Data from the diaries and interviews is being analysed using thematic analysis (Braun & Clarke, 2022).

Very early analysis of the data suggests themes including the use of shared documents as a collaborative information strategy, and the influence of affective needs such as social belonging and self-confidence. Information sharing is often neglected in engineering student work (Fosmire, 2017), however the women in the pilot study appeared to take a leading role on this form of information behaviour. The pilot study participants also all reported a preference for seeking information alone and from non-human sources, due to various affective needs including wanting to appear knowledgeable. The influence of affect and emotion is an under-studied aspect of academic information literacy (Hewitt, 2023), so this may present a valuable perspective.

Preliminary results of the study will be presented, as well as reflections on the methodology and analysis process. Conference attendees will gain an insight into the information experiences of women in engineering education, and the use of qualitative methods to explore information experiences from phenomenological perspective.

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Keywords: *information experience, phenomenology, feminist research, engineering education*

BEST PRACTICE

A New Model for Teaching Information Literacy and Academic Writing

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In an attempt to economize, study programmes at UiT The Arctic University of Norway is undergoing comprehensive revision. The university board has decided that all discipline-based bachelor's programmes shall include compulsory training in information literacy (IL) and academic writing. The University Library at UiT has been tasked with designing this requirement.

While we are happy that the University recognizes the importance of IL and academic writing, the conditions around which the assignment is given raises issues that need to be addressed, the most important being

how to reconcile shrinking budgets, limited resources and overworked teaching staff, with the thoughtful, richly contextualized and well-integrated IL teaching and learning for which we strive.

With the turn from standards to frames (ACRL, 2015), IL professionals' views of their domain matured. This involved the incorporation of insights gained from construing IL as encompassing a limited set of important threshold concepts (Hofer et al., 2019) along with an emphasis on the gradual and potentially transformative nature of IL learning (e. g., Nierenberg et al., 2024). However, in a climate of increasing demand for doing more with less, the tension between ideals and reality is becoming dangerously strained.

In this talk, we present the development of a comprehensive set of flexible teaching materials to be implemented by bachelors's programmes starting inautumn 2025. We will go through the background and the slightly special circumstances of the project, the timeline, as well as our philosophy and our working methods.

We will explain the components and integration of the new IL offering. Briefly, it consists of two digital self-study components plus suggestions for synchronous learning and assessment activities that can be adapted to the individual study programme. The training will correspond to approximately 70 student working hours. A somewhat unique feature of our approach is the reliance on non-library teaching staff to adapt and implement the synchronous components, with library staff serving as advisors.

In this project, we have had particular concerns:

- the tension between the generic and the discipline-specific needs;
- between the decreasing resources and the increasing demand; and
- the tension between the stable, basic aspects of IL and academic writing and trends that are fleeting/changing rapidly (e.g., new technology and tools).

Our hope is that the new model, combining general asynchronous self-study components and discipline-adapted teaching carried out by the study programmes themselves, strikes the right balance amongst these tensions.

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Keywords: *IL instruction, IL integration, academic writing*

When the Faculty are our Students: Exploring the Integration of Information Literacy after an Intensive Faculty Development Workshop

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Information literacy encompasses the critical ways of thinking and acting that guide our interactions with information and our ability to create new knowledge. Many instructors expect that students will develop and demonstrate their information literacy through research assignments but are often frustrated with the results, because students (as novices) may be unfamiliar with disciplinary jargon and conventions that are mostly implicit to instructors (as disciplinary experts). Academic librarians have sought to bridge this gap by providing instruction directly to students, with mixed results. An alternative method, in which librarians offer professional development programming to teach the teachers how to integrate information literacy, is gaining increased attention, although assessment of the efficacy of these efforts is still limited (Smith, 1997; Cowan & Eva, 2016; Hammons, 2021).

Library staff at The Ohio State University have adopted this teach-the-teachers model and offer an information -literacy professional development workshop called Meaningful Inquiry. In this workshop, we introduce teachers to the ACRL *Framework for Information Literacy for Higher Education* along with teaching strategies, such as Decoding the Disciplines and Transparency in Learning & Teaching (TILT), to help instructors clarify their research expectations for students. We believe that the ways of thinking and knowing articulated in the *Framework* remain part of a hidden curriculum for many students. Instructors develop assignments and expectations for performance based on these ways of thinking and knowing, but they are not always transparently taught or discussed with students.

Our presentation explores if this kind of library-led instructor development programming is effective for integrating information literacy into courses and/or curricula. We conducted semi-structured interviews with nine workshop participants, representing a range of disciplines, who received a grant to incorporate workshop content into a course redesign. We then coded the interview transcripts using *Framework*, including the descriptive text for each of the six information literacy threshold concepts, as well as the associated knowledge practices and dispositions. Through this analysis, we explore how instructors integrated information literacy into their courses after participating in Meaningful Inquiry, and which elements of the *Framework* align with the participants' course revisions.

Our analysis revealed that participants considered information literacy to be a source of empowerment for students, helping them to be more confident in college and giving them marketable skills in their professional lives. In addition, many instructors felt empowered and reported transferring their learning to their other courses or initiating program- or curriculum-level conversations about information literacy. Our study suggests that the teach-the-teachers model can be an effective way to integrate information literacy into the curriculum.

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Keywords: *faculty development, empowerment, instruction, SOTL*

Building Inclusive Futures: Graduate Student Perspectives on Preparation for the Library and Information Science Field

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Among universities in the United States (US), Rutgers University ranks very high in terms of a diverse undergraduate student body. The Rutgers University Libraries (RUL) system is vast and complex, spanning different campuses representing and supporting different academic areas and demographic needs. This study explores the experiences of four library and information science (LIS) graduate students employed in the academic library systemwho interact closely with the diverse undergraduate student population as a part of their job duties. The LIS student employees also interact regularly with and receive training from academic librarians who mentor and model in the areas of student interest and library study track. The study utilizes participatory research (PR) methodology that prioritizes participant perspectives and allows inclusivity, ensuring that their voices are central to the study. Specifically, it explores the experiences of LIS students employed in an academic library, centering their individual perspectives to understand how these dual roles shape their identities and influence their work performance in the library, regardless of department. By connecting the experiences of these graduate students as they interact with academic librarians over the course of two years, the research aims to explore the characteristics of and to foster meaningful relationships that support inclusivity. LIS graduate student experiences around inclusivity prior to working in the academic library and exposure to LIS coursework are also critical to the study. Furthermore, the goal of the study is to identify ways to strengthen relationships among librarians and LIS graduate student employees. Moreover, by incorporating qualitative analysis and researcher positionality statements, the study also emphasizes researcher reflexivity in its design.

The findings reveal varied experiences with inclusion, shaped by prior coursework and exposure to critical pedagogy and other inclusive practices, some of which are beyond the academic library (employer). Students who encountered these approaches and ideas felt more included while others reported a perceived lack of structural support. A key theme emerged: the responsibility for fostering or seeking inclusive practices and experiences often fell on the students, rather than being formally embedded in their LIS academic program or in the academic library (the employer). These findings suggest that LIS programs and academic libraries should intentionally integrate inclusive practices and critical pedagogy into their organizational and structural frameworks to better support graduate students in preparation for the workplace which is becoming increasingly diverse in the US and whose clientele (library patrons) are vastly diverse, bringing multi-cultural and multi-lingual perspectives and customs. Furthermore, such inclusive practices can, in turn, create and sustain more equitable environments for all students at the university fostering feelings of belonging. This is especially critical at institutions with highly diverse populations including those that have Native or non-traditional populations. Overall, this study seeks to provide practical strategies for academic libraries and LIS academic programs to better engage with and support their students, recognizing the value of individual identities and the importance of connecting librarians authentically with the graduate student experience to the benefit of all at the immediate institution and beyond into the workplace environment.

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Keywords: *LIS graduate students, inclusive environments, library employment, diversity, participatory research*

When More is Not Less: Incorporating Systematic Literature Review (SLR) Strategies in Information Literacy Education

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During the last decade the University of Groningen Library has developed an extensive ***information literacy programme*** for all faculties and skill levels of students, from first year to PhD students. The programme consists of ***lectures, workshops, one-on-one consultation, written assignments and multiple-choice tests.*** In the last two years we have been incorporating elements of Systematic Literature Review (SLR) research in our teaching materials. This innovation is in line with our strategy of using active learning to increase motivation and match lessons to the true SLR support that we provide at the highest skill levels. These benefits are highly important in an information landscape where thorough information skills and ability to demonstrate how information is retrieved are more important than ever.

We have adapted two steps from our ***Seven-step search plan***. This general information literacy plan provides guidance on how to structure the search process from how to create a research question to properly gathering and processing literature sources. In this session we will describe how we adapted two steps: Search strategy and Processing. For the Search Strategy, we describe how we teach students to create advanced search strings in order to create a more complete and reliable overview of the literature. These advanced search strings can contain elements like truncation, advanced Boolean operator logic and use of field codes. Depending on the skill level of the students, the search examples incorporate multiple or sometimes all of the requirements of SLR research. For the processing step, we have incorporated SLR concepts of creating a literature overview, using a structured search methodology and replicability. Students create a ***Personal Search Plan*** (PSP) based on a template that guides them through a systematic approach to literature searching. The PSP is suitable as a homework assignment that can be graded or be used in discussions with peers or supervisors. These adaptations are modular and scalable and are embedded in our educational programme.

The response to our innovations is very positive. Students' performance on the PSP is excellent in many cases and students regularly outperform the skill requirements of our previous programme by a large margin. We see an increase in requests from teachers for these materials as well as an increase in consultation requests from both master and PhD students. The current materials provide a solid basis for Master and PhD students who are planning to create an official SRL.

We conclude that the adaptations enable the students to learn more, earlier in their academic career and are able to make their learning process and results insightful for themselves and others. In this best practice session, I will demonstrate and share all the key elements and their implementation in order to give a practical template for others to implement and build upon.

Keywords: *systematic literature review, SLR, best practices, active learning, educational programme*

Enhancing Student Motivation through Reflective Self-Assessment

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Struggling with Lack of Motivation

As information literacy (IL) instructors we strive to teach students the skills needed to be lifelong learners. Over the years, a recurring topic of discussion among colleagues has been the lack of student motivation to really comprehend the topics we teach in our IL courses. In our experience, this is not only an issue at our universities but a problem that IL instructors worldwide struggle with. Naturally, in order to become successful information searchers, we want our students to be more motivated to learn and realize the importance of IL skills. In the fall of 2024, we introduced self-assessment as a method to improve students' learning at our IL courses. Correctly implemented, student self-assessment, according to McMillan and Hearn (2008), can work as an effective motivator and promote more meaningful learning. Additionally, self-assessment impacts on student performance by giving students the opportunity to guide their own learning and by making the assessment criteria a part of their own evaluation process (McMillan & Hearn, 2008).

Self-assessment as a Motivator

In an attempt to increase student motivation, we created a compulsory self-assessment assignment in order for students to reflect on their own learning during IL courses and to evaluate their skills as information searchers by answering a set of questions. The assignment was created to increase student motivation at IL courses by students evaluating their own strengths and weaknesses, this hopefully also leading to them getting more aware of the significance of IL. Self-assessment can furthermore be a way to strengthen self-efficacy regarding a specific subject, which can motivate learners and lead to more confidence in these skills (Folk, 2016; Kurbanoglu, 2010). This, for example, was something we could observe from the answers students gave in the assignment. Students who experience high self-efficacy are more likely to develop IL competencies that promote lifelong learning (Ross et al., 2016), which is what we aim for with this self-assessment assignment.

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Keywords: *information literacy, self-assessment, motivation*

How Do We Want IL Governance? The Organizational Structures for the Promotion of Information Literacy at German University Libraries

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The promotion of information literacy is a standard task at many university libraries and an important part of their range of services. Teaching information literacy at university libraries include research skills, skills for academic work and writing, digital literacy, data literacy, copyright literacy and skills for recognizing fake news and fake science. While course content and didactic methods have already been discussed many times, the focus of this contribution will be on the organizational structures of this core library task. For the promotion of information literacy in libraries to succeed, distinctive and clearly defined organizational structures are indispensable.

The German Rectors' Conference emphasized the importance of governance as early as 2012 in its recommendations "*Higher education institutions in a digital age: rethinking information competency – redirecting processes"* (German Rectors Conference, 2012). This contribution analyses which organizational structures university libraries in Germany have now established to teach information literacy and which standards they use. The results of a quantitative survey are presented, on the basis of which it was investigated whether a department, a subject area, a working group or individuals are responsible for teaching information literacy, which tasks are performed and which management structures exist. It becomes clear that no organizational model has yet established itself in Germany and that many libraries work with internal standards or without any standardized guidelines at all.

These results form the basis for the "Recommendations on the organizational structure of the promotion of information literacy at university libraries" of the working group information literacy in the Bavarian Library Network (s. n., 2024), which also addresses the topics of course development documentation of course material as well as course evaluation and course review. The recommendations see transparent organizational structures with clear leadership (Kühl, 2017) and defined task prioritization, accompanied by further training, coaching and generally recognized information literacy standards as a clear success factor for the promotion of information literacy in university and library work.

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Keywords: *information literacy, governance, standards, university libraries, Germany*

IL and AI: Library Services, Developments, Challenges, and Cooperations

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Dealing with (generative) artificial intelligence (AI) is a significant aspect of information literacy and an essential part of library services. According to the IFLA Statement on Libraries and Artificial Intelligence, libraries should help their patrons develop digital literacies that include an understanding of how AI and algorithms work and corresponding privacy and ethics questions. Our contribution analyses how the university libraries in Germany integrate AI in their library courses, which AI competencies are promoted by libraries, and which AI tools are taught. We also discuss the perspective of the teaching librarians, asking the following questions How do they deal with AI? Which aspects of AI do they find challenging? What kind of cooperations do they want?

We present the results of a survey of teaching librarians in the Bavarian Library Network. We discuss the changes and challenges of incorporating AI into information literacy services. The librarians were involved in networking events, exchange of course materials and the collection of good practice examples. We argue that all concepts for promoting information literacy must take artificial intelligence into account.

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Keywords: *information literacy, artificial intelligence, cooperation, university library, Germany*

To Use or Not to Use? Potentials And Pitfalls of Using AI-Tools in (Literature) Research – An Interactive Workshop for PhD Students

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The rise of generative AI tools has sparked both excitement and controversy in academic research. While AI can enhance literature reviews, citation analysis, and knowledge synthesis, its uncritical use has resulted in high-profile retractions and publication scandals. Researchers must navigate the fine line between leveraging AI's benefits and upholding research integrity.

We offer tailored courses on AI literacy to various academic stakeholders, including students, faculty, librarians, and researchers at the Free University of Berlin's library. One of our initiatives is a workshop for the Dahlem Research School's PhD program, integrating principles of good scientific practice with the emerging role of generative AI.

This presentation introduces our workshop model that incorporates interactive discussions on ethical and legal considerations, real-world case studies, and hands-on exploration of AI research tools. Participants learn to critically assess AI-generated content, understand institutional AI policies, and develop best practices for responsible AI usage in research.

Workshop Structure

The workshop is designed to foster critical engagement through the following components:

1. Exploring participants' experiences with AI: We ask participants whether they have used AI in their research. If so, how have they used it?
2. Discussing potential pitfalls of AI usage: Participants are invited to share their thoughts or experiences regarding the misuse of AI, including both generative AI and other AI tools that support the research process. We also provide examples of AI-generated text and images that have successfully passed peer review.
3. Analyzing case studies: Participants discuss false accusations of AI misuse, authorship concerns, and questions of responsibility through three case studies.
4. Deriving best practices: Participants collaboratively establish guidelines for responsible AI use, ensuring adherence to good scientific practices.
5. Exploring AI tools for research: In the final part of the workshop, participants learn how Retrieval-Augmented Generation tools and AI research assistants can support their work, while also discussing their limitations and challenges.

Thus, our workshop equips scholars with the knowledge to:

- Recognize AI's capabilities and limitations in academic research.
- Evaluate AI-generated content for accuracy and reliability.
- Address ethical and legal concerns, including data privacy and copyright issues.
- Implement best practices for transparently documenting AI usage.

Conclusion

The workshop can be modified for other audiences or for specific departments. In this presentation we invite discussion on how academic institutions can integrate AI literacy training into their research support frameworks.

Keywords: *good scientific practices, AI literacy, PhD students, research with AI, literature research with AI, ethical use of AI, authorship, copyright, AI research assistants, retrieval augmented generation*

Bridging the Gap – An Attempt to Empower Students' Academic Information Literacy

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The rise of ChatGPT unveiled the gap between what students know and are used to, and what teachers at university expect. Swedish students' preparedness for higher education has been in decline for years, and an individualized elementary school system seems to be setting students up for failure when embarking on an academic career (Skolverket, 2023). Moreover, the gap between students from the city and from the countryside widens, as well as the gap between students from opposite ends of the socio-economic scale (SOU 2021:3, 2021). In Swedish elementary schools, many students use platforms like Google classroom or publishers' sites to access snippets of information, seldom reading entire books. The infrastructure of information becomes invisible (Haider & Sundin, 2022, p. 58). The quality of school libraries has varied and has been under-financed for decades (SOU 2021:3, 2021). It could be perceived as a case of worst practice opening up for best practices. When we understand this, new possibilities open. There is no point in talking about generative AI-tools that can be of help in students' studies, when students themselves find it hard to tell an academic article from an anthology. We already have knowledge about students' use of AI, interacting with them daily in the library, and they ask us questions that they may not want to ask their teachers. Students in several studies and in various countries express uncertainty in how to apply generative AI in their academic work without cheating or discrediting their work (Schei et al., 2024). All signs point to students being aware of their lack of information literacy (IL) in terms of generative AI, but perhaps not in their basic IL skills. Our first step in attempting to meet this perceived student demand at Karlstad University was to make all our academic IL courses available as Open Educational Resources. These courses are self-assessment courses students and the general public can access as them many times as they need. Our second step was to invite all upper secondary school librarians to meet and discuss how to work better together. By sharing our resources and talking about our common goal of making students better equipped for further studies – and life in general – in times of AI, we feel we are on our way to close the gap on students' IL. Thirdly, we decided to initiate the conversation on generative AI when we meet students at our library and on campus and use our tacit knowledge about our library users. Librarians need to engage in understanding and guiding the use of generative AI, helping students critically evaluate AI outputs and integrate these tools into their study and research process, as we do with other sources of information. As academic teaching librarians it is obvious that generative AI does not make the students' academic literacy abilities stronger by default. AI literacy means more than just using AI tools; it involves an understanding of how AI works and how to make ethical decisions about its use. AI literacy includes skills evaluating, communicating and collaborating with AI (Lérias et al., 2024). Many students use AI chatbots as personal tutors and appreciate the anonymous support and user-friendliness (Schei et al., 2024). However, students also express concerns about the accuracy of information from AI chatbots and the difficulty in fact-checking their outputs (Schei et al., 2024), and they worry about potential negative impacts on their learning and thinking skills (Malmström et al., 2023). To develop better AI literacy and empower students to better decision-making concerning AI, students need firstly to be strengthened in IL and overall academic know-how, and able to summon that strength when they use generative AI. It is also our experience that university teachers are more focused on the cheating aspect of generative AI. We understand that the cheating aspect of generative AI is perhaps a more urgent issue for them, but we want to encourage the conversation to be about more than cheating.

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Keywords: *academic information literacy, students, AI, artificial intelligence*

Service Model for Promoting Information Literacy and Open RDI at Laurea University of Applied Sciences

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In our presentation, we introduce an information literacy service model developed at Laurea University of Applied Sciences. The service model promotes information and data literacy, research integrity, and open research, development, and innovation (open RDI).

The model is based on Annemaree Lloyd's theory of the information literacy landscape. Lloyd (2006) explores information literacy in various contexts, such as higher education and the workplace. The approach involves conceptualizing the information landscape and building a knowledge base through interaction in different contexts. Information literacy arises from complex contextual practices, processes, and interactions that enable access to social, physical, and textual sources of information (Lloyd, 2006).

We have applied Lloyd's theory to various information literacy landscapes in the context of higher education. In practice we provide personalized online guidance to learners, including university students and staff. Learners can schedule guidance sessions within their field of study, open RDI, or accessibility of information resources. The model guides researchers and development projects on research integrity, data protection, and data management.

Guidance sessions are customized to the learner's readiness and needs and vary depending on the context. The aim is to target information literacy guidance activities more accurately and promptly to address learners' practical challenges in various information landscapes and contexts. The service model is constantly evolving, and new themes are promptly integrated as required.

Emerging Themes in Information Literacy – AI, Data Management, and Citizen Science

New themes that broaden our service model include AI, data management, and citizen science. Recognizing and critically evaluating AI-created content has become an essential part of information literacy. AI can also be a useful tool in information retrieval, and we show students and staff how to use an AI-based information retrieval tool, Keenious.

In the contemporary academic and professional world, data management is a crucial skill. At our university, data management applies to both RDI work and theses. At the beginning of projects and theses, a data management plan is drawn up, and we offer support in its preparation.

From the perspective of open RDI, we began in late 2024 to explore our opportunities for supporting citizen science projects within our organization. By citizen science we refer to activities that involve the public in academic research (European Citizen Science Forum n.d.). In our study, we explore citizen science in Laurea's RDI projects and the need for support to facilitate citizen science initiatives.

In our presentation, we will introduce our personalized guidance model in practice and discuss new themes in information literacy.

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Keywords: *information literacy, guidance, open RDI, citizen science, data management*

AI Ethics, Disability, and Information Literacy: The Promise and Peril

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With the advance of Artificial Intelligence (AI) in creating or assisting with both academic and creative works, a team of librarians and researchers at an American university formed to guide the use and development of these tools in higher education, including ethical concerns for using these tools. A subcommittee quickly formed to research the various tools available in order to develop guidelines for ethical use of the most popular AI tools. The research team quickly discovered that AI is a swiftly moving target, and development of the guidelines was stymied as keeping pace with the unfolding changes proved impossible. Any guide for researchers the team wished to develop would be hopelessly outdated before it could even be deployed even as the need for ethical guidelines increased. This understood, the team pivoted away from providing answers and instead put effort into developing questions that students and faculty should ask themselves. These questions included: Was the data informing this tool sourced ethically? What is the safety of your personal data when using this tool? Were the staff responsible for training these tools employed and compensated fairly? Are there concerns of environmental impact due to the computational power required? Will marginalized groups and individuals have their voices heard?

For disabled individuals, the situation is even more dire. Often considered as no more than an afterthought when it comes to design, concern regarding these tools and marginalized populations is paramount. With recent developments in the United States that is hindering progress in the areas of terms of diversity, equity, and inclusion, we cannot rely on government oversight to ensure these concerns are addressed by private industries developing Large Language Models and other AI tools. Already, we are beginning to see backlash against the disabled community, with chilling pronouncements from U.S. leadership. It will ultimately fall to educators and advocates to push accessibility; however, this struggle is not new and we have the ability to help prepare users and designers to adapt.

Zooming out, the authors will present a broad overview of the current situation while highlighting tools that already exist to make information more accessible to all users. Ethical uses of AI have improved accessibility in certain cases. AI has already demonstrated acumen in live transcriptions of presentations and meetings. Such tools have existed for years but AI tools have accelerated their availability and utility. Image descriptions for the visually impaired have greatly improved in a short time through the continuing development of AI tools.

Attendees will acquire deeper knowledge of the fast-moving history of these tools, the ethical issues facing information seekers and creators, and encouraging developments for improving access in the current and future environment.

Keywords: *artificial intelligence, ethics, access, disability*

You've Got to Fight for Your Right to Learn Together: Research Days Empower High-school Learners to Navigate Information Literacy

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In an effort to bridge the information literacy gap between high school and college, we initiated a program called "Your Senior is my First-year" in 2018. Research Days was a concept derived from previous years of doing high school tours and library instruction. It has evolved to include information literacy instruction, hands-on research, searching the library, and critical thinking skills. Within this instruction, high-school learners are introduced to such skills through a progressive framework that focuses on building relational capacity between learners and facilitators. With the help of a high school coaching program called Advancement Via Individual Determination (AVID), Research Days empower high school learners to engage with and learn how information is valued, how they can find it, and how they can engage with it in ethical and responsible ways (Shapiro & Cuseo, 2018).

This best practices presentation looks at the advent of Research days, its progress, and its strengths and challenges. Participants will learn about AVID's Writing to learn, Inquiry, Collaboration, Organization, and Reading to learn (WICOR) concept that allows facilitators and instructors to gradually build relational capacity with learners through scaffolded discovery and progressive risk-taking activities. They will also learn about the journey of a new librarian to seek out training through a faculty-led AVID workshop facilitated by an award-winning AVID coach and how they incorporated it into library instruction for Research Days (Salmans & Durham, 2023). We will also look at the specifics of this instruction and how information literacy is taught and learned in that transition from high school to college, and what it's like working with the dual credit program. With the future of information literacy involving things like artificial intelligence (AI), we are also looking to incorporate AI literacy skill building into Research Days to help learners understand the dynamics of mis- and disinformation, how social media impacts the way we think, see, and use information, and what the future of information might be.

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Keywords: *AVID, college transitions, AI literacy, empowerment pedagogy, emancipatory pedagogy*

Promoting Reading at a Technical University

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Objectives

In recent years the library has been involved in a variety of initiatives designed to promote reading among researchers and students. The overall aim of these initiatives has been to inspire engagement with literature beyond textbooks and academic research. In certain instances, these efforts have coincided with other institutional objectives such as enhancing recruitment diversity, inclusive participation, and equitable education. The projects include book clubs and literary outreach programs. While promoting reading and literacy is not the main focus for the library, it is evident that the ongoing discourse surrounding the role of education has had a beneficial impact on the reception of such initiatives. The purpose of this project is to map and critically examine the reading promotion activities conducted at the library, with an ambition to explore alternatives for further development. In addition, we seek to investigate the perspectives of library staff in the role of reading promotion and the broader concept of *Bildung* in relation to the library's overarching mission.

Methodology

The project has developed as a continuation of an extensive project on equality and equal opportunities, funded by the university, when several book discussions were organized by the library. The selected books can be discussed from perspectives that relate to ethnicity, history, gender and social differences. These kinds of perspectives are presumed to interest participants with different kinds of interests and offer a wide range of ways to talk about the content. As a complement, representatives from the library management have been interviewed and given their view on reading promotion in higher education.

Outcome

The response from the participants has been positive and requests for a continuation of book discussions have been expressed. The book discussions have given the participants an opportunity to socialize and talk about different topics from different angles, such as historical, social, human and more personal perspectives without any pressure. Based on this response we have come to the conclusion that the projects have had a positive effect on students' reading. During the presentation we will share our theoretical standpoints as well as successes and challenges that we have experienced when designing and performing book discussions at a technical university.

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Keywords: *book discussion, humanities, higher education, lifelong learning*

Giving TikTok a Home to Advance Digital Media Literacy

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Overview

The TikTok House, an innovative media literacy intervention, began as a student project at the University of Tartu. Its main goal was to equip individuals with knowledge about TikTok by providing insights into the app's inner workings and data collection practices. The TikTok House aimed to help people make informed decisions about their involvement with the platform by arming them with this information,.

While the intervention covered key TikTok-related topics, including hidden advertisements and legal cases, its primary focus was on the app's algorithm. TikTok's recommendation system determines the content users see based on collected data. Social media algorithms have been described as invisible mechanisms shaping users' perceptions of reality (Klug et al., 2021). TikTok stands out because its content-recommendation algorithm solely determines what users encounter (Bhandari and Bimo, 2022).

The rise of platforms driven by personalized recommendations has highlighted the need for algorithmic literacy. Understanding how these opaque "black box" systems (Oeldorf-Hirsch & Neubaum, 2023) influence social media consumption – particularly among younger generations (Head et al., 2020) – has become crucial. To make the topic accessible, this intervention brought TikTok into a vibrant physical space, where its algorithm was explained interactively. Information bubbles, detailing different aspects of the algorithm, were hung from the ceiling, guiding visitors through a pathway that revealed its functions. A full-length mirror at the centre resembled the familiar TikTok homepage.

The decision to use a physical space, rather than an online campaign, stemmed from research indicating that online campaigns tend to reach fewer people without financial amplification (Miller, 2021) due to platforms' profit models (Kozinets, 2022).

Outcomes

The idea evolved into a physical space intervention as part of Tartu's annual Christmas Village at the end of 2022, held in the Town Hall Square. The TikTok House successfully captivated the public, drawing an estimated 40,000 visitors. To date, the intervention has been hosted in two different seasons and cities across Estonia, with the second edition taking place in August 2023 during the National Opinion Festival. Notably, the intervention has gained attention from the Global Media Literacy Network and TikTok's Trust and Safety team.

At the ECIL conference, this presentation will offer practical guidelines and insights on designing engaging, accessible physical space interventions, drawing from the experience of creating the TikTok House. Given the TikTok House's successful implementation in different contexts, the session will also explore its adaptability, outlining how the intervention can be modified and scaled for various settings.

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Keywords: *TikTok, algorithmic literacy, physical space intervention, general public*

Developing Students' Information Literacy with Wikipedia and AI

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We will present how we use Wikipedia as a tool for information literacy (IL) instruction in our undergraduate IL course. After learning how people add content to the online encyclopedia, students make their first edit on the site. This assignment requires students to identify a fact from a library source and add it to their adopted Wikipedia article. The student must paraphrase their fact from the source, rather than copy and pasting or lightly changing the original text. In previous iterations of the course, this has been particularly challenging for students as they try to ensure their paraphrases are different enough from the original. In the last year, we have required students to use ChatGPT as a paraphrasing tool in this assignment, asking them to critically evaluate the resulting paraphrase. Once satisfied, they publish it to Wikipedia, making sure to cite the original source. We value this use of ChatGPT because we can focus more on the point of the assignment, which is to contribute to this public information resource, rather than teaching paraphrasing. Students seem better able to critically assess the quality of the paraphrase when it came from ChatGPT, often asking for multiple revisions from the tool. Some students refined the AI-generated text further, adding their own final touches before publishing the text in Wikipedia. This practice is affirmed by Wiki Education (n.d.), who strongly caution users to practice "rigorous editing and fact-checking" if they use any generative AI.

This assignment supports our students' understanding of authority, which is a concept key to IL. Students become Wikipedia creators rather than only consumers. Unlike the traditional research paper, which often stays within the confines of a class and may only be read by their instructor, Wikipedia articles are immediately accessible to anyone. As editors of Wikipedia, any edits students make are attributable to them via their username, so they also must evaluate whether they want the addition to be attached to their account. Finally, they are working within an already established community. While we grade them, their work also may be assessed by Wikipedia community members.

The Association of College & Research Libraries' (2016) *Framework for Information Literacy for Higher Education* highlights authority as key in the development of information literacy: "Authority is constructed and contextual." The *Framework* states: "Authority is constructed in that various communities may recognize different types of authority. It is contextual in that the information need may help to determine the level of authority required." Students do not need to be experts in the topic of their Wikipedia article. Instead, they develop their authority by identifying the information need for their Wikipedia article, improving the article, and becoming members of the Wikipedia contributor community. While we focus on the *Framework*, this exercise supports other information literacy models like SCONUL's (2011) *Seven Pillars of Information Literacy*. ChatGPT to paraphrase facts removes a significant barrier for students, allowing them to focus on the more impactful elements of the exercise.

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Keywords: *information literacy, Wikipedia, paraphrasing, authority, artificial intelligence*

Insights and Future Directions: Course Program Development at HSU Library

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Our intention is to present the lines of development from the existing program of training courses and workshops in the field of literature research and information literacy to the new concept of training offers at the Library of the Helmut Schmidt University/University of the Federal Armed Forces Hamburg. This progress is significantly influenced by the results of a user survey and other evaluation methods, such as the number of participants in the training courses.

A description of the changes that AI has brought to the field of research and academic work will serve as a starting point. Working with AI and digital tools seems easy. As a result, information literacy is often no longer seen as a skill that students need to acquire. But students often lack an understanding of how these digital tools work, the opportunities they offer, and the risks they pose (Reinmann, 2023). To adapt our workshop program to these technological and social changes and needs in the academic context, we use the results of our evaluations and the AI competency framework for students (Miao, 2024). This will allow us to expand our workshop program for both students and academic staff, making it more attractive and user-oriented.

In the talk, we will present our current services. We will also share the results of the evaluation of our training courses and workshops over the past two years, as well as the results of the library user survey conducted in January 2025. In consideration of the results, we will present our plans for redesigning our offerings. We will expand our training offerings based on the skills mentioned in the Framework Information Literacy (Klingenberger, 2016). We will also share insights and initial lessons learned from the redesigned workshops.

In a fast-changing world, libraries, as institutions providing access to reliable information, must be early adaptors to technology change. Our assumption: The new workshop and training program is just the first step into the future.

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Keywords: *AI, course program, course development, evaluation, information literacy, library*

Generative Artificial Intelligence Skills in Schools: “It is an intelligence that is not natural, but it is created by a different intelligent form of life”

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The use of Generative Artificial Intelligence (GenAI) has generated a lot of debate in the past year, capturing the public imagination, sparking debate and intellectual discourse related to the future challenges and opportunities of an AI driven society. GenAI, which is made publicly available via general purpose GenAI tools, and is now also incorporated into search engines, is becoming an integral part of young people’s everyday lives, changing how they source and use information for learning and everyday life purposes. Carrying promises to enhance and even revolutionise education, GenAI presents a new era for personalised learning experiences, tailored support and accessible education. In this emerging GenAI reality, the need for fostering critical thinking, ethical awareness, information/digital literacy and resilience is necessary for equipping young people to navigate a rapidly changing world responsibly.

This paper presents the key results of a research and co-creation project, which explored young people’s engagement, perspectives of and experiences with GenAI tools. Empirical data were collected from eighteen underrepresented secondary school students (13-year-olds) (e.g., Black, Asian, minority ethnic and low socioeconomic groups, learning differences) via practical activities, focus groups and questionnaires. Based on their input, a series of animated video cartoon stories on GenAI were developed, allowing them to convey their voices and experiences. An open educational toolkit on GenAI was also developed with resources and activities to be used in class, facilitating conversations/engagement with the challenges and advantages of GenAI. Young people engaged directly with a GenAI tool to find information on UNESCO Sustainable Development Goals and explore issues related to bias, misrepresentation, and information literacy, via an imaginary scenario that involved the arrival of a GenAI teacher, who impersonated most of the characteristics of modern GenAI tools. With the direct input of students, different cartoon characters were created, who became the research participants’ ‘body doubles’ to explore pressing issues in the AI realities they experienced. In relation to text-based prompts, focus group questions addressed use: “What prompts (questions) would you advise your cartoon character to use if they searched for that topic using GenAI”?; transparency/trust: “Would your cartoon character know how this tool generates its content?”; information literacy: “Would your cartoon character find the generated text or visual relevant/accurate/current/credible/reliable/at the right level?; bias/ inclusion/discrimination: “Would your cartoon character find any bias showing in the AI outputs? Would they find that the responses treat all people equally?”; and privacy/data safety and security: “Are there any privacy, data safety and security risks for your cartoon character in using this technology?” In addition, positive uses of GenAI were explored in critical reflection: “Would using GenAI be helpful for your cartoon character?”. In relation to image based prompts the approach used was adapted from the BRIDGE project, asking critical information literacy questions: “What do see and what happens in the picture?”, “Would it be the same or different if a human made it?”, “Who is the one who created this image? Is it you or the GenAI tool?” and “What does the image make you feel like?”. Questionnaires explored young people’s use of GenAI tools, how they would describe GenAI to someone of their age, topics they had searched for already, the things they/not like, their confidence and feelings as well as what the future will look like. At the point of writing this abstract, the results are still being collected and analysed. This research project aims to make a positive impact on young people’s learning by bringing attention to the importance of understanding their changing GenAI empowered realities. Via its ‘co-creation’ approach, it involves educational interventions that shift the focus of research their direct engagement and their human rights (This work was supported by the Engineering and Physical Sciences Research Council [EP/Y009800/1], through Responsible Ai UK funding (RAI-SK-BID-00024).

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Keywords: *artificial intelligence, information literacy, digital literacy, secondary education, school, equity, ethics*

Evaluating Information in a Changing Landscape: Creation of an Evaluation Tutorial

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The information landscape continues to drastically shift with the advent of new technologies. Artificial intelligence, opaque algorithms, data deluge, and the proliferation of information sources removed from their original context (for example news on TikTok) all pose challenges (Head, 2018). We have entered an area where the need for information literacy on source evaluation is at a critical juncture. Evaluating information is a key component of information literacy but students continue to struggle the most with it (Head, 2010). Without the ability to identify whether a source is credible, reliable, and the best evidence for their information need, students will be unable to succeed in school as well as life outside of school.

Our faculty demanded a learning object that can serve as grounding for navigating the changing digital ecosystem. One of the most critiqued aspects of the CRAAP test (and other checklist approaches) is that it is out of sync with the increasing digital information age (Tardiff, 2022). The attempt at engaging in the critical appraisal of information is overly convoluted for students to reliably deploy outside of the classroom. This asynchronous tutorial in source evaluation was uniquely designed with an eye towards improving the efficiency in "truthiness" validation and critical appraisal, regardless of the modality in which the information has been received.

Reserved under a Creative Commons License, this tutorial draws on UDL in combination with important evaluation frames such as lateral reading (Caulfield) with graphic elements (comic strips) and interactive assessments that can be embedded into courses or used for independent learning. This approach is responsive to the learning styles of students who thrive off innovative, accessible pedagogical strategies that amplify the content and actively engage them (Lang, 2020). It differs from many other evaluation learning objects the authors encountered in that it is a true self-guided tutorial (rather than a research guide with static pages of information or a stand-alone video) and it is freely available (rather than being locked down behind a login).

This session provides an in-depth look at the tutorial's development process, highlighting its interactive features, and offering practical strategies for faculty and student engagement. The session will also provide feedback and data on use and user experience testing which informed iterative changes. Attendees will gain concrete insights into designing effective information literacy resources and will receive access to the tutorial for potential adaptation and use in their own institutions.

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Keywords: *source evaluation, tutorial, asynchronous instruction*

Faculty Views on Generative AI Tools – Case: Primo Research Assistant

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Generative Artificial intelligence (GenAI) tools, like ChatGPT have been a major topic of conversation for a few years now in the general public and academia. In the age of Generative AI, information retrieval has undergone a significant paradigm shift as seen in search engines and recommender systems. However, concerns have been raised on the quality of AI produced texts, and/or unethical practices challenging academic integrity (see Miao et al., 2024; Alkaissi & McFarlane, 2023). Could a GenAI tool using curated metadata and verified referencing be a more suitable option for higher education?

Primo Research Assistant

Ex Libris Primo Research Assistant was released as a beta version in late 2024. It uses Clarivate's GenAI platform that is based on GPT 4 and it searches the Ex Libris Central Discovery Index (CDI) containing over 5 billion metadata records of peer-reviewed scientific literature. (Lecaudey, 2024) Primo Research Assistant enables users to make queries in natural language by asking research questions. The Research Assistant provides five sources, and an AI generated summary answering the question in the language that the question was asked. However, all the sources provided might not be available as full-text depending on database subscriptions.

The Survey

The university staff were asked to test the Research Assistant and answer a brief survey. The survey was conducted to open discussion, gather thoughts on the perceived usefulness and possible challenges of Primo Research Assistant. Furthermore, the results help the academic library make an informed decision whether to include the Research Assistant as a part of library's Primo discovery service. In-depth interviews will be conducted during spring 2025.

The Results & Discussion

The preliminary results indicate that staff mostly have a positive outlook on the Research Assistant. Using GenAI was seen as a skill for future working life for students, and not being able to use GenAI tools would put them at a disadvantage. However, there were some concerns that the students do not familiarize themselves with the sources given and just use the summary provided, which might give them a skewed view on the topic. The summary provided might also encourage students to plagiarize, which mirrors the findings from the literature.

The academic librarians would appreciate more transparency in how the articles are selected and ranked. There are also concerns about the coverage of the Research Assistant, as some databases do not allow their metadata to be harvested. In addition, it was noted that the language the research question was asked had a bearing on the quality of the summary since the translation from English to Finnish varied and the sources were mainly in English.

Given the preliminary findings, the Research Assistant is likely to be deployed during summer 2025. Going onwards, to tackle some of the concerns the ethical use of Research Assistant will be included in information literacy teaching and guidance.

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Keywords: *generative AI tools, academic integrity, Primo Research Assistant*

Students Benefit from Digital Accessibility

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The aim of this presentation is to show how the library can support students in their studies by enhancing digital accessibility. Digital accessibility is essential for students with reading disabilities, but all students can benefit from accessible e-materials and contents. There is a wide concern in libraries about student wellbeing (Bladek, 2021). Libraries can contribute by making their online services easy to use and add awareness of accessibility in e-materials.

Laurea University of Applied Sciences Library takes into account the EU Directive on accessibility of websites and mobile applications. Examples of the requirements are captioning, sufficient color contrast, alt text (Pope & Creed-Dikeogu, 2022). Correct technical accessibility doesn't self-evidently coincide with cognitive accessibility. Webpages and learning materials should contain simple language without library jargon, logical structure, and when possible, the same information presented in various forms.

Laurea LibGuides is an example of an online service where accessibility is present. The LibGuides were checked and corrected to meet the required technical accessibility features (WCAG). Cognitive accessibility is supported to ensure that LibGuides are easy to use. The tab order, outlay, and terminology are similar on different guides. Finnish language was simplified, for example, in the new users' guide, which helps foreign students who learn Finnish. Cognitive accessibility is also a part of designing library online courses.

E-books and e-articles are key sources of information for students. Libraries can support studying by informing students about the built-in, often unknown, accessibility features in e-materials. When the new EU Accessibility Act is being enforced, it affects the accessibility features in e-books and software. It is important that library staff keeps up-to-date on the latest development.

Laurea Library developed together with five UAS libraries a LibGuide: Accessibility - Tips for Reading. It includes instructions for using built-in accessibility features in databases and browsers, like 'read aloud'. It has information about optimizing one's own devices and material on learning strategies. Laurea Library disseminates this information by talking about the LibGuide in library introductions, personal guidance sessions, and online courses. In addition, the library works together with other Laurea staff in promoting accessibility.

A professional way for libraries to enhance students' wellbeing is to make reading easier. Ensuring accessibility in one's own work and offering students information about accessibility may affect students' wellbeing. It is also very important to offer all students the possibility of benefiting from the library's e-materials and services in their studies.

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Keywords: *accessibility, university library, e-materials, online services, wellbeing*

No Student Feedback? No Problem: Alternative Approaches for Gathering Programmatic Assessment Information

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Library instruction and outreach programs commonly survey participants at the end of the class or outreach event to determine their attitudes to the session and what they have learned. Librarians use this information to decide what changes might be needed for future instruction opportunities and to contribute to broader assessment efforts. However, gathering this type of formative input has been challenging as we have observed a steep decline in student responses to these surveys in our library over the past 5-10 years. Similar declines have been observed across our university, and educational researchers around the world have also experienced a decline in student response rates (e. g., Possamai et al., 2024). Motivated to strengthen our programmatic assessment, our library research and learning department sought alternatives to traditional quantitative measures of the impact of library instruction and outreach. This presentation will share the three alternative assessment methods we used and will discuss the benefits and drawbacks of each of these methods.

Our library is part of a large, research-intensive university in the Western United States. Our library instruction and outreach program serves a diverse constituency including traditional undergraduates, returning nontraditional students, online students, graduate students, and faculty. We teach topics from basic information literacy concepts to advanced data management skills. Like other library instructors exploring assessment options (e. g., Luetkenhaus et al., 2015), we wanted to assess what students were learning, but we also had questions about the alignment of what we were teaching with broader curricular expectations. Gathering these insights was necessary to ground our understanding of the effectiveness of our instruction and outreach programs and to learn where changes might be needed.

We selected three sample focus areas of programmatic interest that cut across multiple aspects of our instruction and outreach work. We explored a range of alternative, qualitative methods for gathering feedback including focus groups, interviews, and document analysis. Most important was our selection of alternative stakeholders who could serve as proxies for the feedback we lacked from students. This presentation will describe three approaches for gathering programmatic assessment and how we translated what we learned into changes to our instruction and outreach practices. This presentation will describe and compare the qualitative assessment techniques used. Presenting a range of alternative programmatic assessment strategies will help others consider whether new ways of approaching assessment might benefit their library.

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Keywords: *programmatic assessment, participant nonresponse, qualitative feedback, instruction programs*

Transposing Traditional Teaching to Information and AI Literacy – Intense Collaboration between the University Library Zurich and the Faculty of Veterinary Medicine

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In response to the growing influence of artificial intelligence (AI) in academic research, the University Library Zurich has restructured its teaching model for the Vetsuisse Faculty Zurich to integrate digital and AI literacy alongside information literacy. Previously, the curriculum focused on classical search techniques and the use of scientific literature databases. The primary objective of this initiative was to provide Master's students with information and AI literacy competencies to critically evaluate and utilize generative AI tools, such as Scite, alongside conventional search techniques.

The feedback from this initiative led to a mandate from the Faculty Dean for the Library to extend its commitment to teach AI literacy to all faculty members. The transformation began in spring 2024 with a full-day workshop on AI prompting, designed to provide faculty members with basic knowledge and a practical toolbox for applying generative AI tools in research. This workshop served as the basis for further exploration of AI applications by the liaison librarians, which systematically evaluated various generative AI tools to determine their relevance for research and clinical practice. The selected tools were then introduced in monthly coffee lectures, encouraging a collaborative exchange among liaison librarians, PhDs, researchers, clinicians.

Furthermore, with the Dean of Studies and the Vice Deans of Research and Teaching this interactive process influenced an updated curriculum design to AI literacy. The revised teaching approach consists of a 4x45-minute lecture: (1) classical search techniques using scientific literature databases, (2) demonstrations of AI-driven search tools, (3) hands-on group work where students apply both methods and (4) presentations and discussions that frequently lead to ethical debates on AI use in academic research. This practical approach encourages students to critically assess the advantages and limitations of AI-driven methodologies compared to traditional search techniques. The discussions generated through this format highlight the evolving nature of AI integration in academic research and its ethical implications.

Feedbacks of this new approach have been positive, with increased engagement from students and faculty members. The coffee lecture series has established an ongoing dialogue between the liaison librarians and faculty members. This practical improvement, which has already been implemented at various levels, provides a case model for other academic libraries seeking to make the transition from traditional literature literacy to AI literacy.

Keywords: *AI literacy, information literacy, digital literacy, academic libraries, collaboration, higher education*

Wikipedia and AI: Teaching Academic Competency

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Today's American college students are technologically proficient with evolving learning preferences. They have varied racial, socioeconomic, and cultural backgrounds, with many identifying as students of color and first-generation college attendees. They are inundated with fake news and AI generated content (Mowreader, 2025). Educators need new strategies to meet these students where they are. One new strategy used by librarians and instructors at Tennessee State University and the University of South Florida is teaching academic competency through involving students in Wikipedia edit-a-thons. This illustrates incorporating AI into critical thinking exercises (Roberto, 2024).

Wikipedia English skews towards white males for article topics and editors (Davis, 2023). Along with Wikipedia suffering from a deficit of diverse voices and perspectives, American college students have a deficit in information literacy (IL) and critical thinking skills. By contributing to Wikipedia, students learn to navigate and apply the Framework for Information Literacy for Higher Education, including the frames of understanding information creation as a process and recognizing the value of information (Stine, 2022). Teaching students to edit Wikipedia stands at the intersection of editing to fill in content gaps and editing to teach students IL, critical thinking skills, and research skills while making Wikipedia a more diverse and inclusive resource (McDowell & Vetter, 2022).

We aligned our three-hour events with Black History Month, Women's History Month, Native American History Month, and Latin American History Month. During the first hour, Wikimedia Foundation DC teaches attendees how to edit Wikipedia and provides articles on subjects that need creation or more information. The rest of the session is devoted to adding Wikipedia content.

To recruit new editors, we have cooperated with professors who agreed to give extra credit to participating students. The benefits besides improving Wikipedia are that editing helps to teach IL skills, critical thinking, and academic research (Murphy et al., 2021, p. 64). Wikipedia editing also instills a sense of advocacy and belonging in students (Ju & Stewart, 2019, p. 1486).

With the success of these edit-a-thons we are moving into the next phase: at TSU where we are encouraging faculty to assign Wikipedia editing projects instead of traditional research assignments. At USF we are transforming a more traditional IL course into one where Wikipedia editing is the focus. We are including using generative AI to guide students to leverage AI tools for deeper understanding rather than superficial answers, using AI to enhance their learning experience while developing their critical thinking and problem-solving skills (Roberto, 2024).

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Keywords: *higher education, Wikipedia, generative AI, diversity, content creation, critical thinking*

Ten Years of Information Literacy for Doctoral and Postdoctoral Researchers at the EUI: Statistics and Lessons Learned

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Background

The European University Institute (EUI) Library supports a diverse community of approximately 1,350 members, including doctoral and postdoctoral researchers and faculty in the social sciences from all over Europe. Its Information Literacy Working Group (ILWG), comprising four subject specialists with doctoral training and an Open Science team, provides user-focused support through individual consultations and a calendar of specialised training sessions, a practice commonly described as 'boutique approach' (Priestner & Tilley, 2012). The team also addresses data, visual, and digital literacies, as well as scholarly communication.

Objectives

This study aims to assess the evolution and effectiveness of information literacy training at the EUI Library over the past decade (2015-2024) using ten years of statistical and qualitative data; to identify key challenges and opportunities in delivering information literacy support; to provide recommendations for improvements.

Methodology

Quantitative data includes ten years of statistics modelled on SCONUL's 'Benchmarking Statistics' (2025), four user satisfaction surveys (2016, 2019, 2021, and 2024), and a needs assessment survey (May 2024). Qualitative data stems from open-ended survey comments, informal feedback, and instructor reflections from ILWG meetings. This study also takes into account a research about EUI doctoral students (Signoriello, 2021), which offers a better understanding of their information seeking behaviour.

Findings

Findings reaffirm that the boutique approach to information literacy (Priestner & Tilley, 2012) remains highly effective for EUI's research community. Several improvements, however, have been and will be implemented in the following areas:

- Enhanced communication to optimise attendance.
- Broader offerings to accommodate smaller and more focused research groups.
- Student-centred teaching approaches (Trigwell & Prosser, 2004) especially aimed at online teaching, with continuous professional development for librarians.
- Development of asynchronous material.
- Collaborations with other institutions and researchers to bridge knowledge gaps and share expertise.

While these developments may initially appear specific to the EUI, this study demonstrates that an accurate analysis of statistics can significantly improve the training provided by academic libraries, and it furthermore suggests how improvements can be accomplished.

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Keywords: *doctoral information literacy, academic libraries, research support, boutique approach, qualitative assessment, quantitative assessment*

Empowering Librarians to Combat Disinformation: A Training Framework for Public Libraries

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Public libraries play a crucial role in fostering information literacy, strengthening democratic and local social resilience (LAPAS, 2022; Kine & Davidsone, 2021) as well as information integrity (Adewojo et al., 2024). In the digital age, librarians are increasingly confronted with challenges such as disinformation, conspiracy narratives, and hate speech—phenomena that are exacerbated by advancements in artificial intelligence. These phenomena are not simply random byproducts of digital communication but are often deliberate strategies employed to polarize societies, alienate individuals from democratic institutions, and reinforce ideological silos. Se developed a training program to equip library staff with the necessary analytical skills and countermeasures. In this best practice session, we will present our training framework. It empowers librarians to become experts in recognizing and countering disinformation, conspiracy narratives, and online hate while implementing reflexive exercises to help librarians recognize their own cognitive vulnerabilities—key targets of disinformation strategies. The curriculum is structured as follows:

- Understanding disinformation and AI-powered manipulation: This module covers the basics of mis- and disinformation, how it spreads, and the role of AI. It also explores psychological tactics like cognitive biases and emotionalization that make disinformation so persuasive.
- Conspiracy narratives as part of the disinformation ecosystem: Participants learn how conspiracy theories erode trust in democratic institutions, drive polarization, and generate profit through monetized content and platforms. The module trains librarians to identify common rhetorical strategies used in such narratives.
- Media literacy as a key preventative measure: Public libraries serve as hubs for information literacy, and training librarians to develop educational formats is essential in fostering critical thinking skills among patrons.
- Hate speech as an escalation of misinformation and conspiracy narratives: This session examines how disinformation and conspiracy narratives fuel hate speech by promoting division and enemy images. Librarians learn to recognize and respond to hostile language patterns.

We successfully implemented the training in several district libraries in Berlin, Germany, where we conducted six online workshops and two in-person sessions. Through the interactive workshops, participants learned how to apply their knowledge in real-world library settings, for example, by engaging in role-playing exercises. To maximize the impact of this initiative, we focused on two key elements alongside general staff training, both grounded in research and designed to empower librarians to recognize and challenge disinformation. First, we addressed outdated knowledge of search technologies by integrating up-to-date insights into digital search behavior and misinformation detection (Tripodi et al., 2023). Second, we collaborated with local non-profits specializing in hate speech prevention and anti-democratic behaviors, ensuring the training reflected real-world expertise and met community needs (Young et al., 2020).

In this session, we will share insights from our implementation process, highlight key learnings, and provide recommendations for scaling similar initiatives in diverse library contexts.

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Keywords: *disinformation, media literacy training, democracy, artificial intelligence, public libraries*

The Evolution of an Information Literacy Course for International Dentists Over Seven Years

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Like many dental schools in the United States, the dental school in this study has an international dentist program (IDP) which matriculates a small number of international students with dental degrees from countries outside the US, many of whom are practicing dentists with years of experience, through an accelerated and intensive curriculum that allows them to graduate with a US Doctor of Dental Surgery (DDS) degree in less time than traditional students. One of the biggest challenges of this program is to take numerous students from wildly different educational and other backgrounds and normalize fundamental skills to ensure success in the DDS program. Despite being advanced students, some have never had any kind of information literacy training or experience with informational research. In the first part of the first year of the program, the IDP students are immersed in intensive didactic and clinical coursework and experiences that not only seek to normalize them among one another, but also ensure that they have equivalent skills to advanced DDS students, whose cohort they join in Fall of their first year. One of the skills addressed in their early, intensive didactic courses is information literacy including evidence-based practice. This curriculum has undergone several changes and evolved significantly over the seven years it has been deployed. There have been significant changes in its timing, expansions in number of classes and information covered, and how it shares concurrent timing with other modules both as a standalone course as well as under different umbrella courses. This presentation evaluates the changes it has undergone through the lens of longitudinal student self-assessments and other in-class assessments throughout the past seven years. This case study will hopefully be of use to any information literacy instructors, particularly those involved with international students, who have issues with timing of sessions and assessment of students in the context of an integrated and/or demanding curriculum.

Keywords: *international education, international students, health science education, dentistry, evidence-based practice*

AI Literacy for Faculty: Librarians as Agents of Responsible AI Adoption

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The rapid advancement of generative AI is profoundly influencing information-seeking behaviors within the academic community. While many scholars have integrated these cutting-edge technologies into their workflows, there is an increasing reliance on general AI tools such as ChatGPT, Perplexity, and Copilot in research processes. Conversations with faculty reveal widespread concerns about biases and hallucinations of these platforms and a general lack of awareness about AI tools intended for academic research.

The presentation showcases a comprehensive library program developed by the library at Carnegie Mellon University in Qatar designed to empower the academic community with essential knowledge of AI technologies and their application in research. While AI literacy in academic library instruction has traditionally focused on students, there is a significant gap in the literature regarding librarians' contributions to support faculty scholars in understanding AI and leveraging its potential to enhance research practices. This initiative addresses that gap by offering a multifaceted program that includes presentations at faculty retreats, promotion of the AI LibGuide, hands-on workshops to explore new apps and master the art of prompting, and personalized support through one-on-one consultations. As information professionals, librarians take the lead in learning relevant AI tools, introducing them to faculty, and educating scholars on their functionalities, benefits, and limitations. The selected tools include university-subscribed text-extraction platforms such as Scite.ai and Keenious, AI assistants integrated into scholarly databases Scopus and Dimensions, and popular tools with free plans, including Research Rabbit and Consensus.

The presentation covers strategies for engaging stakeholders in testing AI tools and provides practical considerations for planning and executing similar faculty-focused programs. Additionally, it explores the faculty's shifting attitude toward using generative AI tools in the research process. The overarching goal is to inspire librarians to take an active role in advancing AI literacy on campus, facilitate the responsible adoption of AI in research, and demonstrate how AI-powered tools can enhance research productivity and scholarly workflows. As generative AI continues to transform the landscape of academic research, librarians drive the effort of educating scholars on the intelligent and efficient use of these technologies, helping researchers to save time, enhance the quality of their work, and accelerate progress in their fields.

Keywords: *AI tools, literacy, research, faculty*

A Transdisciplinary Course on AI Literacy: From Concept to Reality

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The emergence of generative artificial intelligence (AI) technologies has rapidly transformed our landscape of knowledge creation and communication, raising great opportunities, but also significant challenges, particularly for students at higher education institutions (Furze, 2024). AI literacy—essentially an extension of information literacy—has come to the fore as a central skill to ensure the effective and ethical engagement with these new tools. In addition to providing a foundational understanding of the functional possibilities and limitations, AI literacy aims at fostering student's abilities to critically evaluate the provenance of individual tools and models, as well as to consider the broader societal, environmental, and ethical implications of their use (UNESCO, 2021). To achieve this comprehensive understanding, perspectives from diverse disciplines must converge, making interdisciplinary collaboration essential for successful AI literacy training—not only among lecturers but also among students, who bring their own disciplinary backgrounds and perspectives into the learning process.

This talk introduces the design and implementation of the course "*ChatGPT and Beyond: Interdisciplinary Approaches to AI Literacy*" developed by the University Library Zurich and the School of Transdisciplinary Studies at the University of Zurich, Switzerland. The course aligns with the academic library's mission to promote information literacy and aims to equip Bachelor's and Master's students from various disciplines with the skills needed to responsibly navigate and innovate within the rapidly evolving landscape of generative AI.

The seminar-style course features eleven lecturers from a range of disciplines including computational linguistics, information science, health science, art, and law. We combined flipped-classroom elements and practical workshops on generative AI tools, alongside discussions addressing critical issues such as societal implications, environmental concerns, stereotyped or biased content, and the power dynamics embedded in AI systems.

As a preliminary outcome of the course, the student's assessment portfolios demonstrate that participants develop a nuanced understanding of AI, becoming equipped to critically assess and apply generative AI tools in ethical and effective ways.

Finally, we highlight the vital role of academic libraries in promoting both information and AI literacy. Libraries act as a melting pot for interdisciplinary collaboration, providing spaces where diverse perspectives can come together to tackle complex challenges. As key facilitators of knowledge and literacy, academic libraries are uniquely positioned to lead the way in fostering responsible engagement with generative AI technologies.

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Keywords: *information literacy, AI literacy, higher education, critical thinking, transdisciplinary education*

Libraries as Hybrid "Third Spaces": A Speculation

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Although Ray Oldenburg mentions libraries only briefly in his seminal work on defining the fluidity of public spaces at the end of the 20th century (Oldenburg, 1989), the idea that libraries act as third spaces has taken root in library and information science (LIS) literature. For example, the term "third space" was used in 364 scholarly journals, dissertations and theses and trade literature in the database Library & Information Science Collection between 1990-2024. While use of the term within the LIS literature includes reference to libraries as physical places, as, for example in Kawartani (2024) or Bouaamri and Ágnes (2024), much of literature applies the term to discuss libraries as hybrid and programmatic (Kranich, 2005).

Does the concept of "third space" extend to the electronic and digital realms of libraries, such as library web sites and digital libraries? Library web sites are themselves libraries of information. They provide information that refer users to the physical aspects of libraries, such as library spaces and their hours, physical collections, and the presence of human expertise. At the same time, library web sites contain information that was born to be included in them, such as tutorials, frequently asked questions (FAQs), access to the electronic content of library collections, to name just a few examples. To add to the fluidity of conceptualizing libraries as hybrid and programmatic "third spaces," digital libraries are formal information systems, and computer scientists have theorized that they are spaces and have societies that interact with their spaces (Gonçalves, et al., 2024). We would like to propose that the concept of "third space" may be partially shifted to apply to libraries in the digital realm, broadly defined.

In discussing the overlap of the physical and the virtual in libraries, we will speculate on the sort of information literacy and communal networking libraries may be able to develop when we no longer access physical "third spaces".

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Keywords: *digital libraries, third place, electronic libraries, online communities*

Encouraging Students' Information Literacy through Embodied Experience of a Library

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Twenty years ago, Wayne Weigand asked, "To what extent are libraries places worth experiencing?" (2005, 78). Now, as generative AI pushes us to live digitally, we must retain focus on how we interact with physical spaces. And we must continue to examine embodied experiences that take place in libraries. As Annemaree Lloyd says, "the body as an information source that matters and is pivotal to meaning-making that is essential in all forms of human existence" (2024, 166).

Objective

In this best-practices presentation, I will describe the outcomes and implications of my research study that examined university students' recollections after taking an on-site library tour.

Methods

Drawing on almost 500 responses by undergraduate students to the exit survey, I will provide a brief overview of the implementation of the tour, which is the only one known to employ a particular combination of recorded content, asynchronously offered, but experienced on-site. Results indicate experiences of physical spaces are embodied experiences providing students with first-hand information about their agentic choices not only within the library, but in their broader educational contexts. These results reflect similar findings based in the work of Andrew Cox (2018; 2019), who examines academic libraries as sites rich in embodied cognition and sensory experiences. This work also connects more broadly to the work of Annemaree Lloyd, in that these experiences are ones of information literacy as the "performance of emplacement" (2024, 177). This suggests that not only are libraries worth experiencing, but they are places worth experiencing corporeally.

Outcomes

Participants of this session will:

- Deepen their understanding of embodiment and embodied cognition in the setting of an academic library.
- Recognize the main components of the tour in order to implement a similar offering in their context.

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Keywords: *information literacy, embodiment, academic library, asynchronous tour*

PECHA KUCHA

“Make students leaders of their learning”

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Objectives

At Bologna University, as Information Literacy librarians, we were asked to offer a course within the Transversal Competences project which provides 3 credits. Since 2020, the exam is held online on MSTeams and on Moodle. This teaching mode change pushed us to foster participation through creative learning to make students work in collaborative groups, in a non-judgmental atmosphere where mistakes may happen, believing that if you are not ready to make mistakes, you’ll never reach something new and original. We are convinced that ideas rising from a group are more likely to be successful than those each one can develop. Now the aim is to facilitate and promote the sharing and reuse of educational resources and to improve teaching quality through increased collaboration between actors in academia (teachers, students, administration, and management).

Methodology

Following this belief, we started the Peer Review activity**.** We encourage students coming from different courses to rate each other’s work. We use double-blind review where students need to respect and trust each other. The exchanged review is not a judgment but an exchange and a debate. We divide the class into groups of 5, and we assign each group the same topic, to elaborate as they choose. The form includes formulation of the research question, identification of keywords creation of queries, use of available tools, filters setting, 5 relevant references collection. Once this is done, we exchange the works and through a guide sheet, we ask to review the work done by another group, possibly replicating the work described. The distinction between trainers and trainees fades. We move from one-way communication to circular communication and we learnt much more effective communication. This is a “worthwhile” interchange, creating a new educational environment, where everyone plays their role in creating knowledge. This activity asks students to reflect on the process made, the analysis of the possible tracking made by others. Upon completion, groups do not report result feedback, but an experiential one. We are going to include some students’ feedback also in the presentation.

Outcomes

This activity proved to be a good way to transform our job from teaching students to helping them learn. We are no longer transferring information; they make sense of information through active engagement where information flows. Education is no longer about information, it is about how to use information.

Keywords: *peer education, soft skills, transversal competences, active learning, educational resources*

Do AI Research Assistants Live Up to their Hype? An Exploratory Study of Some Freely Available Tools

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As artificial intelligence (AI) tools become increasingly widespread, "the ability to think critically and make balanced judgements about any information we encounter and use" (Information Literacy Group, 2018, 2), that is, one's information literacy, is increasingly relevant. The answers provided by these AI tools powered by large language models (LLMs) are usually quite convincing and compelling. However, we must be aware that LLMs only know what an answer should *sound* like, which is different from knowing what the answer should *be*. Its epistemological foundation "is solely based in language, not in referring to reality or the world" (Flierl, 2024, 55).

Several of these AI tools that use LLMs to generate direct answers are designed to be digital research assistants. In addition to the increased number of standalone AI services, several discovery systems of libraries, academic and research services are integrating AI tools. This scenario compels users to be informed about the capabilities and limitations of such tools (Gusenbauer, 2023; Liu et al., 2023; Shah & Bender, 2024). In this study we intend to contribute to this debate with a qualitative assessment of some of these freely available tools.

Since we wanted to test freely accessible AI tools, we selected *Ai2 ScholarQA* and *ORKG Ask*, as they are open access, and the free plans of the *Consensus*, *Elicit*, *Perplexity*, *SciSpace*, and *Undermind* tools. The free plans of these tools limit some functionalities, but do not limit use to a finite number of days. All the tools selected are designed to act as research assistants and provide additional information on how they work.

Methodologically, we will formulate questions about a specific research topic, the development of knowledge organization systems (Machado et al., 2023). The assessment will first consider the difference in the type of output produced by the tools. Not all of them have the characteristic of presenting a more detailed output (so-called deep research). This type of output will be assessed in terms of the correctness, detail, and grounding of the statements. The other type of output will also be used to assess the consistency of the tool. A comparison will be made of the answers, and sources listed, given to the same question at different times and with different semantics (Tay, 2024). As for the sources, not only the capabilities of the tools are at stake, but also where they seek the sources they cite. Despite the limitations of the study, namely the restriction to one research topic, we believe that the result will contribute to a more informed use of these tools.

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Keywords: *AI generative tools, informed use, large language models*

Doctoral Students Getting Support from University Library: Two Courses as Cases from Linköping University

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We will present newly established courses at Linköping University in Sweden, where academic librarians teach doctoral students information literacy and other skills needed during thesis work.

Doctoral students are an academic group that has often been overlooked in the past regarding support from the library. While considerable time has been devoted to teaching undergraduate students information literacy, and senior researchers have received customised research support, doctoral students have frequently fallen through the cracks.

According to the Swedish Higher Education Act undergraduate students should develop the ability to make independent and critical assessments, to distinguish, formulate and solve problems independently, to seek and evaluate knowledge at a scientific level and be able to follow the development of knowledge in their fields. This corresponds to several information literacy concepts. Further on the act says that education at advanced level and postgraduate level must build on and deepen this knowledge and these skills and abilities.

Based on these circumstances and following a reorganisation a few years ago, Linköping University Library decided to enhance our research support to meet doctoral students´ needs to a larger extent as well.

Currently, our library offers individual search support and introductory workshops on reference management systems, in addition to an introductory lecture titled “New PhD Student” and a web-based doctoral course, “Library Course for Doctoral Students”, comprising eight modules on various topics related to the research process. These modules can be completed with assignments for credit, but attendance without enrolling in the full course is also an option. Moreover, the library provides a credit-bearing, on-site course, “Literature searching and reviewing”, for one of the university’s engineering institutions and has recently been invited to hold lectures in a course at another engineering institution. The courses are constantly revised and do now include elements of AI-literacy and AI-based information searching as well as traditional search methods.

Within the Faculty of Medicine and Health Sciences library staff plays an integral part in two mandatory doctoral courses, “Scientific communication and information retrieval” and “Scientific methodology”. The library also offers lectures and workshops for doctoral groups upon request. Lastly, the library delivers a lecture known as “Soon PhD” which provides essential information that doctoral students need to acquire during the thesis publication process and in preparation for their PhD defence.

We would like to share our experiences, with focus on the credit-bearing course “Literature searching and reviewing” and the web-based course “Library Course for Doctoral Students” and discuss further improvement of our courses.

Keywords: *information literacy, PhD-courses, teaching librarians, doctoral students*

Adapting Infosphère: Leveraging an OER Information Literacy Platform

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In the rapidly evolving landscape of higher education, ensuring that students possess robust information literacy skills is crucial. Infosphère – a comprehensive, modular online information literacy training platform originally developed and released under a CC BY license by the Université du Québec à Montréal – provides a dynamic, customizable framework to help learners refine their abilities in navigating complex information ecosystems. Leveraging its status as an open educational resource (OER), EPFL library training team adapted Infosphère's content to better align with the specific curriculum needs of bachelor's and master's students at our institution, EPFL academic contexts, and language and technology specificities.

This pecha kucha will detail the process and rationale behind customization of Infosphère. We will discuss how the platform's open license facilitated the adaptation and the revision of instructional materials to better address disciplinary nuances and student learning outcomes. By sharing these insights, we aim to highlight how the OER nature of Infosphère not only supported intellectual freedom and pedagogical innovation, but also enabled iterative refinements based on the exchanges with stakeholders.

Attendees will gain practical knowledge about the implementation challenges and opportunities encountered throughout this adaptation journey. We will explore how our team collaborated with subject librarians, pedagogical and IT experts, and internal key players to establish a responsive, inclusive, and transparent development process. Moreover, we will discuss the adjustments needed to ensure that content and navigation patterns were accessible to learners with diverse backgrounds.

This session underscores the transformative potential of openly licensed educational resources, showcasing how tools like Infosphère can be molded to meet local needs while retaining their core mission of cultivating critical information literacy competencies. Ultimately, by embracing the adaptability and scalability of OER-driven platforms, academic libraries can reaffirm their commitment to fostering equitable and meaningful learning experiences for students across all stages of their academic journeys.

Keywords: *Open Educational Resource (OER), infosphère, information literacy, tools adaptation, learning experiences*

Information Literacy Tasks in Quebec French Schools: Conception and Validation of a Questionnaire addressing Teachers' Practices

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Invested in collective efforts to fight disinformation, didactics researchers are interrogating contemporary information literacy practices. In doing so, light needs to be shed on the actualization of didactics, especially in consideration of the growing importance of generative artificial intelligence (Steinhoff, 2023). In order to support teachers in their evolving role, teaching practices related to the integration of information literacy in linguistics (Gouvernement de l'Ontario, 2023) and the development of digital competencies (MEES, 2019) need to be investigated. As limited scientific data are available to guide didactics interventions, emerging teachers' initiatives are essential to understand the situation. How are teachers planning and implementing the students' learning tasks in information literacy? How are they evaluating the students' learnings? Are teachers integrating generative artificial intelligence in their teaching of information literacy competencies?

This contribution's objective is to present the initial results of research aimed to conceive and empirically validate a questionnaire designed to address information literacy tasks (Pleau, 2023) in contemporary teaching practices. Inspired by the works of Waitzmann & al. (2024), the methodological protocol required two phases: the conception and the empirical validation. The latter was implemented by three validation cycles: 1- expert validation; 2- focus group validation; and 3- factor analysis validation (Pohlmann, 2004; Sireci et Sukin, 2013). Each cycle provided feedback that led to the adjustment of the questionnaire. The empirical validation addressed a population of 1st to 6th grade French school teachers in Quebec. We creatd two distinct samples for the purpose of the validation cycles: focus group validation (N=6) and factor analysis validation (N=100). The initial data presented a primary portrait of tasks elaborated and implemented by teachers in different Quebec French schools. The collected data also provided a critical analysis of the questionnaire that will be part of a larger investigation.

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Keywords: *information literacy tasks, linguistics, teaching practices, generative artificial intelligence, questionnaire*

Citing AI with Zotero: Academic Integrity and Information Literacy

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Academic Integrity values are often highlighted in various information literacy guidelines; for example, the ACRL Framework states that learners should know how to cite the work of others (Framework for Information Literacy for Higher Education, 2015). Moreover, incorporating citation tools like Zotero into the research process is beneficial for students as a time-saving tool and as a gateway to both academic integrity (Huffman, 2014) and information literacy (Kuglitsch, 2015; Veach, 2019). To that effect, the instructional librarian, with the support of the Writing Center at a small but very diverse undergraduate university in the Middle East, has conducted numerous Zotero workshops to highlight the value of citing for academic integrity and how to save time and effort.

Nevertheless, various challenges arose since the release of ChatGPT in late 2022 and the subsequent conversation on the ethical use of AI tools. Students were familiar with citing books and journal articles but not with AI-generated text. The various citation styles like APA, MLA and Chicago had still not incorporated clear instructions for this material type in their handbooks. And, finally, the non-replicability and lack of straightforward sharing options, made citing AI-generated text challenging.

As a result, the instructional librarian designed and delivered two workshops for undergraduate students that were also attended by staff and faculty members due to high interest in the topic. They also produed a handout was with explanations on how to creatively use Zotero item fields to suit the needs of different citation styles (Chicago, APA, MLA). A library guide and a workshop for faculty are also planned for the future.

Based on the content of these workshops, this presentation is an original contribution that demonstrates practical ways to cite AI-generated text with citation tools like Zotero in popular citation styles. This practice can help undergraduate students understand and apply academic integrity values for the AI era by touching upon:

- what the major citation styles recommend about citing AI usage;
- how to consistently declare and be transparent when using AI tools (by saving queries, taking ChatGPT conversation snapshots, and providing permanent URLs); and
- ways to use AI ethically (e. g., brainstorming and keyword generation) recommended by UNESCO.

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Keywords: *AI tools, Zotero, citing, academic integrity, information literacy instruction*

POSTERS

Investigating the Effectiveness of AI Tools in Maintaining Academic Integrity in Research at Accra and Koforidua Technical Universities: A Faculty Perspective

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Research technology has always resulted from frequent invention but in recent years, AI has carried out cognitive activities focused on problem-solving. In this study we investigated how AI-based tools were effectively used in research at the Faculty of Applied Sciences at Accra and Koforidua Technical Universities. We did this by analyzing how often tools were used, how they affected academic integrity, and what measures were taken to ensure ethical research practices. We specifically sought to identify any issues with data manipulation, plagiarism, and attribution of authorship. We suggest ways to encourage students to practice ethical AI use in scholarly research. We employed Venkatesh et al, the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Deterrence Theory. We adopted a mixed-method approach with a population of hundred twenty-six students (189) and twenty-one (42) faculty members. Participants were associated with nine different departments (Medical Laboratory Technology, Science Laboratory Technology, Computer Science, Applied Mathematics and Statistics, Fashion Design and Textiles, Hospitality, Food, and Post-Harvest, Computer Science, and Applied Mathematics) with both Bachelor of Technology and Higher National Diploma students. We distributed a structured questionnaire to students and used a semi-structured interview guide to collect data from faculty members. We analysed the data using thematic content and descriptive statistical data analysis. The findings revealed that 60.0% of faculty members and 81.5% of students indicated they frequently they used AI tools. Forty% of faculty members and 15.1 %, of students had not used them. The findings showed that 95% of faculty members stated they experienced how students' over-reliance and inappropriate use of AI tools resulted in plagiarism, fabrication, falsification of data and such use affected academic integrity in research. Students indicated that they experienced over-reliance (11.3%), plagiarism risks (33.9%), misinformation (24.3%), and unreliable AI-generated content (22.6%). Nearly half of the respondents (46.9%) worried about the accuracy and reliability of AI-generated research content and had ethical concerns (7.8%). Ninety% of faculty members and 76.5% of students believedAI tools maintained academic integrity, while 17.6% disagreed due to misinformation or misuse concerns in the study findings. Accra and Koforidua Technical Universities ensure every research work and assignment runs through Turnitin before submission and an ethical clearance form to be filled out before conducting any research work in the university in from the findings. All participants agreed on the need of education through seminars, workshops, and policies for effective AI tool use. Deans and library staff addressed this by integrating AI literacy training, workshops, and seminars in the two universities.

Keywords: *AI tools, Accra Technical University, usage, academic libraries, faculty, research, teaching*

Building a Community of Training Librarians in French-Speaking Switzerland: How a Collaborative Bottom-Up Approach Reached to a Successful Conference Day

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This poster presents the outcomes of the first "Journée romande des formateur·trices en compétences informationnelles dans les bibliothèques des hautes écoles" meeting, a bottom-up initiative aimed at bringing together training librarians from French-speaking Switzerland. The event, jointly organized by the libraries of EPFL and University of Geneva, provided a unique opportunity for more than eighty trainers from different types of higher education institutions. With levels of expertise ranging from aspiring trainers, who have yet to lead their first independent session, to seasoned experts, participants shared experiences, best practices, and common challenges on teaching information literacy skills, thus fostering the creation of a dynamic and collaborative community of practice.

The poster will go through the different stages of the success of this journey: from the birth of a concept to the building of an inter-institutional organizing committee supported by stakeholders, to the realization of a day that reaches the target groups. Based on the outcomes and participants' feedback, the poster will illustrate the current reflection on the next steps of this moment for a community that wants to meet but also to develop their skills together and face the challenges of librarian trainers.

Moreover, it will also showcase how the initiative aimed at encouraging participants to propose and develop topics for workshops without imposed themes, has catered to a wide range of needs and interests. This inter-institutional collaboration among various higher education libraries contributed to a richer and more multifaceted exchanges during the event.

Bridging an existing gap in the current offer of such events in Western Switzerland and placing people at the core, the meeting ensured that all attendees – representing a diversity of the public – could benefit from the variety of experiences in different contexts. This strategy not only led to the success of the event in terms of attendance and engagement, but also fostered an atmosphere of innovation, providing sustainable models and insights for future gatherings and collaborative endeavors.

This poster will conclude with the lessons learned, the scalable models of collaboration developed, and the long-term impact of this open, participatory model on future library-led community initiatives.

Keywords: *information literacy, conference, workshops, community building*

AI-Powered Tools and Searching for Information in the Deep Web

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Objectives

The presentation serves as an introduction to the topic by raising questions rather than providingdefinitive answers. My aim is to highlight the issue of searching for information within Deep Web resources using popular, freely available AI-powered tools.

My main questions are: Do such tools manage to effectively access information contained in the Deep Web? Can they serve as trustworthy Deep Web search engines? Consequently, can an average, untrained user seeking for this kind of content rely on them?

The Deep Web encompasses resources that are not so easy to access. It includes not only legal but also valuable information, including scientific and official databases, digital libraries, andnspecialized maps that are searched using their own interfaces. The Deep Web should not be confused with the Darknet or Dark Web.

It is worth noting that there are few publications on this topic. While some studies address aspects of the discussed issue, they primarily focus on technical applications such as leveraging deep web data for LLM development, AI-based tools for scientific professionals, or OSINT frameworks, rather than on general end-user behaviour.

Methods

I conducted a search experiment, involving sixty undergraduate library and information science (LIS) students, using popular AI-based tools – ChatGPT, Copilot, Gemini, and Perplexity. I developed four specific search questions, for example: "What percentage of middle and upper-level managers are women in Guyana?" or "How old is the president of the Association of Information Professionals in Poland?" First, students found the correct answers in reliable Deep Web resources, such as databases of international organizations (e.g., EUROSTAT, ILOSTAT), government databases of individual countries, and scientific resources. Then, the same questions (already knowing that proper answers existed) were posed by students to the aforementioned AI-powered tools, with a recommendation to probe various prompts to obtain accurate answers within a 20-minute timeframe.

Outcomes

None of the AI-powered tools answered the questions accurately. Moreover, they suggested that such data do not exist at all. They provided incorrect or fabricated answers, or, at best, stated that they lack access to such content. While a specialist in prompt engineering might obtain better results, the problem is that the average user is not such a specialist.

Conclusion

The presented results are only an introduction to further research. Moreover, in light of these findings, it is worth considering what actions in the field of AI literacy education in the context of Deep Web should be taken.

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Keywords: *AI-powered tools, Deep Web, information searching, search engines*

Nurturing the Next Generation of Professionals: Transformative Peer-Based Student Mentoring for Career Development

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One-on-one research consultations are a cornerstone of library research services and are repeatedly shown to significantly impact student learning. Employing students to provide research support for peer students, along with traditional reference services, is now commonplace and well-established in academic libraries. Within the context of information literacy instruction outside of classroom settings, such peer tutoring has been found to have a wide range of benefits for both the student tutor and the student peers seeking research help. Peer tutors are often seen as more approachable and relatable and frequently have more direct knowledge from recent student experiences. Moreover, studies have repeatedly shown that peers prefer to consult with peers over librarians (Thomas et al., 2017). Such peer-based learning and research support have similarly enabled academic libraries to effectively engage critically in information literacy instruction with students in ways not possible through traditional programming and outreach efforts.

The university library Research Desk offers one-on-one research consultations to students from all levels as well as faculty and instructors. Following a peer-to-peer learning model (Rinto, Watts, & Mitola, 2017), the desk is staffed by students from different disciplines at different stages of their programs. These student tutors undergo specialized training that includes advanced discipline-specific research methods, information literacy skills, and pedagogical approaches to teaching students. The service model is designed around a dialogic approach to learning that situates the research assistant and student on the same level, highlighting that they actively learn from each other in order to construct a better understanding of the topic. Often, students find those dialogic spaces predominantly in classroom-based settings; however, providing interstices between curricular and co-curricular settings, and within peer-based contexts, students collectively endeavour into a co-construction of shared knowledge through reflective dialogue and shared conversation.

Over the past year, research assistants began completing self-reflection documents at the end of consultations in order to evaluate both their developing research skills and their research assistance and dialogic skills. Critical self-reflection (Dahlen & Hanson, 2023) applies a humanist lens (Freire, 1970) through which to assess peer-based learning in libraries. This reflective tool instructed the research assistants to reiterate the discussion that took place during the consultation and list examples of questions they used to connect with the student. It also asked the assistants to reflect on how a specific consultation compared to previous ones and how the skills developed in the cumulative appointments would impact future consultations. By instilling a contemplative approach to research assistance, not only do research assistants build their dialogic practice but also practice the specialized research skills they learn in training.

This session will introduce attendees to the training model peer research assistants undergo and will review student-created self-reflective documents to understand the importance of peer-to-peer collaboration in the research and information-seeking process; it will also discuss how these types of service models develop research skills in co-curricular environments that become transferable to post-graduation careers as well as how peer-based information literacy instructional efforts move libraries toward relational models and away from long-established transactional ones.

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Keywords: *dialogic learning, reflective practice, peer-based learning*

“What?” – The Q-drop Corpus’s Usage of Rhetorical Questions to Refer to Independent Information Retrieval

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Communications from the source “Q” are regarded by the QAnon movement as their primary information source. This movement is a political and conspiracy theory group that rose to prominence in the early months of 2021 after storming the U.S. Capitol in Washington, D.C. Between November 2017 and November 2022, “Q” posted brief remarks on many message boards, including 4Chan, 8Chan, and others. The messages make predictions about future political developments and offer commentary on current political happenings (OperationQ, 2025).

The Q-drop corpus—the 4,966 posts made by the poster Q—is full of rhetorical questions with the purpose of inciting the reader to “Do your own research.” Relating to earlier research, I have made a collection of all Q-drops in .txt format, which makes it possible to search through all posts using the program *Grep* (Grep, 2025). In this poster I will map and analyse the use of rhetorical questions in the corpus; especially such rhetorical questions that invite the reader to do their own research using a search engine.

Purpose

“Do your own research” or DYOR has been trending in social media for a couple of years. It is often used in connection to the spread of conspiracy theories and by authors on the subject described as: “The basic idea behind DYOR is that laypeople should not follow the conclusions of experts but instead seek out information on their own to arrive at their own conclusions.” (Ballatyne et al., 2022). Using a known corpus of conspiracy theory as the Q-drops to investigate the use of DYOR-inciting will put new light on the reciprocative nature of conspiracy theory.

Method

The investigation is performed in two phases. First a mapping phase, in which the material is reviewed through a hermeneutic method and categories of injunction towards “do your own research” are created. Then an analytical phase in which a search for these different categories in the material is performed. This will form the basis of an analysis of how the Q-drops urges the followers to “Do their own research.” The research process and the results are presented in the form of a poster.

Results

There will be two types of results. First, a variety of categories that describe the settings in which DYOR is employed are the outcomes of the mapping process. The second is the frequency of occurrence of each category in the corpus.

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Keywords: *QAnon, rep, conspiracy theories, 4Chan, Donald Trump*

Information Literacy meets Artificial Intelligence: Challenges and Strategies at the NTNU University Library

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ChatGPT and other generative artificial intelligence (AI) tools emerged a few years ago, and the numbers of students and researchers using it for various purposes has expanded immensely ever since. Academic libraries soon became involved in the discussion on the use of AI tools at higher education institutions, in particular concerning plagiarism detection and assessment design. For academic libraries, one of the biggest issues is AI literacy. That means, it is critical that library users, library staff and other stakeholders have the necessary skills to work effectively and reasonably with AI tools, to minimise their disadvantages and to make the most out of their advantages.

The Norwegian University of Science and Technology (NTNU) started discussing the impact of Artificial Intelligence and how to handle its use in early 2023, as soon as students and researchers began to use available AI tools seriously.

The NTNU University Library realised the potential for possible new roles, given the need for teaching and training students and researchers about AI, its tools and the various ethical implications. Since the library already delivers information literacy instructions to students and researchers, it seems to be appropriate to provide courses and guidance concerning AI-tools, as well. However, given the rapid development of AI, ambiguous guidelines, no standardised practice, and an unclear distribution of responsibilities at the university, the library's role is not that obvious. Questions like 'Should the library teach the appropriate use of specific AI tools?', 'Should the library remind students about learning outcomes and warn them about ethical challenges?' or "Should the library only teach the referencing to or declaration of AI tools?' have not been answered once and for all.

This poster will illustrate the various activities at NTNU University Library to foster AI literacy among students, researchers and other employees, including library staff. It will show the initiation of AI working groups, both at the library and in collaboration with other stakeholders at the university (Nogueira, et.al., 2024). In addition, it will present which lectures and workshops are provided, and various other activities and approaches to meet the challenges of using AI tools. Furthermore, it will demonstrate the continuous discussion about the role of the library when it comes to AI, and the services it can offer to its users.

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Keywords: *artificial intelligence, information literacy, university libraries, collaboration*

How Good are They? How Can AI Help? Analyzing the Quality of Systematic Literature Reviews in Business and Management

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Systematic literature reviews (SLRs) have become increasingly popular outside of the health sciences. They synthesize study results following rigorous protocols, providing a robust and objective research method and a strong foundation for future research and practice. While the quality of SLR and the support needs of researchers in the health sciences have been researched extensively, data on the quality of SLRs in the social sciences are incomplete. In order to offer high quality guidance and instruction for conducting SLRs, including the application of AI tools, the authors aim to gain a deeper understanding of the quality of published SLRs articles in business and management research.

The authors conducted a search in five major databases for SLR publications of business school faculty members at two German universities. The search yielded a total of 362 papers of which 117 identified as a systematic literature review. The articles were analyzed, using a list of selected criteria from established standards and checklists like PRISMA, PRESS, and MECCIR. In addition, special attention was paid to the protocols and guidelines as well as AI tools used in the studies. Thus far, 30 papers have been assessed in detail.

Preliminary findings reveal intriguing insights into the state of SLR quality in the field. A significant challenge lies in the different understanding of conducting literature reviews outside of the health sciences with its rigorous frameworks and protocols. SLRs in business and management follow various guidelines despite the efforts by the Campbell Collaboration to adopt and establish standard SLR protocols. Incomplete or incorrect search strategies, missing documentation of search strings, inconsistencies in methodological rigor and inadequate transparency in data synthesis have shown up in the publications. These deficits highlight the pressing need for the researchers' deeper understanding of the quality requirements for conducting a systematic literature review by following established SLR techniques including AI tools.

The quality criteria system used in this study will support a better performance of SLRs. It will also allow to identify deficits which might be eliminated with the support of AI tools. The insights gained from this study will provide a solid foundation for improving librarians' support and instruction for high-quality SLRs in business and management studies.

Keywords: *systematic literature review, quality assessment, business and management, AI tools*

How to Keep Up with AI Tools in Academic Information Seeking

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In academic libraries, a big part of the job is helping students and researchers find the right information sources and search platforms, use library resources effectively, and navigate the growing number of information options out there. In the past, this was a pretty straightforward process. Libraries bought specific products and paired them with recommendations for free databases and search engines, giving users a clear path to reliable sources.

With the emergence of artificial intelligence (AI) a lot has changed. AI-driven tools for academic information seeking are popping up everywhere. There are now numerous options, including both free and paid tools. Generative AI features that enable searching with questions in natural language instead of search strings are added to trusted databases like Web of Science (WoS) and Scopus. These add-ons claim to make searches smarter and results more relevant. At the same time, they are changing the expectations on how information seeking works. There are also standalone tools like Keenious, Scite.ai, Semantic Scholar, and Elicit creating new ways to search and analyze information.

Our poster dives into some of the key questions and challenges that come with the fast-changing world of AI tools:

- How to start to tackle the sheer number of tools out there?
- How can librarians find the time to explore and test AI tools to figure out which ones are worth recommending?
- What should students and researchers keep in mind when they're using AI tools? Is it possible to set clear guidelines for picking the right tool?
- Are the AI add-ons in platforms like WoS and Scopus really better, or are standalone tools just as good?
- Are students actually using the tools we recommend, or are they finding their own solutions?
- How to figure out which AI tools are the most popular and useful for students when it comes to academic research?

Our poster aims to make sense of all this. With useful frameworks such as We will share practical tips and insights from our experiences at the Turku University Library: how we have approached evaluating AI tools, figuring out which ones to suggest, and how we have been working with students and researchers to meet their needs. By breaking down these challenges, we hope to spark ideas and offer helpful advice for other library professionals dealing with the same questions. AI is changing how academic libraries work, and we're excited to be part of the journey to figure it all out.

Keywords: *information seeking, AI tools, library competence*

Information Literacy Ambassadors: Bridging the Information Literacy Gap in Stilfontein Townships South Africa

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In South Africa, townships refer to historically underdeveloped urban residential areas that were designated for non-white communities during the apartheid era. Despite the end of apartheid in 1994, townships remain underdeveloped with many still facing challenges such as inadequate infrastructure, high unemployment, and limited access to quality services. The townships also have a high population of 'Not in Education, Employment or Training' (NEET) youth which is like others in South Africa. In the digital era, access to reliable and reputable information is essential for both personal and societal functions. The advent of various technological tools, particularly Artificial Intelligence (AI), has made it increasingly vital for individuals to develop the skills necessary to locate, access, and critically evaluate information to satisfy diverse informational needs. Nonetheless, a significant number of young individuals lack sufficient Information Literacy (IL) skills, hindering their ability to meet daily information requirements and make well-informed decisions.

This two-phase study is a result of a science shop project which engages with a community facility affiliated with a specific university department or a non-governmental organization (NGO), that provides independent, free, participatory research support in response to civil society concerns and issues.

The initial study employed a Participative Action Research approach, which encompassed several phases: the initial phase involved investigating the IL skills and needs of the NEET population, followed by the implementation of an intervention, culminating in a post-evaluation that demonstrated an enhancement of IL skills among the NEET participants. As a result of the first phase of the science shop study the term "information literacy ambassadors "was introduced by the researchers.

This poster defines the concept of "information literacy ambassadors," provides a profile of the participants, the activities conducted, and the lived experiences of the information literacy ambassadors at Khuma Transnet Community Centre in Stilfontein, located in the North-West Province, South Africa.

The second phase of the study, as currently planned, will also be outlined in the poster. This phase intends to use a mixed methods approach, including using a Project Outcome (PO) Survey to measure the outcome of "participant's understanding of IL' and follow up with interview questions to learn how they have introduced it to their community. The PO survey will also collect qualitative data on how the participants identify the challenges and opportunities for universities to assist in the IL skills of the local community. It is anticipated that the findings will provide insight into enhancing IL training initiatives among NEET youth, encourage and motivate library and information professionals to participate in scholarship projects with local community organizations such as libraries, and inspire further empirical research into this phenomenon in other geographical contexts.

Keywords: *information literacy, NEET, information literacy ambassadors, South Africa, townships, youths*

News Literacy on Board (NEED): Outputs of an Erasmus+ Project

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NEED – News Literacy on Board is an Erasmus+ project, partners of which are Nikanor (Bulgaria), UPI – ljudska univerza Zalec (Slovenia), Belgrade City Library (Serbia), and Hacettepe University (Türkiye). It aimed to teach news literacy skills innovatively through game-based learning. The goal was equipping individuals with the skills they need to become engaged and informed civic participants in today's information-overloaded world, marked by the rise of social media and artificial intelligence. By developing the ability to judge the reliability and credibility of news, individuals are empowered to evaluate information critically and thereby become active and responsible citizens. The spread of disinformation, often fueled by limited attention spans and complex issues, poses a significant threat to societies. Understanding the creation and spread of disinformation is crucial in combating it.

Game-based learning is an active learning technique that utilizes games to enhance the knowledge acquisition process. It is a valuable tool that, through the motivational aspects of games, creates dynamic and effective learning experiences aimed at addressing the lack of engagement and motivation among participants to participate actively in the learning process. Its goal is for the learner to acquire knowledge while playing (Yu, Gao, & Wang, 2021). This can be achieved through both digital and non-digital games, including board games.

The aim of this poster is introducing the main outcomes of the project which include two board games and an online learning platform. Both games are under Creative Commons licence so that everyone including trainers/teachers and learners can download the games and teach or learn while playing.

Project Outcomes

A Game-based Assessment Tool for assessing the actual knowledge and skills level, in other words, proficiency of learners, regarding news literacy and critical thinking. Available in five languages namely, Bulgarian, English, Serbian, Slovenian and Turkish, it consists of a board, a set of rules, and questions with different difficulty levels. It is designed to be played separately for three core competence areas, namely, "Understanding the News Landscape", "Finding Reliable Information" and "Verifying News". Players advance and win by correctly answering a series of questions. The winner is the first player who answers four questions correctly from each of the three sub-competence areas correctly.

The game is an Educational Board Game for teaching as well as self-learning news literacy skills. It consists of 30 questions selected from a larger pool of questions from all competence areas. Selection of the questions is mainly based on the results of the assessment game (tailor-made). All players answer the same multiple-choice questions simultaneously. Scanning the QR code on the question card leads players to a specific information source in the online learning platform which includes the answer. The first player who answers the question correctly earns points indicated on the board. The player with the highest total score at the end is the winner. Both games incorporate a reward and penalty system.

An online learning platform provides access to quality open educational resources (OER which includes MOOCs, videos, books etc.) on news literacy. This platform includes links to open access information sources on news literacy in five languages (Bulgarian, English, Serbian, Slovenian and Turkish). It has a filtering and a search mechanism. About 125 sources were indexed, categorized and labeled to indicate the topics and competence areas they address as well as the format and the language of the source. This platform serves as a gateway to news-literacy-related information sources and corresponds with the QR codes used in the educational game.

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Keywords: *news literacy skills, critical thinking skills, board games, game-based teaching, game-based learning*

Promoting Reading among Adults – The Role and Responsibility of the Public Library

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What is the role of the public library in promoting reading for people of different ages? What methods should be used, how can the work be measured, and who is responsible for the quality?

In our poster we will discuss promoting reading and literacy skills among adults and the role and responsibility of public libraries. As a starting point we will present the content and impact of the library path aimed at the schools in Espoo and explore which factors of the literacy work in the educational field could be adapted in promoting reading and literature among adults in the public libraries.

We get comments from after school classes visiting the library such as: "Booktalks are so inspiring!" "My students were happy and amazed!" "The library pedagogue had chosen books that are perfect for children of this age." Could we develop services for adults that would be equally effective and inspiring?

The public library pedagogical program "KULPS" or "The library path" is offered to all pupils in elementary and secondary education in Espoo, a city in the metropolitan area in southern Finland. The library path offers programs, such as booktalks, workshops and information seeking sessions at branch libraries or schools, aiming to involve every student in comprehensive education yearly. The program is planned and carried out by library pedagogues in close cooperation with the class and specialist teachers. It is a well-functioning proof of the literacy education described, for instance in *The National Literacy Strategy 203* and the *National Core Curriculum for Primary and Lower Secondary (basic) Education.* The library path is thoroughly documented and evaluated. The library team in charge of the literacy education for children and young people collects statistics and feedback in order to develop the services to fit the specific requests and needs in the educational field.

Promoting literacy and reading among adults is also a task assigned to public libraries in Finland. Due to *Public Library Act,* the public libraries are tasked with not only providing "access to materials, information and cultural contents" but also "guidance and support (…) in versatile literacy skills" and "promoting reading and literature". *The National Literacy Strategy* names library professionals and personnel as literacy professionals. They, along with other actors, have a crucial role in enabling and encouraging reading and improving literacy in all ages (27, 31). However, there is limited information on the concrete implementation of literacy work for adults. No methods, measures or evaluation tools are defined in the regulatory documents. Could we aim to such a high standard of services or even "a library path" for adults?

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Keywords: *literacy education, promoting reading, the role of the public libraries*

The Use of Generative AI in Academic Studies: A Study at Linköping University Library

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Generative AI has quickly become a tool that many students use to enhance their academic performance. Despite its popularity, there is limited research on how these tools are in fact used and their impact on students' learning. This study aims to contribute to the research by examining students' use of generative AI and its consequences for their academic achievements.

At Linköping University Library, we have conducted a study to understand how students use generative AI in their academic learning. This study employs a mixed methods approach, meaning that both quantitative and qualitative data have been collected and analyzed. The goal is to identify students' possibilities and challenges with the use of generative AI in an academic context.

Quantitative data was collected through surveys distributed to students at Linköping University. These surveys include questions about how often and for what purposes students use generative AI, which tools they prefer, and the benefits and challenges they experience. Qualitative data was obtained through spontaneous interviews with a limited group of students around the university campus. The interviews provide a deeper understanding of students' experiences and perspectives on the use of generative AI.

300 students, from different study programs and levels of study responded to the survey. The study was then extended with 12 interviews with random students at the campus library. The preliminary results show that using generative AI has become an integrated part of the students' study habits. Although a majority of the respondents report using AI regularly, they also express concerns regarding ethics and request guidelines from the university authorities regarding the use of generative AI.

At Linköping University there is also an upcoming project that focuses on students' digital safety. This project aims to enhance awareness and security regarding the digital tools and platforms used by students in their daily academic lives. The library's survey will be included as a part of this collaborative project, and it aims to contribute with insights into how generative AI is used by students and the implications on their learning. By understanding students' use of generative AI, the university can better support their academic success and ensure that these tools are used in a way that promotes ethical and effective learning. The results of the study will highlight students' expectations and needs for support from the university, such as guidelines, workshops, and training in the use of generative AI.

Keywords: *generative AI, academic studies, mixed methods, student learning, critical thinking, educational support*

Am I AI–Lost? What Information Professionals and Librarians Seek and Need to Stay Updated for Teaching AI-Driven Information Literacy

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With the ever-growing emergence of AI-based tools and resources for scientific work, information professionals and academic librarians who support students and other customers in those tasks face the challenge of keeping themselves up to date. As their job is to guide university members communities in the use of AI tools (e.g., Martin & Armstrong, 2024; Cox, 2022), they themselves need to become AI literate. However, current surveys show that not all library employees feel they are fit in guiding others in this topic (Lo, 2024). Being aware of the community's need to discuss and learn more about these new developments, the Deutsche Gesellschaft für Information und Wissen e.V. (DGI) started cost-free online lectures as well as specific workshops targeting information professionals and librarians. Whereas the lectures focused on trends and research on AI-based information systems and data management, the workshops examined more specific topics relevant to praxis, such as how search assistant tools work and can be efficiently applied or how AI-based text tools can be applied for scientific writing. The workshops targeted the principle of train-the-trainer, in other words, making information professionals and librarians fit for guiding students in using AI-based tools. In 2024, the DGI offered nine lectures and 38 workshops on AI-related topics. Those activities found immense reception in the community. As a result, and information literacy and AI was a main topic at the DGI annual meeting in 2024. Workshop attendees and DGI members discussed the uncertainty about what one should know about the new AI-technologies and tools and how one can address students' needs and questions that arise. Addressing those questions, this poster contribution aims at summarizing the community discussions that came up in the workshops and during the annual meeting and discussing relevant topics and good teaching practices regarding the steady development of AI-driven information systems. The basis for the discussion comes from a) a qualitative analysis of the lecture and workshop topics; b) qualitative analysis of the sticky notes collected by the participants of the DGI annual meeting; and c) interviews with DGI members. Throught this poster we want to contribute to a better understanding of what AI literacy means for our praxis community and how we can effectively manage to stay up to date with AI developments and resources.

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Keywords: *AI literacy, information need, community, train-the trainer*

AI and Information Literacy: Step Forward or Step Back? The Polish Perspective

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Interest in artificial intelligence (AI) is growing in academic and popular science publications (Dejian & Xiang, 2023) due to its applications in various fields, including education. Research suggests that AI can be more effective than traditional teaching methods (Fan, 2023). However, concerns arise regarding students' limited understanding of AI and its risks (Lindner & Berges, 2020). Many students attribute human characteristics to AI and struggle to define key technical terms like "machine learning" or "neural networks" (Bewersdorff et al., 2023). A major concern is AI's improper use, potentially leading to intellectual dishonesty and hindering student development. AI's accessibility and ability to generate quality content may encourage passive learning attitudes. Thus, developing competencies in AI's appropriate use is crucial (Bewersdorff et al., 2023). This raises the question: does AI enhance information literacy or contribute to its decline?

To explore this issue, the Laboratory of Media Studies at the University of Warsaw conducted a CATI Interview survey between April 17 and April 21, 2023. A total of 1427 interviews were completed and weighted to ensure representativeness of the Polish population. The study results were analyzed using the bootstrap method and examined in relation to variables such as age, gender, place of residence, and respondents' level of education. The distribution of variables was assessed using the non-parametric Kruskal-Wallis significance test.

This poster will present Poles' attitudes toward AI in education, focusing on its impact on student creativity (for full results, see Brylska et al., 2024). The results revealed a polarization of views, reflecting a broader debate on technology's impact on intellectual development. These concerns can be reduced to questions: What skills should define an educated and creative individual? Which aspects of creativity should be nurtured naturally versus supported by technology? Does AI enhance information literacy or should it be viewed as a challenge to traditional learning?

Survey results indicated a divided opinion on AI's role in fostering student creativity. Supporters and opponents were nearly equal in number. Notably, women were more inclined to perceive AI positively, a trend that merits further investigation. One possible explanation is that women, traditionally playing a significant role in children's education, may be more accepting of tools that facilitate learning. Respondents' educational background also influenced attitudes toward AI. The higher the level of education, the more likely individuals were to oppose including AI in information literacy programs. This may stem from AI's ability to perform tasks requiring mid-level skills, such as writing summaries, narrowing skill gaps between those with basic, secondary, and higher education. While some see this as beneficial, others see it as a threat to their competitive advantage. Additionally, individuals with higher education may be more aware of copyright dilemmas and view creativity as a uniquely human trait that AI challenges. By highlighting these perspectives, the study contributes to discussions on adapting information literacy programs to AI-related challenges, emphasizing the need for targeted educational initiatives to develop critical evaluation skills and ethical AI awareness, which directly addresses key issues in the field of information literacy.

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Keywords: *AI, artificial intelligence, education, information literacy*

From Fragments to Cohesion: Developing a Sustainable Online Course for Foundational Information Literacy Instruction

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In response to the COVID-19 pandemic, our academic library, like many other libraries, transitioned to online instruction by developing comprehensive online learning materials (Martzoukou, 2021). As we resumed face-to-face interactions, we retained these resources to enhance our instructional scaffolding and better serve our students (Fullmer & Strand, 2024). Despite their positive impact, we faced challenges with our previous approach to online learning, which relied heavily on instructors to integrate individual Canvas modules into their courses. This method proved to be unsustainable and limited students' exposure to the diverse library resources available. After a library-wide reorganization that whittled our twelve-librarian instruction team to five librarians, our team decided to create a more sustainable approach to instruction with an emphasis on online learning. To better serve the needs of our students and our small team of librarians, in Fall 2024 we developed a standalone online Canvas course focused on foundational research skills for first and second-year writing students.

Our new course, Research Foundations, requires students to engage with every page of a module, complete assignments or quizzes, and submit feedback surveys to earn badges. Students can upload and submit these badges as a course assignment to demonstrate completion to their primary instructor. The course covers essential topics such as using and citing AI tools, primary source literacy, understanding source types, evaluation, and synthesis. The Canvas course remains accessible on students' dashboards until they graduate, serving as a valuable resource throughout their academic journey.

By centralizing the course content, we can ensure consistency and accuracy across all modules. The standalone course format allows real-time updates, ensuring students always have access to the most current information. Additionally, the course structure enables us to collect detailed data on student engagement and performance, providing insights that were previously unattainable.

This poster session will discuss the strategies we employed to build a sustainable online learning program and the lessons we learned along the way. We will address common challenges associated with maintaining and updating online learning resources, highlighting the logistics and ongoing commitment required. Our goal is to provide a comprehensive understanding of how to create an effective and sustainable online learning program that enhances student engagement and success. By sharing our experiences and outcomes, we hope to inspire other academic libraries to rethink their online learning strategies and embrace innovative solutions that meet the evolving needs of their students.

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Keywords: *online learning, information literacy instruction, sustainability, learning management systems*

Enhancing Information Literacy: Supporting Academic Success of Final-Year Students

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Libraries in higher education are evolving from mere knowledge repositories to active partners in the educational process, directly supporting curricula. By offering consultations, lectures, and workshops with faculty, libraries are improving assignments and promoting information literacy (IL) (Lechtenberg & Donovan, 2022). This emphasis on IL is crucial for graduating bachelor students, as it underpins academic success and provides essential skills for their future careers (Medaille et al., 2021; Le et al., 2022).

Our university offers full-time undergraduate and postgraduate programs to about 16,000 students and part-time online studies. The library, with three branches, provides resources, study spaces, and library professionals' help for various disciplines to meet the needs of students and faculty.

The library actively participates in the educational process by offering training and providing appointment-based consultation services, both in person at the library and online. To support bachelor students in their final year, the library provides customized workshops in collaboration with faculty and mentors from the academic writing center. These workshops offer tailored guidance to individual students or groups working on their theses, fostering information literacy and equipping students with the skills necessary for academic success.

This paper investigated Faculty of Communication, Leadership, and Marketing students' perceptions about their IL skills development, and how do they evaluate the effectiveness of the customised workshops, library resources and services in their academic success. We used a mixed-method approach with a questionnaire that includes both close-ended and open-ended survey questions. The open-ended responses were analysed using a thematic approach.

It was found that customized workshops play a significant role in developing students' information literacy skills. Students found the workshops highly beneficial, providing comprehensive guidance and support, with librarians, faculty and mentors readily available and approachable. Students reported that these workshops provided targeted guidance relevant to their thesis work, enhancing their ability to locate, evaluate, and utilize scholarly resources effectively as well as formulate research questions. Additionally, participants recognized the value of library resources and services in facilitating their academic journey; for example, finding and choosing the right information, analyzing the source of information, referencing, and librarian support as key contributors to their learning process. Students who engaged with the library-led initiatives felt more confident in their research abilities and were better equipped to navigate complex information landscapes. Student feedback indicates that face-to-face workshops are highly beneficial. However, such workshops necessitate the involvement of multiple librarians and faculty members to offer support and provide ongoing assistance for each student or each group.

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Keywords: *information literacy (IL), library services, library workshops, academic support, undergraduate students*

WORKSHOPS

An Information Literacy Taxonomy: A New Tool for Developing IL Learning Outcomes

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The Framework for Information for Higher Education is a move towards a constructivist understanding of information literacy, but translating the six frames into actionable steps for working with faculty and students can be challenging. Instructors expect that students will develop and demonstrate their information literacy through course-based assignments but are often frustrated with the results, because students (as novices) and instructors (as disciplinary experts) are seemingly speaking two different languages (Leckie, 1996). Using findings from our study exploring instructors' perceptions of information literacy, we developed a new information literacy taxonomy (Folk et al., 2024). We believe the taxonomy will help librarians and instructional partners develop information-literacy learning outcomes intentionally with clear expectations and scaffolding for learners, because it accounts for both foundational information literacy skills and the threshold concepts that highlight valued ways of thinking and knowing. Based on Bloom's taxonomy (Anderson & Krathwohl, 2001), our taxonomy allows for the information literacy-related expectations that instructors have for students to be placed on a familiar continuum from "remember" to "create." This model has implications for how we approach the development of learners' information literacy with intentionality, both in collaboration with faculty and for our own teaching practices as librarians.

In this workshop, participants will explore the five levels of the taxonomy, collaboratively classify where common research assignments fall on the taxonomy and develop learning outcomes for their information literacy instructional contexts. Sample research assignments will be provided, and participants will work in small groups or individually to analyze the assignments in relation to the taxonomy to bridge the novice-expert gap. Reflective questions will be included in the presentation, and collaborative software such as Padlet will be used to anonymously share these insights.

At the end of this presentation, participants should be able to: (1) Describe the five levels of the information literacy taxonomy, (2) consider how different skills or ways of thinking or acting could be categorized in the taxonomy, (3) Apply the taxonomy to a sample research assignment to begin mapping skills and knowledge needed for success. Participants will reflect on the value of the taxonomy in supporting their teaching practices and work with instructors. We hope this work will equip and empower librarians to have conversations with instructors about information literacy outcomes rooted in a generally accepted taxonomy. Participants are encouraged to bring their electronic devices, though some paper copies of the workshop materials will be available. Presenters will need to be able to project a PowerPoint presentation on a screen. Target audience: Any librarian who works with faculty/ instructors, particularly at a college or university.

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Keywords: *taxonomy, learning outcomes, ACRL framework, professional development, instructional design*

Emotions as Motivators: Designing Instruction to Support the Research Behaviors of First-Year Students

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Emotions are a normal and necessary part of knowledge construction; it is natural for students to experience a range of emotions as they establish their own research process. Earlier research has studied how first year students express anxiety during this process of research (Bostik, 1992; Onwuegbuzie, Jiao, & Bostick, 2004), but recent scholarships explored how emotions assist students as they construct new knowledge. Our research focuses on this gap; using data from interviews with first year students, we mapped the emotions students experienced at three stages of the research process: Searching, Accessing (Finding), and Evaluating. Our data show that Problem Solving Persistence appears most often during the Searching process, and it is the only emotion students experienced across their entire research process. Students were most likely to give up during the Finding (Accessing) stage, while also expressed feelings of Passionate Persistence.

In this workshop, participants will explore the research process through the lens of student emotions. We will collectively discuss observed research roadblocks, from the perspectives of participant institutions. Participants will then reflect on how students' emotional responses encourage and influence their persistence; working in small groups or individually on one of the three research processes, participants will be lead through a brainstorming activity guided by the pedagogical tools TILT and Decoding the Disciplines to discover ways to motivate learners. Reflective questions will be included throughout, and collaborative software such as Padlet will be used to anonymously share these insights.

At the end of this presentation, participants should be able to:

- Describe the emotions year one students experience during the Searching, Finding (Accessing) and Evaluation stages of the research process.
- Apply instructional practices and frameworks that help students navigate emotional challenges and motivate them to navigate barriers throughout their research process.
- Participants are encouraged to bring their electronic devices. Presenters will need to be able to project a PowerPoint presentation on a screen and have microphones for accessibility. Target audience: Any librarian who works with students, particularly at a college or university.

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Keywords: *instruction design, emotion, motivation, information literacy*

Hands-on Workshop on Reflective Online Search Education

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Reflective Online Searching Education

In the age of digitalization, Online Searching (OS) has become a key component of Information Literacy and part of secondary and tertiary curricula around the globe. In a complex and diverse world, effective OS is a fundamental factor promoting equity in social participation, active citizenship and academic success. OS education is a multidisciplinary endeavor that must consider topic differences, along with an overcrowded infosphere, restlessly developing technologies, and individual preferences and styles. Also, OS skills relate to personal beliefs and computer, reading and reflective and self-regulatory skills (Hahnel et al., 2016). Although some studies emphasize the importance of process-oriented reflection (Corrall, 2017), its integration in online search education is challenging, because the search process remains invisible (Botturi et al., in press), leaving teachers to usually rely solely on the final product (e.g., report or presentation) for assessment and feedback.

The ROSE Approach and Platform

Thanks to a project funded by the Swiss National Research Foundation, the Reflective Online Search Education (ROSE) project team, in collaboration with secondary school teachers in Switzerland and Germany and based on previous research outcomes, has developed a web-supported approach for reflective OS education. The ROSE web platform implements three features:

Search Process Visualization as Timeline. Process visualizations are powerful scaffolds, as they foster in-depth thinking and reflection (Wang et al., 2018) and collaborative learning. By visualizing the OS process in interactive graphs, students get insights into their own search and can compare searches over time, or by different people.

Adaptive Prompting and Recommendation. Capturing salient search process elements to generate adaptive feedback in the form of prompts or recommendations fosters reflection and self-regulated learning (Chen et al., 2009), reinforcing effective practices and suggesting incremental improvement.

Learning Analytics. The display of salient data from individual searches supports teachers in providing feedback, enhancing classroom management and promoting discussion and peer learning (Lodge et al., 2018). Teachers can focus their intervention where it is most needed to capture "teachable moments".

Workshop Description

This workshop (proposed duration: 90' min.) welcomes educators from secondary schools and higher education. The participants will try hands-on the ROSE platform as students first, and then as teachers. A guided debriefing will focus on underlying principles and on the integration of the ROSE approach and platform into different educational settings, to identify opportunities and limits. Participants are required to bring their personal laptop. They will be asked to install a browser extension on either Firefox or Chrome (not available for tablet or smartphones).

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Keywords: *online searching, secondary education, higher education, web platform, self-regulation skills, process feedback, visualization*

AI Literacy and Your Information Literacy Teaching Practice

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The increasing availability of generative artificial intelligence (AI) tools has proven to be a major disruptor in education at all levels, as instructors and students grapple with effective and ethical uses of AI. Students and researchers are using generative AI tools in myriad ways, including as information sources, as generators and editors of academic writing, and as shortcuts to research. As such, the prevalence of generative AI offers both challenges and opportunities to librarians engaged in information literacy instruction (Cox, 2024). This workshop will explore ways in which we can use the concepts in the Association of College and Research Libraries' Framework for Information Literacy for Higher Education (ACRL Framework) to guide our work with students around AI literacy and AI ethics (Association of College and Research Libraries, 2015). Topics covered will include a discussion of the ACRL Framework as related to AI literacy and an exploration of specific teaching methods useful in AI literacy instruction. In this workshop, participants will examine and discuss the ACRL Framework with an emphasis on knowledge practices and dispositions relevant to AI. Through a combination of lecture, small group discussion, and hands-on activities, participants will acquire a fundamental understanding of the relationship between information literacy and AI literacy and develop a ten- to fifteen-minute activity they can use with students to develop their AI literacy. Participants will learn about different types of active learning activities and plan an activity relevant to their own teaching context, including considerations such as timing and assessment. Resources for teaching AI literacy and specific examples of successful learning activities will be provided. As a result of this workshop, participants will leave with one or more activities they can use in their information literacy instruction. The target audience includes any academic librarian involved in instruction at any level of teaching experience; strategies discussed in this workshop can be integrated into one-shot library instruction sessions or longer, for-credit courses. Participants may choose to focus on synchronous or asynchronous instructional methods or to draft a plan for an online resource for students. Participants are encouraged to have read the six frames in the ACRL Framework document prior to the workshop. No specific equipment is required.

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Keywords: *AI literacy, AI ethics, information literacy, instruction, teaching methods*

Gossip as Information Literacy Praxis

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The concepts underlying information literacy can be troublesome and difficult to grasp. Often these concepts are introduced at a point where learners may be least capable of applying them: as first year university students (Head, 2012). Up until—and sometimes well into—university, students are often not expected to critically engage with their assigned readings. Textbooks, for example, are meant to be read exclusively to master their content. As students move into the university environment, not only do they encounter texts in unfamiliar formats (the scholarly article), but they are also asked to question and critique them. Moving from a position in which the authoritativeness of texts is assumed to a posture that critically evaluates this authority is a big ask, made more so given that this expectation comes in the context of scholarly literature, with its unfamiliar methods, conventions, theoretical groundings, and review process. Information literacy is an essential skill, but nearly impossible to develop without a more scaffolded approach to scholarly information and information systems. Gossip, as a familiar information system, presents a low-stakes context in which students can engage with the theoretical underpinnings of information literacy, as expressed in the Framework for Information Literacy for Higher Education (2016).

Despite some negative associations, gossip has demonstrated roles in learning and knowledge constuction (e.g., Baumeister, Zhang, & Vohs, 2004; Jolly & Chang, 2021) and problem solving (Camp & Nordstrom-Sanchez (2025).

Students will likely be familiar with gossip and both the way it impacts their lives and environment, and the different ways people create, share, value, and use gossip. This creates an ideal and engaging way to explore how ideas such as authority, curiosity and inquiry, information creation as a process, and the value of information are represented in information systems, both formal and informal.

In this workshop, we will engage participants in a mix of activities and examples to explore how we can exploit gossip to help learners develop their understanding and practice of information literacy. We will explore the similarities between gossip networks and scholarly information systems, articulate the connections between gossip and information literate practice, and demonstrate activities that can help students grasp the interconnected core concepts outlined in the Framework.

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Keywords: *information literacy, gossip, information systems, pedagogy*

Using Board Games for Teaching and Assessing News Literacy Skills

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Today, people are surrounded with vast quantities of ambiguous information provided mainly through social media and the internet. When people are misinformed, they still make judgments or decisions, and form opinions, based on that misinformation. Consequently, misinformation becomes a serious threat not only to democracies, but also to the well-being of societies and individuals (Canales, 2020; Lewandowsky et al., 2012). Therefore, equipping individuals with news literacy skills to help them judge the reliability and credibility of news has a crucial importance.

Using innovative teaching methods increases the success of news literacy instruction programs. Game-based learning is an active learning technique that utilizes games to enhance the learning process (Literat, Chang, & Hsu, 2020; Sousa et al., 2024; Wedlake, Coward, & Lee, 2024; Yu, Gao, & Wang, 2021). Learning while playing games boosts the capacity to retain information for a longer time.

In this workshop, participants will be introduced to two complementary board games developed as the outcomes of an Erasmus+ project (NEED – News Literacy on Board). The first game is designed as an assessment tool for assessing the actual knowledge and skills levels of learners. The second game (which blends analog and digital elements through the use of QR codes and an online learning platform) teaches news literacy skills based on the findings of the assessment phase.

The primary challenge while developing the games was finding the optimal balance between play and learning. Therefore, the rules of both games were kept simple. Both games consist of a board, a set of rules, and questions. Players advance on the board by rolling dice. Both games incorporate a reward and penalty system. Games were designed to allow players to advance and win by correctly answering a series of questions. In order to make sure that the questions address different aspects of news literacy, three core competence areas, namely "Understanding the News Landscape", "Finding Reliable Information" and "Verifying News", along with three sub-competence areas within each core area were identified. Sub-competence areas include "Information Pollution and Its Reasons", "The Psychology of Misinformation", "New Media and New Journalism Practices", "Recognizing News", "Information Sources", "Search Strategies", "Algorithms", "Verification" and "Fact-checking Platforms".

The main aim of this workshop is to provide participants with an opportunity to play both games and thereby gain first-hand experience. Participants can download the game elements from the project website, adapt, further develop and use both games in their teaching and training activities.

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Keywords: *news literacy skills, critical thinking skills, board games, game-based teaching, game-based learning*

More Than Meets the Algorithm: First-Year Students and the AI Effect on Information

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Recent research has investigated how students perceive generative AI tools (Amani et al., 2023; Chan & Hu, 2023; Johnston et al., 2024), little is known about how AI use reshapes their underlying information assumptions and behaviors. This study examines how the information behaviors of first-year students have evolved in an information landscape that includes AI generated text and images. Using a survey adapted from Cole, Napier, and Marcum and a complementary interview protocol, we will share our analysis of new 2025 data on the potential impact of generative AI through a longitudinal study with data starting from 2017. Our results probe critical topics such as students' evaluation of image authenticity, their use of generative AI in searches, and how they assess the reliability of AI-generated textual information. This research provides a unique perspective on first-year students' understanding of authenticity, evaluation practices, and generative AI's limitations.

Participants will engage with results to gain practical strategies for integrating these insights into library instruction and basic AI education, such as considering a Wikipedia-first approach to pre-research to avoid AI hallucinations. The session will include reflective questions, giving space for anecdotal experiences to be compared to our findings; collaborative tools like Padlet will encourage active participation and anonymous sharing of implementation ideas for practices at their own institutions.

At the end of this presentation, participants should be able to:

- Identify how Gen AI influences students' information evaluation behavior.
- Understand some of the changes in information beliefs based on AI
- Apply our findings to their own IL teaching practices

Participants are encouraged to bring their electronic devices. Presenters will need to be able to project a PowerPoint presentation on a screen and have microphones for accessibility. Target audience: Any librarian who works with students, particularly at a college or university.

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Keywords: *generative AI, student perception of AI, information behavior, first-year students*

Scaffolding AI Literacy in Higher Education: Practical Strategies and Tools

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Artificial Intelligence (AI) is reshaping higher education, creating both opportunities and challenges for how we teach and engage students. Yet students are embracing AI tools in their lives before understanding the ethical, privacy, and practical considerations of their use. This gap offers educators a crucial opportunity to embed AI literacy into their teaching practices.

In this session, we will share the course design of "Arts&Sci 3120: Information, Citizenship, & Social Justice," which uses open pedagogy for a semester-long textbook authoring project alongside two scaffolded AI assignments. These assignments guide students to use AI tools ethically and critically as they contribute content to their course project. In addition to learning how to engage ethically with AI by learning about ethics, privacy, and best practices, students also use tools like H5P, Hypothesis, goblin tools, and Pressbooks that offer transferable skills throughout the semester.

As AI pragmatists, our goal is to demystify the integration of AI into open pedagogy projects. Attendees will leave with adaptable templates for AI assignments, practical strategies for embedding AI literacy into their courses, and a deeper understanding of how to scaffold open pedagogy projects that empower students as creators. This session demonstrates how educators can align open pedagogy and AI with Universal Design for Learning (UDL) principles to create inclusive, student-centered learning experiences.

To foster interaction and collaboration, we will use Mentimeter to gauge audience familiarity with AI and open pedagogy, and Padlet to help participants actively co-create a resource of guided questions and strategies, which they can revisit after the session.

Learning Outcomes

By the end of this session, participants will be able to: Cultivate strategies for integrating open pedagogy and AI into assignments fostering critical and ethical engagement with AI tools.

Reflect on personal teaching practices to effectively incorporate AI literacy into instruction.

Understand how to scaffold an open pedagogy project throughout a course, providing students with opportunities to engage with AI responsibly.

Presenters will require projection capabilities for a PowerPoint presentation and microphones for accessibility. Attendees are encouraged to bring electronic devices for interactive participation.

Target Audience: Librarians and educators in higher education working with students on information literacy, pedagogy, and AI literacy.

Keywords: *artificial intelligence literacy, open pedagogy, critical thought*

Am I Fooled? Do I Fool Others?

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The purpose of the workshop is that participants share their experiences and practices about misinformation and disinformation in their instruction. The facilitators will present the learning material 'Am I fooled? Do I fool others?', which helps students to identify misinformation and disinformation. The method in the workshop is learning cafe, which supports discussing and sharing ideas. The learning café is based on the presented material.

The Internet is a relevant source of information for students. Openness makes it easy to publish, social media makes it simple to share. Unfortunately, students encounter misinformation and disinformation in online environments. The World Economic Forum (2024) named misinformation and disinformation the biggest short-term risks, and they remain in the long-term risks. Students should learn critical thinking skills for their studies because they have a role and responsibility as producers and sharers of information.

Academic librarians are concerned about untruthful information and its impact on society. Librarians have widely reacted to this concern and integrated critical thinking into their instruction. Critical thinking should be a key learning outcome from information literacy instruction, as the skill significantly increases, for example, the likelihood of identifying fake news. Being able to assess online information, also check facts, is an important skill as an actor in society as well. (Goodsett & Schmillen, 2022; Jones-Jang et al., 2021; Saunders, 2023). An easy-to-use material on identifying untruthful information helps instruction librarians integrate the theme into their teaching.

The facilitators will first present the learning material 'Am I fooled? Do I fool others? The material focuses on typical information used in assignments: news, images, numbers and statistics, scholarly articles. First, the students self-reflect their own thinking before the theme is discussed in more detail. The participants in the workshop will step into the shoes of students in the workshop's learning cafe. The learning material is CC-licensed and won The Federation of Finnish Learned Societies' Annual Open Educational Reward in 2023 and was updated in 2025.

Session outcomes for Participants

- gain and share new ideas into their guidance
- experience learning from the students' point of view
- self-reflect their own thinking
- familiarize with an open access learning material, which they can apply

Session Activites

- facilitators introduce learning material 'Am I fooled? Do I fool others´ and learning café method
- participants circulate learning café tables in small groups and do activities
- summary of workshop in plenary discussion

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Keywords: *fake news, misinformation, critical thinking, university library*

An Innovative Approach Using Picture Books to Empower Critical Information and Digital Literacy in Primary School Education

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The aim of this workshop is to provide open and flexible suggestions for an original approach empowering the development of information and digital literacy with an emphasis on the promotion of equality values, understood as the values of a democratic and ethical culture based on respect for human rights, regardless of gender, culture, religion, sexual orientation or any other aspect of identity. The proposal is based on the use of children's literature, in particular picture books (Haynes & Murris, 2012; Mallan, 2017; Pesonen, 2019; Whitehurst, n.d.) following the work of the Erasmus+ KA2 European project BRIDGE ("Information and Digital Literacy at School. A Bridge to Support Critical Thinking and Equality Values for Primary Education Using Children's Literature and Transmedia"), developed by 8 partners from 6 countries (Universitat Jaume I, Spain; Hacettepe University and Çankaya University, Turkey; Università degli Studi di Genova, Italy; University of Oulu, Finland; Ionian University, Greece; InformAll and SP4IL, United Kingdom).

BRIDGE introduced an information and digital literacy framework for promoting critical thinking and equality values in primary education, by means of a practical intervention methodology that offers an embedded and transversal way to develop information and digital literacy skills in the school curriculum. The workshop will present and use materials generated by the BRIDGE project that are available in open access: a portal of resources (https://bridgeinfoliteracy.eu/portal), selected for the age range addressed by the project (children in the approximate stage of middle primary education, between 8 and 11 years old) and a booklet (https://bridgeinfoliteracy.eu/training) with didactic recommendations (available in Spanish, Catalan, Italian, Turkish, Greek, Finnish and English). The process and practical methodology developed as part of the project will be followed, engaging participants directly with a silent picture book (that will help transverse language barriers for all participants) to critically explore information and visual literacy with reference to equality values.

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Keywords: *information literacy, digital literacy, primary education, school, picture books, critical thinking, equality values*

MIKS Survey 2025 on Media and Information Literacy among German Students: Insights, Discussion and Learnings of the Leuphana Pilot Study

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How will students in Germany work and learn with digital tools in 2025? What skills will they have in terms of research for scientific information, media design, use of word processing, communication, and cooperation tools? What expectations and ideas do they have in relation to these digital fields of application? We want to address these and other pressing issues in the current Media and Information Literacy Study MIKS 2025. The MIKS survey was initiated by the Joint Commission on Information Literacy of the two important German library associations, dbv and VDB, in cooperation with the DIPF Leibniz Institute. The Media and Information Centre of Leuphana University Lüneburg conducted the study in cooperation with Professor Dr. Dana Mah as a pilot study at Leuphana University Lüneburg. This workshop will provide insights into the research design and present the most important core statements of the research results of MIKS 2025 for further discussion among the participants concerning practical implications for the work of libraries in Germany. Beyond practical issues the results of this study are also important for science, politics, and education as they urgently need up-to-date, empirically sound data on the specific information behaviour of Generation X students especially in times of fake news, fake science, filter bubbles, and artificial intelligence. The first and most recent major survey on information literacy among German students was conducted in 2001. This was the widely received "SteFi" study (Gavriilidis et al., 2001), commissioned by the German Federal Ministry of Education and Research (BMBF). At the time, the study provided some alarming insights into students' information practices which subsequently led to a wide range of efforts by libraries to promote information literacy. With the Stefi study now almost a quarter of a century old a renewal of empirical findings in the field of information literacy is long overdue. As early as 2012, the German Rectors' Conference (HRK) therefore explicitly emphasised the need for a new study following a broader understanding of the concept of information literacy (Hochschulrektorenkonferenz (HRK), 2013, p. 16). The term information literacy should therefore be understood very broadly in the context of the study. Based on this understanding, the structure of the study was inspired in equal measure by both the EU's "DigComp 2.2" Framework (Vuorikari, Kluzer, & Punie, 2022) and the ACRL's "Framework for Information Literacy for Higher Education" (Association of College and Research Libraries (ACRL) & American Library Association (ALA), 2015). The 55 main questions of the MIKS survey, therefore, cover both traditional areas of information literacy as well as media and information technology literacy. The project presented here empirically examined the media and information literacy of students at Leuphana University Lüneburg (n>350) as part of an initial pilot study and does not yet reach the sample size of the former Stefi study. However, perspectives for further scaling of the sample and for the reuse of the survey at other universities will be presented and discussed during this workshop.

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Keywords: *empirical study, media literacy, information literacy, artificial intelligence*

Empowering Teachers, Learners, and Librarians with Meta-Scientific Literacies

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Digital transformation has enabled the instant global spread of unverified information, fuelling an unprecedented rise in socio-scientific mis- and disinformation that has eroded trust in science and authorities, undermining public confidence in expertise when evidence-based decision-making is more crucial than ever. Pressing global issues like climate change, pandemics, and resource scarcity require science-based solutions that depend on informed citizen action. However, such socio-scientific issues are often politically charged and socially contested, entangling facts with misinformation. Scientific knowledge is insufficient to engage with them meaningfully, citizens must contextualise, critically assess, and apply scientific information, balancing empirical evidence with societal, ethical, and personal considerations. The PISA 2025 framework reflects this need by expanding the concept of scientific literacy to include the ability to "research, evaluate and use scientific information for decision-making and action" (Organisation for Economic Co-Operation and Development (OECD), 2023). Empowering future generations to be responsible, engaged democratic citizens must be a key priority in education, both within and beyond schools.

Many teachers may not yet be fully prepared to cultivate the broad range of competences required. Education and teacher training must expand to encompass what we refer to as **meta-scientific literacies**. The diverse skill set required calls for a **cross-disciplinary effort** (Siarova, Sternadel, & Szönyi, 2019), with socio-scientific issues serving as the connecting thread. The Erasmus+ Teacher Academy SciLMi (2023-2026)[1] has developed a Framework of Meta-Scientific Literacies, providing educators with a practical guide to incorporating meta-scientific literacies into everyday teaching. Based on a cross-disciplinary scoping literature review, the framework underwent substantial restructuring to enhance its accessibility and appeal for teachers. The often-overlapping competences associated with Critical Thinking, Media and Information Literacy, and related areas were systematically integrated into the framework, organised into four domains: (1) Open up your mind, (2) Click and think critically, (3) Make up your mind, and (4) Speak out and take action. Within each domain, the defining competences are broken down into learning goals and learning outcomes, which systematically build on one another. Based on teacher feedback and requests, the learning outcomes were then operationalised through concrete "HOWs", specific steps learners need to follow to achieve a given outcome. The structured development of meta-scientific literacies reflects our guiding principle: "Every lesson, however small, contributes to empowering students by fostering the skills to detect and resist misinformation. Don't wait. Start as soon as you can." (Osborne, 2024, 13).

After a brief introduction to the project, we will invite secondary school teachers, education researchers, and librarians to actively engage with the Framework of Meta-Scientific Literacies. In the first hands-on activity, participants will map learning outcomes to their corresponding learning goals. Once familiar with the framework, they will select key learning outcomes and explore digital activities to familiarise themselves with technical terms. In a concluding plenary session, we will reflect on key insights. Participants are encouraged to bring their notebooks; no particular digital expertise is required.

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Keywords: *media and information literacy, digital literacy, critical thinking, socio-scientific issues*

[1] *Meta-Scientific Literacies in the (Mis-)Information Age*, Grant No. 101104523, https://www.scilmi.eu/team. Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA).

Bridging the Digital Divide: A Practical Workshop on Digital Inclusion in Adult Education

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Digital inequality remains one of the most pressing societal challenges, affecting access to education, employment, and civic participation (Smit et al., 2023; Smit et al., 2024; Stiller & Trkulja, 2024). The mechanisms of digital exclusion extend beyond basic internet access and include lack of digital skills, affordability issues, inadequate equipment, poor connectivity in rural areas, security and privacy concerns, low motivation, and insufficient accessibility measures. These barriers disproportionately affect individuals based on gender, geographic location, socio-economic background, personal limitations, and age. This interactive workshop aims to raise awareness of digital inequality and introduce practical measures to achieve digital equity in adult education. Participants will engage in a participatory format that enables them to develop strategies for digital inclusion in their own educational contexts.

Topics, Objectives and Expected Outcomes

This workshop is grounded in Van Dijk's frameworks on the digital divide (e.g., 2020) and studies that investigated different aspects of digital inequity, highlighting that digital inequality is not just about access but also about skills, autonomy, and the ability to use technology meaningfully (Pérez-Escolar & Canet, 2023; Robinson et al., 2020). Participants will gain a deeper understanding of digital inclusion and its impact on learners. They will explore digital inequality, its impact on education, and develop practical skills to identify barriers during the phases of educational programs and implement inclusive strategies.

Workshop Structure and Target Audience

We will begin the workshop with a 15-minute introduction and input session where participants are presented with theoretical frameworks on digital inequity, highlighting its various manifestations and societal implications. Following this, a 30-minute hands-on activity engages participants in group work using discussion cards with persona-based case studies. Each group identifies key barriers to digital inclusion for their assigned persona and maps these challenges to the different phases and elements of digital educational formats: recruiting, onboarding, course structure, and learner support. The discussion also explores how intersectional factors such as gender, age, disabilities, and socio-economic status shape digital exclusion. The session then transitions into a solutions-focused segment where participants explore measures and practical intervention strategies to create inclusive digital educational formats based on their assigned persona. Finally, we will introduce them to a one-page cheat-sheet toolkit that offers practical guidance for designing inclusive digital education programs. We shaped the toolkit through the experiences of designing digital education formats for refugees over the last two years. It enables educators to identify specific needs of their target groups and ensures that their digital education initiatives are inclusive and sustainable. We designed this workshop for professionals and educators working towards digital inclusion in educational programs as well as anyone engaged in fostering digital equity and inclusion.

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Keywords: *digital inclusion, digital inequality, social inclusion, digital divide, digital equity*

Identifying Outdated Notions in Research Assignments and Information Literacy Instruction

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In the United States, librarians frequently express frustration about the quality of research assignments students are expected to complete. These assignments can sometimes include instructions or strategies many educators now consider to be ineffective. This unhelpful guidance can be taught in high school and reified by university instructors. For example, in their report, Sam Wineburg and his colleagues (2020) provided examples of failed strategies for evaluating sources undergraduate students have been taught. Librarians at two large research institutions have identified more examples of outdated guidance over the past two years. These outdated research notions are often shortcuts in the research process – attempts to make complex ideas easier for students, for example discounting Wikipedia as a source because "anyone can edit it." Or they may be remnants of ways of thinking about information that are no longer as useful as they once were, for example indicating print sources are more authoritative than digital sources. Either way, these notions have become embedded in the curriculum.

As the research landscape has evolved, guidance about effective research practices has also changed. Practices that once made sense no longer work within the context of the current information environment. Continuing to provide outdated guidance can frustrate students and make it difficult for them to develop their information literacy. By identifying these outdated research notions, we can start the process of removing these roadblocks for students in order to align with information literacy best practices (ACRL, 2016).

Objectives

Provide examples of outdated research notions that have been identified by librarians in the United States.

Discuss the prevalence of these outdated notions within the European context.

Guide participants to apply these concepts in their own librarianship.

Methods

This interactive workshop will be divided into two parts. In the first part, we will present outdated research notions in our context and answer questions. In the second part, via reflection and structured discussion, participants will identify outdated research notions for their own contexts, including how these notions may arise in their work.

Outcomes

Participants will identify several outdated research notions applicable to their context in order to bring conversations about these notions to their own librarianship practice.

Participants will be able to support students' information literacy development in our current information environment by working to change stakeholders' understanding of effective research practices.

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Keywords: *information literacy, outdated research notions, research assignments*

PANELS

Humans in the Loop: Advancing Metaliteracy for Generative AI Learning Environments

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This panel explores the transformative potential of metaliteracy as a holistic framework for addressing the global challenges and opportunities presented by artificial intelligence (AI). We investigate the role of metaliterate learners as "humans-in-the-loop" (HITL) to ensure active participation through inclusive pedagogies that involve AI (Munro, 2021). HITL defines the collaborative engagement of people in dynamic settings that are increasingly automated and generative through large language models (Mosqueira-Rey, E., et al., 2023). Exploring metaliteracy as a learner-centered pedagogy in relation to the affordances of HITL systems, offers insights into what people require to experiment in these settings, rather than focusing solely on the risks associated with these technologies.

Metaliteracy empowers learners to produce new knowledge as ethical participants in evolving information environments (Mackey & Jacobson, 2022). This unifying model encompasses four learning domains—affective, behavioral, cognitive, and metacognitive—cultivating the capacity to explore motivations, apply knowledge, reflect on abilities, and critically engage with advancing AI technologies (Mackey & Jacobson, 2022). Focusing on self-regulation, self-efficacy, and discernment, we explore how these factors shape students' interactions with AI.

Global trends such as increasing access to generative AI reveal a critical knowledge gap that influences whether students experiment with, use, and build literacy with these technologies. Faculty perceptions and institutional narratives—portraying AI either as a promising tool or as something harmful—further contribute to this disparity. Moreover, AI tools often perpetuate biases against underrepresented groups, including non-native English speakers and students with disabilities (Tate et al., 2023). Emphasizing AI detection or banning its use undermines trust, making students fear false accusations and reinforcing a fear-based approach to AI in learning.

This international panel offers multiple perspectives, sharing case studies that demonstrate actionable strategies for empowering learners as humans in the loop through metaliteracy. We will explore five interrelated themes: 1) ethics of AI in digital media, 2) responsible use of AI in postgraduate research, 3) culturally sustaining pedagogy for inclusive learning, 4) misrepresentation in AI, and 5) inclusive curriculum design. These case studies illustrate the transformative potential of metaliteracy by drawing from several disciplinary perspectives, institutional contexts, and global environments. Together, they underscore the value of preparing learners to apply AI tools constructively while fostering ethical practices and adaptability within collaborative and interconnected learning communities. Attendees will gain practical insights for advancing the responsible application of AI technologies. The session will introduce innovative methods for integrating metaliteracy into multidisciplinary curricula and provide effective approaches for preparing learners to succeed in AI-driven environments. These takeaways will offer participants the perspectives needed to address the challenges and leverage the opportunities presented by AI.

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Keywords: *metaliteracy, AI, humans-in-the-loop, information ethics, digital pedagogy*

Family History Literacy: How We Learn from Stories of Adoption and the Indian Boarding School Experience

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Background

What we call family history literacy is the nexus of genealogy and the psychology of reflection. Finding one's family story is often the impetus to deep understanding of oneself. That knowledge of being is often a first step in the lifetime information seeking process of preparing, asking, seeking, making, understanding, sharing, and, finally, celebrating (Cajete, 1997). We will illustrate the concept and processes of family history literacy by referencing our individual histories.

Objectives, Methodology and Outcomes

The primary objective of our presentation is to investigate the relationship between personal history and individual learning style(s). With that objective in mind, we considered the following questions:

1. What is the relationship between story and documentation in family history literacy?
2. How does understanding of one's family history influence one's role as a researcher (Roy, 2014)?
3. How might family history literacy be a decolonizing force within IL pedagogy (Denzin, Lincoln & Smith, 2008)?

We employed several of the Indigenous research methods that Smith identified in *Decolonizing Methodologies* (1999). These include *testimony* and *story telling* through locating data and *sharing* family stories. Sharing is conducted while still protecting family biography and *negotiating* privacy and writing. Smith mentions *remembering* as an Indigenous research method, even if such *remembering* includes not forgetting a painful past.

Audience members will leave our session with: a greater understanding of the role of family history in understanding personal learning styles and worldview; an awareness of an adoption process; an understanding of the history of American Indian boarding schools; and a view of the impact of family history on information seeking and, thus, information literacy. Our presentation provides us as researchers, writers, practitioners to demonstrate the contributions of marginalized voices into the IL fields. We will introduce finding information about family history including McCauley's process of locating details including her first official records related to her birth in South Korea and subsequent adoption by an American couple (Nelson et al., 2010). Her return to the country of her birth aided in her understanding of her personal history. Roy's family history includes stories and documentation of her grandfathers' attendance at the Carlisle and Pipestone boarding schools in Pennsylvania and Minnesota (Fear-Segal & Rose, 2016; Krupat, 2021). Such attendance was enforced and shortened due to the 1915 influenza and the return of the United States soldiers from WWI. Details about the Carlisle Industrial School are available through a searchable database developed and maintained by library staff at Dickinson College in Pennsylvania while national efforts are underway to document the Indian boarding school experience through local initiatives and the Native American Boarding School Healing Coalition (NABS).

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Keywords: *adoption, off-reservation boarding schools, family history, cultural assimilation, learning styles*

Academic Librarians' Responses to Mis/Disinformation: A Cross-Country Study

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Introduction

Mis/disinformation has been identified as a global threat (World Economic Forum, 2024), a challenge that has been exacerbated by the rise of generative AI and its ability to facilitate the creation and dissemination of mis/disinformation. Instruction in information, news and/or media literacy could help combat the spread of mis/disinformation, and research suggests that instruction can be effective (e.g., Bateman & Jackson, 2024; McGrew et al., 2019; Roozenbeek, Culloty, & Suiter, 2023). Having long championed information literacy, academic librarians could be well-positioned to offer such instruction to university students. However, the instructional role of librarians can be impacted by many factors, institutional and faculty expectations, the discipline(s) they support, and their own attitudes toward mis/disinformation and news literacy. This session will share the results of a cross-country study exploring academic librarians' perceptions of mis/disinformation, and whether and how they are engaging in news literacy instruction.

Study Overview

The study consists of a survey that was first piloted in the United States and France, and then replicated by thirty scholars in 28 different countries across Europe, South America, Asia, and Africa. The survey asked librarians their opinions on a range of issues related to mis/disinformation, including its potential impacts, whether and how it should be regulated, and the perceived efficacy of various interventions. In addition, they were asked whether they provided news literacy instruction, if so, how they approached that work, and if not, why not. Each participating scholar or team reviewed and approved the survey, translated it into their local language, obtained institutional review as necessary, and distributed the survey to the population or some sample of the academic librarians in their country. The survey instrument was maintained in LimeSurvey by the principal investigators from the USA and France. As each participant completed data collection, the country-specific survey was closed and the data delivered for analysis of findings from that country. The PIs maintained the full data set to conduct comparative analysis across countries. In this session, participating researchers will share the results from their own country, followed by an overview of the comparative cross-country analysis, including those countries that are not represented within the live session. The results of this study provide insight into how academic librarians in a variety of countries think about the challenges of mis/disinformation and the extent to which they are engaging in news literacy instruction to help students develop the skills necessary to identify and avoid mis/disinformation. They may help academic librarians review and analyze existing news literacy instruction programs or facilitate the development of such programs at their institutions. They also provide a baseline overview of some of the differences in how the challenges of mis/disinformation are approached by region.

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Developing an International Research Agenda for Information Literacy

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The panel's objectives are: to propose ways to develop an international research agenda for Information Literacy (IL); and to gather specific ideas from the panel's audience about how this can be achieved. Whilst a few research agenda have been drawn up for IL, these have been restricted in a number of ways, tending to focus on a specific sector or specialism, and often in the context of a specific country (e.g., ACRL IS Research and Scholarship Committee, 2021; Hicks et al., 2024; Partridge et al., 2008). They have also involved a restricted group of contributors, often library and information practitioners and/or researchers. This excludes contributors to the IL research base outside the library and information community such as researchers in other disciplines and policy researchers (see Webber & Johnston, 2025). The ILIAD (Information Literacy Is A Discipline https://www.iliad-group.org/) collaboration aims to lead the development of a more inclusive and wide ranging IL research agenda building on the work in Kaufmann & Maybee (2025).

Topics will include: Who should be involved in developing the agenda; How might the different contributors be involved; Practical ideas for developing, promoting and implementing the agenda; Some possible themes and a mission for the agenda. The audience will be engaged by soliciting feedback and ideas in person and through online contributions (via Slido or Padlet) and participants will also be informed on how they can be involved after the session.

Sheila Webber (Chair and panelist) will outline the different groups who contribute to the IL knowledge base, and the contextual factors affecting them. **John Budd** will speak to the traditions and history of information literacy. **Karen Kaufmann** will identify how cross-institutional and international collaborative research can be drawn on to develop an agenda. **Clarence Maybee** will highlight efforts to explore the role of IL in addressing information challenges in various contexts. **Bill Johnston** will propose ways of engaging contributors using inclusive and deliberative methods. We will conclude by identifying ways forward to make the ILIAD collaboration into an ongoing organisational focus for building a research agenda, and the potential role of The European Conference on IL (ECIL) and its contributors.

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