Abstract

Purpose – This paper presents recently published resources on library instruction and information literacy, providing an introductory overview and a selected annotated bibliography of publications covering various library types, study populations and research contexts.

Design/methodology/approach – This paper introduces and annotates English-language periodical articles, monographs, dissertations, reports and other materials on library instruction and information literacy published in 2020.

Findings – The paper provides a brief description of all 440 sources and highlights sources that contain unique or significant scholarly contributions.

Originality/value – The information may be used by librarians, researchers and anyone interested in a quick and comprehensive reference to literature on library instruction and information literacy.

Keywords Academic libraries, Library instruction, Information literacy, School libraries, University libraries

Paper type Literature review

Amid the tumultuous year of the COVID-19 pandemic, professional literature covered by this annual annotated bibliography continues to provide librarians and researchers with insights into research on library instruction and information literacy (IL) in a variety of contexts. The authors applied methods similar to previous years by searching in all EBSCO research databases.
databases available through their institutions, which includes Library, Information Science and Technology Abstracts (LISTA) and Education Resources Information Center (ERIC), as well as Scopus, Web of Science, ProQuest Dissertations and Theses and WorldCat, for English-language materials published in 2020 that included the terms “information literacy,” “library instruction” or “information fluency” in the title, abstract or keywords. The authors also searched professional journal websites that are not otherwise indexed, including In the Library with the Lead Pipe, Journal of New Librarianship and Emerging Library and Information Perspectives. The bibliography excludes materials three pages or less in length, book chapters, conference proceedings and reviews of previously published materials. This year, 434 articles, books, reports and dissertations are annotated and organized in the following categories: K-12 Education, Children and Adolescents (34); Academic and Professional Programs (303); Everyday Life, Community, and the Workplace (45); Libraries and Health Information Literacy (26); Multiple Library Types (11); and Other Information Literacy Research and Theory (15) (see Table 1).

Studies of note in “K-12 Education, Children and Adolescents,” which focuses on school libraries, K-12 curriculum and studies on adolescents, cover a variety of topics. A systematic review reveals that school libraries and school librarians provide more than just physical spaces and collections, they also collaborate with teachers, enhance the curriculum and promote reading habits (Parisi-Moreno et al., 2020b). Although school administrators value libraries and library media specialists, studies also note challenges due to a lack of funding, resources and trained staff (Andrew, 2020; Parisi-Moreno et al., 2020b; Sheridan, 2020). Haeffner (2020) finds that novice school librarians possess high levels of confidence in the skills, knowledge and dispositions from the American Association of School Librarians (AASL) Standards for the Initial Preparation of School Librarians, but they often face constraints such as a lack of time as they balance multiple roles.

Keeling (2020) provides elementary school librarians with detailed lesson plans mapped to the AASL Standards Framework for Learners and other relevant disciplinary standards, and Thomas et al. (2020) link the 2018 National School Library Standards and the AASL Standards to evidence-based curriculum, assessment and reflection. Findings from Sauerwein (2020) emphasize the need for consistent expectations and information across all subjects to further integrate IL throughout the curriculum. One area for professional development for teachers and teacher-librarians might be assessment, as one survey shows that teachers possess a limited ability to assess IL competencies (Schiffl, 2020).

Case studies from Colorado (Lance and Maniotes, 2020) and New York (Stripling, 2020) provide examples of effective learning through inquiry-based models in which students are empowered to work collaboratively, choose their own topics and apply critical thinking skills. This approach is similar to what Kohnen and Saul (2020) call “generalist literacy” in which teachers model curiosity, skepticism and persistence in finding credible information sources to make decisions beyond the classroom. Another study showcases culturally responsive pedagogy in a project with Hawaiian high schoolers and teachers in which they explore cultural information through digital resources and field trips (Montague et al., 2020).

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<thead>
<tr>
<th>Category</th>
<th>Number of 2020 publications</th>
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<tr>
<td>K-12 education, children and adolescents</td>
<td>34</td>
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<td>Academic and professional programs</td>
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<td>Multiple library types</td>
<td>11</td>
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<tr>
<td>Other information literacy research and theory</td>
<td>15</td>
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<td>Total</td>
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Table 1. Number of 2020 publications by category.
Additional research evaluates the IL skills of adolescents in the German-speaking countries (Seufert et al., 2020), Indonesia (Tanudjaya and Doorman, 2020), Singapore (Majid et al., 2020), Slovenia (Dolenc and Sorgo, 2020) and the USA (McLemore, 2020; Schiffl, 2020; Wade et al., 2020). An international study across 14 countries also shows that students with greater access to computers at home and higher levels of confidence in using information and communication technology (ICT) perform higher on IL tests (Fraillon et al., 2020).

For “Academic and Professional Programs,” several trends emerge. Due somewhat in part to a special issue in Communications in Information Literacy, critical information literacy (CIL) is at the center of this year’s literature. Cooke (2020) outlines how critical library instruction can be a pedagogical tool to address equity, diversity and inclusion (EDI) in the classroom, which is particularly important given the profession’s silence on white supremacy in library praxis (Leung and López-McKnight, 2020). Flierl and Maybee (2020) also note a potential European bias and Coleman and Pankl (2020) call librarians to resist positivism and neoliberalism in library instruction. Librarians are not solely responsible for teaching CIL; Torrell (2020) proposes implementing CIL across the curriculum with the support of faculty. In “The problem with grit: Dismantling deficit thinking in library instruction,” Tewell (2020) highlights how CIL and culturally responsive pedagogy can help dismantle harmful notions of grit and growth mindset that obscure systemic issues of inequality in education. Quinonez and Olivas (2020) use validation theory and a culturally relevant curriculum to ignite first-year Latinx students’ scholarly identity, and Bartow and Mann (2020) use CIL and community-based learning (CBL) to validate the experiences of Spanish-speaking students. In addition to the classroom, Bruce (2020) argues that one-on-one research consultations can be a site to apply an ethics of care, relational-culture theory and critical race theory. Despite these efforts, Ferretti (2020) notes that critical librarianship has not shifted the power dynamics between library colleagues in support of Black, Indigenous, People of Color (BIPOC). Additional critical theories for library instruction include cultural humility (Goodman and Nugent, 2020), feminist pedagogy (Irving, 2020; Kingsland, 2020), open pedagogy (Hare et al., 2020; Sinkinson, 2020) and trauma-informed pedagogy (Gohr and Nova, 2020). Nonetheless, Scale (2020) argues that CIL is still at the margins of library practice, and Schachter (2020a, b) notes that institutional culture, a lack of time and resistance to change may influence the adoption of CIL.

This year, several studies describe transitions as a result of the COVID-19 pandemic, such as meeting higher demands for research support and instruction (Pauwels et al., 2020), shifting instruction to an online environment (Roy, 2020; Wittek, 2020) and communicating changes in services (La Macchia, 2020). Universal design is an important framework that can be used to provide accessible online instruction (Black, 2020; Hays and Handler, 2020; Lund, 2020; Whitver, 2020), and online learning best practices more broadly can be useful in a hybrid or fully online environment (Mune, 2020; Turnbow and Roth, 2020). Harding and Shepard (2020) detail their process for designing IL modules in LibGuides CMS using best practices, and Hammons (2020a) describes an online self-paced course for faculty. The Writing Instruction + Research Education (WI + RE) project out of the University of California, Los Angeles, introduces grassroots, peer-led model for creating videos, tutorials and handouts, highlighting authentic student representation and best practices in user experience design (Harper et al., 2020). Other approaches to engaging students online include micro-credentialing courses (Peacock et al., 2020), digital badges (Pothier, 2020), student-centered research guides (Paschke-Wood et al., 2020) and short videos (Liu, 2020). Interestingly, one systematic review by Morris (2020) finds that overall students express no preference for face-to-face, online or blended learning; and there is no statistically significant difference in performance.

Conversations around the Association of College and Research Libraries (ACRL) Framework for Information Literacy for Higher Education continue across various disciplines and topics. Julien et al. (2020) and Stöpel et al. (2020) provide case studies on integrating threshold concepts and Framework-based learning outcomes into disciplinary
curriculum. Additional examples of applying the Framework to various disciplinary standards and activities can be found for business (Houlihan et al., 2020), communication studies (Pun, 2020), indigenous studies (Dudley, 2020), medical education (Brennan et al., 2020), nursing (McGowan et al., 2020) and political science (Harden and Harden, 2020). The Framework can also be used as a guide to teach government information (Albert et al., 2020) and incarcerated students (Kuntz Balcer, 2020). Coleman (2020) explores antiracism in the ACRL Framework while providing suggestions for how to combat epistemic racism in the classroom, and Heffernan (2020) provides classroom discussion questions for each ACRL Framework frame through an EDI lens. A survey of community college librarians finds limited familiarity with and application of the Framework (Wengler and Wolff-Eisenberg, 2020), but some scholars offer examples of how to use the Framework to highlight community college students’ lived experiences (Poskey and Roper, 2020) and create drop-in workshops that lay foundational skills (Mohess, 2020). A collection of case studies edited by Vong and Vrkljan (2020) provide examples of how to connect the Framework to cocurricular activities, and additional studies show that cocurricular activities in libraries can also engage students in IL concepts, such as cultural art exhibits (Ching and New, 2020a; Ching and New, 2020b), learning communities (Pate et al., 2020), speaker series (Kasten-Mutkus, 2020) and student-run journals (Moore, 2020).

IL program coordination, instructional identities and assessment also emerge as themes this year. A collection edited by Gardner et al. (2020) provides vignettes of various IL programs, and Mallon (2020) offers a manual for building and developing instruction programs. A study on the design process of one-shot instruction sessions reveals that, while ill-prepared for instruction from their MLIS programs, librarians find peer observations helpful for building skills (Hostetler, 2020), and Oberlies et al. (2020) present three tools for peer observation that promote professional growth and reflection. Reale (2020) reflects on challenges related to teaching IL, which includes factors such as library anxiety, librarian stereotypes and the perceptions of librarians as service providers, as well as imposter syndrome. A study by McCartin (2020) notes another challenge in that younger and newer librarians are more likely to defer to other teaching faculty. Forming instructional identities is also supported by a study by Nichols Hess (2020), which reveals that length of employment, among other factors, leads to the development of one’s teacher identity. In terms of the assessment of student learning, several studies use the now sunsetted Experiences with Information Literacy module of the National Survey of Student Engagement (NSSE), which find that students value instruction on basic search skills (Davidson Squibb and Zanzucchi, 2020) and that there is a significant correlation between IL and the practices of instructors (Fosnacht, 2020). One exemplary assessment project highlights efforts to assess IL in relation to the American Psychology Association Goals for Undergraduate Majors in Psychology, which includes several assessment strategies and tools that may be adapted for other disciplines (Mueller et al., 2020). Another area of concern in assessment is the use of personal identifiable information; Michalak and Rysavy (2020) argue that using specific identifiers can be useful for IL program assessment and faculty collaboration. In “Moving from critical assessment to assessment as care,” Arellano Douglas (2020) critiques impact-value assessment and argues for applying a feminist ethic of care that seeks to value students as individual learners. Interviews reveal that librarians see assessment as a way to energize instruction programs and contribute to campus conversations surrounding IL, though they may need additional institutional support (Willenborg et al., 2020).

Various strategies for evaluating information, news and media literacy and fake news remain popular topics in library instruction. In response to the rise of misinformation, Lynch and Hunter (2020) propose a new framework for critical source evaluation called “IF I APPLY,” which integrates students’ experiences and beliefs into a checklist evaluation technique. Bobkowski and Younger (2020) also present an instrument for source evaluation,
which encourages students to use additional authority indicators and evidence. According to a study by Šuminas and Jastramskis (2020), journalism students, who receive more instruction on media and information literacy, are better equipped to evaluate key aspects of news and media sources. Lim (2020) also highlights various definitions and checklists for identifying fake news from online research guides. Saunders and Budd (2020) review criticisms of the ACRL Framework frame “Authority is Constructed and Contextual,” arguing for more nuanced checklists that contextualize the use of opinion and individual experience. Faix and Fyn (2020) go beyond this frame to identify relevant aspects of misinformation within the entire Framework. The Thinking Critically About Sources Cookbook, edited by Morris (2020), provides numerous lesson plans and activities for evaluating information, and Kaufman (2020) provides lesson plans to evaluate evidence-based claims in the news. One workshop of note related to misinformation uses transgender issues to dispel myths and analyze bias in media representation (Krutkowski et al., 2020). Several studies also note the role of cognitive bias in information behavior and practices (Behimehr and Jamali, 2020; Wittebols, 2020b).

IL also intersects with a variety of specialized literacies and populations. This year, studies explore algorithmic literacy (Bakke, 2020; Head et al., 2020), archival (Gray, 2020; Silva, 2020) and artifactual literacy (O’Sullivan, 2020), data literacy (Burress et al., 2020; Jewell et al., 2020) and data management (Griffin, 2020), financial literacy (Liagat et al., 2020), privacy literacy (Hartman-Caverly and Chisholm, 2020), publishing literacy (Ndungu, 2020), science literacy (Perry, 2020) and visual literacy (Matusiak, 2020; Munroe and Payne, 2020; Thompson and Beene, 2020). Instruction is not a one-size-fits-all. Studies also report on best practices for reaching first-generation students (Arch and Gilman, 2020), English-language learners (Balci et al., 2020; Crist and Popa, 2020), PhD students (Nylander and Hjort, 2020a; Nylander and Hjort, 2020b; White and King, 2020) and transfer students (Robison et al., 2020; Vinyard, 2020).

Librarians often engage students with IL concepts in creative ways. Adams et al. (2020) provide examples of using humorous satirical videos in one-shot instruction as a jumping off point to discuss IL concepts. Instructors also use assignments that have students edit Wikipedia to engage in the dissemination of knowledge and activism (Duncan, 2020; Kingsland and Isuster, 2020; Poulter and Sheppard, 2020). Walsh (2020) argues for the use of play pedagogy to encourage students to explore environments and learn from mistakes. Games in library instruction are also popular, such as escape rooms (Crowe and Scippa, 2020; Koelling and Russo, 2020; Kroski, 2020), augmented reality for library tours (Sample, 2020b) and other games (Encheva et al., 2020; Yap and Peñafior, 2020). Additional strategies for engagement include a flipped classroom approach (GÓmez-García et al., 2020; Wittebols, 2020a), case-based learning (Frati, 2020; Jones and Wisniewski, 2020) and the use of various technology platforms, such as Padlet (Rödl, 2020), WeChat (Guo and Huang, 2020) and Rain Classroom (Han and Lu, 2020).

Lastly, this year saw a growth in international studies on the IL skills of students and the experiences of librarians. These include studies from Australia (Jewell et al., 2020), Belgium (Pauwels et al., 2020), Botswana (Oladokun and Jorosi, 2020), Cambodia (Seng et al., 2020), Cameroon (Bawack and Kala Kamdjoug, 2020), Canada (Elbassiouny et al., 2020; Munroe and Payne, 2020; Schachter, 2020a; Sharun, 2020), Chile (Reyes-Lillo et al., 2020), China (Allard et al., 2020; Chow and Wong, 2020; Gu, 2020; Pang, 2020; Xie, 2020; Zhang et al., 2020), Finland (Soltani and Nikou, 2020), Ghana (Ayoung et al., 2020; Yebowaah and Owusu-Ansah, 2020), India (Mylapalli, 2020), Indonesia (Yanto et al., 2020), Iran (Keshavarz, 2020), Israel (Aharony and gazit, 2020; Aharony et al., 2020; Amit et al., 2020), Kuwait (Al-Qallaf, 2020), Latvia (Ahn, 2020; Ahrony and Paz, 2020), Latin America (Crawford-Visbal et al., 2020), Malaysia (Heryanto et al., 2020; Wan Mokhtar et al., 2020), the Netherlands (Testers et al., 2020), Nigeria (Igbinovia et al., 2020; Ikenwe and Anaehobi, 2020; Ikolo, 2020; Mbagwu et al., 2020; Okeji
et al., 2020; Okocha and Owolabi, 2020; Tella, 2020), Pakistan (Ahmad et al., 2020; Awan and Idrees, 2020; Awan et al., 2020; Azam et al., 2020; Humbhi and Jabeen, 2020; Liaqat et al., 2020; Soroya et al., 2020), Poland (Głowacka et al., 2020), Portugal (Sanches et al., 2020), Russia (Gridasova et al., 2020; Korepin et al., 2020), Singapore (Dresel et al., 2020), Slovakia (Fázik and Steinerová, 2020), Slovenia (Koler-Povh and Turk, 2020), South Africa (Bangani et al., 2020; Coetzee and Mapulanga, 2020; Matchiyane et al., 2020; White and King, 2020), Spain (Trujillo-Torres et al., 2020), Sweden (Karakoyun and Lindberg, 2020), Turkey (Balci et al., 2020; Karakoyun and Lindberg, 2020; Uzun and Kilis, 2020), Ukraine (Saienko and Lavrysh, 2020) and the United Kingdom (Froste, 2020; Sewell et al., 2020; Soltovets et al., 2020). Sengupta et al. (2020) also examine student engagement and IL practices through an international scope.

Of particular interest in the category “Everyday Life, Community, and the Workplace” are a number of studies on the information-seeking behaviors and information practices of various populations and professions. One study of Finnish CEOs finds that workplace IL plays a role in innovation and opportunity recognition, as well as fostering learning and collaboration among employees (Ahmad et al., 2020). In a study of recent graduates, Pedersen and Hahn (2020) find that transferring college IL skills to the workplace can be challenging, although IL may not be as important to employers as other transferable skills (Kirschner and Stoyanov, 2020). Studies also recommend that librarians support lawyers in finding legal information (Jamshed et al., 2020) and connect prisoners to the Internet and reading materials (Chandani and Weerasooriya, 2020). Refugees navigate complex information landscapes during their resettlement and face barriers such as information overload, disjuncture and liminality (Lloyd, 2020), whereas other migrants are able to plan for their relocation and possess more advantages such as better English-language and IL skills (Marshall et al., 2020). Hicks (2020) challenges the notion of IL as threshold concepts and argues for more research on how IL mediates transitions. Lawal and Bitso (2020) call for more research on everyday life information seeking (ELIS), which through a constructivist approach views IL as social processes and varied relationships to information, especially in contexts outside of education and the workplace. ELIS can also be viewed through a revised information anxiety framework (Naveed and Anwar, 2020).

Public libraries serve as a hub for the community by promoting lifelong learning and providing IL training (Mothiba and Enakrire, 2020; Seifi et al., 2020). One study by Matteson and Gersch (2020) shows how one-on-one instructional interactions help patrons search for and evaluate information for their everyday life. Public libraries also serve special populations such as teen parents (Beier, 2020). Through photovoice instruction, Saal and Gómez (2020) note that adult learners can use multimodal literacies to express their IL skills, which may be applicable to public library IL training. Other barriers to building IL skills exist; for example, Hosman et al. (2020) describe a project that brings online digital and information literacy skills to an offline digital library to train users with limited or no access to the Internet, in addition to other forms of information poverty (Marcella et al., 2020).

Goldstein (2020) argues that IL is crucial for engaged citizenship and necessary for combating misinformation. Especially during a global pandemic, digital and information literacy is important for digital citizenship and for promoting underrepresented voices in digital spaces (Buchholz et al., 2020). Maertens et al. (2020) created and used a fake news simulation game to study inoculation to misinformation and suggest that successful interventions may focus on altering mindsets. Furthermore, a study by Buchanan (2020) shows that misinformation is more likely to occur due to preexisting attitudes and source familiarity. Fact-checking is a common intervention, and IL education can be informal or formal through various media-based fact-checking organizations (Kuś and Barczysyn-Madziarz, 2020) and librarian-led instruction (De Paor and Heravi, 2020). Wikipedia is another platform that can be used as a model for policies and structures that mitigate misinformation (McDowell and Vetter, 2020). News websites might also be more transparent through better
user experience (Wu, 2020). However, these interventions must take into account the “gray digital divide” in which older adults view the Internet as a place for socialization rather than education and may be more susceptible to misinformation (Brashier and Schacter, 2020). More training on news literacy is needed, even among information professionals (Ameen and Naeem, 2020).

In the category “Libraries and Health Information Literacy,” Ancker et al. (2020) call to attention the proposed change from the US Department of Health and Human Services in the use of the term “health literacy” to “health information fluency” as a better definition that encompasses both individual and societal concerns in making health-related decisions. Several studies highlight the COVID-19 “infodemic,” or the spread of health-related misinformation during the global pandemic (Naeem and Bhatti, 2020a; Tangcharoensathien et al., 2020), and the call attention to the susceptibility of COVID-19-related information on social media (Anumudu and Ibrahim, 2020). Additional training may also be needed to support healthcare workers’ knowledge of COVID-19 (Amit et al., 2020). Many turn to the Internet for health information, and a study on the quality of online Q&A forums finds that the highest quality information is often behind a paywall, which has implications for those with lower IL skills (Ameri et al., 2020). Use of mobile technologies also necessitates good health IL skills to discern accurate information online (Crosswell, 2020).

Studies out of China show that health IL plays a moderating role in the overuse of smartphones (Fu et al., 2020), and knowledge around breast cancer awareness can predict compliance to prevention strategies such as screenings (Liu et al., 2020; Yang et al., 2020). Other factors that affect health information may include education level, Internet use and income (Shiferaw et al., 2020). Studies from rural areas of Africa also show that more support is needed to improve health IL (Ekoko, 2020; Ncube and Tsvuura; Odigie and Obinyan, 2020; Shiferaw et al., 2020). Higher IL skills of nurses also indicate greater use of evidence-based practices (Azami et al., 2020; Teolis, 2020), and consultations on health information can build trust in physician–patient interactions (Peng et al., 2020). A study by Abelsson et al. (2020) shows that patients often turn to other sources such as the Internet and family or friends to make decisions about their care.

Studies included in “Multiple Library Types” overlap in areas where they address IL or have broader applications. One study analyzes the joint efforts of various libraries in Romania to react to the COVID-19 pandemic by providing online resources and programming (Erich, 2020). Combating fake news is another area in which multiple libraries can join efforts (Agosto, 2020), and Hanz and Kingsland (2020) outline an effective workshop intended for a wide audience from high schools to adults. Online learning during the COVID-19 pandemic prompted a group of high school teachers to collaboratively develop learning material using methods that all librarians can learn from (Sadler et al., 2020). Wagg and McKinney (2020) present a case study of outreach bridging schools with higher education, and Meyer and Cranmore (2020) highlight the IL skills of advanced, college-bound high schools. After an assessment of the IL skills of high schoolers and first-year college students in Slovenia, Dolenčar et al. (2020) recommend more preparation in secondary education, especially in search strategies. However, research out of Malaysia and Bangladesh comparing the IL and ICT skills of Generation Z refutes the notion of digital natives (Kassim et al., 2020).

Finally, “Other IL Research and Theory” provides a broad array of scholarship on IL. Bapte (2020) presents a global scientometric review of the literature on IL and notes an exponential growth, whereas Park et al. (2020) expand the scope of their scientometric review to include digital, ICT, information and media literacy. Similarly, Onyancha (2020) visualizes and maps IL scholarship, which elucidates the growth of IL from computer literacy to the broader diversity of the term IL as it is used today. Lastly, Odede (2020) compares the six common theoretical frameworks for IL and concludes that Kuhlthau’s Information Search Process is the most applicable across various disciplines and social contexts.
K-12 education, children and adolescents


Semantic content analysis of the UNESCO’s media and IL curriculum for teachers through the lens of structural considerations of information, a distinct discipline that applies critical theory to IL competencies; however, there are weaknesses to the UNESCO document through a critical lens, which does not fully address disinformation and globalization. It argues for updating the curriculum to recognize power structures that exist in the media industry and develop critical thinking skills necessary for a democracy.


Study examining the role of school library media coordinators, specifically as digital literacy instructors and technology professional development leaders, in South Carolina from the perspective of elementary school principals that identifies the relationship between perceptions of school media programs and staffing decisions. Through a survey of 94 elementary principals and three additional interviews, the author concludes a positive correlation between academic achievements and having trained school library media coordinators on staff, particularly in light of nationwide budget cutting trends, accreditation changes and legislative directives.


They conducted a study to explore the value of new digital epistemic scaffolds on students’ ability to evaluate and integrate multiple documents and construct document models. Using a mixed method of embedded design, researchers studied four ninth grade classes (n = 88) in an Israeli city and assessed the results using both quantitative (pre- and posttests) and qualitative (essays and open responses) data. The authors found that learning with the epistemic scaffolds resulted in significant gains in evaluation and integration performance and had a positive effect on meta-epistemic knowledge about source justification and trustworthiness. One of the unique elements of this study was the creation of a document mapping scaffold that allowed students to represent full document models that contain not only the source contents but also the networked nature of the source itself.


Qualitative study using Bandura’s social cognitive theory to examine high school students’ inquiry process in a problem-based learning setting. Findings reveal that when students are offered choices between teacher-provided resources and resources found in their own research process to support claims, they select the teacher-provided resources first. It suggests that in order to build self-efficacy and IL skills using problem-based learning inquiry, instructors should limit offerings of information to allow for greater engagement with research efforts.


A case study examining two schools, one that participated in a national program and one that did not, on the status of IL in primary schools in Israel, looking specifically at school
administration policy toward integration of IL, perception of the teacher’s role in teaching IL and the acquisition of IL within the teaching framework between two schools. Findings show that both schools incorporate online content in their teaching, but neither school systematically integrates IL instruction into the curriculum. The authors suggest that IL, at least within the Israeli education system, should be treated as a distinct area of knowledge, and administrators should provide better training, support and structured models of pedagogy.

Davis, S.R. (2020), The Impact of Librarian Literacy and Research Instruction by a State-Certified Teacher-Librarian on Student Academic Achievement and ACT Reading Scores, PhD Thesis, Union University, Jackson, TN.

It assesses the impact of an embedded state-certified teacher-librarian on ACT scores and research paper grades for (n = 80) junior high school students. Findings reveal no difference in ACT reading scores between those taught by an instructor-librarian and those who were not, but there were significant improvements in the research paper scores of juniors who worked with a teacher-librarian.


It assesses the results of the International Computer and Information Literacy Study (ICILS), which describes the computer IL competencies of students from 19 countries to identify determinants of computer IL competency. ICILS is administered by questionnaire to students, administrators, ICT professionals and teachers to explore student, school and teacher characteristics such as gender, expected levels of education, number of computers and the uses of technology personally and in school, as well as ICT competency. Results indicate that socioeconomic factors have the most significant bearing on computer IL and that in eight countries male students show lower levels of ICT competency.


It reflects on the omission of digital legacy in K-12 digital literacy education. Despite the increase in government-mandated responsibilities for K-12 librarians to teach digital literacy, digital legacy and conversations surrounding the longevity of digital information after a creator’s death are largely omitted. The author argues for expanding conversations on digital legacy to better prepare students to understand the endurance of digital information.


Assessment of (n = 229) Slovenian 14–15-year-old adolescents using a shortened Information Literacy Test (ILT-B), which included 14 multiple choice questions and a Likert-scale self-evaluation of the difficulty of each test question. Similar to previous studies, this study found that adolescents with low scores overestimated their skills, while those with higher scores underestimated their skills. Based on these results, the authors recommended including IL in secondary school curricula through methods such as teaching IL as its own subject, sessions about using the library and databases taught by a librarian and project-based collaborations with librarians and subject teachers.


An analysis of the results of the International Computer and Information Literacy Study (IEA-ICILS, 2018) in order to identify the practices and dispositions of organizationally resilient schools related to digital and information literacy. Organizationally resilient schools are defined as schools that exhibit high achievement related to digital and information literacy despite socioeconomic disadvantage and are identified by using IEA-ICILS 2018 data on student achievement and family socioeconomic background. Researchers were able to
identify three typologies of organizationally resilient schools: competent schools with a lack of ICT resources (71.8%), competent schools (23.2%) and restrained schools (5.0%).


Computer-based assessment and questionnaire of \((n = 46,561)\) eighth graders on their computer and information literacy skills (CIL) and computational thinking (CT) across 14 countries, as well as a survey of teachers and school administrators on their use of digital technologies. In terms of their CIL skills, students with greater access to computers at home and more confidence in using ICT performed at higher levels on tasks, which for IL include items such as identifying relevant or biased information. The report also revealed that teachers value CIL and are more likely to emphasize it in their classes when they have time to develop ICT skills and plan lessons, work in a collaborative environment and have more ICT resources and support.

Gokbel, E.N. (2020), The Effects of Teacher Professional Development and Self-efficacy on Classroom Uses of Information and Computer Technologies, PhD Dissertation, Duquesne University, Pittsburgh, PA.

It investigates the relationship between technology use in classrooms and professional development in \((n = 136)\) eighth grade mathematics teachers using 2013 data from the ICILS. Findings show a positive correlation between direct instruction and technology use, with face-to-face collaboration having positive associations with technology use, and three significant factors for technology use in dialogic instructions: self-efficacy, collaboration and course-based professional development. The author recommends encouraging online learning communities for teachers only after face-to-face professional development training.

Haefner, C.N. (2020), Factors Influencing the Self-Efficacy of the Novice School Librarian, PhD Thesis, University of Nebraska, Omaha, NE.

Survey of \((n = 14)\) novice school libraries and \((n = 12)\) focus group interviews to measure perceived levels of efficacy in the skills, knowledge and dispositions defined by the AASL Standards for the Initial Preparation of School Librarians, finding high level of confidence in most of the competencies with slightly lower levels of confidence in data-based practices and carrying out programmatic change. It identifies three challenges to the self-efficacy of novice school librarians: transitioning into a new professional role, constraints on their time and dual roles that incorporate both school librarian and computer science teaching. It shares recommendations to increase novice librarian self-efficacy.


Study to investigate the effect of introducing digital media into industrial education instruction to \((n = 77)\) students in a Japanese high school. The authors felt that the current method of instruction for “power technology” (i.e. electricity) is insufficient because it relies primarily on textbooks and does not include audiovisual and web-based resources. As a result, the authors deployed a series of questionnaires and concluded from analyzing the results that the introduction of media research tools strengthened students’ understanding of the subject in addition to content provided in textbooks.


A collection of lesson plans for kindergarten through second grade and third through fifth grade covering civics, economics, geography and history. Each lesson plan is mapped to the AASL Standards Framework for Learners, Common Core Language Arts Literacy Standards, and Social Studies Standards for C3 (College, Career, and Civic Life) Framework. Lessons also include worksheets, learning objectives, directions and recommended resources.

Description of a 2018 partnership between Kenyan and US educational scholars to provide professional development to 49 Kenyan school teachers to assist them in developing instruction practices for new literacies through a program called the New Literacies Teacher Leader Institute. Researchers conducted thematic analysis of data collected from focus groups and interviews and distilled the results into three overarching themes: shifting to learner-centered pedagogies, change is slow but coming and strategies for teaching new literacies. The professional development series revealed challenges these teachers face in terms of resources and training and determined that strategies such as scaffolding, group work and multimodal presentation would be beneficial to improving student ICT skills.


Assessment of \( n = 16 \) eighth grade students’ ability to evaluate the credibility of a website before and after participating in a one-day IL workshop. Findings suggested that students’ information evaluation skills improved after the workshop intervention by using techniques such as lateral reading in the postworkshop tests. Researchers recommended developing a curriculum that builds background knowledge related to the types of sources encountered online and the broader online information ecosystem.


It introduces “generalist literacy” as an identity-based framework for teaching IL that encourages young people to ask questions and find credible information sources to make decisions beyond the classroom. The authors outline how teachers can develop their own generalist identity in which they show curiosity, skepticism and persistence that they can then model for their students. It includes classroom examples of generalist literacy units and additional activities.


It describes a statewide survey in Colorado on how often librarians facilitate student-led inquiry to teach IL skills. Findings show these librarians are twice as likely to teach students to work collaboratively, evaluate and apply critical thinking and other IL skills. Librarians in the survey report that their schools and district leaders value deeper learning and critical thinking, which helps motivate teachers and librarians to implement such projects and that it does raise issues of implementing a whole school effort or specific inquiry model approach across the state to increase equity of these IL skills and opportunities.


Questionnaire designed to assess the IL skills of \( n = 3,306 \) secondary students in 14 secondary schools in Singapore. The mean score for the overall assessment of IL skills was 51.46 out of 100, with students showing the highest levels of success in “defining the information task” and struggling most with “appraising the information process and product.” The authors suggested that while there has been some success in integrating IL into secondary curriculum in Singapore, there needs to be a review of the strategies used to integrate IL and how they are addressed in different subject areas.


Mixed methods study of \( n = 24 \) eight grade students’ IL skills and gaps via a unit of seven 50-min classes in a social studies class. In an analysis of data, observations and focus
groups, students indicated that their self-efficacy had increased and their skills had improved. The author concluded that gamification and collaboration between librarians and teachers can have a positive impact on the IL skills and self-efficacy of students.


Description of Nānā I Ke Kumu (“Look to the Source”), an IL project in Hawai‘i built on models that respect and incorporate the richness of local culture, language and tradition. Thirteen total sessions introduced 286 high school students and educators to digital resources composed of cultural information, with student sessions including IL skill workshops and field trips and educator sessions focused on professional development. Of the 144 teachers and librarians who submitted self-assessment feedback, 100% either agreed or strongly agreed that the sessions increased their understanding, interest and confidence in using the resources going forward.


Reports on a correlational study that uses a survey of (n = 464) primary and secondary school teachers to compare levels of 21st-century education management skills and strategic leadership behaviors of school administrators in the same region. It finds that IL, technology literacy, accountability, leadership and responsibility were significant predictors of managerial leadership behavior.


Qualitative study that critiques the school library as the main resource for IL instruction in early childhood education and offers an alternative approach with material source instruction through the school museum. It argues that object-based learning, artifactual critical literacy and museum-based learning provide pathways to gaining IL skills where students cannot yet fully read or write. It posits that the metacognitive approach to learning with material sources, together with traditional IL instruction in the school library, improves critical thinking and IL skills.


Systematic review of (n = 70) literature on school libraries and librarians related to the promotion of reading and IL. A review of the literature affirmed that school libraries continue to provide physical and digital spaces for learning, and librarians not only manage collections but they also collaborate with teachers to enhance the curriculum and promote reading habits. Barriers to the success of school libraries include lack of trained staff, inability to collaborate with teachers and limited funding.


It describes a mixed methods study including surveys, workshops and interviews of male and female differences among (n = 237) Spanish adolescents’ dispositions, skills, security strategies and attitudes toward social media and other online transmedia. Data reveal that in many aspects, there are no significant gender differences; however, male participants engage in more video game play with friends, both online and in person, and are more likely to accept all social media friend requests; female participants are more likely to gather together in person to search for television shows, make playlists and take and share photos. Participants like having large numbers of followers and are concerned about their digital reputations. Few participants use Internet safety strategies. It concludes that social media use increases
adolescents’ aptitude for informal learning and reinforces creativity and imagination important for lifelong learning.

Sauerwein, A.R. (2020), *Are Content Teachers Prepared to Teach Information Literacy Skills? A Multiple-case Study Examining High School Content Teachers’ Expectations for Information Literacy Teaching and Learning*, PhD Dissertation, Emporia State University, Emporia, KS.

It studies teachers’ expectations and instruction of IL in four Kansas high schools through core subjects. Using a combination of surveys (n = 330), interviews (n = 15) and instructional documents (n = 12) and the Common Core State Standards (CCSS) and Next Generation Science Standards (NGSS) as the basis for information, technology and scientific literacy standards, the author finds inconsistent curriculum integration of IL in high school core subjects. The author further calls for consistent expectations and instruction across all subjects with opportunities for students to build IL skills.


Assessment of the IL competencies of (n = 391) 8th, 10th and 12th grade biology students and (n = 46) biology teachers, including their abilities to find information independently and to extract information from texts, as well the abilities of teachers to accurately assess student competency. Students were provided with a questionnaire that asked them to find and identify information sources and extract information from a text. The teacher questionnaire asked teachers to state average student competencies. Students primarily identified online sources, but also used books and personal sources as well, particularly among older students. Teachers showed a limited ability to assess students’ IL competency.


Questionnaire and performance test of (n = 432) upper secondary students to determine subjective and objective information in Austria, Germany, Lichtenstein and Switzerland. Objective IL did not appear to increase with advancement through upper secondary school, but there was a correlation between objective IL skills and grade. The majority of upper secondary students, who average around 18 years old, needed support (39%) or were not able to perform the IL tasks (17%).


Results from a 10-year annual survey of (n = 387) Australian school libraries. Respondents expressed the need for increased library budgets, additional staff to manage workload and funding for quality online resources. It includes 11 recommendations for the national level to support teacher librarians, government sponsorship of resources for school libraries and future research areas.


Study on the four IL Standards for the Empire State Information Fluency Continuum (ESIFC), a consortium of school librarians in New York that empowers learners and librarians with agency. It describes components of agency as self-identity, context, literacy and design thinking, self-confidence and action and reflection. A key theme of ESIFC is the learner’s ability to choose topics and self-direct inquiry. For each stage, the author provides brief examples from IL instruction for multiple grade levels aligned with ESIFC.

It assessed students’ ability to exhibit higher-order thinking (i.e. the capacity to reason and use concepts, procedures, facts and tools to explain and forecast phenomena and acquire IL skills) in mathematics by testing \((n = 372)\) ninth-grade students and their \((n = 6)\) teachers. The authors identified a major issue with students’ ability to think critically about a problem beyond the construction of a mathematical model, indicating a lack of IL skill. Additionally, teachers’ responses indicated inconsistencies with their understanding of pedagogy and teaching strategies related to developing students’ higher-order thinking. These findings indicated the need for additional resources and support for students and teachers.


It provides an overview of IL instruction and building basic information-seeking skills for students in K-12. It revises a text last edited in 2011 with updates including the 2018 AASL Standards and the 2016 ACRL Framework. It encourages using evidence-based practices and IL theory to structure curriculum, assessment and reflection.


Results of two trials in Canada using the computer software, ISIS-21, with \((n = 150)\) late elementary students. The program guided students’ inquiry into a big question from developing keywords all the way to ultimately producing a product answering their question. After the trial, the researchers measured teacher perceptions, self-reported student perceptions, use of the software, overall literacy skills and IL skills as measured by Tool for Real-Time Assessment of Information Literacy Skills (TRAILS). Students saw the highest outcome gains in the planning phase of their inquiry project, though grade level did not account for significant variation. Both students and teachers commented that ISIS-21 is too comprehensive for easy and quick use and the researchers modified ISIS-21 to have a flexible mode as a result.

Academic and professional programs


It describes how librarians at California State University, East Bay, incorporate humorous and satirical news video clips in credit-bearing courses and one-shot instruction sessions. Although the authors caution against selecting potentially triggering subjects and content that can be difficult to explain, these videos can be used to engage students in IL concepts. They also provide a LibGuide with examples of video clips for each ACRL Framework frame.


It analyzed \((n = 321)\) responses of first-year student pre- and posttest assessments from a pilot program for digital literacy titled the Digital Polarization Initiative. Results were drawn from First Year Seminars student assessments over the course of two years. Pretests were evaluated using the Association of American Colleges and Universities (AAC&U) Valid Assessment of Learning in Undergraduate Education (VALUE) Rubrics, which measure skills in four areas, and both pre- and post-tests used the same questions as the Stanford Civic Online Reasoning study. The study highlighted the need to bridge concepts of civil, digital and information literacy and equip students with the skills to navigate the misinformation landscape.

Survey of \( (n = 193) \) students conducted in 2016 and 2017 to investigate the relationship between master’s and doctoral students in occupational therapy and librarians who provide IL instruction, research consultations and general reference support. A majority of students expressed a preference for seeking information from their peers before consulting with librarians, a slight preference for face-to-face communication and a willingness to search for up to an hour before seeking help. A segment of students also indicated reluctance to find assistance at any point.


Study of IL and self-efficacy among students \( (n = 136) \) from the information science department at Bar-Ilan University in Israel during the spring semester of 2017. The study focused on how three variables explain IL self-efficacy: students’ openness to experience, cognitive threat and challenge appraisals and motivation. The authors modified and distributed four existing questionnaires (information literacy self-efficacy, openness to experience, cognitive appraisal and motivation) along with an additional questionnaire to gather demographic data. The data confirmed that openness to experience, cognitive appraisal threat and challenges and intrinsic motivation all positively impact students’ IL self-efficacy; however, extrinsic motivation was not found to have a relationship to students’ IL self-efficacy.


Case study on the IL instruction practices and use of the ACRL Framework by Israeli academic librarians. Findings show a commitment to IL, but assessment and evaluation of IL objectives are informal, which suggests that a systematic assessment of learning outcomes would improve IL instruction and overall support for instruction and that the Framework has little to no influence on the majority of IL instruction. The survey highlights the need for greater understanding and support for best practices in IL instruction and recommends that other countries recreate the study to have a better global understanding.


Study of \( (n = 306) \) students’ IL skills and perceptions of the importance of IL at COMSTATS in Lahore, Pakistan. Graduate and undergraduate students in electrical engineering, computer sciences, management sciences and chemical engineering were provided with semistructured questionnaires, which were analyzed using SPSS. Results indicated that while the majority of students considered IL to be very important, not all students had adequate training or exposure to these essential skills.


Mixed methods study of \( (n = 43) \) library and information science (LIS) graduate students in Kuwait using a pre- and posttest, especially the Information Literacy Assessment Test based on the ACRL Information Literacy Competency Standards for Higher Education, and a faculty \( (n = 7) \) focus group. Findings reveal that students’ knowledge and skills increase in their ability to find, evaluate and ethically use information after several IL sessions throughout the semester, and faculty agree that students are ill-prepared, but they feel optimistic about the value of IL instruction. The author recommends advocating for
additional IL instruction (e.g. credit-bearing courses, workshops and course-integrated instruction) and setting a structured plan for improving IL programs.


Case study on the use of the “Information Creation as a Process” frame from the ACRL Framework to teach students about the complexity of government record creation. It features a lesson plan used to teach students evaluative skills to assess government sources and focuses on the important role librarians play in encouraging student use of government information for academic research. It concludes that during a period of high skepticism and distrust, librarians can combat misinformation through Framework-aligned instruction.


Survey of (n = 305) LIS students to evaluate their understanding of the role of library user education in student experiences during their coursework. Participants highly rate the importance of workshops, research consultations and course-based instruction sessions, with some differences in ratings among the universities attributed to lower librarian–student ratios at certain campuses. It notes that students in LIS may be predisposed to having a positive orientation toward IL and user education that affect the outcome of the study.


Survey of (n = 148) Israeli nursing students on their perceptions of evidence-based practice (EBP), IL self-efficacy and motivation to implement EBP in a clinical setting. Findings reveal that participants with higher IL self-efficacy and intrinsic motivation to experience stimulation (i.e. expand their knowledge and apply it to their future career) are more likely to implement EBP in the future. The authors recommend integrating IL skills into EBP education to enhance the quality of patient care.


A survey of undergraduate and graduate students to better understand how students perceive library resources and the role libraries have in overall student success. Findings were varied by discipline and overall mixed. The survey highlighted the students who use the library and how they perceive library resources and services contributing to their success, but also realized that the students who do not use the library and its resources can also be successful. They also found that library usage and success are different for both graduate and undergraduate students, and this opens the door for future research on how and why these differ.


Focus groups of California State University Bakersfield (n = 18) students and (n = 5) faculty to evaluate the existing first-year experience programs to determine the need for a mandatory first-year experience course at the beginning of students’ programs. The author identified a positive correlation between exposure to first-year experience and college readiness; however, because students could take the student development course at any point in their program, students were often exposed to necessary information too late in their college career. These findings pointed to an example of altruistic misguidance where CSU
Bakersfield provides well-intentioned first-year experience programs, but the format and requirements do little to help students due to their implementation.


A description of the collaborative design and implementation of a stand-alone journal club for undergraduate nutrition and dietetics students by a faculty member and a health sciences librarian. Over the course of three fall semesters (2016–2018), the instructors conducted five sessions for 23 students. Voluntary assessment surveys and written feedback revealed that students generally found the club helpful for reading and evaluating scientific journals. Because of the positive outcome, the authors planned to create a similar journal program for the master’s degree program at their institution.


It offers introductory guidelines and best practices for libraries in instruction, space design, outreach and partnerships to address the particular needs of first-generation students who may find academic libraries hostile. It includes research on first-generation student identity, background on first-generation students and their experience in academic libraries and guidelines for conducting site-specific surveys and interviews with local campus community members.


It expands on the work of Mari Accardi in “Teaching Against the Grain: Critical Assessment in the Library Classroom” to analyze the current language and practice of academic library assessment through a care-based lens. It explores existing practices of critical and feminist assessment along with the theoretical roots of assessment models in care-based fields, such as nursing, education and midwifery. It concludes by arguing for the necessity of grounding assessment efforts in our personal and professional values.


It reports on the development of a noncredit online metaliteracy course designed by the author and offered to online EdD students (n = 19) at Abilene Christian University. The study uses an exploratory, quantitative, quasi-experimental, one-group pre- and post-test design, and results reveal a significant difference between pre- and posttest responses. While the author structures the course using metaliteracy goals and objectives instead of the ACRL Framework to assess students’ IL skills, the author includes a table that maps metaliteracy goals and objectives to relevant frames in the Framework.


Measurement of the United Nations 2030 Sustainable Development Goal related to lifelong learning via interviews with (n = 6) academic library administrators in Ghana. All three participating universities are aware of these goals and provide support, such as IL training sessions, orientations, conferences and reading clubs. The authors recommend professional development on IL skills, greater ICT infrastructure and partnering with public libraries, the Ghana Library Association, academic faculty and the community to achieve lifelong learning goals.


Survey of (n = 138) academic librarians on past training and knowledge of IL, as well as implementation of curricular IL at their respective universities. It found that slightly more
than half had taken a course on IL during their master’s program, and 70% had attended IL professional development within the last two years. The majority (72%) did not offer IL instruction as a part of their university’s curriculum. Of those that did, more offered noncredit IL courses than credit IL courses. It suggested that Pakistani universities do more to integrate IL into university curricula and that professional associations should offer more professional development opportunities for librarians to stay current on their IL skills.


It examines the research information-seeking behavior of \( n = 233 \) social sciences master’s and PhD students at a university in Pakistan using multilevel total population sampling of 34 universities in Lahore. The results show that students find research information more often when browsing rather than looking with a specific research need in mind, but those who are looking for specific information tend to download or keep more of the information they find. These results may interest instructors who are interested in using different programs and tools to store their research.


Inductive thematic analysis of \( n = 51 \) qualitative reflective reports submitted by student teachers who participated in a national health institute program that trained students to facilitate IL and evidence-based practice workshops. Identified themes included: (1) students’ preference for active teaching and learning strategies, (2) students felt they gained something from their participation, such as communication, public speaking and/or teamwork skills, (3) increased confidence using library-based search tools. Confirmed that student tutors gain many benefits from participating in peer-to-peer training programs including an improvement in their IL skills. A variety of recommendations for improving the program are also included.


Qualitative study evaluating the Library Connectivity Project (LCP) between the Ghana Investment Fund for Electronic Communications (GIFEC) and the Ghana Library Authority (GhLA) from ten years prior that extends ICT. Using a digital inclusion model focusing on the northern part of Ghana through a set of \( n = 133 \) interviews, the authors find success in the LCP to remote communities (despite setbacks including limited computer access and inadequate funds) toward promoting IL and computer literacy. Major takeaways from the study include the following: funding is critical, support for staff and librarians for training is needed and extending the program to more areas.


Survey of \( n = 233 \) female undergraduate and graduate students on their library and related Internet use habits. It found that the population surveyed preferred finding information online than the library due to factors such as the time to find answers and physical distance to the library. Based on the results, the authors recommended increasing library orientation programs for new and existing students and increasing marketing of library resources and services.


A qualitative study that looks at the nuances of first-year student writing and IL learning from the perspective of faculty. It includes looking at barriers to student IL learning, such as
time, student motivation and general overconfidence in student abilities. The faculty perceptions of how students learn helps librarians understand how faculty approach teaching IL and how they think students learn and understand IL.


Observed (n = 7) undergraduate students’ search process for everyday health information needs. All participants began at Google, modified their search terms based on suggested results and were heavily influenced by rankings in the search results. Based on the results, the author proposed an assignment for composition students reflecting on how the search process influences their results in order to increase algorithmic literacy.


Study of (n = 97) Turkish English-language and literature students on their ability to perform IL tasks during an English-language interactive tutorial for the ACRL Framework frame “Scholarship as a Conversation.” Students were randomly placed into groups with no titles, English captions or Turkish subtitles, and screen tracking software was used to measure the time spent to complete a task and whether students successfully completed the task. It found that students who read subtitles in Turkish while listening to an English soundtrack performed better on each task, which showed that native-language instructions support IL learning comprehension and provided equal opportunities for English-language learners.


Postsession survey of (n = 1,144) students at a South African university on their perceptions of the usefulness of IL sessions and the teaching abilities of librarians. It found that most students strongly agreed or agreed that training sessions were useful and that librarians were audible, understandable and able to interact with students. In the additional comments section, students described wanting more instruction in their native language, more time for training, more hands-on practice and less information, which could be used to negotiate more class time with faculty.


It surveyed (total n = 93) paramedic educators and (n = 470) paramedic science students to develop a paramedicine integrated IL framework and evaluate perceptions of IL education and skills, respectively. Researchers found an inverse relationship between students’ low understanding of IL terms and the frequency at which those terms were used in assignment descriptions. The researchers articulated the importance of identifying oversight within education design and with the support of IL specialists.


A report presenting the connections between CIL and CBL in how narratives about Latinx and immigrant communities are framed and disseminated through class discussion and community engagement. The intentional collaboration created a demonstrable achievement in learning outcomes and a sustainable model for future partnerships between faculty and librarians. The course focused on an advanced level CBL course in Spanish, which deepens the relevance of CIL in its “real-world” application of reflection and analysis, as well as reinforced the value of knowing and speaking Spanish for students.

It explores the digital information usage of university students studying in a developing country, Cameroon, and how this relates to student success and satisfaction. Focus group with \( n = 10 \) graduate students as well as a survey \( n = 303 \) analyzes data using partial least squares–structural equation modeling (PLS-SEM). Results suggest that digital information usage is affected by information need, information-seeking strategy and available information resources and that students’ academic performance, ability to collaborate and satisfaction with their studies positively correlate to the ability to use digital information.


Interviewed \( n = 25 \) PhD and MA seeking graduate students about their information behavior practices as outlined in the Big6 Skills for IL. The researchers found 28 cognitive biases present in the research process with some biases present at multiple stages in the research cycle. Confirmation bias, bandwagon effect, availability bias and anchoring bias were the most frequently discussed cognitive biases though due to the exploratory nature of the research, the authors do not draw any conclusions about if these students were under the influence of these biases.


It provides a compact guide to evaluating and ethically using sources rooted in rhetorical analysis for novice researchers. It includes chapters on both academic and popular sources as well as rhetoric, research methods, the research process and academic integrity.


It presents findings from a 64-item questionnaire of \( n = 261 \) students at a small liberal arts college examining the impact of librarian–student interactions. While scholarship in this area tends to focus on IL sessions and reference interactions, this study focuses on individual interactions with librarians. Results indicate that librarian–student contact increases perceptions of librarian competence and availability, as well as increasing use of resources and elevated perceptions of the library as an inviting place. Positive interactions with librarians alongside instruction sessions thereby increase student IL competence.


It describes a collaboration between the library, writing center and course instructors to improve the integration of writing and research skills in a Doctor of Nursing Practice (DNP) program. At this institution, students respond positively to a librarian-led IL session and follow-up consultations with librarians and writing instructors. Similar projects may allow for more referrals between librarians and the writing center, as well as an increase in confidence and advanced research skills among DNP students.


Study of student source bibliographies to gauge effectiveness of library instruction for \( n = 12 \) sections of an oral communication course at a small private liberal arts institution. Results cite the impact of librarian consultations and faculty influence on sources students choose to cite in assignments. Results highlight the strengths of citation analysis in formally
reviewing instruction efforts, as it provides evidence that allows librarians to identify improvement areas and demonstrate impact to faculty.


It describes the application of the Understanding by Design (UbD) framework as it applies to one-shot library instruction sessions, which includes backward design (i.e. starting with identifying the desired results, determining acceptable evidence and planning instruction). This framework also asks librarians to reflect on big ideas, essential questions and enduring understandings to focus on the desired results of the session. It includes an example workshop plan and a worksheet for designing sessions using UbD and parts of the WHERE TO checklist for engaging students.


It explores the role of the academic reference librarian in identifying and remediating perceived skill deficits that may impact a student’s ability to conduct research during a reference interview. The author describes the tension between a librarian’s role as an educator and service provider who is present to assist users with their research needs and the limitations of time and resources that may limit the extent to which they are able to help a student. It concludes with reflection on the changing roles of librarians and librarian adaptability in meeting student needs.


It describes the development of a new source evaluation instrument by applying the threshold concept perspective to the ACRL Framework frame “Authority is Constructed and Contextual” and an established source evaluation tool. After developing the assessment tool, researchers assess the credibility of an example article by \( n = 154 \) undergraduate journalism students who have been exposed to the instrument. Results indicate that after exposure to the instrument, students use an increased range of authority indicators and more evidence while evaluating sources.


It conducted an autoethnography of their own experiences with IL as an undergraduate student, graduate student, practicing librarian, ESL instructor and researcher. It examined their own lived experiences through the lenses of adult learning theory and lifelong learning to illuminate facets of the IL learning process. It found that their lived IL experiences took place both individually and communally as well as in formal, nonformal and informal arenas. Upon reflection, the author suggested that librarians offer adult learners’ choices in how they approach their personal learning process (individual, group, format) and acknowledge the importance of information-seeking experiences outside of formal classroom examples.


In this study, \( n = 55 \) undergraduate engineering students in three core courses completed eight online discussion forums and took a pre- and post-survey of the course to determine if writing assignments increased self-motivated learning and student engagement. It found that students generally valued blended learning, feedback and reflection. Although engineering students often find writing and IL challenging, the intervention provided authentic learning experiences that connect theory to real-world applications and prepare students for the workplace.

It presents a comprehensive mapping between two core competency frameworks for medical education and the ACRL Framework, which is of particular interest for medical librarians and academic librarians who work with medical professionals in training. It finds that the core competencies from the medical community have gaps when applied to the Framework and highlights the difference in philosophy between the Framework’s set of interrelated concepts and the Core Entrustable Professional Activities and Common Program Requirements’ prescriptive approach to skills demonstration. It offers opportunities to advocate for including librarians in curriculum and assignment design to integrate IL instruction into evidence-based medicine education using a more holistic approach.


It argues for the application of care ethics, relational-cultural theory and critical race theory in the provision of individual research consultations. The author explains that as a site of one-on-one IL instruction, research consultations can be a powerful site of transformation and deserve the same scholarly attention as other forms of IL instruction. It concludes with suggestions on integrating theory into practice.


It explores the overlaps between the liminal spaces that writing centers and libraries inhabit between the individual writer and discipline-specific academic work. It argues that writing centers offer vital institutional support structures that underlie subject-specific practices as well as a pedagogic model that emphasizes process over product. Both writing centers and libraries are places that help students navigate processes and hegemonic academic performance. Situating writing centers in libraries supports libraries in their quest to be active incubators of good academic practice.


It describes a case study in which two librarians facilitated a multidisciplinary faculty learning community (FLC) on data literacy at a four-year college in the USA. In this FLC, faculty share data analysis tools used in their classrooms as well as for their own research. Products of the discussions in the FLC include the development of campus framework for data literacy competencies, the creation of a faculty toolkit for teaching data literacy and a pilot to integrate data literacy into library instruction for freshman student success classes. It argues that an FLC where librarians are just as much peers as leaders allows librarians to integrate into the culture of teaching and learning with disciplinary faculty at the university.


It reviewed (n = 17) articles to analyze syllabus review methods with a focus on IL. Syllabus studies helped identify what types of IL were being taught and courses where IL instruction was present, but also classes and subjects that did not have IL embedded in the curriculum but that presented opportunities for collaboration. The study identified seven themes, some of which include “better insight into collaboration with faculty and student instruction,” “mismatch between librarian involvement and IL indicators found in syllabi” and that “disciplines vary in kinds of IL instruction needed.”


It provides a sociocultural perspective and methodological frame for observing and analyzing IL in higher education and offers autoethnographic accounts to inform pathways
to teaching. In addition to introducing conceptual frameworks, it outlines several IL profiles of university students, which IL instructors will find useful in applying to their own contexts. Particularly interesting is the breakdown of students’ attachment beliefs around IL and how these sociocultural influences affect the way they learn and apply IL skills.


Survey of (n = 100) students in health professional programs at a campus within the City University of New York (CUNY) system regarding awareness and use of research guides in their coursework and for projects in research. It finds that graduate students were somewhat more aware of guides than undergraduates and that 97% of students who use the guides find them useful. It recommends that IL instruction include practical application of research guides through course-based IL sessions, research consultations and integration into the learning management system (LMS) in collaboration with disciplinary faculty to engage students with these resources.


A guide for undergraduate students designed to develop critical thinking and IL skills in both educational and professional settings. Each chapter is organized using the ACRL Framework and includes lesson plans and activities to support and supplement the research process.


It examines the possible skill gaps in science, technology, engineering and mathematics (STEM) undergraduate students and the inadequate preparation in reading and understanding of primary literature. Barriers in the development of the skills can be attributed to faculty and students both overrating their skills and ability and the lack of librarian intervention at both the undergraduate and graduate level, with librarians focusing more on the information-seeking and retrieval skills over reading comprehension of primary literature. It suggests active reading strategies to help librarians close the gap and improve those skills.


It describes the implementation of an online learning module for Australian undergraduate nursing students (n = 236) in their final year, utilizing video tutorials created in Camtasia, guided demos and tutorials in LibWizard, eportfolios via PebblePad and digital badges to motivate self-directed learning of CINAHL database searching. The majority of students (68.2%) recommend the module for further use, though some still desire direct synchronous instruction. Since this study does not measure IL skills of students, future projects could explore this possibility.


It describes the development of an instrument to measure the holistic competencies of undergraduate students, which includes IL skills. Findings from the exploratory factor analysis show that students think of problem-solving and critical thinking skills as closely related, which also includes the IL skills of finding and evaluating information. The study also finds a large correlation between all six scales included in the measurement, which are all closely related and intertwined.

Study \( n = 116 \) examining the effect of three process-based learning (PBL) instructional formats (flipped, online and blended) on the validity of the ARCS (attention, relevance, confidence, satisfaction) model for motivation and process-based learning outcomes using a standardized IL lesson plan. It finds all three methods validate the ARCS model and show no significant variance in attainment of outcomes, but blended yields the best outcomes for increasing self-directed learning and group collaboration while reducing negative learning attitudes. Libraries who are seeking to expand or further develop their online IL efforts will appreciate the problem-based learning -blended pedagogical approach as student-centered and beneficial to student engagement and learning satisfaction.


It recounts how academic libraries in East Asia leveraged young people’s interest and appreciation of Chinese calligraphy through the Calligraphy Connections Project. The cross-institutional, library-based initiative motivates young people to engage with historical texts by facilitating the creation of calligraphy artworks and sharing them with the public through exhibits and seminars. While it is not uncommon for libraries across Hong Kong and China to have calligraphy exhibitions, they typically feature work by prominent scholars/artists and rarely by students themselves. This type of project demonstrates how exposure to East Asian texts can facilitate cross-disciplinary learning for students and foster different skills among ethnically diverse peers.


It describes the development and implementation of a series of cocurricular activities centered on recitations of historical East Asian poetry and practicing Chinese calligraphy at an urban university library in Hong Kong. This program is held annually and includes students, faculty and librarians. The program focuses on exploring the aesthetic aspect of poetry and calligraphy while providing students with necessary IL instruction so they can connect with their own varying East Asian backgrounds.


Study of \( n = 504 \) junior and senior undergraduate students at a tertiary institution in Hong Kong on their IL self-efficacy and academic motivation. Researchers asked questions about subjects’ personal information and academic habits and administered the information literacy self-efficacy scale (ILS) and academic motivation scale (AMS). Results indicated a moderate positive correlation between IL self-efficacy and academic motivation and that scoring highly on the AMS and having a personal computer were both positively predictive for IL self-efficacy.


Study of the various skills of primary school teacher candidates and digital storytelling, which include IL. Findings showed that all participants utilized accessing and evaluating information critically at almost every stage of digital storytelling. Some also added not only thinking and evaluating critically, but also having to be aware of copyright, legal and other issues while finding and using information.


Case study at Newcastle University to investigate via interviews how five historians and three academic library professionals view and approach digital archival collections in their practice, especially in comparison with physical archival collections and in light of the
prevailing view within the field regarding digital selectivity and its effects on researchers and their research. It finds that participants acknowledge the reality of digital selectivity, remain aware of the limitations of digital archival collections, adapt in practice via personalized techniques and approaches (which they do not necessarily share with colleagues) and highlight how differences in career track greatly affect the research practices of historians. It recommends implementation of standardized usage metadata for digital archival collections, further collaboration between historians themselves and with library professionals to improve and expand IL skills of researchers and future research into the information-seeking behavior of historians and into the ethics of creating digital archival collections, especially with materials originating from underprivileged and marginalized groups.


It assesses the experiences of (n = 40) participating students and (n = 5) course facilitators in an advanced teaching certificate program at the University of the Free State in South Africa. In alignment with similar previous studies, students note a lack of awareness of research services and online materials available through the library, leading to minimum engagement with articles and other peer-reviewed resources to support their coursework. It notes that students and facilitators desire online IL instruction from the library and clearer pathways to find research support from the library’s website homepage.


It describes “anti-racism information literacy” in the context of the author’s research in theological librarianship, particularly in the development of the Antiracism Digital Library and Thesaurus and how anti-racism can be explored through the ACRL Framework. It provides insight into how IL combats “epistemic racism” embedded in academia and librarianship. It includes a sample exercise and vocabulary in the appendices.


Expanding on their previous scholarship and the work of Henry Giroux, the authors describe continued concerns over positivism and neoliberalism in library instruction. Although the ACRL Framework shifts the focus from skills to students, librarians are still pressured to provide one-shot instruction and justify the value of their work with outcomes-based measures. The authors urge librarians to make instruction meaningful to students and seek opportunities to connect instruction to students’ previous experiences and future endeavors in and outside of academia.


It explores how librarians influenced by critical library instruction and critical pedagogy can continue to develop and put into action the principles related to justice, EDI espoused by critical librarian scholars within a profession dominated by whiteness. It describes the author’s practices of critical self-reflection, critical actions and the community of praxis of women of color who support this journey. It emphasizes the deep importance for librarians committed to EDI principles of continuous and rigorous self-reflection and expansion of their understanding of critical library pedagogy and praxis.


Study of the development of digital competencies in (n = 229) undergraduate communications majors across four Latin American universities. The study employed both qualitative (focus groups, semistructured interviews) and quantitative (questionnaires)
research methods and discovered that while students exhibit high levels of digital connectivity, there were significant deficiencies in basic IL, awareness of academic search platforms and content creation. The authors identified and discussed conditions related to information, technology and communication that affect many Latin American students and aspired to apply these results to updating communications department curriculums to support digital skill development necessary for success as professionals.


It describes the dispositions and understandings related to IL, specifically the ACRL Framework frame “Authority is Constructed and Contextual,” held by Chinese English-language learners studying at an American public university. The results of qualitative vignettes and in-depth, semistructured interviews with students indicate that students utilize many different information-seeking and evaluation methods depending on the context. The authors suggest critical reflection on the part of librarians related to respecting cultural differences by recognizing personal biases and utilizing varying information sources.


It discusses the implementation of games and gamification for academic library services and IL instruction. Within the IL section, it includes four case studies for first-year experience, escape rooms, one-shot workshops and other non-course-related instructional programming. It offers information for building a circulating game collection, programming and outreach and a general overview of games in libraries.


A multistep assessment and intervention project consisting of a campus-wide and program-wide assessment of the IL impact on undergraduate students through an instructional intervention at the capstone level. It found that the intervention was overall successful, showing performance improvements in the targeted areas.


It analyzes and describes themes from focus group interviews (n = 14) and local upper-division students’ responses to selected questions from the Experiences with Information Literacy topical module of the National Survey of Student Engagement (NSSE). It proposes that though many librarians want to move beyond instruction sessions that focus on mere mechanics (such as database searching), undergraduates still value basic instruction, which suggests that librarians may need to function as both trainers and educators, perhaps by moving training to online tutorials and leaving face-to-face time to focus on more complex pieces of IL instruction.


Analysis of course descriptions of library instruction courses in LIS programs accredited by the American Library Association (ALA) for course content and whether it was required of LIS students. In total, 95% of the 57 programs offer at least one library instruction course; however, only three schools require the course. Given the prevalence of instruction requirements in academic library jobs, the author recommends that LIS programs require instruction courses.

Developed and validated a self-directed information literacy (SIL) scale to assess undergraduate engineering students’ self-directedness in using information for classroom work. Grounded in the work of Knowles (1975), the ACRL Standards and the needs of engineering students, the authors defined the scale on the following dimensions: recognize, seek, evaluate, apply, document and reflect. They analyzed the results of first-year engineering students (n = 1,608) and found it to be fair and valid across gender groups with slight variance between fluent English speakers and English-language learners.


It examines the activities of Singapore’s National Library Board (NLB) including digital and information literacy programs, social media activities and user participation in development of its services. This case study investigates the role of libraries in the ongoing development of a knowledge society in Singapore by examining the merits and success factors of its library system. It concludes that the NLB is an essential building block of Singapore’s knowledge society and Smart Nation, and how given its large member base and its services and programs, it is a vital component of Singapore’s national identity.


It explores the relationship between students’ access to information and their knowledge formation with a focus on social media as a source of information and increasing knowledge skepticism in an evolving knowledge economy. It describes changing modes and themes in popular science communication and the role of social media in increasing knowledge skepticism, particularly among students. Author suggests a focus on media and information literacy, particularly as students transition to college, as an essential means of reducing knowledge skepticism.


Within the context of the ACRL Framework frame “Authority is Constructed and Contextual,” explores how Knowledge Organization Systems (KOS) play a significant role in reproducing Western values and marginalizing indigenous counter knowledges. It emphasizes how Library of Congress Subject Headings (LCSH) and other mainstream knowledge organizations limit the retrieval of Native American materials. It offers approaches to teaching this frame within the context of Indigenous Studies, illustrating the use of EBSCO’s Alternative Press Index (API).


It applies Kuhlthau’s Information Search Process theory to pre- and posttest survey results from a sample of rural first-year undergraduates. Students received two IL sessions and saw a statistically significant improvement in skills on the rubric applied. Adopting micro-credentialing for first-year students and continued administrative support for IL instruction is recommended.


It examines the dueling democratization of information and Western/colonial biases inherent to Wikipedia and presents library programs with collective editing as opportunities for both IL practice and activism for marginalized and underrepresented groups and individuals. It details such a program at University of the Arts in London. It presents the creation of secondary sources, especially oral traditions and histories, as a way to correct and contribute to Wikipedia.

Description of the implementation of a research poster assignment at the University of Toronto where (n = ~700) second-year biology students from different courses prepared, planned, researched, created and presented together in groups-as-learning-communities to integrate knowledge from disciplinary subfields, exhibit effective communication and teamwork skills and demonstrate IL. It found that a majority of students met or exceeded expectations, as 76.2% of students scored 8 or higher out of 10. The scaffolded design of the assignment included campus partnerships with university librarians, who provided IL instruction via research guides, online quizzes and online consultations throughout the project timeline. Adapting this approach for other disciplines and larger groups providing additional support (e.g. libraries, writing centers) is recommended.

Ellenwood, D. (2020), “‘Information has value’: The political economy of information capitalism”, In the Library with the Lead Pipe.

It explores the ACRL Framework frame “Information Has Value” alongside Marx and other anticapitalist theorists as a starting point for developing a basic political economy of information capitalism, which can be included in IL curriculum. The author grounds this analysis in Fister’s presentation of three waves of information literacy, the third of which must focus on developing understandings of the structures, including structures of capitalism, which frame our access to and understanding of information. It presents open education, open access and alternative media as potential sites for resistance to information capitalism.


It introduces Project NAVIGATE – Information Literacy: A Game-based Learning Approach for Avoiding Fake Content and promotes game-based learning for IL. It reports study results (n = 423) to assess students’ IL competencies at universities in Bulgaria, Italy and Sweden to inform the design of IL educational games, which are now in the testing phase. It finds that students perform similarly in their overestimation of their IL abilities across institutions, particularly for evaluating and synthesizing information, and explicates how assessment of student learning through games can inform constructivist interventions to improve IL skill attainment.


Case study examining the effect of virtual library tours and an accompanying quiz within five English sections at the University of Wisconsin-Stevens Point Libraries to replace in-person library orientation. Quiz scores suggest that virtual tours adequately introduced students (n = 88) to the library and its library resources as a time-management saving feature and IL/outreach tool for library staff.


It proposes a framework for biochemical graduate students by creating a comprehensive blueprint of the development of various skills within the discipline. The authors link seven key skills, which include IL and critical thinking, to create a metaliteracy foundation to implement and support in the use of evidence-based learning, as well as to create a further definition of biochemical literacy.

Exploratory pilot using Lennart Björneborn’s framework, a classificatory system that measures serendipitous discovery, to analyze \((n = 12)\) first-year honors students’ first classroom experience with a digital archive. To analyze student reflections, researchers coded responses utilizing the three major factors of curiosity, mobility and sensitivity, each with three to four other subfactors. Findings offer suggestions to improve instructional design in archival and primary source instruction with a focus on how librarians can foster exploratory research.


It reviews each frame within the ACRL Framework to identify relationships between research and evaluation strategies and misinformation. It provides a close reading of each frame and how it relates to combating misinformation and suggests classroom activities that dovetail with each of the frames. It argues that while most librarians turn to the first frame “Authority is Constructed and Contextual,” librarians can and should holistically incorporate elements of each frame to adequately teach students how to critically engage with misinformation.


A qualitative phenomenological study on the IL experiences and ideas of new university students within three categories: the conception of digital technologies, the conception of knowledge and the conception of truth. Findings show a strong interrelated correlation between all three categories and point to the diversity of the concept of IL in relation to other types of literacy and how they coincide with other scientific disciplines. This study offers a new contribution to the concept of truth and truthfulness of information within an IL context.


It argues that critical librarianship practices have centered on patron facing activities, such as instruction, but have not shifted power dynamics between library colleagues. While critical librarianship may have changed what is taught in the classroom and the role of the student, changes are slower to other aspects of librarianship, which is troubling for BIPOC. The author provides a summary of criticisms of “critlib” including performative wokeness and exclusionary language practices. It concludes with the recommendation to extend criticality to interpersonal and management practices so as not to perpetuate gaslighting and microaggressions of BIPOC library workers.


It describes the results of a “train the trainer” approach to embed IL into disciplinary curricula through a faculty learning community at Purdue University. Using the action research method (i.e. the plan–act–observe–reflect cycle), the participant-researchers highlight their success in addressing IL with faculty, especially during supplemental and less formal meetings. It recommends strategic planning for when to introduce IL, offering professional development for librarians, building relationships with other units such as instructional designers and technologists, drawing practical applications of IL with faculty and connecting IL to other pedagogical theories such as backward design and self-motivation theory.


Examination of CIL theory and informed learning theory toward the application of “good” IL practices in higher education. Authors analyze the potential 20th-century European biases...
of CIL and informed learning, recommending that academic librarians contribute to IL practices through participation as scholarly practitioners able to refine theory through practice and vice versa.


A study exploring how second-year students were engaging with IL skills within the curriculum. The two-part study gathered data from a specific module and assignment as well as from a qualitative questionnaire. The findings showed that students were engaging with IL concepts that aligned with the curriculum and that they benefited from the learning and understanding of the unit overall.


It examines four faculty–librarian teaching collaborations in a higher education setting through the use of portraiture methodology. It notes the challenges and opportunities inherent in coteaching where differing levels of ownership and ability to develop curriculum may exist, the time and effort required, how colearning from one’s partner is an important motivator and the importance of clear and open communication. Recommendations for practice include defining course loads for librarians, incentivizing coteaching practices and embedding coteaching in the core curriculum, particularly for first-year experience and research-focused courses. It suggests future areas for research, including the effect of faculty–librarian coteaching on students, such as positive impact on engagement and student awareness that they are being taught IL skills.


It describes efforts at a community college library to integrate the ACRL Framework frame “Authority is Constructed and Contextual.” In one case, a class for returning adult students frames authority from the perspective of parents and the various sources of information they have to assess. In another, librarians organize a zine event for LGBTQ+ students and emphasize the importance of expressing one’s own identity and experiences. While many community colleges struggle to incorporate the Framework, the authors argue it can serve as inspiration for creative instruction and programming for the communities that use the library.


It investigates the validity of the Experiences with Information Literacy module of the National Survey of Student Engagement (NSSE), which from 2014 to 2018 received 60,631 first-year and 83,762 senior student responses and examines the relationship between IL engagement and self-assessed student learning. It finds significant correlation between IL and student learning as three factors (use of information, its evaluation and an emphasis on IL practices by instructors). It suggests that further research can dive deeper into the individual-student and campus-institutional factors that affect IL engagement, as well as look into sustained IL in terms of news consumption after graduation.

**Foster, B. (2020),** “Information literacy beyond librarians: A data/methods triangulation approach to investigating disciplinary IL teaching practices”, Evidence Based Library and Information Practice, Vol. 15 No. 1, pp. 20–37.

Study seeking to develop higher-order IL skills and campus partnerships based on disciplinary faculties’ response to a mixed-methods approach including a survey (n = 91), focus groups (n = 9) and assessment reports at the California State University Fresno. The author concludes that faculty understand and value the importance of IL with the majority of
IL learning coming from librarians. It recommends explicit methods of IL learning through pedagogical methods (e.g. standards, competencies, IL outcomes, etc.) to support higher IL skill development in students.


Case study of a California politics class including the redesign of the course materials and assessment of student learning. Students completed two group projects, one on a team of researchers and one on analyzing and applying policy; in each group students found, summarized and analyzed journal articles. Prior to the course, students rated themselves (n = 37) a 3 out of 5 on their ability to analyze journal articles, and after the course students’ self-perception of their skills rose a full point.


Using an electronic survey, it evaluates library orientation practices in special libraries and information centers. Themes from library orientation case studies, such as program redesign, partnership and tools and techniques, guided the development of the 15-question survey. Findings highlight the need for consistent orientation delivery approaches, with a particular emphasis on training materials that address trends and challenges within and across different libraries.


It describes how one librarian uses inquiry-based learning and complex clinical scenarios to help nursing students identify answerable questions as part of evidence-based nursing practice. The author also discusses integrating the ACRL Framework into course-embedded instruction, as well as using multiple modes of instruction, such as a flipped classroom approach, online modules and library clinics. Instead of focusing solely on competency-based search skills, the author works with students to improve the clinical questions that guide their research.


Description of the development and assessment (n = 18) of an IL program for healthcare workers in training to become registered nurses at a hospital in the United Kingdom. The program included a one-on-one meeting with a librarian on literature searching, a 2-h group session on critical appraisal and a 1-h group session on citation. Based on survey responses, students’ confidence in library research increased after the three sessions and free response comments indicated that although the sessions were helpful, students may need additional support, especially with critical appraisal.


This edited collection consists of 39 profiles of IL programs in academic libraries across the USA. Although an index of Carnegie classifications is provided, chapters are organized by program model types: teaching teams, subject liaisons, a combination of teams and liaisons, solo instruction librarians and credit-bearing courses. Chapters highlight the unique structure of each program and include practical information about the program scope, operations, marketing, outreach, assessment, pedagogical highlights and a profile of each IL coordinator.

Auditorium survey of IL skills at two Polish universities with (n = 319) history, journalism and information science BA, MA and PhD students, which was then compared to a previous Spanish study. The emphasis on the most important competency varied based on field, but notable findings included that students indicated high levels of self-efficacy (including in areas where their skills may actually be lower than ranked), students honed in on the skills that involve contact with patrons and the public, and they place less value and do not show high levels of self-efficacy in competencies that involve communication and dissemination of information. Neither survey group considered the library as a place where they gained IL skills and knowledge.


It discusses neoliberalism, meritocracy and related ideologies in the academy and libraries and specifically how their manifestation in the results of the 2016 election affected students, librarians and academic institutions. It addresses how typical one-shot IL instruction sessions using social justice topics without critical reflection on their relevance can cause trauma and discomfort among students without appropriate context, focusing on how to center students’ lived experiences and decenter the positionality and authority that IL librarians have in the classroom. It offers additional resources for inclusive pedagogy and teaching with trauma-informed practices.


Systematic literature review of English and Spanish-language open-access journal articles discussing flipped classrooms to teach IL. It describes the literature and finds that there are multiple ways that flipped classrooms are being implemented, including video tutorials, interactive presentations and videos embedded in training modules. It suggests that universities implement flipped teaching as a dynamic and innovative way to teach IL and enhance undergraduate learning.


It describes the experiences of two liaison librarians who develop instruction around cultural competence and cultural humility for a graduate-level dental medicine course. Lesson content and activities include the sharing of stories that illustrate the intersection between racism, poverty and historically underrepresented groups, access to health care, definitions of cultural competence and cultural humility and reflective activities designed to get students to think about their own cultural backgrounds as well as how they will practice cultural humility as future dentists. It recommends that librarians learn more about cultural humility or cultural competence to gain confidence in delivering instruction on these topics.


It evaluates (n = 16) studies of IL instruction in a systematic review and (n = 12) a meta-analysis of graduate and professional students. It finds IL instruction statistically significant in students’ performance on IL assessments after instruction takes place, but finds no differences in instruction modality, whether online, face-to-face or hybrid. It identifies a need for more published studies in this area, especially for online IL instruction and for nonhealth science disciplines, as well as more consistent description and data-gathering practices among researchers.

It describes a 12-year collaboration between the special collections librarian and history faculty to transform a one-shot session into an embedded, primary source research 10-week course. It speaks to the growing movement to standardize IL for archives and special collections and the benefits of collaborations between archivists, special collections librarians and liaison librarians. It concludes that the long-term embedded format works well for immersing undergraduate history majors with primary sources.


It analyzes readiness potential of the Russian modern university to implement digital education opportunities and create new professional competencies for foreign language teachers. It examines the application of digital technologies with a focus on the need to foster teacher skills. It concludes that foreign language educators should incorporate digital and information literacy in their efforts to foster an accessible information teaching environment.


Study of information practices in physical activities via a scoping review, discussions and observations, specifically in the field of classical musicianship. Students in this field sought information to acquire sheet music, background information about composers, how to care for instruments and videos and audio related to their field. Some participants revealed that in their search for freely available sheet music, they also acquired the knowledge to discuss the intellectual property rights and licenses attached to sheet music, which is IL that is specific to the field of classical music. How the students go about seeking information is heavily influenced by their community, including their instructors and peers.


Describes in detail an in-person, flipped classroom, noncredit bearing eight-week program in data management delivered to graduate students (n = 26) by the University Library at the University of Illinois Chicago during summer 2019. The author distinguishes her course from others through its design based on the thematic frames of discovery, infrastructure and sustainability, as well as its student research data approach to data management education. Based on the pilot’s success, the author is exploring adapting the course to an online format in order to make it accessible to regional campuses.


A collaborative longitudinal study that scaffolds the principles of IL and evidence-based practice in a senior level theory-based research course for nursing students. It found that by the end of the course, students had a deeper understanding and appreciation of nursing research and greater confidence in their searching and critiquing skills. The traditional practicum project was redesigned into a collaborative longitudinal scoping review project that students felt not only fostered their growth but would continue to grow and help them in their careers as nurses.


It assesses students’ problem-based learning in a constructivist learning environment (CLE) to understand the relationship between the CLE model and the development of research abilities in a BA thesis writing course. Seniors (n = 66) in Fall 2008 and juniors (n = 31) in Spring 2014 were evaluated on their productions within the course and interviews.
conducted throughout their learning. Findings support the use of the CLE for enhancing students’ learning outcomes as evidenced by an improvement in students’ research ability in a course employing a CLE model that provided additional instructional support, peer discussion and information resources.


Survey of (n = 44) English teachers at North China Electricity Power University to evaluate IL on the criteria of information awareness, information knowledge and information ability. Findings suggest that English teachers have a low level of information awareness, knowledge and ability, indicating a need for improved IL training and skills. The author suggests the following improvement strategies: improving focus on professional development, improving communication and collaboration between instructors on the topic of IL and modernizing information technology training.


It examines the use of the WeChat instant messaging platform as a tool for IL education in 39 university libraries across China. Based on data published on the libraries’ public WeChat accounts, findings reveal how libraries are using the app for IL instruction generally, for teaching IL courses, conducting training for freshmen students, posting information about IL lectures and sharing campus activities related to IL. It supports the continued and expanded use of WeChat for supporting IL by expanding course offerings and developing diverse or multimodal content in order to connect with students where they are.


Results from a questionnaire (n = 200) of faculty IL skills as described by the ACRL Standards. Faculty rated themselves as having good IL skills for questions related to information access, evaluation, use and legal issues. However, faculty were less confident with their skills for identifying information needs. The findings conflicted with other cited studies of faculty IL skills, and the authors provided suggestions for further research.


It details the development and content of an online, self-paced, course for disciplinary faculty to incorporate IL instruction in their curriculum. Using backward design, each of the six modules begins with a scenario and includes a mix of text, discussion and videos. As a self-paced course, attrition is a problem; however, it allows for faculty to receive instruction without competing with other campus multiday workshops. The author concludes with the insight that though time-intensive, the creation of an online course improves library expertise in instructional design and recommends creating faculty courses to other librarians.


A review of case studies since 1997 on a teach-the-teacher approach to IL instruction within the curriculum. In total, 26 case studies were included in the review and span activities such as a workshop series, learning communities, course redesign programs and other initiatives both incentivized and not. The impacts were varied depending on the program and included reaching a greater number of students, deeper learning and less librarian-led one-shot sessions. Based on the existing literature, the author concluded that it is not yet possible to determine the impact teach-the-teacher programs have had on faculty teaching methods or student IL skills, but the methodology is promising.

Mixed methods study on the use of Rain Classroom in an introduction to the library course at Tsinghua University in China. Rain Classroom is a free app for online teaching, and other similar tools may be of use in both one-shot and course-integrated instruction. The authors found that the use of Rain Classroom was well received by students and prompted higher levels of participation and active learning.


It introduces the ACRL Framework to political science faculty and provides practical examples of how faculty can address IL threshold concepts with their students with or without librarian intervention. It includes examples of activities that address “Scholarship as a Conversation” and “Authority Is Constructed and Contextual;” for example, one activity asks students to “follow the conversation” by looking up references and using the “cited by” feature in Google Scholar. It recommends scaffolding IL concepts throughout the curriculum to help students develop research skills.


It describes the development of a modular tutorial based on the ACRL Framework using LibGuides Content Management System to host videos, infographics, assessments and a final quiz with a certificate of completion. Topics include developing a research question, searching, evaluating scholarly sources, citation and research in the workplace. The authors recommend using minimal text, following best practices for accessibility, and reviewing analytics to inform future outreach and revisions.


Case study of a librarian–faculty collaboration using open pedagogy to introduce authority, copyright, open access and other scholarly communication topics in a doctoral education course, culminating in the creation of an open educational resource (OER). The authors expand on the theory of mutual adaptation in their analysis of discussion board forums and course evaluations to assess student learning in terms of adaptation on three levels (emerging, mastery and investment), as well as resistance and co-optation. Although some students rely on their prior knowledge and consequently misunderstand or misapply course concepts, the authors urge practitioners to use lessons learned from resistance to revise the curriculum.


It evaluated the applicability of expanding Wikipedia stub articles as a final project for an IL course. Due to the complexity and variety of skills necessary to successfully expand a Wikipedia article, student success was proportional to the integration of the project throughout the duration of the course. Despite an increase in student engagement with course content over the course of the study, researchers found an insignificant increase in students' scores from the beginning to the end of the data collection period.


It describes the values of the WI + RE program at the University of California, Los Angeles, and their student-led and grassroots approach to producing videos, tutorials, handouts and other instructional materials. After several years of the successful program, the
student authors reflect on WI + RE’s learner-centered pedagogy and process, which includes diverse and authentic student representation, feedback and user testing, prototyping, creativity, universal design and accessibility. It includes examples of the program’s award-winning and creative commons work that addresses common, hidden and contextual challenges with research and writing.


It reviews privacy scholarship from a wide swath of disciplines and summarizes key themes, definitions and theories and then provides a literature review of privacy scholarship within the field of LIS. Survey of (n = 80) US libraries using a newly developed survey instrument to explore current practices of privacy literacy instruction in academic libraries. It finds that while many librarians do address privacy literacy in their instruction, many barriers exist with the top three being a lack of instructional time, that it was not a priority learning outcome, and lack of expertise to teach about privacy. It advocates for privacy-centric initiatives and programs that place privacy literacy at the center, not at the periphery, of instruction.


It discusses the importance of self-regulated learning and universal design when working with students in the LMS, especially in light of increased online instruction during the COVID-19 pandemic. Three principles of universal design are particularly important to self-regulated learning online: motivation, coping skills and self-assessment. The authors provide examples of approaches that address these principles in their own work, such as student-centered scenario videos in an LMS tutorial and providing opportunities to reflect on students’ research progress and growth in a credit-bearing IL course.


It analyzed data from undergraduate focus groups (n = 107) and faculty interviews (n = 37) from eight different college campuses on awareness and concerns of automated algorithms. Students expressed ambivalence and resignation about algorithms, often representing contradictory feelings of joy over convenience and concerns about their influence. Personal concerns, personalized advertising and societal concerns, such as reinforcing inequalities, ranked high for students. Students used some defensive privacy practices, such as private browsers, but had engaged in few formal education experiences about privacy or algorithms in their college coursework, which was echoed in responses from faculty interviews. The researchers concluded with suggestions for professors and librarians on incorporating algorithmic literacy into IL instruction and recommendations for media companies to increase transparency about algorithm uses.


It summarizes each ACRL Framework frame and how it can be used to develop a critical consciousness around information. It uses the Right Question Institute’s Question Formulation Technique (QFT) to develop questions that emerge when one looks at the Framework through anEDI lens. It includes a list of questions that can guide classroom discussion and activities.

An analysis of student response times in regard to computer and information literacy within different groups of students according to various demographics. The results showed the process data can be used to explain differences in response times and that there are various differences in fast processing profiles, including having a significantly higher computer IL particularly in Germany and the Czech Republic. The authors noted that interpreting the data related to processing should also include the completion process data during testing.


Qualitative study addressing how (n = 15) undergraduate students experience IL while participating in a student creativity program at Diponegoro University in Malaysia. The authors analyzed data collected from semistructured interviews using thematic analysis and identified the three experiential themes: contributing to the community, brainstorming and Googlization. The study distinguished itself and its findings from other Indonesian studies by focusing on the experience and students’ conception of IL as opposed to evaluating student IL behavior.


Study of how IL and learners are positioned within professional texts using positioning theory and discourse analysis. The findings showed that the ideas of IL continuing to be skill-based are at odds with the librarian push toward constructivist thinking and learners are positioned as overwhelmed and drowning in information overload, which limits their capacity and ability to learn and engage with the concepts of IL. The findings represented only the early beginnings of IL discourses in higher education and could feed into the future revision of IL models.


It used the Delphi technique to determine what, if any, consensus exists between (n = 25) academic librarians in how they design one-shot library instruction. Participants in the study confirmed the hypothesis that their Master of Library and Information Science (MLIS) degree did not prepare them for one-shot instruction either because they were not covered as part of the degree plan or because classes related to instruction were only available to those on a specific track in their MLIS program. The participants indicated that professional development and training via observation and experience were the most beneficial in building their instruction skills as well as the opportunity to collaborate with peers. Participants also indicated that they used a backward design approach for one-shot instruction design due to the lower threshold of knowledge needed to apply backward design to instruction.


It analyzed business IL literature from 2000 to 2019 via a scoping review for authorship, method, theory, research topic, findings, impact and recommendations for practice. Of the 135 identified publications, the majority were original research articles studying undergraduates. Surveys were the most frequent methodology with a stark decline to the next most popular method, content analysis. Few theories were explicitly applied in the literature and the most frequently explored topics were faculty collaboration, teaching methods and assessment. The authors conclude with the recommendation for business librarians to further contribute to the literature on the ACRL Framework as applied to business disciplines.

Study of students’ information practices and use of librarian consultations for an experiential learning competition at Purdue University. Focus groups with ten students who participated in the previous competition revealed that when students could not find information about their specific ideas, they reached out to friends, family and industry experts to make evidence-based decisions. Students also reflected on how consultations with a patent and business librarian helped them at the beginning of their project to find information about a product’s uniqueness and marketability.


It provides a brief review of the literature (n = 14) regarding IL competency of healthcare students in navigating both clinical applications of professional literature and guiding patients in understanding consumer health information. It suggests a rationale to incorporate health-specific IL competencies into curricula for students in allied health professions to increase understanding and skills in evaluating information, particularly for evidence-based practice and assisting patients with navigating the vast quantity of health-related data and information available publicly.


Survey of (n = 12) academic librarians to gauge the state of IL in Pakistan, identifying current skill levels, practices, challenges and opportunities for growth. While respondents generally self-reported proficiency in IL skills and standards with a preponderance of face-to-face instruction, a majority (66.6%) believe that other faculty should be involved in IL instruction alongside academic librarians, and 83% agreed or strongly agreed that their respective institutions lacked policies supporting IL implementation. It recommends continuing professional development opportunities for academic librarians, updating institutional and national policies to support IL integration, faculty collaborations and dedicated IL courses for credit.

Hutto, T. (2020), Healthcare Faculty’s Experiences with and Suggestions for Students’ Information Literacy Skills as the Skills Pertain to Evidence-Based Practice: A Phenomenology Study, PhD Thesis, Northcentral University, La Jolla, CA.

Qualitative phenomenological study of (n = 14) clinical healthcare faculty members teaching at an undergraduate health program in the USA to analyze their current practices and recommendations around addressing student IL skills. The author identified common themes in faculty responses. One hundred percent of faculty reported that students struggled with translating patient findings into a research question and students lack the ability to synthesize the literature they read. Faculty believed the literacy skills undergraduates are most lacking to deliver individualized patient care are reading comprehension and data collection.


It examines the information literacy competency of (n = 138) LIS undergraduates in Nigeria related to fake news stories around the COVID-19 pandemic. LIS students demonstrate a high IL competency and a low susceptibility to fake news stories, though some students did not believe there was COVID-19 in Nigeria. This research supports previous literature that asserts that fake news does not thrive when IL competency is high, which leads the authors to recommend IL as a required course or skill for undergraduates.

It describes a correlation study to investigate the connection between information needs and information availability, especially digital information, through the library by lecturers (n = 665) in Southern Nigeria. Findings indicate that lecturers’ skills in locating information in addition to the availability of information affect digital IL. This study and others negate earlier studies published in 2013 on the topic on the limitation or lack of digital IL of lecturers.


Survey of (n = 103) Nigerian librarians and LIS educators at five state universities on their perceptions of IL, core skills, willingness to collaborate, areas of potential collaboration and perceived challenges. It found that definitions of IL and core skills were similar and that both groups were willing to collaborate to promote IL, enhance their teaching and advocate for the integration of IL at the university level. Despite these positive attitudes, both groups thought the other would be hesitant to collaborate.


It describes how early-career scholars in educational fields construct their research workflows, which includes their training and experience in IL and information management. Findings show that IL training varies; some experience IL education as undergraduates, others at the master’s level, and citation management was largely underutilized in their research workflow overall. Based on these findings of fragmented IL education and management, the authors recommend greater training and support in IL, including better software tools and subsequent training that support the research process.


It considers the evolution and changing trends of IL including critical and feminist pedagogies in regard to information access. It describes definitions, practice and exploration of these critical approaches, as well as examples of social justice and collaborative initiatives with educators and activists.


Study (n = 24) at Western Sydney University examining IL academic skills for business graduates as compared with workplace information skillsets desired by employers. It finds key themes of contextual skills (specific research strategies and tools), focus on business context, business acumen, current awareness, filtering and synthesizing information and people skills, suggesting that the curriculum be adjusted to include a broader range of information sources, provide training on common software and emphasize the use of data/promote data literacy. It provides examples of specific assignments and active learning strategies to address each theme.


It describes the two-year evolution of library instruction for pharmacy students from a lecture-based session on drug information to a faculty–librarian collaboration with patient case exercises for sterile compounding and patient medication profile review. The librarian also offers LibChat for point-of-need instruction during laboratory class time and plans to include short videos in the LMS in the future. It includes case scenarios in the appendices.

A compilation of case studies surrounding the ACRL Framework and how to incorporate it into IL instruction and teaching practices to preservice librarians for preparation in higher education. Chapter topics include strategies for mapping and scaffolding IL threshold concepts to different disciplines, using student learning outcomes with the Framework, and various case studies using the Framework to create or redesign programs.


Study of (n = 197) preservice teachers in Turkey and Sweden on their perceptions of 21st century skills, including IL, distance learning and communication. Teachers from both countries indicated that digital literacy was the most important skill, followed by critical thinking and problem-solving from Turkish teachers and communication skills and IL for Swedish teachers. The viewpoints of the preservice teachers were influenced by personal experiences with technology or experiences from their teaching programs.


It reflects on the role of cocurricular and extracurricular programming in academic libraries in developing students’ IL competency and scholarly identity, connection to the academic community on campus and overall critical thinking skills. It argues for different types of programming from orientation and social events to research talks and speaker series to engage students at different points in their educational path. It situates library programming as a core academic and pedagogic function of the library as another expression of IL instruction outside of course-based experiences.


It summarizes student news consumption vis-à-vis the trends of fake news and ideological news reporting. It shares four sample classroom activities that can promote discussion and evaluation of media in ways that advance media literacy. In particular, discussion-based activities and those that ask students to evaluate evidence-based claims can be a fruitful means to engage with students on this topic.


It expands on the previous work of the authors who examined research article comprehension skills in undergraduate psychology students using a journal article comprehension assessment they created by manipulating the amount of practice students completed. Findings show that all students improved their comprehension. The authors include a discussion on theoretical implications for how the amount of practice affects student learning, as well as practical suggestions to use in incorporating article reading into instruction.


Survey of (n = 380) Iranian students on their perceptions of the trustworthiness and expertise of online information in terms of ethics, writing style, website appearance, website identity, professionalism, accuracy, usability, interaction and overall credibility. The study included information about the validation and reliability of the survey instrument, which was found to be a consistent measure for the study constructs. Influential factors for evaluating the credibility of a website included usability, appearance and accuracy.

It compared IL scores of student research papers in two groups: a STEM writing class that received IL instruction \((n = 40)\) and a control group that did not \((n = 41)\). It found a significant positive effect of IL instruction on three dimensions of the Information Literacy VALUE Rubric. Discipline-specific IL instruction is offered less to science disciplines than other disciplines in the first year at 4-year and 2-year colleges and universities and could benefit from active outreach to STEM faculty by librarians.


It reviews the practice of feminist pedagogy techniques and methodologies in the IL instruction setting and in the assessment of students. Feminist pedagogy is an effective pedagogy for fostering critical inquiry and developing students’ IL skills. Methods include fostering inclusive dialogue, modeling searches that center women or their research, using faculty collaboration as an entry point, consulting with students on the course or one-shot content and assessment criteria and employing 1-min essays. It explicates challenges and rewards to feminist pedagogy and encourages librarians to experiment and use their authority to not only address IL skills but also to disrupt systems of oppression.


Results of a pre- and posttest of \((n = 53)\) kinesiology students’ experience with Wikipedia before and after completing a librarian-designed Wikipedia assignment. Prior to the assignment, the librarian was embedded in the course, attended all class sessions and led several class sessions on editing Wikipedia. In the pretest, most students had never edited Wikipedia before but reported using it in their personal lives and for academic research. After the assignment, students reported in the posttest that they believed their research, media literacy and communication skills had improved, with 17% of students responding that they were likely to continue editing Wikipedia outside of the assignment.


Randomized controlled trial of \((n = 64)\) occupational and physical therapy students to determine the effectiveness of PICO versus an alternative framework to identify search terms and retrieve appropriate results for recall and precision. The alternative framework, based on the information-seeking practices of clinical practitioners, asked students to identify eight elements instead of four: problem, intervention, population, outcome measure, time, context, professional stakeholder and patient or family stakeholder. After equivalent instruction with a control and intervention group, the researchers found no significant difference between the control and intervention group, indicating that alternative frameworks can be as effective.


It describes the application of game-based IL to create and assess an educational escape room designed to acquaint University of New Mexico first-year students with the library and make them more comfortable talking with librarians. The “Mystery Room” focuses on the ACRL Framework frame “Information Creation as a Process,” introduces students to common information formats and helps them make sense of when and why to use them, unlocking clues to solve the mystery in the process. Librarians find that the fun, low-stakes workshops are highly flexible and can easily be adapted to audience and subject matter, such as incorporation into the training of library student assistants. It provides a link to the lesson plan, flowchart and sample puzzles.

It reports findings of an action research project at Texas A&M University to determine which of four assessment methods (1-min papers, team process interviews, focus groups and questionnaires) would be the most effective for collecting actionable feedback to improve student research consultations relative to librarian time and effort. It finds that while team process interviews yield the most insight into student beliefs about what they learned from IL instruction, questionnaires are the best fit for the setting due to the ability to collect data, streamline distribution and integrate into existing workflows in an efficient manner. It endorses the action research method as well-suited for the unique contextual factors present in the academic library setting.


It describes the instructional design process and content for IL classes that teach students about creative commons licensing for a first-year writing class working on a multimodal assignment. While multimodal learning and production have been used in composition classes for 20 years, libraries have only recently begun to address this change. When multimodal production is a part of students’ assignments, they offer unique opportunities for librarians to teach students about copyright and how to apply open licenses to their work.


Two-part study examining the effects of IL instruction on Slovenian doctoral students in engineering with a questionnaire to evaluate attitudes of (n = 81) students after receiving IL instruction and an examination of the citations in doctoral theses and professional publications by (n = 65) doctoral students. It finds that 99% of students consider IL instruction courses relevant (and 48% extremely relevant), 90% consider them useful (and 44% very useful) and 94% consider their expectations met or better. Also it finds that students receiving IL instruction cite more references than those without, though the difference is not significant, and student age may play a factor in citation frequency. It recommends that academic librarians consider the professional experiences and information expectations of doctoral students in order to better aid them.


Study using original surveys (n = 1,600) and additional survey data conducted by consulting group KMDA.PRO on 700 representatives from 300+ Russian companies toward identifying the optimum software for organizing Massive Open Online Courses (MOOCs). A couple of key findings include e-learning as a new educational paradigm and the importance of professional qualities and competencies found in digital economies. Research indicates a need to adapt new labor markets and market requirements through the transformation of e-learning.


It discussed the “Fake news? Trans edition” workshop at a university in London, UK, to apply critical thinking and IL skills to discuss transgender issues, unconscious bias and media representation. Participants learned about common myths, facts that dispel those myths and analyzed how media headlines negatively portray transgender people and how information-seeking behavior can reinforce our views. Staff indicated that their knowledge of trans issues increased and that they were now aware of cognitive bias and biased media representation related to trans people and issues, which would allow them to critically analyze and reduce bias.

Survey of (n = 24) librarians who teach or consult with government sources in an academic environment. This research seeks to examine perceptions about the trust and reliability of government sources since the 2016 election. Findings reveal that partisan beliefs shape students' perspectives around government sources. Ultimately, librarians call for more IL tools to effectively evaluate government documents within the context of highly polarized political environments.


It describes the author's experience as a writing tutor and IL instructor with the Goucher Prison Education Partnership with a particular focus on the lack of equitable access to information resources available to incarcerated students. Despite the tight restrictions placed on students' access to information in a carceral context, the author is able to use the ACRL Framework to develop an engaging curriculum. It advocates for academic institutions to increase resources allotted toward prison education programs and for the inclusion of librarians in developing their curriculum and learning outcomes.


It introduces multiple types and uses of immersive and interactive breakout games, including how libraries can be used as engaging activities in IL instruction. It includes multiple resources and examples on how to create, promote and assess breakout games, which are all freely available.


Reflective essay on EDI efforts of an academic digital library in a graduate business school in Berlin, Germany, during COVID-19 transitions. Author describes the transition to an online environment during the pandemic and providing digital library services while communicating with library users on the ongoing and changing services. The “new normal” of the library to meet IL needs requires reaching more students, customizing to meet class content and going deeper with instruction.


An open-access book that summarizes pedagogical practices specifically in developing IL teaching and training. Each chapter contains one aspect of IL, pedagogical challenges and best practices. While the key audience is academic librarians, this could also be utilized by public library staff, as well as library school students.


It contextualizes the academic librarian instructional role around diverse and multilingual children’s book collections for education undergraduate and graduate students. Study measures education student identity and reading experiences (n = 180) and assesses student participation in IL sessions for diverse children’s books (n = 20). It finds that one-shot IL sessions should foreground exploration of diverse children’s books and authors over traditional library search and discovery activities in order to develop future teachers’ knowledge of and ability to recommend culturally sustaining texts; emphasizes the importance of intentional collection development to create a diverse children’s collection in the academic library.

It critiques the decentering and professional silence on white supremacy in the text Critical Library Instruction: Theories and Methods and in critical library instruction generally through the lens of critical race theory, emergent strategy and cultural and race-centered pedagogies. It describes the long history of white supremacy in the praxis of librarianship within the context of growing white-supremacist extremism and continued racial oppression in the USA. Through personal narrative and theoretical discourse, the authors advocate for the importance of centering the effects of white supremacy in library praxis, which aims to be critical as well as increase accountability in the LIS profession for recreating and upholding the structures of white supremacy in our institutions.


It describes how one university established a team within the library to provide information analysis services, including bibliometrics, to its campus community. Information analysis is used by campus stakeholders to support campus decision-making and the development of intellectual property. While university librarians often provide traditional IL instruction, there is a need to add more information analysis literacy instruction including topics such as information visualization and information synthesis to its curriculum.


Study of noncommerce university students (n = 382) in Lahore, Pakistan, to determine demographic and socioeconomic differences in financial information literacy via questionnaire. Financial information literacy knowledge is higher among men than women, students above age 26, students who attend private universities, students with a higher GPA, students who seek financial advice from family and students who have a family income above 90,000 rupees. The authors suggest financial courses for all students, regardless of discipline, additional financial literacy education opportunities and regular assessment of financial literacy of students.


It examines working definitions, methodologies, evaluation strategies and psychological factors in detecting fake news and facts in academic library guides. A review of (n = 21) library guides from academic libraries shows slight variations of defining “fake news” and “facts” with most guides using checklist evaluations. Results indicate further need for clarification on definitions and additional considerations needed by librarians when constructing fake news IL library guides.


It describes a project exploring the effects of incorporating micro-videos into a fundamental computer science course for nonmajors. The author provides that the IL skills of (n = 54) students at the institution is varied, affecting the ability of instructors to meet all student needs. It argues that introducing micro-videos allows students to study independently and promotes classroom interaction among students and instructors. Findings reveal that students are willing to view videos independently prior to class and that this modality can positively impact IL.

Results of a mixed-methods study assessing IL competency in a population of upper division undergraduates at a large, urban, research university. \( N = 772 \) research projects were assessed using the AAC&U Information Literacy VALUE rubric and results were evaluated along with \( n = 630 \) responses to the National Survey of Student Engagement (NSSE) Experiences with Information Literacy module. Results of this assessment indicated that though students’ IL competencies are developing as they progress through their degree program, benchmarks for where students are expected to be in upper-division courses are not universally met. These benchmark results are now being used to guide changes to IL curriculum within the library as well as campus-wide assessment.


It explores the efficacy of teaching Boolean functions for upper-level instructions based on a prior 2018 study on the same topic focused on lower-level undergraduates. The authors perform a comparison of simple versus complex searches \( n = 4 \) using 11 search engines and databases. The conclusion the authors draw is that the number of searches in simple and complex searches using Boolean functions are similar, although this analysis did not take into account the quality of the results, and that subject-matter expertise is of greater importance than search functionality.


Longitudinal survey of \( n = 123 \) librarians in the OhioLINK consortium on their perceptions and promotion of Google Scholar during library instruction. In the past 15 years, opinions have shifted from a mixed response with some cynicism of Google Scholar to more librarians embracing Google Scholar as a stand-alone or supplementary resource. Over time, more librarians linked to Google Scholar on their websites, database lists or LibGuides, but still felt that subscription-based and discipline-specific databases were a better use of classroom time.


It provides practical advice for making online library instruction accessible to a broad range of abilities using principles of universal design, such as making assignments and presentation materials accessible to screen readers, captioning videos and multiple forms of interaction with materials. The author expands on these principles to include methods of communication via the Internet, balancing accessible instruction with engagement and an expectation of evolving technologies. It concludes with four case studies of institutions that exemplify accessible practices.


Using the example of a misinformation campaign orchestrated by the Office of the Environmental Protection Agency administration under President Trump, it argues that IL instruction needs to place more emphasis on students’ individual social and emotional contexts when teaching source evaluation. Authors state that the “Authority is Constructed and Contextual” frame is heavily weighted toward fact-based source evaluation and indicators of authority, such as credentials and publication type, but in the posttruth era, librarians must also include student self-evaluation to surface how their own experiences and contexts inform their beliefs. Authors provide that the “IF I APPLY” method is a useful first step in integrating students’ personal dispositions and biases toward information into their critical evaluation of information.

It explores the affective consequences of poverty on IL practices and the development of IL competency at a large, open-enrollment community college serving a high-poverty region. Semistructured focus group interviews with \( n = 31 \) students cover their feelings about research both for academic and personal reasons. Students indicate they experience anxiety, shame, guilt, and other negative affective responses related to the pressures of engaging in academic research while navigating the oppression of poverty. The authors provide recommendations for best practices for assignment design and curriculum to address the results of this research.


Survey of \( n = 63 \) engineering undergraduates and \( n = 134 \) professional engineers exploring their information-seeking practices and confidence in finding information. Surveys were distributed to professional engineers through personal invitations and inclusion in a professional newsletter while students were recruited from two different engineering courses. Results indicated that while most students felt they have adequate access to information, they experienced frustration when it comes to evaluating sources, whereas most engineers felt that they lacked access to appropriate resources and relied more heavily on proprietary information from their companies.


A great resource for current and aspiring instruction coordinators, this book takes a macro-level view of building and developing instruction programs in university libraries. It presents strategies and techniques that can apply to various types of instruction programs and institutional contexts. Topics include developing leadership skills, conducting an environmental scan, creating a culture of teaching and learning through professional development, using the ACRL Framework to guide learning outcomes and program statements, advocacy, assessment and suggestions for addressing challenges.


A survey of students to gauge digital IL from Scotland, Ireland and Greece on the supposition that universities have yet to embrace digital competencies as a core component of literacy. The authors use the European Digital Competence Framework for Citizens (DigComp) and The Digital Capabilities Framework (established by the Joint Information Systems Committee or JISC) to assess students’ digital competencies for everyday and educational lives. The authors find a positive correlation between the ability to handle everyday digital tasks and the ability to develop digital competencies in education, calling on higher education to address digital competencies as core components of future digital citizenship.


Study and focus group of librarians at North-West University in South Africa to determine awareness of multimedia content available for IL instruction. The majority of librarians favor LibGuides as a tool but did not necessarily use other tools due to either lack of knowledge in using the tools or lack of infrastructure. This study suggests that librarians need training in the use of multimedia tools available to them for IL instruction.

It explores the implementation of a case-based learning (CBL) unit in a music therapy course cohort for \((n = 6)\) junior-level students, measuring their own perception of their IL skills, critical thinking skills and evaluating their own biases as they applied previous knowledge to a specific sample patient. It discusses the perceived positive effects of the IL instruction session on the critical thinking skills necessary to apply abstract concepts such as cultural competency and information from high-quality resources to propose a diagnosis and treatment plan that is clinically appropriate. It notes the close collaboration between the librarian and faculty members to create, teach and assess a constructive-learning unit that provides a high-quality educational experience for allied health students.


Survey exploring integrating social media into IL instruction and the librarians’ attitudes toward the ACRL Framework. It found that librarians believed in the importance of teaching social media competencies and that the Framework lends itself well to social media sites and applying those competencies related to social media sites can help make students better informed. However, only a small percentage of librarians were or are planning on incorporating social media into their IL instruction.


Systematic review of \((n = 30)\) empirical studies of visual literacy published between 2011 and 2017 to identify research methodologies employed and types of visual evidence documented in the studies. Analysis of the studies revealed use of quantitative, qualitative and mixed-method design methodologies and a high incidence \((n = 26)\) of image use, both analog and digital, in the research process. The author noted that the limited number of studies available is somewhat surprising considering the prevalence of images in social media and everyday life and argued that a lack of emphasis on visual literacy in LIS programs could be a contributing factor.


Quasi-experimental research design of \((n = 163)\) adult vocational educational undergraduates in Nigeria via a three-wave survey. It suggests that self-directed study interventions can help students increase their lifelong learning tendencies. The study also shows a relationship between IL self-efficacy and lifelong learning.


It details a mixed-method study analyzing the deference behaviors of academic librarians to other teaching faculty. Survey participants \((n = 139)\) displayed greater levels of deference in their mid-twenties to mid-thirties or if they were newer librarians, though high deference behavior was found across all demographic categories, including as a strategy of play. In focus groups, librarians discussed the role of faculty status, library leadership, MLS versus PhD, self-perception of expertise and fear of losing business play a role in their deference to faculty. Suggestions for LIS education, IL program managers and individual librarians are provided to minimize deference behavior.


Results from an ACRL Health Science Interest Group working group survey of \((n = 68)\) nursing faculty on their perceptions of the relevance of various IL concepts at each educational level, as well as their integration into the curriculum and familiarity with the...
ACRL Standards and Framework, to create a forthcoming Framework for Information Literacy for Nursing document. Although nursing faculty rated most IL concepts as relevant to their curriculum, they were not as familiar with ACRL documents as nursing education association standards. The authors recommended integrating expanded IL concepts into the curriculum by collaborating with nursing curriculum and learning outcomes committees.


It assesses whether the Big6 process is effective in the development of IL skills among college students at a four-year polytechnic university. The Big6 problem-solving model teaches information and technology skills; however, it is also applicable to the everyday information needs of students and critical in integrating information research and technology tools. It concludes that Big6 skills provide a foundation in higher-order thinking skills and can be applied across academic disciplines to teach IL skills to undergraduates.


Examination of two case studies to underscore critical appraisal and IL for undergraduate STEM students using RADAR validity and evaluative frameworks (i.e. currency, relevance, authority, accuracy and purpose or CRAAP). One case study covers COVID-19 and safety of hydroxychloroquine as a potential cure (the article has since been retracted) and the other covers face masks and safety in hospitals during COVID-19 (as an opinion piece). Authors conclude the need for contextual information and limitations of current scientific publishing practices to better imbue IL onto undergraduates STEM students.


It reflects on the personal identifiable information (PII) of students in higher education for a small, private college for the library’s IL assessment program and partnering academic departments. The authors provide arguments for collecting specific PII through its program by complying with ACRL standards and assisting faculty with student academic grading and assessments.


It presented findings of a systematic literature review (n = 20) conducted using the PRISMA standard on required digital literacy skills for graduates in the “Fourth Industrial Revolution” to determine employer expectations, institutional strategies for preparing students and ways to motivate students to improve their digital literacy. It found that employers do not expect new graduates to have all skills, but the motivation to self-learn what they do not yet know is the skill employers require most, in addition to analytic and communication skills. With regard to the role of higher education, articles reviewed revealed that developing digital literacy should not be solely concentrated in technology courses, but rather spread across the disciplines in the form of assignments that encourage students to develop their digital literacy. Finally, the research showed that students need to play an active role in their digital literacy development, and they need to feel empowered to do so by their educators and employers.


Qualitative research study via (n = 18) teaching evaluations and (n = 22) questionnaires at the University of the Western Cape School of Business and Finance that aimed to help
students overcome bottlenecks and designed teaching methods to create deeper IL learning via the Decoding the Disciplines Paradigm. The researcher mapped the instructor’s thoughts about their teaching practice to the ACRL Framework, and they discovered that instructors develop “information literacy habit of mind” in their disciplines, which lead to the librarian and instructor meeting to develop a teaching method that reflects the instructor’s thought process. The new lesson allowed students to demonstrate critical thinking skills, and most students indicated that they benefited from the lesson.


It provides an overview of introductory workshops offered on a drop-in basis to students at a community college. It describes the offered workshops and the logistics of scheduling and marketing of the program. It argues that many community college students need access to one-shot style classes where they can become “IL novices” and gain the basic knowledge and skills necessary to move on to the more advanced stages of IL knowledge practices and dispositions outlined in the ACRL Framework.


It explores how librarians can incorporate open peer review models into IL instruction and other student learning initiatives, such as student-run journals. Through a discussion of both blind and open peer review systems, the author offers that the practices and objectives of open peer review afford librarians a means through which to implement the ACRL Framework and particularly the “Scholarship as Conversation,” “Authority is Constructed and Contextual” and “Information Creation as Process” frames. It suggests that academic librarians are uniquely positioned to provide leadership in the adoption and understanding of open peer review by both faculty and students because of their expertise in scholarly communication and IL.


Systematic literature review that builds on a 2017 systematic review by Weightman et al. on student preference for delivery format of IL instruction in a higher ed setting. In the (n = 7) newly identified studies that compare at least two of the following: face to face, online or blended delivery formats, overall, students express no preference for delivery format and also find no statistically significant difference in student performance on outcomes in different formats.


A part of the ACRL Cookbook series that features brief, clear, IL lesson plans and activities stylized as recipes on how to teach critical thinking and evaluation of sources. The recipes are grouped into two parts: evaluating sources or consumption and synthesis or information production. Activities and lessons include understanding the scholarly spectrum, evaluating audience, analyzing different sources, such as Wikipedia or infographics and other current information evaluation topics.


It describes current assessment practices related to Goal 2 of the American Psychological Association (APA) Goals for Undergraduate Major in Psychology: Scientific Inquiry and Critical Thinking. Authors detail numerous assessment strategies and tools including sample
assignments, pedagogical approaches and surveys for assessing IL within the context of psychology curriculum. It includes future directions related to developing nationally standardized assessments, using institutional assessment technology and continuing to create new assessment techniques.


It provides a broad overview of how libraries can support online learners by facilitating access, creating communities and building engagement. Topics include standards, guidelines and best practices for implementing and assessing equitable online reference and instructional services, open educational resources, online mentoring and providing digital literacy and IL instruction. It includes a comprehensive bibliography of tools for support of online learning.


Employing a narrative framework, coauthors (a librarian and a faculty member) recount an IL session and evaluation model for students in the History of the Métis course in the Indigenous Visual Culture program at the Ontario College of Art and Design University in Canada. The article details the overlap of standard library instruction strategies and indigenous visual culture methodologies designed by the librarian to support students’ developmental understanding of Métis culture and history. It concludes with examples of students’ artist statements that highlight the evaluation rubric, the framework for which was the Seven Grandfather Teachings, a set of seven principles to guide people in pursuit of living a good life.


Survey of (n = 90) students in the Bachelor of Science in mathematics, physics and computer science IL program at the Aditya degree college library in the state of Andhra Pradesh, India. Results reveal that while a majority of the students are aware of circulation policies and services, fewer are familiar with electronic resources. The author recommends improving student knowledge of all library services and bringing subject experts into the IL program to teach specific skills.


It argues for the inclusion of publishing practices in IL instruction. It describes the Open Journal Systems (OJS) platform and its role in making open access publishing accessible to most libraries. It provides some suggestions for publishing literacy content including author agreements, author identifiers such as Open Researcher and Contributor ID (ORCID) and publication ethics.


Description of a research consultation program created to supplement and extend the reach of the existing IL instruction program. The program was intended to meet the needs of the students who attended IL sessions as well as distance education and nontraditional students. A follow-up survey was created to gather student feedback and support the growth and evolution of the program and responses were overwhelmingly positive.


Study analyzing data collected using King’s Learning Activity Survey to determine how librarians’ teaching identity is impacted by work demographics. Findings reveal statistically significant relationships between how institution types and length of employment inform librarian teaching identity development. Results offer opportunities for library leaders to
offer intentional and data-driven support for academic librarians as they develop their
identities and skillset as instructors.

dialectic study within the health sciences”, New Review of Academic Librarianship.

It evaluated health sciences PhD students’ IL proficiency through interviews with (n = 7)
students and (n = 5) advisors. Findings indicated that while advisors assumed students had
the necessary IL skills to find and evaluate information, some students felt unsure of how to
search and resorted to random and unstructured methods. Interestingly, while students and
advisors held positive views toward the library, they remained unaware of the services and
support the library could provide.

sciences: A review of scholarly articles (2009–2018)”, Evidence Based Library and
Information Practice, Vol. 15 No. 1, pp. 142–158.

Systematic review of (n = 7) research studies focused on the information literacies of PhD
students in the health sciences, which is largely an underrepresented distinct population in
LIS and education literature. Methodologies, sample sizes, objects of study and population
sizes varied, and larger trends could not be identified due to a lack of data about disciplinary
practices in the health sciences. In their conclusion, the authors called for health science
librarians to publish more research in peer-reviewed journals.

practices to improve library instruction: Using customized tools to support peer mentoring and

Description of three peer observation tools, Teaching Practices Inventory (TPI),
Classroom Observation Protocol for Undergraduate STEM (COPUS), Teaching Squares
and their applications within an academic library. The researchers modified the TPI to be
more applicable to a single session IL course rather than a credit-bearing course and also
made some adjustments to COPUS for IL instruction. After an initial pilot with eight
librarians, further adoption of these tools for peer observation and self-reflection on teaching
practices in the IL classroom is recommended.

Ocholla, D.N. and Ocholla, L. (2020), “Readiness of academic libraries in South Africa to
research, teaching and learning support in the Fourth Industrial Revolution”, Library

Study analyzes South African public university libraries’ (n = 26) preparedness to meet
the Fourth Industrial Revolution (4IR) requirements for an interconnected physical, digital
and biological society. It identifies 23 areas as trends in academic libraries, which correspond
with 4IR, and finds emerging trends such as makerspaces and robotics/AI and well-
established services such as IL and remote access to electronic resources. It urges improving
individual library response to emerging areas and improving web presence and visibility to
make academic libraries better resourced, accessed and used and suggests using the study as
a benchmark for measuring strategic improvement.

survey of final year undergraduates of library and information science in Nigerian

Survey of (n = 1,350) graduating Nigerian LIS undergraduate students on their perceived
IL skills. A majority of students are able to identify appropriate sources that meet their
information needs, but they struggle to paraphrase and cite information. They prefer online
sources, and they view the authority, currency, accuracy and relevance of information as
most important for evaluating sources.

students in Kwara State Nigeria”, International Information and Library Review, Vol. 54
No. 2, pp. 263–271.
It describes a study of information-seeking behavior of undergraduates (n = 261) in higher educational institutions in Nigeria based on the Currency, Relevance, Authority, Accuracy and Purpose (CRAAP) test with an additional criterion for accessibility due to regional peculiarities. Authors draw the conclusion that students prefer to search relevancy rather than authority when evaluating sources, recommending the need for undergraduates to improve their IL skills.


Based on University of Botswana’s position as a founding member and decade-plus participant in the African Network on Information Ethics (ANIE), the authors explore and present findings on how extensively the university has incorporated information ethics into its curriculum. It applies content analysis to courses offered in all 41 departments comprising the university and finds that the humanities offer the most courses with an ethics/morality component while the sciences do not offer any. Most courses that do offer ethics content predate ANIE and therefore do not incorporate its framework and principles. Authors recommend that the LIS department open courses to students from other departments and that the university offer university-wide information ethics courses similar to other general education offerings.


It argues for the creation and use of bibliographical teaching collections of medium-rare books in order to teach artifactual literacy, foster excitement over textual objects and serve as a form of touch-centered learning. It suggests that teaching collections also serve a dual purpose as special collections outreach. The author provides suggestions for the creation of a teaching collection including category suggestions, such as printing substrates, book binding structures, illustration methods, typography and content.


Study of the disciplinary-based IL skills of medical students in an Iranian medical university based on five components of the ACRL digital literacy framework. The authors conducted a survey (n = 298) where the digital-based IL skills of upper-level students were stronger than lower-level students, although the survey results showed skills were low overall. For students to succeed, the authors advocated for information literate students to carry IL into their professional development and practice.


An investigation on the implementation of hierarchical embedded service (HES) information education in Chinese universities for teaching IL. It found that students who are taught with HES (n = 50) score were higher than the control group (n = 50), which was taught with more traditional methods (86%–66%). The need for further research into HES is emphasized due to the relatively limited number of students included in this survey.


It investigates an alternative approach to resource guides to a more pedagogically sound direction, focusing on guiding students through the process of research instead of providing a list of potential and limiting resources. This restructuring of how guides are made and used provides students with support in understanding or navigating aspects of the research process and is made with the intent of making the research experience intuitive for novice researchers.

Study on the impact of Freshmen Learning Communities (FLC) on student engagement and learning outcomes related to IL, writing and communication within a criminal justice program. Researchers compared the overall engagement and achievement of learning outcomes between freshmen who participated in an FLC and those who did not. While improved outcomes were observed for some skills, differences in overall engagement with the course were not found between FLC participants and the control groups.


Description of how a Belgian medical/health science library provided COVID-19-related research through an information hub and shifted to remote services. Due to the pandemic, they received an influx of requests for research and data management support and provided IL instruction for students online via short videos, LMS discussion forums and interactive workshops. The pandemic highlighted the need for more funding, resources, staff and content expertise to meet user needs.


Used the Attention, Relevance, Confidence and Satisfaction (ARCS) model and the Instructional Materials Motivation Survey (IMMS) to evaluate \( n = 393 \) first-year seminar students’ completion of a four-part micro-credentialing course. In addition to survey results, the researchers analyzed final reflection essays, which revealed that students expressed more positive connections to relevance and satisfaction than in the survey. Although the assessment methods had limitations, the researchers planned to modify the course to use examples of career readiness to encourage learning transfer and partner with course instructors to build both student and instructor confidence in the micro-course.


Two-part survey distributed in the spring of 2016 examining faculty practices at two research universities with the purpose of identifying perceptions and collaboration strategies that foster IL instruction partnerships with librarians. It aimed to examine the nature of faculty–librarian relationships by collecting data on collaboration methods and soliciting comments on what motivates or hinders partnerships. Results indicated that more experienced faculty reported a greater range of collaboration methods and that most collaborations involved in-class sessions followed by an online course guide. Data from study highlighted setting instructional priorities and revealed why some faculty refrain from collaborating with librarians.


It explores undergraduate students’ understanding of financial conflicts of interests (FCOIs) and setting a baseline of instruction based on faculty and librarians’ expectations at 100 randomly selected higher educational institutions. Using a mixed-method study of quantitative surveys \( n = 149 \), semistructured qualitative interviews and pre- and posttest design, the author concludes that instruction on FCOI is not often included as part of coursework of IL sessions. The author recommends a specific “science for nonscientist” course or other science literacy collaboration to better evaluate research and funding sources.

Development of a questionnaire to measure perceived IL levels in teachers and students called Mobile Information Literacy Education Attitudes Perceptions Prospecting Students (MOBILE-APPS), especially in regard to mobile technologies. The questionnaire was based on the ACRL Framework and design in collaboration with experts in the field, and the authors validated the survey through two iterations of the questionnaire (n = 44, then n = 105) and qualitative validation in two focus groups.


Survey of (n = 749) English, translation studies and education students at two Spanish universities using the IL-HUMAS questionnaire. Students responded that communicating in public, writing a document, abstracting/summarizing information and recognizing an author’s ideas were the most important IL abilities. English majors rated IL abilities overall as less important compared to the other majors in the study. The authors recommended that IL instruction be situated within a discipline to increase student motivation.


It analyzed the literature on IL and mobile applications using bibliometric visualization techniques. Researchers retrieved articles from the Scopus, Web of Science, Eric, Lisa and LISTA databases for 2006–2019 and then classified these into 15 main topics. The results in VOSViewer highlighted increasing interdisciplinarity and clustered subtopics for IL and mobile apps. The researchers provided cluster maps and connections as well as suggestions for further research.


It describes the design process and validation of the MOBILE-APPS instrument to measure educators’ perception of using mobile technologies in the teaching and learning of IL competencies. Through a mixed methods analysis (n = 43), it finds high internal consistency and reliability making the instrument a valid measure to be applied in higher education and secondary contexts. It includes the finalized questionnaire, and librarians may find it useful for gauging librarian/faculty readiness for mobile IL instruction methods, as well as informing future design choices for IL instruction.


It analyzes two student standardized datasets (n = 102) and faculty interviews (n = 5) at a community college to reveal a significant, positive relationship of moderate strength between critical thinking and IL and identifies eight critical thinking subskills significantly positively correlated with IL including analysis, inference, evaluation, induction, deduction, interpretation, explanation and quantitative reasoning. It explores faculty perceptions related to integrating IL and critical thinking and supports scholarly speculations that IL could be a powerful tool in teaching critical thinking.

A solo business librarian increased the delivery of IL while emphasizing the usefulness of IL in the context of workforce development to a first-year experience program for business students. The author described the two badges and badging technology integration, as well as content of the IL modules embedded in the campus LMS. It offered a range of advice for other librarians interested in developing disciplinary IL badges, such as the importance of a strong collaboration with discipline faculty to increase the success and adoption of badging by targeted students.


It describes Wikimedia and its projects, including Wikipedia, as a publicly accessible online resource first imagined by early Internet architects. It uses Leeds University as a case study of how they contributed to Wikimedia Commons by identifying media from research data repositories. The authors further advocate that higher education should engage with Wikimedia as it addresses IL through copyright, open access and community engagement activities.

Powell, C. (2020), “Information privilege and first-year students: A case study from a first-year seminar course using access to information as a lens for exploring privilege”, In the Library with the Lead Pipe.

Case study on teaching information privilege in a first-year credit-bearing class. It identifies themes in what students learn about information privilege and assess the overall impact of the class. The author offers recommendations for noncredit-bearing classes and how to best incorporate information privilege discussions in deeper and meaningful ways.


Analysis of the ACRL Framework and the National Communication Association’s (NCA) Learning Outcomes to determine commonalities between the two combined with focus groups and interviews of academic librarians and communication studies faculty. All participants agreed that overlap between the two existed, though the Framework was characterized as more conceptual while communications learning outcomes were characterized as narrow in applicability. The main two themes that emerged were “concept into practice” and “communicating information into society” with participants discussing ideas about the limits and potential of the synthesized guidelines, assessment and how librarians and faculty can work together.


It analyzes and synthesizes original research on IL instruction practices in undergraduate nursing courses. Across 26 articles, it finds themes of collaboration, course integration, linking to assessments and student confidence and identifies challenges of amount/context of instruction, time and effort and connecting with learning outcomes. It recommends librarian involvement throughout and integration with the undergraduate nursing curriculum to improve IL outcomes. It suggests further research into specific learning activities and analysis of completed student work to assess IL skill attainment.


Study of how validation theory affects the student scholar identity of first-year college Latinx students at a mid-sized Hispanic Serving Institution (HSI). Using critical pedagogy as a framework, librarians aimed to equip novice researchers with an inquiry-based model of the research process, develop students’ agency and foster a sense of belonging in the academic community. Given the feedback from a revised curriculum unit used in the study, librarian
researchers stressed the positive impact of culturally relevant IL instruction to the success of first-generation Latinx students.


Assessment of a year-long pipeline program at a community college for students interested in pursuing careers in the health field that provided assistance in developing IL skills to increase graduation rates toward 4-year colleges. Programming consisted of academic and professional workshops, which included two librarian-led IL instruction sessions. Findings showed that the academic and professional skill building elements were key components in the program's overall success.


Through personal narrative, the author describes challenges related to teaching IL in higher education, such as library anxiety, librarian stereotypes and perceptions of being a service provider, imposter syndrome, emotional labor and collaborating with faculty. Each chapter ends with reflective questions for readers to consider their own experiences. It concludes with intentional communities of practice as a way to share knowledge with others and revitalize teaching practices.


It compares threshold concepts in both engineering and writing studies with IL curriculum after a failed implementation of the framing of threshold concepts in engineering. It uses the analogy of diamonds and cubic zirconia to represent hierarchical or horizontal structures to illustrate how different disciplines might differentiate and implement these concepts into their curriculums and as a way to frame ways of thinking and practicing.


Case study of (n = 20) first and second-year students in computer and education technologies teaching to determine information search strategies in relation to argumentation activities, metacognitive skills and how the two relate to each other via screen recordings and interviews. Using argumentation activities was effective in informing and shaping the student’s search strategies, and they used metacognitive strategies to come to their conclusions about each source. Argumentation activities can benefit students in planning their search process and analyzing their results and may contribute to the development of a student’s IL skills.


Case study mapping instructional content in (n = 15) email reference responses to the knowledge practices and dispositions of the ACRL Framework. Notably, the author’s institution uses a template to standardize responses to in-depth research questions and uses email reference as a teaching moment. Templates address “Searching as Strategic Exploration” the most, but either the template or additional content addresses all frames.


It describes the need for and process of Massive Open Online Courses (MOOCs) as an IL tool. Authors briefly describe the different types of MOOCs (automatic and connected) before
outlining the design process for implementing a MOOC at the Universidad Viña del Mar in Chile to teach information seeking, selection and evaluation of information sources and ethical use of bibliographic rules. At the time of publication, the authors’ MOOC course has not been implemented.


Description of the process, objectives, observations and outcomes of a collaboration between an upper division undergraduate contemporary art history course at Missouri Western State University and the Spencer Art Reference Library in the Nelson–Atkins Museum of Art in Kansas City, Missouri implemented in 2018. The collaboration introduced the course of primarily art majors (n = 34) to an archive of artist files of local artists maintained by the Spencer with the objective of providing students with an opportunity to gain experience evaluating and synthesizing various kinds of information, including archival collections, while learning more about individual regional artists. The experience of researching local artists using archival documents dismantled some of the students’ preconceived impressions that the study of art history was irrelevant to their careers as practicing artists. The authors additionally recognized that evaluating the Spencer artist files helped students realize that important artistic production happened in their own community and not only in large metropolitan cities.


It uses semistructured interviews with (n = 15) undergraduate transfer students at three US universities to ascertain difficulties they experience in research-intensive courses and what strategies they use to move through those barriers in their research processes. Some students tend to use resources that offer the least resistance to access (i.e. Google or databases introduced in previous IL encounters that may or may not be applicable for their new information needs), while others have a more nuanced understanding of the research process and take more time to select resources. Participants note that prior experience with research at other institutions makes them feel at an advantage to their peers when conducting research using library and other resources, but experience challenges in adequate support during orientation and understanding what professors’ expectations are. Providing asynchronous resources during orientation and highlighting the added value that IL instruction and research consultations can provide can help in supporting this student population.


Study of using Padlet in a one-shot library instruction session to increase student engagement, which can be especially challenging in a large lecture hall class. The author used an activity where students examined different types of sources that addressed a research question and added comments to different columns for each source in Padlet. It found that an average of 47% of students in the class added comments and the activity served as an icebreaker to generate discussion.


It describes the author’s approach to teaching digital literacy within two university-level physics classes by integrating a classroom activity that is project-based, integrates technology and facilitates an active learning environment. By analyzing the projects students produced, 20–23% of students demonstrate very good IL skills while 64–69% of students demonstrate good IL skills.

It argues for scholars in the humanities and social sciences to collaboratively write book reviews with librarians and undergraduate students as a strategy for learning the ACRL Framework frame “Scholarship is a Conversation.” The authors describe several iterations of the book review project with refinements along the way, such as integrating a librarian to provide citation instruction. The best book reviews from the project situate the book in a larger conversation by comparing it to previous scholarship and other literature on the same topic.


Reflections on converting an in-person library instruction course for LIS students to an online course mid-semester due to the COVID-19 global pandemic. The author provided discussion posts and examples of assignment changes such as the creation of videos and the use of Zoom for those experiencing a similar conversion.


It describes the importance of integrating the multiple literacies that burgeoning adult literacy learners possess into IL instruction. It provides an eight-step process using photovoice, a tool originally developed for participant action research, to leverage multimodal literacy using photographs and oral and written expression as an outlet for adult learners’ unique perspectives. It suggests that research and practice infrequently recognize or permit more complex and nuanced meaning making when considering the literacy skills of adult learners.


Study (n = 97) at Broward College examines English-language learners’ (ELL) beliefs about and attitudes toward IL to solve an academic problem before and after an IL intervention. It finds statistically significant differences in beliefs for groups who identify as ELL or have different sociocultural backgrounds than native US students, notably that nonnative students are less likely to state they are uncertain or anxious about performing IL skills than their native-born peers. It concludes that learners will benefit from individualized and scaffolded assignments and IL instruction to alleviate anxiety and overcome learners’ overestimation of their IL skills.


Survey of (n = 155) postgraduate students in Pakistan regarding awareness and knowledge of IL concepts, previous training in IL skills and desirability toward IL programming. It finds that while 94% of respondents expressed a need for IL programs to increase academic success, only 12% ever received IL training. It calls for the implementation of formal IL training in academia.


It examines the impact of mobile IL learning tools on student IL outcomes via a mixed methods study of mechanical engineering undergraduates (n = 47) at the National Technical University of Ukraine. It finds that mobile learning strategies are of increasing importance to IL instruction and that employing a variety of tools geared toward specific frames improves IL skill attainment. It recommends communicating clear learning outcomes, providing
immediate constructive feedback, utilizing different types of data presentation in activities and adjusting activities to meet students where they are for the best outcomes.


It traces the historical progression of IL definitions from 2000 to 2015, prior to the 2016 adoption of the ACRL Framework. It focuses on first-year IL instruction within the period that corresponds to the influence of the ACRL Standards on the work of LIS professionals and IL instruction scholars. The development of IL definitions is examined using the three major categories based on the 2013 Addison and Myers IL framework.


Formative assessment on the use of augmented virtual and mixed reality (AVMR) technology to create a virtual library tour for graduate students returning to college after some time aimed at reducing library anxiety by familiarizing students to the library and library resources before arriving on campus, as well as reducing barriers with staff. Findings showed that the tour improves students’ self-perception of competence in using the library. Anecdotally, students noted that they wished this sort of tour had been available when they first began college and that it would assist new students.


Survey of (n = 59) Portuguese higher education libraries on the impact of the Recommendations for Higher Education Libraries in Portugal. Most of the ten areas showed movement toward implementation of the policies with “supporting editorial projects concerning academic and scientific publications” being the least successful area. The majority of respondents (70%) indicated that their institution had developed initiatives and programs to respond to the guideline of “reaffirming the importance of information literacy skills in the academic community,” but there is a lack of recognition of the importance of IL skills in the curriculum.


It reviews criticisms of the ACRL Framework frame “Authority is Constructed and Contextual,” noting that some librarians have interpreted the frame through a constructivist view that encourages students to see opinions and individual experience as equal to expertise or truth. In contrast to this approach, the authors provide examples of how librarians might instead use a phenomenological or disciplinary framework for analyzing evidence and methods that are appropriate to the context of study, such as finding patterns of experience in primary sources or evaluating the research methods of a scientific study. It recommends scaffolding instruction with nuanced checklists and modeling of more advanced critical thinking skills for students.


Mixed methods study of higher education librarian’s CIL practices and instruction in British Columbia, Canada, via content analysis, surveys (n = 22) and interviews (n = 13). While most of the librarians understood the concept of CIL or had exposure to it, most felt that they needed a better understanding of how to apply CIL to their practice. Barriers to implementing new approaches to IL include time, resistance from faculty and sometimes other librarians and resistance to change.

It explores potential gaps in CIL through library pedagogy and IL practices. The author describes the lack of awareness and application of theory toward library practices, the ACRL Framework as an explicit attempt to incorporate educational and learning theories into developing IL practices. Some of the barriers to implementing pedagogy and theory include institutional culture and lack of time for librarians to develop new theories and approaches.


It features case studies of IL instruction involving several high-impact practices (HIPs) such as first-year experiences, internships, service learning, collaborative assignments, writing-intensive coursework and undergraduate research. It offers suggestions for how to begin engaging with HIPs in local IL instruction contexts.


It reflects on the role of critical pedagogy in LIS since the publication of Critical Library Instruction: Theories and Methods. The author applies Sara Ahmed’s definitions of institutionalization and argues that critical library instruction has been institutionalized and legitimized in some ways, but because library instruction is inherently gendered and marginalized it is still at the edges of the profession. This marginalization can allow for further “trouble” and criticality despite its institutionalization.


A study examining the short-term effectiveness of IL training in undergraduate students using an IL self-efficacy questionnaire before and after a 3-week IL training. Findings showed that IL scores were significantly higher after the training, which indicated that short-term IL interventions are an effective means to promoting IL to students. This study highlighted the need for greater IL integration in Cambodian universities.


Volume in a wider series addressing student engagement in higher education with an international scope. It presents case studies for improving IL through course-based instruction, partnerships with other campus centers, faculty–librarian collaborations, workshop programming and assessment of library programs and services. It offers ideas for incorporating evidence-based practices into IL instruction for engaging students in the context of specific implementations.


A description of the methods used by the authors, who are librarians at the University of Cambridge, to redesign copyright educational materials for their colleagues. Having identified both access (due to COVID-19 restrictions) and time limitations, the authors employed the model of “life hacks” to increase staff engagement with their copyright literacy materials. The new formats, which included brief videos of roughly a minute, text that could be read when audio wasn’t possible and brief static visual resources, were easily shared on social media and broke down complex copyright concepts into assimilable amounts of information. One challenge identified by the authors was balancing the need to include precise explanations when discussing an issue as complex as copyright with the sparse visual design used for social media platforms such as Instagram.

Evaluation and study on the use of mobile Chromebook labs as an alternative to traditional computer labs, drawing inspiration from K-12 use studies. In a study of three campuses at Penn State University, \( n = 185 \) student surveys during library instruction sessions showed that Chromebooks were easy to use for undergraduates; however, students still preferred a traditional desktop or laptop to Chromebooks. Additional studies are needed to explore the full capabilities of Chromebooks and extensions for individual institutions.


Mixed methods study of \( n = 431 \) Turkish first-year medical students’ achievement, performance and efficacy perception level after a 4-h IL session with a lecture and lab component. Assessments included pre- and posttests, the IL scale, grading rubrics and a feedback survey. It found that students had higher levels of achievement, performance and efficacy after the session, and feedback affirmed that students found the training satisfactory.


A comparison of three cohorts of students (honors students, average GPA students and Center Scholars) at a small liberal arts college on an IL skills test. Results of a pretest showed similar results for students with an average GPA (\( n = 571 \)) and Center Scholars (\( n = 85 \)), a program targeting low high school GPA students. The honors students (\( n = 60 \)) scored significantly higher on the pretest, especially on questions such as locating a book’s call number in the library catalog. After receiving IL instruction, Center Scholars did not make significant improvements, and for some questions declined compared to the pretest, while average GPA and honors students improved on the posttest. The authors provided suggestions for future research and exploration for low GPA students and IL skills.


Case study of a course-based undergraduate research experience (CURE) in a STEM course that integrated computer programming, data analysis and IL. Students used Mathematica and the Wolfram language for computational exercises, analyzed climate change data and discussed finding reliable sources about climate change. The course also included peer mentors and student presentations at a regional conference, which contributed to an overall positive response to postclass student surveys.


It describes the methodology and results of a phenomenographic qualitative study exploring how students in the departments of social work, nursing and child studies at Mount Royal University in Calgary, Alberta, Canada, experience IL in their practice placements. Findings reveal that students engage in negotiation of IL in workplace settings rather than directly applying it and that their experience of IL is tied to the help they were providing. The author recommends evaluating IL for health and human services students to ensure that instruction amply addresses the contextual, cultural and interpersonal aspects of IL to sufficiently prepare students for translating IL to their professional placements. It provides recommendations on ways to better tailor IL instruction for preprofessional and vocational students in these fields.


Through a social constructivist and critical pedagogy lens, it presents case studies (\( n = 6 \)) that examine the perceptions of collaborations between teaching faculty and academic
archivists to include primary source instruction in undergraduate courses. It finds that collaborations yield fruitful benefits related to archivists’ and instructors’ roles and are effective in achieving constructivist learning outcomes including critical thinking, historical empathy and expanding career insights. It recommends aligning primary source instruction with the ACRL Framework in addition to situating instruction within the archives, scaling projects to match students’ level, engaging in reflective practices, exploring professional development opportunities and raising the visibility of primary source instruction.


Empirical assessment of IL competency levels of (n = 520) social science researchers. Data collected through a questionnaire was analyzed using descriptive and inferential statistics, and respondent IL competency levels were measured using the Performance and Competency Scale. Findings highlighted the importance of proper planning and implementation of IL activities for developing information skills.


Assessment of the information evaluation skills of (n = 520) doctoral students across various social sciences from four universities in Delhi using a questionnaire based on Competency Standard 3 from the ACRL Standards. It found that 66.9% of respondents demonstrated good or better levels of information evaluation skills, 13.8% demonstrated fair, 8.5% demonstrated below average and 10.8% failed. Women performed slightly better than men, and students in economics performed the best out of all the fields. Increasing academic librarian collaboration in curricula and further implementation of IL instruction to increase information evaluation skills is recommended.


It presents the author’s reflections on her work with open educational resources (OER) through the lens of critical and open pedagogy with a renewed perspective. Resisting the replication of banking education with open textbooks, instructors can use OERs while also embracing critical pedagogy. Drawing from the 2008 Cape Town Open Education Declaration and the Open Pedagogy Notebook, the author reviews learner-centered examples such as creating open textbooks, building syllabi with students and student contributions to Wikipedia.


This exploratory study describes the IL skills of (n = 83) domestic and international students at a Finnish university. Researchers utilize a mixed-methods approach first by administering a modified version of the B-TILED online survey and then following up with semistructured interviews. Results indicate that international students’ IL skills appear less developed than those of domestic Finnish students, and the authors recommend continued research on how best to support the development of essential IL competencies for international students.


Analysis of digital IL in doctoral students in Britain using mixed methods, theoretical research methods using university library websites (n = 20) for evidence of digital IL activities and support for doctoral students. The authors propose that librarians as both formal and informal information mentors should develop digital IL. It concludes with the limitations of the study and the potential for mentorship opportunities.
Recognizing that emotional intelligence (EI) is a facet of the learning process, study ($n = 223$) examines how EI serves as a predictor for IL skill self-attainment among undergraduate medical students at Riphah International University in Pakistan and the United Arab Emirates. It finds statistically significant correlations between self-emotions appraisal (better able to manage stress), others-emotions appraisal (understand human/machine response and reformulate) and use of emotions (direct their emotions towards personal performance) with increased IL skill self-efficacy. It confirms that the ability to regulate emotion has no significant impact on IL and that attendance of IL sessions and English-language proficiency are additional predictors. It recommends embedding EI-related content into IL sessions and providing opportunities to develop fluency in speaking and writing in English.


Study of ($n = 68$) students in a university level IL course that used a flipped classroom model with a “personalized ubiquitous learning support system” to investigate the effectiveness of the flipped classroom on IL curriculum and achievement. The study analyzed and compared the IL achievement of students in the personalized ubiquitous learning support system group and in the conventional ubiquitous learning support system group via pre- and posttests and a self-efficacy survey. It found that both groups had gains in achievement, but students with the personalized support had larger gains in achievement. The students in the flipped classroom had higher gains in achievement and career and grade motivation, but both groups experienced higher levels of IL self-efficacy following the course.


It reviews research support and instruction in academic libraries by summarizing current research consultation services, metrics for effectiveness of research consultations and technology applications. Using the PRISMA-ScR reporting standards and a total of 43 studies for extraction, the authors find 95% of librarians provide research consultations as a part of their practice with the vast majority of users reporting favorable outcomes after consultation sessions. Although these consultations take more time and effort to perform, the authors recommend using the evaluation methods to better understand the impact of library service and instruction.


A collection of lesson plans and case studies that highlight technique and suggestions for better integrating discipline specific curriculum with the ACRL Framework in collaboration with faculty and librarians. Topics include designing a collaborative experience, insights into the faculty–librarian relationship and various lesson plans surrounding creating and redesigning for course specific IL curriculum.


Comparative study of journalism and publishing and advertising students on their news literacy skills in which participants were asked to determine whether three fabricated news
articles were trustworthy, partly trustworthy or untrustworthy. Journalism students, who took four courses related to media and information literacy in their first three semesters, were more accurate in identifying trustworthy news and provided more complex reasonings for their judgments. Eye tracking software also confirmed that journalism students were more likely to reread critical parts of the articles and focused on authorship, photo captions and sources.


Interviews (n = 25) with Nigerian researchers on their publishing practices and perceptions of “predatory” scholarly journals. All respondents said that Nigerian academics publish in predatory publications, which participants defined as misrepresenting their peer-review process or the journal. Those interviewed believe academics are publishing in these sources knowingly as a result of the pressure to publish quickly, specifically noting that many universities in Nigeria require a certain percentage of scholarly articles be published in foreign journals as a criterion for promotion. Interviewers recommended stronger educational programs and mentorship to prevent publishing in these sources as a way to increase international trust in Nigerian research.


Study into the dynamics of affective learning in online training programs of (n = 366) adults in an online IL course in a distance learning environment in the Netherlands. In the study, first-year premasters students at the Learning Sciences at the Open University of the Netherlands, researchers found that five affective characteristics of learners (learner readiness, motivation to learn, positive outcomes, negative outcomes and personal capacity) may lead to transfer of new learning. Some recommendations include facilitating a positive, motivating affective transfer climate with social presence being two important conditions.


It presents critiques of deficit-based thinking in education, such as the concepts of grit and growth mindset. Grit and growth mindset overemphasize the role of individual achievement and effort in learning. Tewell argues that these concepts obscure systemic issues of inequality and individualizes the blame and subsequent response with the learner. It concludes with recommendations on utilizing critical information literacy and culturally responsive pedagogy in library instruction to dismantle deficit-oriented perspectives.


It examines the adoption and use of the ACRL Visual Literacy Standards in literature from 2011 to 2019 through a scoping review, which found 196 research items that relied on the Visual Literacy Standards significantly. Empirical research authored in the United States about academic audiences represented the majority of the sources. The discussion notes that most of the library science authors view visual literacy as a subcomponent of IL and that use of the Visual Literacy Standards is the most comprehensive defining work to date on the topic.


It evaluated the use of performance-based interview, a traditional interview with the addition of live reference questions and a postinterview discussion, for lecturer-level searches of library faculty specializing in reference and IL services. It found that performance interviewing allowed the committee to quickly assess candidates’ skill sets and
organizational fit, which could potentially reduce the workload associated with serving on a search committee. Additionally, performance interviewing provided opportunities for the committee to identify potential problems related to a candidate's approach to their functional area.

Torrell, M.R. (2020), “That was then, this is wow: A case for critical information literacy across the curriculum”, Communications in Information Literacy, Vol. 14 No. 1, 118–133.

It argues for the development of a CIL across the curriculum both horizontally (i.e. across all majors) and vertically (i.e. from introductory to advanced courses). It describes a model that draws on a writing across the curriculum (WAC) approach that depends upon the collaboration between librarians and instructors from across the disciplines. The larger responsibility falls to discipline faculty who, the author argues, need to thoroughly examine their own beliefs and practices around CIL and bring greater urgency to its inclusion in their teaching practices.


Survey of (n = 8) business professors to examine their perception of the role social media plays in students’ critical thinking and job skills, as defined by the Critical Thinking Development by Social Media (CRDSM). The author identifies intentionality and industrious learning in the interviewees’ perceptions of students’ social media use. Findings suggest the importance of social media and critical thinking expertise among educators.


It offers an analysis of the perceptions and development of IL skills of (n = 57) practicing early childhood education teachers in Spain and compares the competencies between those teaching at public versus private, with state-funded support, institutions. It finds no significant differences for questions directly related to the development of IL between teachers from one type of center to another.


Study on the integration of IL instruction in an introductory biology lab course (n = 120) through a multiweek inquiry module about barn swallow parental behaviors. After receiving IL instruction in finding and evaluating primary research sources, their annotated bibliographies were assessed on how relevant their chosen literature was on a scale from 0 to 5, with 5 being the most relevant. The authors reported that 83% of the students successfully used relevant literature and received a score of 4 or 5. They concluded with recommendations for biology courses to better integrate IL skills.


It introduces instructional design theories, development processes and practical ways to enhance your skills as an instructional designer or technologist to create online instructional materials. Topics include performance support, prototyping, wireframing and storyboarding, documentation and evaluation of materials, video production and more. Each chapter includes an “Instructional Design in Practice” section that showcases online instruction at various libraries.


It describes a cross-sectional survey study of Turkish university students (n = 588) and their intention to plagiarize using an adapted Extended Theory of Planned Behavior
(substituting IL, computer literacy and Internet literacy for planned behavior control). It finds that favorable attitudes toward and past behaviors of plagiarism significantly predict positive intention to plagiarize, while higher IL and internal moral values significantly predict negative intention. It suggests IL training and ethical codes to curtail plagiarism and recommends studies of different universities and majors for further research.


An investigation into how academic libraries can best assist transfer students in regard to IL instruction, exploring student perceptions of how the library could market services and assist transfer students. Interviewers found that transfer students want institution specific information and better awareness of library services. As a result of the interviews, outreach efforts, library resources and service awareness, among others, were the takeaways for overall transfer student service improvement.


It investigates connections to the ACRL Framework that can be made through IL instruction in contexts outside of course-based instruction. It presents case studies for connecting to campus groups, employment IL, targeting populations with specific needs or interests and constructing assessments for cocurricular IL. It includes chapters on professional development of student employees in libraries.


It analyzes data from a first-year writing course at a public research university to assess a scaffolded instructional program. Findings reinforce the effectiveness of librarian teaching practices in relation to student learning outcomes. This research highlights the importance of course-integrated IL content in helping students achieve IL competencies.


It discusses the potential of play pedagogies in IL instruction as constructivism empowers learners to safely explore in an environment where they are open to learn from mistakes. This contextual approach to IL recognizes the social dimension of learning and can improve outcomes at any age. Recognizing the general aversion to formal play outside of childhood settings, the author calls for openness and implementation by those teaching IL.


It reflects on assessment of an IL program geared toward undergraduate and senior students, providing insight into what has been successful for them in terms of effective learning outcomes and the use of rubrics, evidence-based and perception-based measures and offers its strategies and methods to a wide range of institutions. Over the course of the assessment program, the library has seen many areas of improvement across five learning outcomes and has goals to continue the program to learn not only what needs to be taught, but how to teach those aspects.


It discusses using evidence-based practice (EBP) and competency-based education over the existing frameworks to better identify and guide instruction for IL skills in health education and professions using qualitative data. Findings reveal four out of the five programs have explicit IL skills or behaviors stated, and all five programs have implicit IL
skills or behaviors, all highlighting the need for support within instruction. Utilizing the rubric created for this study can allow the library to scaffold IL skills through instructional opportunities.


Study to identify IL skills of \((n = 165)\) undergraduate students from all disciplines at the Universiti Teknologi MARA Selangor. In an effort to improve the learning outcomes for undergraduate students, the authors designed and employed a questionnaire using a Likert scale to measure student awareness of the concept and importance of IL, as well as the practice of information literate strategies. Analysis of the results of the questionnaire revealed that it is critical for students to attain at least “good” IL skills to support their success in all disciplines throughout the university.


It expands on the author’s earlier work of curriculum mapping to scaffold IL instruction in a degree-granting program to implement curriculum mapping for a team of library faculty at East Carolina University. Librarians receive instruction in curriculum mapping methods, undertake the development of new curriculum maps, complete SWOT analyses and perform outreach to programs. Assessment affirms the value of the work and illuminates the amount of time and effort it requires.


Survey of \((n = 1,201)\) community college librarians in the United States found limited familiarity with and integration of the ACRL Framework into community college instruction. Respondents that already participated in professional development related to the Framework often reported that these sessions did not meet their needs as community college librarians. Survey also found that community college librarians are interested in a version of the Framework document modified for implementation in community college IL instruction.


It evaluated training for and collaboration with nonlibrary service desks located in the library on the criteria of connecting students to the appropriate service and the integration of advanced skills, such as IL into new and existing service models. In reviewing transactional and interview data, researchers found that referrals between departments were effective, evidenced by a 14% increase in research consultations, and student workers were engaging in a low level of advanced skills not necessarily related to their direct job duties. Interestingly, researchers identified training engagement as a barrier to the application of advanced skills, as student workers with a low level of engagement (e.g. not connecting the relevance of skills with their job duties) showed lower levels of curiosity and self-motivation.


It describes the history of the Vatican School of Librarianship, founded in 1934, its current standards and practices and ongoing changes to keep pace with job requirements and advances in the LIS field. Recent changes include providing students with workshops designed to help them develop soft skills and requiring internships. It includes selected results from a survey questionnaire administered to faculty, students and alumni assessing strengths and weaknesses of the program.

Study on proposed scholarly communication guidance and training model for librarians to provide doctoral students derived from a case study conducted by the authors at Kwame Nkrumah University of Science and Technology in South Africa. Adopting a mixed method approach including questionnaires, interviews and a bibliometric survey, the population studied included $(n = 123)$ doctoral students, their $(n = 29)$ advisors and $(n = 12)$ librarians. Review of the data revealed that doctoral students at the university were not receiving adequate training and guidance on research and scholarly communication from their advisors, and advisors were only moderately likely to direct their students to the library for guidance. The authors developed a scholarly communication guidance model, which is provided in the article. To address this issue starting when doctoral students enter the university and continuing to provide support until they complete their programs.


A conversation and call to action to make library instruction more accessible using theories from disability studies and a social model of disability that corrects systems rather than placing the burden of equity on people with a wide range (dis)abilities. It criticizes ALA’s Library Services for People with Disabilities Policy for being a checklist for retrofitting with accommodations and outlines practices from Universal Design for Learning (UDL) and Universal Design for Instruction (UDI) to create flexible learning experiences and environments. Examples include providing clear instructions, videos, printed handouts, multiple modes of expressing learning (e.g. paper-based or digital concept mapping) and access to materials before and after a class session.


It discusses the history of IL with a focus on how the political and social aspects of “information landscapes” have been taught in higher education. It offers critique of current practices and new ideas for IL instruction through exploring the history of cartography as a metaphor for place and time. It presents different practices for mapping as tools to construct a holistic practice and achieve critical dispositions for sustained IL.


Qualitative study using semistructured interviews of $(n = 26)$ academic librarians to learn about their ideas and experiences with IL assessment. While some participants see the conversation as slow-moving and circuitous, others see positive change toward using assessment to energize programs and to contribute to campus conversations about IL as a learning objective. It recommends lowering barriers to access in the IL assessment community of practice for those who are newer to the work, increasing institutional support for assessment and creating context-specific offerings for those who feel shut out of the conversation due to inexperience or low institutional funding for their professional development.


It explores the connections between motivational interviewing (MI), constructivism and IL with a focus on integrating MI into existing constructivist strategies for teaching IL. It provides detailed analysis of MI concepts: the spirit of MI, readiness for change and promoting change talk, as well as an example of how these concepts may be applied to the
sample topic of teaching institutional racism. It concludes that MI perspectives are particularly useful to apply in situations where teaching touches on sensitive topics.


It examines (n = 35) student responses to assignments within a flipped classroom, college-level critical IL course. The course, which focuses on confirmation bias and CIL theory, incorporates social and political perspectives. Analysis of student reflection papers reveals enthusiasm for the “hands on,” flipped classroom approach to learning news and information literacy.


It reviews theories from psychology related to cognitive biases or the tendency to ignore facts that challenge previously held beliefs, such as confirmation bias, heuristic bias and social cognitive schemas. Especially in a time of news, personalized algorithms and immediate search engine results, it is important for students to be aware of cognitive bias when they encounter alternative perspectives. The author proposes using critical pedagogy to encourage critical thinking, curiosity and critical consciousness to confront and reduce cognitive bias.


It discusses how various library departments, including IL instruction, moved from face-to-face operations to online environments during the COVID-19 epidemic in 2020. It notes how library instructors sought to contextualize content and find examples pertinent to the epidemic to bring to instruction sessions. It highlights tutorial creation and open-access materials as important resources for creating IL sessions for online learning.


Study of (n = 17) students in school librarianship in the Indonesian state of Jatinangor testing the IL competency of individuals before and after a training session. While there was not a statistically significant increase in competency as measured through a standard deviation test, students increased their mean score on the exam overall. Other factors in their overall education and training may have played a role in the gain in their knowledge and understanding of IL.


It analyzed the APA citations of Kazakhstan student master’s theses (n = 20) in an open repository. Of the 1,432 references, 850 had errors determined by the researcher, and most of those errors were in the source title or author components of the citation. The researcher did not distinguish between formatting errors, such as the use of italics, and errors that point to a misunderstanding of citation practices. The study recommended partnering with writing centers to improve citation IL instruction.


Case study on game-based learning approaches to teaching media and information literacy (MIL) at De La Salle University in Manila, Philippines, and Nazarbayev University in Nur-Sultan, Kazakhstan. Teams of students raced to complete a series of IL tasks designed to strengthen targeted MIL skills, and activities allowed students to draw upon their existing
knowledge/skills while developing new ones. Games made IL instruction more interactive and fun and increased student engagement; specific activities and promotional materials are presented.


It describes the effectiveness of an edited sociology book assignment developed as part of an overhaul of the Lehman College (CUNY) Department of Sociology’s required sociological theory course. Findings evaluate book assignments produced by students (n = 58) in the course for the 2018 and 2019 academic years. The assignment supports the development of students’ understanding of disciplinary debates through the production of a book for which they serve as editors and select articles from different sociological traditions for publication. The author describes how discipline-specific IL is critical to assist students in identifying sources originating from a specific sociological tradition; students are introduced to such elements of articles as citation indexes, discussion sections and reference pages to dispel confusion. Additionally, the author includes the perspective that discipline-specific IL is imperative in diverse institutions to compensate for gaps in cultural competencies that may exist.


Survey of (n = 303) Ghanaian preservice teachers on the types of information they use for academic and personal information needs, their use of the library and their preferences for online searching. It found a higher than expected use of television for accessing information, a low use of electronic library resources and a reliance on search engines such as Google for effective searching. Integration of IL into the curriculum and joining a local consortium for additional materials are recommended to increase IL skills and support new requirements for independent research in the program.


A description of IL interventions at the University of Macau in China for honors students, which included a library orientation for first-year students and workshops for second-year students preparing for a thesis. Librarians used the ACRL Framework to develop learning outcomes for each session and asked students to draw analogies between general instruction and their discipline. Although there was a mix of IL skills, majors and cultural backgrounds, postsession feedback was positive, and the author recommended making the session mandatory in the future.


It applied Behrman’s critical literacy practices to an upper-division class in hopes of challenging students’ traditional assumptions about information and media literacy in their fields of study. Researchers reflected on this application with an anecdote of a student pursuing a research project with a limited number of scholarly sources; challenging the concept that knowledge is created only by those in a position of power and scholarly sources are the only important form that knowledge takes. They concluded that giving students the ability to question authority and information allowed for a greater understanding of student voice and autonomy.


Survey of (n = 90) business students at a university in Hong Kong in three different majors, information systems, accounting and finance and economics and finance, on their
usage of the library, views toward library instruction and the importance of these services. It found that when faced with difficulty in finding information, students went to Google first; however, they had a positive attitude toward library instruction. Based on these findings, the researchers recommended that librarians improve their marketing of these services and tailor instruction to the specific IL needs of each major.


It addresses the lack of scholarly work that examines IL as a social justice issue and explores interactions between the two terms in scholarly trends within the SCOPUS database. Results include a series of visualizations that display countries, authors and journals producing relevant literature and studies that recognize the importance of IL to career prospects, education, health and well-being. It concludes that despite a consensus within the field that social justice is a critical tenant to the work of libraries, few studies in LIS explicitly explore IL as an issue of social justice.

### Everyday life, community and the workplace


Survey of \(n = 184\) Finnish CEOs in small and medium-sized enterprises using a reliable and validated 20-item workplace IL scale. Findings based on structural equation modeling reveal that IL has a positive effect on exploratory innovation, exploitative innovation and opportunity recognition and that opportunity recognition mediates innovation. Furthermore, higher workplace IL of individuals who make decisions may have implications for the development of manager and employee IL and the ability to foster learning and collaborative knowledge creation.


Systematic review exploring the use of a smartphone or similar device for personal information management (PIM), as well as the correlation between facility with PIM and general mobile device self-efficacy to provide librarians with necessary context when designing media and information literacy programming and instruction. The review was conducted using Preferred Reporting Items for the Systematic Review and Meta-analysis (PRISMA) guidelines. Researchers identified challenges related to PIM including information, technical and mobile phone adaptability challenges, as well as determining a positive correlation with mobile device self-efficacy and PIM.


Survey of \(n = 128\) Pakistani university librarians to determine if demographic variables impact their news sharing behaviors and perceived news literacy skills. The validated survey, which is based in part on the ACRL Framework, asks participants questions related to their use of social media to share news, their opinions about why fake news is shared on social media, the level of trustworthiness of different news formats, as well as their perceived news literacy skills and frequency of determining authenticity. Findings reveal that younger librarians use social media to share news more often than other age groups. Education level, age and work experience influence the use of social media to share news and perceived news literacy skills, and overall additional training on news literacy skills is needed to provide news literacy instruction sessions for students and faculty.

It examines the reality of teen parenthood and explores the response of public libraries to address the needs of a growing user group and their challenges as caregivers. It presents best practices in US public libraries, such as partnering with community organizations already serving teen parents and providing programs that benefit both child and parent. It includes an online resource list for librarians and library staff.


The authors explore factors affecting older adults and their consumption and distribution of misinformation. Those in the “gray digital divide” approach the Internet as a tool primarily for connectivity rather than education and may be more susceptible to trusting information that comes from close social circle members. They also have trouble identifying deceptive information, especially doctored images. It argues for digital literacy interventions that take into account how older adults seek socialization online, not just the changes to an aging mind.


It analyzes results of (n = 2,634) four studies that explore the extent to which message attributes and viewer characteristics increase the likelihood of social media misinformation sharing. Results indicate that authoritativeness and peer engagement with a source do not influence sharing. Instead, misinformation more likely occurs due to preexisting attitudes and familiarity with a source. Ultimately, findings reveal strategies for countering social media disinformation with a focus on digital literacy education.


Reflection on the relationship between digital literacy and digital citizenship through the lens of participatory actions, such as evaluating information, locating and developing online spaces for engagement, effectively using technology and balancing digital and nondigital interactions. It highlights the importance of justice-oriented digital citizenship, which can start to identify and promote equity for voices missing in digital spaces. These concepts play together to start to develop ideals for encouraging ethical engagement with digital spaces as digital citizens.


Survey of (n = 80) male inmates at a large maximum-security prison in Sri Lanka for IL skills. Researchers found that inmates consumed reading material in all genres; the most popular genres were religious materials (63.8%), health (62.5%) and finance (62.5%). Because of censorship and other restrictions, many materials are not permitted in the prison library. The authors concluded with recommendations to improve IL skills for prisoners including staffing prison libraries with LIS professionals, increasing access to Internet and reading materials, focused collection development and strategic planning.


It addresses IL and fake news in a post-truth era within educational, policymaking and technological perspectives. Contributed chapters include IL and identifying different types of information, information overload and its impact and a case study. Intended audiences range from educators, policymakers and technology development professionals.

It examines the fake news phenomenon and the response of libraries via IL efforts. A literature review finds that “false news stories,” which unintentionally misinform or disinform to profit or entertain, are consumed and spread because of deficient IL skills and that libraries serve as an essential bastion against the threat that fake news poses to democracy. It recommends that libraries continue to advocate and build trust within their civil and academic communities, examine how to both remain neutral and combat fake news, push for collaboration to increase acceptance of IL instruction and consider metaliteracy as a more palatable and therefore more effective tool. It notes the lack of research into how “societal distrust and uncertainty” contributes to the spread of fake news.


Edited collection on the intersections of IL and engaged citizenship to combat misinformation and empower members of society with informed and critical decision-making. Chapters cover multidisciplinary and international perspectives such as the value of IL for democracy, IL and political science, human rights and civic engagement, misinformation and public policy. It includes implications for school and public libraries and addresses special populations, such as refugees and the elderly.


It examines the concept of transition in IL through the grounded theory of mitigating risk, which draws upon the experiences of international-traveling language learners (n = 26) via interviews and personal photo-documentation. Through this reframing, rather than treat transition as movement from one static point to the next in progression, “information literacy is seen to mediate transition through supporting preparation, connection, situatedness and confidence” as language learners learn from and validate the experiences of others, develop relationships, engage with information in novel social-immersive contexts and navigate new and emerging identities as they grow in practice. It challenges IL as a framework of threshold concepts and proposes further research into IL and the role played by transitions, with the view that individuals subjectively move through time and space to become information literate.


It studies IL in an online environment using the Solar Power Educational Learning Library (SolarSPELL) initiative, demonstrating the importance of education of online IL skills and not simply access to an offline digital library. The authors conclude that the initiative can bring digital literacy to communities with limited or no access to electricity or Internet connectivity to build digital IL skills. Through the use of open-source technologies, the SolarSPELL initiative makes an offline Internet accessible for marginalized communities and locally based trainers to build digital capabilities and IL.


Survey of (n = 140) practicing lawyers to explore their legal information-seeking behavior. The top reported barriers to using the local law library include the lack of a professional law librarian and a lack of IL training. It argues for the need for a professional law librarian in order to help lawyers understand specific legal problems related to their cases.


It describes the role of self-efficacy, or a person’s belief in their ability to perform certain tasks, as a necessary psychological competency toward web and information literacy.
The author explains that self-efficacy is the requirement of competency, with subsequent dimensions of knowledge and skill, and the various modalities of self-efficacy embodied in an online environment. These examinations draw a conclusion that calls for the need to further examine self-efficacy behaviors through web literacy activities.


Survey of (n = 180) Pakistani librarians on their current and needed levels of digital IL skills. Findings reveal that participants have low levels of digital IL skills, especially in terms of digital innovation, technology applications, services and tools, whereas there is a high demand for digital IL skills from university library employers. Strategies for acquiring more digital IL skills include training programs, social media and tutorials and barriers include a lack of training, interest, Internet access and user demand for digital innovation services, which can be addressed by supervisors to promote stronger digital IL and university stakeholder collaboration.


It describes a research study using group concept mapping wherein (n = 95) educators and experts from North America and Europe determine the skills and competencies necessary for youth to learn and develop to find gainful employment in the future as automation and new technologies change markets and industries. Of the 15 mapped clusters, metacognition and reflection, skills transfer and critical thinking rank highest in importance, while IL, learning for the future and redesigning the school rank lowest in importance. Literacy and numeracy, information skills and collaboration rank highest in implementability, while metacognition and reflection, skills transfer and critical thinking rank among the bottom five in implementability. It calls for more research with participants from different fields and parts of the world.


It explores the difficulties of navigating digital environments through behavioral and cognitive interventions. The authors use the concept of boosting, a cognitive intervention method that improves cognitive and motivational competencies, to address the challenges of an online environment including potentially misleading information architecture, AI-enabled algorithms, false information and other distracting environments. It concludes that there is not a single solution and instead requires efforts from policymakers (including designing simple rules for data privacy and IL) and behavioral changes for Internet users (including learning to filter misleading information).


It describes a study investigating IL education through both media and civil society-based Polish fact-checking organizations through (n = 5) in-depth, semistructured interviews. The authors uncover two types of education modalities that seek to inform the general public. These include informal education, more frequently found in media-based fact-checking organizations that claim their fact-checking efforts are by their very nature a type of IL education, and formal education of civil society-based organizations making structured efforts to increase IL educational activities.

It presents a conceptual analysis of the evolution of IL research toward a holistic view of ELIS, especially in contexts outside of education or work (e.g. hobbies, leisure). ELIS seeks to understand how people navigate their daily lives and solve problems, and a constructionist approach views IL as more than a skill but as information practices in specific situations, including social processes and relationships in the production of knowledge. It calls for continued expansion of research and attention to ELIS using existing theoretical frameworks.


Survey of Korean adults (n = 500) to assess the relationships between IL confidence, information overload, website usefulness and trust in government websites. Findings reveal that the greater confidence participants have in their information evaluation skills, the less information overload they experience. Information overload also negatively impacts perceived usefulness and trust of government websites. It concludes with recommendations for e-government providers and policymakers to minimize information overload on government websites.


It examines the relationship between subjective well-being, the policy information gap and the distribution of information on the antipoverty relocation settlement program (ASRP) in Shaanxi Province, China. It uses data on 550 relocated households collected in 2015 from a rural livelihood and environment survey conducted by Xi’an Jiaotong University. Data reveals that across different populations, male, elderly and low-income resettlers are more sensitive to policy information gaps. The authors argue that rather than simply publicizing public policy, the focus should be on improving the ability of resettlers to acquire and comprehend information, and that more effort should be made to support information disadvantaged constituencies.


It introduces theories and concepts related to information practices of refugees to navigate the fractured information landscape they encounter during the resettlement process. Refugees use various technologies and digital spaces to negotiate their responses and solutions to resettlement and integration. The author describes three themes that describe the information environment refugees navigate in their countries of resettlement: intensification (information overload), disjuncture (disruption) and liminality (the inhabitation of “between spaces”). While information obtained through technology often enables refugees to remake themselves in a receiving country, it can also create conditions for inequality.


It describes a series of three longitudinal experiments (n1 = 151, n2 = 194, n3 = 87) that measure psychological inoculation to misinformation in the news using the Bad News Game, a social media simulator with objectives to gain influence and spread misinformation while avoiding being discredited. The first experiment with follow-up tests finds a significant inoculation effect with little decay through 13 weeks; the second without follow up tests finds decay of inoculation effect after 9 weeks; and the third finds the previous experimental findings “unlikely to be because of item-specific or item-ratio effect.” It mentions the possibility for future research to focus on interventions that may alter belief and mindset rather than defend against misinformation.

It reflects on the results of a roundtable discussion of LIS academics entitled “Empowerment through information: Tackling barriers to information and information poverty amongst disadvantaged groups” at the conference Information, Interactions and Impact (I3) in 2017. Coding of the conversation between the 11 participants reveals themes including: definitions of poverty and information poverty, literacy and information literacy, information to reduce poverty, government information, LIS initiatives tackling information poverty and social justice and information. Based on the conversation around these themes, aspects of information poverty identify areas for future research including information as an agent to eradicate poverty, the causal factors resulting in information poverty, creation and production activities to combat information poverty and better understanding of areas of extreme disadvantage and aspects of information need.


Interviews with (n = 21) female Polish economic migrants to the United Kingdom on their information-seeking behaviors. Unlike refugees, these migrants are able to plan for their migration using a variety of information sources, such as government websites and social connections, and overall they have greater autonomy and self-direction, better English-language skills, more cultural similarities and more IL skills to navigate their new information landscape. The authors also identify factors that influence the information-seeking behaviors of economic migrants versus refugees at various stages of migration to demonstrate a broader perspective of the migrant experience beyond barriers and challenges.


Study of how (n = 21) public librarians taught IL through one-on-one patron interactions using data collected from a one-time survey and web-based diary entries after each shift over the course of five shifts. Drawing from the four stages of the Fundamental Process Model of IL (plan, access, judge, communicate), thematic analysis revealed that instructional interactions were most often related to searching for and evaluating information for everyday life information-seeking needs. Although public librarians felt that teaching was a core part of their job, the authors argued that approaches to teaching IL could be enhanced by greater structural support from public libraries and preparation in library school.


Analysis of Wikipedia’s community policies and structure for their ability to mitigate false information. The five pillars of Wikipedia strictly reinforce traditional information hierarchies, which increases the reliability of the encyclopedia. The authors argue that other social media platforms can learn three lessons from Wikipedia for combating fake news: move away from a click-through advertising incentive structure, policy as pedagogy and function as a community of practice.


It explores the use of the language of IL in (n = 15) Estonian government policy documents related to IL concepts dating from 1998 to 2014. It uses textual analysis and critical discourse analysis methods to describe and analyze both explicit references to IL and implied references. It concludes that explicit engagement with IL is oriented around technology use with few other aspects of IL discussed.

Survey of (n = 112) young public library users in South Africa on their IL competencies to find information for a particular information need based on the Society of College, National and University Libraries (SCONUL) seven pillars of IL. Findings reveal that most participants are unaware of IL competencies, they primarily gain awareness via assignments, use of the Internet and study in the library, and they gain IL skills by using tools such as Google, Wikipedia and Google Scholar. It suggests offering IL training through the public library and in the school curriculum and updating collections and computers in the library to facilitate use of the Internet.


It builds on Wurman’s (1989) concept of information anxiety to propose a new anxiety framework composed of six parts: task conceptualization, need recognition, finding information, evaluating information, accessing information and using information. The authors present the nonlinear framework and correlative literature from LIS for each stage. They ultimately argue that this new framework is crucial for IL instruction in schools and understanding information-seeking behaviors in everyday life and encourage further research applying this framework.

Ondego, V.K.O. (2020), Web Search Behavior and Results Selection by Non-native English Searchers, PhD Dissertation, University of Maryland, Baltimore, MD.

A mixed-methods research study exploring the information-seeking behavior of non-English native Internet users in an English-dominant online environment. Conversational English-speaking Kenyans (n = 42) participating in the study were biased toward English-language content because of the belief that English-language content is more accurate than other languages and the availability of English-language content as a whole. The study provides a detailed framework investigating the information-seeking behavior of other populations through questionnaires, interviews and search tasks.


It reviews the literature about recent graduates’ education in critical thinking and analysis skills as applied to using online sources for research and synthesis in problem-solving and how these skills and education translate to their work environments with a slight focus on literature involving graduates of business programs. It notes employers’ perception that graduates overrate their research skills or find it difficult to apply IL dispositions they learned in college to their work environment and job needs. It stresses connecting IL skills to future needs in the workplace, such as verifying information for credibility, providing citations for facts and figures and obtaining information outside of library-subscribed resources.


Survey of (n = 123) social workers about their use of evidence-based practice (EBP) research, access to professional scholarly literature and IL instruction during their academic program in social work. About 85% indicated that EBP research is important to social work practice and around 60% have access to peer-reviewed articles with cost being a barrier for many. Around half of participants received IL instruction, although most indicated that they would have liked more interaction with the librarian and continued access to resources after graduation, which might be addressed through workshops for graduating students and larger-scale outreach about the use of open-access journals and access to resources available through several prominent professional organizations named in the article.

Study of \((n = 1,017)\) public perceptions of media literacy in Latvia. Over 50% of survey respondents did not have an interest in media literacy, with a higher interest in populations in the capital city and surrounding areas, those with a tertiary education and those with higher levels of income. Only 34% of respondents rated their media literacy as sufficient, while most respondents chose knowledge and the ability to use current technologies, such as smartphones and the Internet, as one of the most important items that could mitigate the risks of insufficient media literacy to Latvian society.


Study of \((n = 215)\) reference librarians at \((n = 10)\) public universities in Malaysia examining their competencies and self-directed learning practices. Assessing through the Knowles andragogy-adult learning theory and the Canadian Association of Research Libraries’ (CARL) Core-Competencies for 21st Century Librarians model finds respondents scored highest on “role of the learner’s experience” and “readiness to learn” for self-directed learning traits and “interpersonal skills,” “information literacy” and “entrepreneurialism” for competencies. It finds statistically significant differences by gender, length of service and academic qualifications for various dimensions and creates a model for librarians to incorporate self-directed learning traits that are positively correlated with CARL competencies to improve development and practice. It recommends increasing opportunities for training and job rotation to upskill in a variety of work environments.


It describes an eye-tracking experiment \((n = 100)\) in combination with prestudy interviews and poststudy questionnaires to determine the extent to which viewing and clicking behavior on search engine ads correlates with their understanding of search engine advertising, as well as differences in behavior patterns on desktop versus smartphone screens for Google search engine results pages (SERPs). It finds that the first text ad on the top of the SERP and the first shopping ad received more visual attention on smartphones and confirms previous research findings that users with a low level of knowledge about search advertising are more likely to click on ads than users with a higher level of knowledge.


Pre- and posttest of \((n = 30)\) Iranian high schoolers at a public library on their readiness for lifelong learning, which includes self-directed learning, readiness to overcome deterrents to participating and readiness to respond to triggers for learning. After seven weeks of training covering a range of IL skills, the experimental group showed an increase in self-directed learning and readiness to overcome deterrents to participating, but their overall lifelong learning skills did not increase significantly. Nonetheless, participants learned valuable skills that would help them in their studies and additional IL training in public libraries is recommended.


It compares IL through the accessibility of ICT via a probit model between farmers’ sales channels with versus without mobile phones and Internet access in the Shandong province of
China. Using field survey data from 2017, authors’ findings include the active use of ICT is more important than the simple accessibility of ICT (suggesting that training in rural areas can lead to improved awareness and IL) and the need for increased infrastructure in the form of information service coverage and relevant agricultural information.


It describes the development of a Digital Serious Game meant to assess the IL skills (based on ACRL Standards 1 through 4) of (n = 40) Dutch public safety, emergency and civic professionals during a fictional terrorist attack crisis management situation, which was successful in creating assessment models for Standards 1 and 2. Further studies can build on this foundation and future games can include self-reflective components that mirror professional training and practices.


It examines redocumentarization of religious content by Algerian Internet users to understand the role of Islam in the 2019 Algerian protests. It finds that while the central core of the protests is religious, digital media represents the diversity of Algerian society as a whole. Furthermore, the manner in which digital media is redocumentarized indicates technical and IL skills such as message creation, self-efficacy, identity construction and meaning production.


Study in Indonesia conducted through in-depth interviews of three communities. All three communities had the goal of educating the community on IL-related issues through online activities via social media, text messaging and offline communication. Offline communication was preferred by organizations as a way to directly engage with the community with supplemental Instagram posts mostly showing in person events and low online engagement rates despite the fact that Indonesia has a large number of Internet users.


Study analyzes parent profiles to investigate the relationship between their ICT proficiency and adolescents’ IL skills. Results indicate that adolescents whose parents were identified as active and compliant users performed better than those of parents categorized as quiescent users. Findings highlight strategies for enhancing and cultivating adolescents’ IL skills.


Assessment of user interface (UI) and user experience (UX) needs of internal and external users of a theoretical website used to tackle fake news online. The author identified current difficulties surrounding fake news and addressed users’ need to be able to connect news with evidence as members of the public, news reporters and news editors. Although the scope was limited (n = 14), this thesis introduced simple UI/UX principles using the framework of information visualization through fake news.


It explores the gaps in digital and media literacy in corporate environments highlighted by the increase in remote work due to the COVID-19 pandemic. Researchers emphasize the
importance of including media, information and digital literacies in corporate education programs to improve competencies for working in a remote environment and interacting with company media online. These findings highlight the importance of recognizing generational skill and knowledge gaps, especially in relation to technology use.

Libraries and health information literacy


Interviews with (n = 17) Swedish primary care patients on their experiences communicating with health professionals and obtaining information about their conditions. Three themes emerged: the need for easy access, the need for adaptation and information exchange, under which were subcategories of information evaluation and quality. Participants often turned to the Internet/Google, online health services and family/friends to verify information from their healthcare provider and make decisions.


An analysis of the varying quality of nine different health Q&A platforms available to laypeople seeking health information online: AllExperts, AnswerBag, ChaCha, Google Answers, JustAnswer, Mahalo Answers, Quora, WebMD and Yahoo Answers. Specially trained human raters with medical expertise analyzed each platform to identify how platform design impacts the quality of health advice available online and its accessibility for everyday users who may lack the necessary expertise to meaningfully evaluate the health information they find online. Results indicated that the highest quality medical information available online requires payment, making it less accessible to low-income users and that the quality of the question significantly impacted the quality of the answer, a further disadvantage for lower literacy users.


A cross-sectional study exploring nurses’ level of knowledge and evaluation skills regarding COVID-19 in Israel. Findings showed gaps in the depth of knowledge, particularly in the procedural knowledge and preventative behaviors for COVID-19. The gaps can be explained by the novelty, but the authors also acknowledged the importance of ongoing training for nurses and healthcare workers.


It examines a proposed change by the US Department of Health and Human Services to the definition of “health literacy” for Healthy People 2030 from focusing on an individual’s understanding and interpretation of health information to make health decisions to a focus on the overall society’s provision of health information to individuals that they can understand and use to make such decisions. It argues that while this definition moves away from a deficit model for conceptualizing individuals’ health literacy, it confuses the common understanding of what health literacy means, both inside the health field and outside of it, creating difficulties for research in this area. It offers “health information fluency” as a term to encompass both individual and societal concerns in health literacy-related topics.

Survey of \(n = 450\) Nigerian social media users on the results of information about COVID-19 provided on preventative health behaviors and beliefs about susceptibility to COVID-19. Using the Health Belief Model (HBM), the authors evaluated the relationship between self-efficacy and cues to action in terms of the perceived susceptibility to COVID-19 based on information users accessed via social media. Results indicated that while perceived susceptibility to COVID-19 had a small effect on mediating actions, perceived susceptibility was relatively low among respondents.


It investigates the relationships between IL, evidence-based nursing practice, nurses’ dispositions toward information and medication errors in a population of \(n = 164\) nurses working at four university hospitals in Iran. The study’s questionnaire assesses familiarity with evidence-based practices, IL and medication errors, as well as demographic information. Results indicate a significant positive relationship between IL and successfully practicing evidence-based nursing.


Study of \(n = 232\) participant preferences for a new and comparative educational video on colonoscopy preparation. Overall, patients preferred the new video and after randomly counterbalancing the order of the videos, and participants were more likely to prefer the new video if they watched it after the comparative video. Conclusions from the study implied that individuals with varying levels of health IL may benefit from videos and other accessible educational materials to reduce anxiety and improve outcomes.


Study of \(n = 440\) nurses working at hospitals in mainland China and Taiwan on their use of and dispositions toward nursing information systems. Results indicate that among nurses working in China, effort expectancy is the primary factor influencing nursing systems use, though this does not affect nurses working in Taiwan.


A study of mobile technologies in medical practice based on testimonies from experts in the field through a double-round Delphi survey method, the first \((n = 11)\) and second \((n = 9)\) both consisting of an average 17.7 years of professional practice. The findings show a positive trend toward mobile communication, engagement and information distribution as the healthcare industry adopts more digital technologies. The findings also caution not to ignore those without the capabilities of communicating via mobile technologies and the need for patients to be good consumers of information capable of discerning information accuracy.


Semistructured interviews with \(n = 252\) randomly sampled Nigerian women living in rural Delta State on their functional (i.e. reading, writing and numeracy), communicative or interactive and critical health IL skills, as well as the sources they consult for health information. It found that most had no formal education, could not read or understand health information and made critical health decisions based on advice from traditional healers, relatives and chemists instead of scientific sources. The authors concluded with suggestions...
for how libraries can fill gaps in education, provide services and consumer health information and collaborate with women’s groups in primary health programs.


It examines the relationship between health issues and students’ academic performance based on the role of health IL having a positive effect on people’s ability to obtain and process health information and subsequent health-related decisions. Using the stimulus–organism–response (S-O-R) framework, the authors adapt existing validated scales through data collected via questionnaires (n = 6,855) through a public university in Central China. It concludes that health IL plays a moderating role in smartphone overuse, helping to reduce insomnia and poor eyesight but not nomophobia or the psychological fear of being detached from smartphones.


Study using a three-factor structure of an Everyday Health Information Literacy (EHLIL) screening tool measuring awareness, access and assessment to find where individuals or groups may need support when faced with obstacles surrounding health information. Between the three factors measured, findings showed that there were various differences between groups, which supported the screening tool and its effectiveness within various multicultural backgrounds and health conditions.


Scoping review of (n = 28) literature related to digital health competencies in primary care in which several domains are identified, including IL. Although most findings relate to information technology, informatics and digital competencies, seven studies include IL. The authors recommend developing curricula and training programs to improve digital competencies of healthcare professionals and health outcomes.


It presents the authors’ work to translate, adapt and validate a tool to evaluate nurses’ informatics competencies for a Turkish audience. It describes the process to test their translated version of the TIGER-based Assessment of Nursing Informatics Competencies (TANIC) Tool on (n = 481) practicing nurses. The translated tool is reliable and has high content validity. It recommends that nursing students be tested using the tool to identify any gaps in their informatics skills and address nursing informatics in nursing schools.


It studied women in China (n = 274) for breast cancer awareness and its predictors in order to increase breast cancer screenings and reduce the occurrence of cancer. Participants received the Breast Cancer Awareness Measure and Health Information Literacy Self-Rating Scale in addition to demographic questionnaires. Breast cancer awareness was moderate among the entire sample and higher levels of awareness were associated with more frequent screenings, higher educational attainment of husbands, closeness, proximity to local hospitals and higher levels of health IL. As a more easily modifiable factor than other
predictive variables, the authors recommended that health practitioners focus on increasing health IL to reduce breast cancer.


It describes how the COVID-19 pandemic resulted in the spread of health misinformation and disinformation, or an “infodemic.” The authors advocate for health science librarians to play an active role in stemming health misinformation through creating research guides on fake news and evaluating information. They also provide different resources including myth busting sites through the World Health Organization, fact checkers and other resources for librarians to address misinformation.


Cross-sectional survey and questionnaire of (n = 517) doctors in Punjab, Pakistan, on their use of online health databases. Over 50% of the doctors surveyed had never used any medical databases for clinical decisions, and while most expressed confidence in their ability to perform basic searching strategies such as keyword identification, a majority of doctors had little or no confidence in their ability to conduct advanced searches, with age and years of experience factoring in their self-evaluation. The authors recommended that health sciences librarians launch publicity campaigns about health databases and provide IL sessions, particularly to rural health providers, in order to increase awareness and efficacy in using online databases.


Survey of (n = 72) Zimbabwean community members on their access to health-related information, supplemented by data from interviews with (n = 3) information professionals. Findings reveal that participants primarily access health information from clinics, the radio and indigenous knowledge systems, especially in rural areas. Although participants face barriers such as a lack of libraries, health information centers, Internet access and digital literacy skills, the authors argue for reinstituting community libraries, offering health information centers or kiosks and providing digital and information literacy training.


Assessment of staffing, equipment, services and utilization of primary care health centers between 2009 and 2015 in the Central Senatorial District of Edo State, Nigeria, to meet sustainable health goals based on a survey of (n = 286) staff, interviews and documentary analysis. Challenges to providing quality care include low health IL among staff and patients, inadequate training, funds and staffing and other challenges in rural areas, such as a lack of access to clean water, unstable electricity and poor sanitation. Overcoming these challenges through adequate funding, trained personnel and health IL education may improve healthcare delivery in the future.


Quantitative study examining the influence of online health IL and online physician guidance on patient-physician interaction and trust in China. Researchers conducted a web-based survey and employed structural equation modeling to analyze applications gathered from (n = 446) participants in two Chinese hospitals. Results reflected trends in health information-seeking behavior, highlighting how most Chinese Internet users are far more
likely to consult online health information versus traditional health consultations. Findings indicated that online health information support from doctors builds positive patient–physician interaction.


Description of the development, pretesting, field testing and validation of an assessment instrument for measuring primary healthcare workers’ public health informatics competencies, including computer, ethical and health literacy skills. A two-round Delphi technique was used to refine an initial questionnaire, followed by two pretest pilot studies (n = 40 and n = 35), with a final field test of (n = 462) public healthcare workers. Testing and validation confirmed that the tool is both valid and reliable for measuring public health informatics competencies in urban and rural public healthcare facilities.


Cross-sectional survey (n = 404) assessing the eHealth literacy levels of patients with chronic diseases treated at a university hospital in Ethiopia. It finds that higher levels of education, Internet usage and income have significant positive effects on eHealth literacy skills. It recommends further research into other factors that impact eHealth literacy levels and calls for action on the government and hospital level to help increase eHealth literacy in patients.


Survey of (n = 354) Master of Science and PhD students investigating the relationship between IL and health literacy. Findings show that there is a positive and significant relationship between the two and that the overall level of IL was higher than the average level. The authors recommend that future studies look into other populations, such as public library patrons, health consumers and so on, to examine the correlation and variations of IL and health literacy.


It describes World Health Organization collaborative online effort to tackle the COVID-19 infodemic (i.e. overload of information and misinformation during a pandemic), in which 1,483 registrants around the world provided input based on their various areas of expertise. Five themes emerge from 594 suggestions: “identify evidence,” “science and knowledge translation,” “amplify action,” “quantify impact” and “coordination, standards and governance,” culminating in a 50-point framework. It highlights the growing field of infodemiology to combat contemporary health crises.


Previous research shows that nurses are either not equipped or not given adequate time to integrate EBP into their care. The author describes a plan for how hospital librarians can collaborate with nurse educators to offer three continuing education credit workshops that scaffold training to nurses on EBP. In the hopes of improving outcomes for patients, nurses need to be able to formulate PICOT questions, use library resources to find relevant materials, appraise the quality of evidence and integrate the best available evidence into their care.

Survey of (n = 205) female Chinese nursing students using the Breast Cancer Awareness Measurement (C-BCAM) and Health Information Literacy Self-Rating Scale (HILSS). Findings among these participants reveal average health IL scores, a good level of breast cancer awareness and three statistically significant factors influencing breast cancer awareness: level of education, training in breast self-examination and intention to undergo breast cancer screenings. Since future nurses are educators and promoters of early breast cancer prevention, the authors recommend additional blended learning training on breast self-examination and developing students’ abilities to find and evaluate health information.

Multiple library types

Edited collection on fake news and librarians’ pursuit to help learners understand what information to trust and the importance of thinking critically about information, particularly in light of social media and political controversy. Chapters range from the origins of fake news to economic inequality, intellectual freedom and intersections with media literacy. It includes perspectives from academic, public and school libraries and describes their role in addressing fake news in their respective realms of influence.


It introduces kinesthetic activities as an active learning technique in IL instruction to increase student engagement and expand teaching methodology. Little research is available on kinesthetic activities in the IL setting, and more is needed; however, a review of the literature in other disciplinary educational settings shows positive outcomes for kinesthetic activities including increased learning and reduced stress. It provides and describes sample activities including “line-up,” where students are prompted to step forward or back in response to questions; “opinion,” where students move to different parts of the room based on their stance on a topic; and “stations,” where students engage with and complete IL activities at different stations around the room.


Assessment of the level of IL of secondary school students in Slovenia to discover differences between secondary school freshman and university freshman to define a framework based on gaps. Overall, findings showed that more emphasis should be put on the secondary schools to improve retention and practice in applying learned skills. The framework defined is one that should apply to both school librarians and subject librarians to keep the IL reaching focused on relevant topics and issues found in the study, such as search strategies.


It analyzed websites and social media of various types of libraries including Romanian national libraries, county public libraries, central university libraries, state or private universities and medical libraries from March 16–April 13, 2020, to determine how libraries were responding to the COVID-19 pandemic with IL resources to the public. The only type of library that transmitted COVID-19 health-related information from reliable sources was
county libraries, with other types of libraries sharing information related to accessing online library collections and programming. The author recommended that libraries use their position as the primary source of reliable information to provide quick and easy access to those looking for information on what to do in an emergency.


Case study in Canada of an IL workshop presented to various audiences, including high school, undergraduate and graduate students, as well as academic staff and faculty, with a focus on identifying fake news. Authors share the iterations and modifications over the course of 19 workshops in two years, such as examining tweets from Donald Trump and articles from WebMD or The New York Times with the CRAAP test, detecting doctored images found online and gamifying the identification process with content from The Guardian’s Instagram “Fake or Real” videos. It provides a structure that aligns with the ACRL Framework and various examples to make IL workshops more engaging and effective.


Study examining (n = 636) public library websites in Japan and analyzing those with web pages specifically addressing support for local schools (n = 136). It finds that 59 library websites provide information on all five key aspects identified as “School Support Services,” “Resource Sharing,” “Cooperative Library Programs,” “Teaching Support” for teachers and staff and “Learning Support” for students. While 76 library websites contain resources supporting student reading, learning and IL, only 21 provide library how-to guides and only 10 provide information on searching the children’s catalog. It provides a content model for public library school support services on web pages for both Japan and the United States.


It describes a study exploring gaps in digital IL and ICT through comparisons between Malaysia and Bangladesh of Generation Z (n = 107). In their study, the authors find students’ digital competency attitudes, computer self-efficacy and IL higher with increased daily use of digital technologies in everyday lives. This finding refutes common notions that members of Generation Z are naturally digital information literate.


Study of the research practices of (n = 10) college-bound high school seniors related to college applications and selecting a college. Data was gathered through semistructured interviews with participants to determine what information they sought during this process and what sources of information they used to meet their information needs. Results suggested that students use direct contact with university workers, word of mouth, online sources and campus visits to find information about campus culture, peer support, academic support and career development opportunities.


Rapid scoping review mapping advocacy skills, knowledge and behaviors to IL skills to understand how IL instruction can improve effective advocacy outcomes for individuals. It finds close associations with IL outcomes for the knowledge component, notably researching, making sense of, contextualizing, critically thinking about and communicating about a situation or issue. It recommends early and lifelong IL skills instruction in a variety of settings to empower individuals as effective health, education, social, policy and self-advocates.

Case study \( (n = 12) \) describing facilitated collaborative learning object design with a group of high school teachers to develop COVID-related instructional materials employing issue-based learning pedagogy. Videoconferencing technology allowed for remote collaboration and resulted in the production of novel curriculum materials, including a computation simulation, systems thinking tools, a mathematical model and media and information literacy tools. A link to these materials is provided. K-12 librarians may benefit from the tools developed for evaluating Internet-based media, and all librarian types might consider applying an issue-based collaborative approach to the design of new IL instructional materials.


Case study and situational analysis of the Information Literacy Outreach Program (ILOP) of one Higher Education Institution (HEI) in the North of England with 15 participants from schools who participated in the ILOPs and the HEI. Seven themes were identified after the analysis, including that IL is less visible in schools than Higher Education (HE), the ILOP as a bridge between the social worlds of schools and HE, emotional value and importance and the socioeconomic influences of IL outreach. While participants saw the importance of outreach and IL, there were some barriers at the time of the study such as time and staffing, which have largely been addressed by the HEI.

Other IL research and theory


Review of global IL research output based on data from the SCOPUS database from 1975 to 2019. Analyzing 7,070 record and 50,584 citations, results show an exceptional growth in IL research from 2001 onward with several key results including top IL publications, top 15 IL authors, top coauthorship network, subject-specific distribution, document distribution, distribution by country, output by institution and most popular keywords.


It advocates for the application of Luciano Floridi’s philosophy of information and information ethics as a lens through which to preserve privacy in information behavior. Authors introduce and describe six facets of a Floridian approach in information privacy including the concept of privacy, an overarching philosophical and ethical system, an ontology of information, types of privacy, influence of digital technologies and informational frictions. It applies this philosophical disposition to the Information Seeking and Communication and Information Grounds models for information behavior and the metaliteracy model of IL.


Survey of \( (n = 997) \) adults in the Austin, Texas, area on their ICT skills. Draws on past literature surround IL, digital literacy and Bourdieu’s theory of capital to explore the role of skills in ICTs in the development of information and media literacy fluency. The authors describe technocapital as a form of cultural capital based on proficiency in using ICTs and the
relationship of comfort and skill in this area to socioeconomic class. Results indicate a positive relationship between advanced ICT skills and both education and socioeconomic status, but a negative correlation between age and ICT fluency.


Compilation of publications (n = 6,744) about information-seeking behavior research from Web of Science from 2009 to 2018 for coword analysis. While IL appeared as the seventh most common theme in the literature, the term did not rank highly in degree and betweenness centrality. IL appeared most commonly in the context of education research and academic libraries and health information literacy of patients, both of which displayed low centrality and density, raising concerns about IL skills.


Review of current trends in media literacy and IL as separate topics through content analysis of Russian and foreign research in the 21st century. The authors analyze content and use a comparative approach to conclude several key points including that media literacy skills are vital for a modern digital environment, the global environment for IL comes from the argument for pluralistic social environments and the need for IL training at all levels of education.


It uses a content analysis method to analyze George Orwell’s diaries in relation to UNESCO’s Five Laws of Media and Information Literacy to examine how IL concepts can be traced in historical documents. Findings reveal that Orwell’s diaries and the Five Laws share ideas on bias and access to information. It illustrates how information evaluation concerns are represented within historical literature, revealing how the fight against “fake news” is not a new phenomenon.


A qualitative study on the meaning and implications of grounded theory of mitigating risks in IL using a constructivist theoretical methodology. Findings showed the importance of time, affect and information creation within IL research and the need for continued research and theorization of IL concepts. This paper raised questions and suggested reflection to inform continued development of IL instruction and teaching practices.


It discusses the way society views the humanness and/or machineness of information technologies by illustrating these perceptions through the debate of (non)photorealism in archaeology. The author argues that the perception of human labor and machines conflate reality to the point where it is difficult to discern what is “real” (e.g. search machines are seen as artificial intelligences instead of complex algorithms created and manipulated by people) and ultimately the loss of human agency in understanding their world.


It studied the contributions of key terms, including IL, to the conceptual understanding of digital literacy. Researchers found that the conceptualization of digital literacy includes
contributions from a wide range of subjects and disciplines. The term IL, for example, created networks between terms within and outside of the scope of this study, emphasizing the importance of a multidisciplinary approach to the topic. Furthermore, the study highlighted the importance of a broader view of digital literacy that is situated along a social framework, such as the “digital divide,” that incorporates user needs and motivations for a more equitable and inclusive approach to information access.


It provides a chronological overview of the formation of new literacies and competences over the past few decades, which the author organizes into three phases: the era of literacies and multiple literacies (e.g. media literacy, computer literacy, IL), the convergence of digital literacy and IL into what some call information fluency and the divergence of multiliteracies as a result of big data and complex web environments (e.g. data literacy, academic literacy, transliteracy, metaliteracy). The author also summarizes previous attempts to classify these literacies into monohierarchical and multifaceted taxonomic models. It concludes with a case study of Voremetur, a research project to create a taxonomy of multiliteracy and develop a metamodel, which is used in the context of higher education to inform curricula, programming, instructional design, educommunication, digital educational objects and program evaluation.


Literature review compares the strengths and weaknesses of the most common IL pedagogical methods: the Information Search Process (ISP), the Big6 information skills, the Seven Pillars of Information Literacy, the Pathways to Knowledge, the PLUS model and the Seven Faces of Information Literacy. It concludes that Kuhlthau’s ISP is the most useful model for its applicability across disciplines, information contexts and age/ability levels. It emphasizes the importance of integrating IL across the curriculum to build and develop IL competencies for an evolving future.


Using the Scopus database, it visualizes and maps scholarship (n = 6,662) on IL authored between 1975 and 2018 to examine the evolution of the concept. Using the “analyze research results” function provided by Scopus and the VOSviewer to analyze the data, findings reveal that while IL focused closely on computer literacy in the early years of its use, it adapted and expanded in more recent decades to reflect the diversity of subject areas and models and environments in which it is studied and employed. Based on these findings, the author recommends that curriculum design and library instruction adapt more interdisciplinary and collaborative models to address the evolving complexity of IL.


It analyzes keywords, authorship and citations of digital literacy publications through scientometrics to investigate research trends since 2000. Findings indicate that digital literacy is a core competency in multiple disciplines, including those identified by the authors: media and information science, health sciences, nursing and language education. It suggests that digital literacy research includes participants with a wide range of experiences from primary-school students to professionals.


It observes that library laborers are subordinate to and subjugated by the organizations in which they operate while simultaneously called to critique and critically deconstruct those
institutions. It discusses the precarity, animus and burnout prevalent in the profession, which is stuck in structural violence and institutional oppression. It encourages information professionals to engage in “fugitive forms of solidarity,” which enable them to transcend the frame and engage in action. It can be applied to IL instruction by foregrounding awareness of how IL pedagogy might perpetuate and reinforce inequitable and unjust systems.


It describes the development of a fuzzy mathematical model for measuring information awareness in the context of Israeli sustainable development. It includes fuzzy group parameters related to IL and four laws for application to determine whether sustainable development can be achieved.

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