Information Literacy Is a Social Practice: A Threshold Concept for Academic Instruction Librarians

Logan Rath

This article proposes that understanding information literacy as a social practice is a threshold concept for academic information literacy librarians. While the social nature of information literacy has been theorized for more than 25 years, the noted theory-to-practice gap in this area suggests a new question to be raised. This study explores how practicing academic librarians come to adopt this understanding, if at all. The article reports on the development of a grounded theory to explain the theory-to-practice gap. Participants were 17 academic instruction librarians who participated in interviews. A grounded theory approach was used to analyze the data and found that a threshold concept might explain a shift from seeing information literacy as skills-based to practice-based. Implications for LIS education include explicit discussion of this threshold concept as well as including the related concept of information landscapes in the LIS curriculum.

Keywords: information landscapes, information literacy, social practices, threshold concept

KEY POINTS:

- Seeing information literacy as a socially situated practice is a threshold concept for academic instruction librarians.
- Lloyd's conceptualization of information landscapes was not known by participants, yet it resonated with them.
- LIS education on information literacy would benefit from a deeper understanding of the field of literacy.

Current research demonstrates that practitioners are still some viewing information literacy in terms of a discrete set of skills (Graves, LeMire, & Anders, 2021; Safdar & Idrees, 2020; Schachter, 2020). This understanding has existed in the information science literature since 1995 (Hjørland & Albrechtsen, 1995). Todd (2017) has called for a deeper understanding of information literacy in order to move forward in a sustainable fashion. He advocates for us "unpack underpinning assumptions to and beliefs about the nature of knowing, information, and how people engage with it,

and to not assume that a one-size-fits-all approach is the way forward" (p. 132). Lloyd's (2017) mid-range model of information literacy appears to be one answer to this call. This model allows for both practitioners and researchers to engage with common information by positioning them on the same landscape of information literacy, albeit with different entry points. Furthermore, this model requires a sociocultural view of information practice, meaning that information literacy is socially constructed and influenced by dominant discourses. It remains to be seen, then, whether practitioners share in this understanding of information literacy as a social practice. If they do not, that could explain part of the

© Association for Library and Information Science Education, 2023 Journal of Education for Library and Information Science 2023 Vol. 64, No. 3 DOI: 10.3138/jelis-2021-0067 theory-to-practice gap. In order to explore this concept, this exploratory study set out to reveal practitioner beliefs. Specifically, it aimed to answer the following question: What are academic instruction librarians' understandings of information literacy as a set of social practices?

Literature review

Information literacy is sometimes defined in terms of literacy (see Julien, 2016, for example). Examining information literacy from the perspective of literacy leads to larger questions about the nature of information literacy. The connection between current definitions of literacy and theorizations of information literacy can be useful to understand shifts in practice, such as the change in definitions of information literacy from the Information Literacy Competency Standards for Higher Education (ACRL, 2000) to the Framework for Information Literacy in Higher Education (ACRL, 2016). For example, two literacy scholars, Barton and Hamilton (2000), have studied the social aspects of literacy proposed by Street (1984), which suggest that literacy is not a set of autonomous skills. Barton and Hamilton assert that "literacy practices are the general cultural ways of utilizing written language which people draw upon in their lives. In the simplest sense, literacy practices are what people do with literacy" (p. 7). Information literacy, by extension, could be described as what people do with information. This view of literacy helps explain the current definition of information literacy from the Association of College and Research Libraries: "Information literacy is the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning" (ACRL, 2016, p. 3).

Lund (2010) uses recent definitions of literacy in information science. When describing the use of *text* in the field of document theory, Lund supports his comparisons with citations from literacy scholars. He notes that literacy scholars use *text* in the way that information scholars use *document* to describe a container for information. The development of critical information literacy also builds upon the concept that information literacy is a socially enacted practice (Elmborg, 2006). This field comes from applying critical literacy to information literacy. Tewell (2015) writes that "critical literacy considers in what ways librarians may encourage students to engage with and act upon the power structures underpinning information literacy relies on the ontological understanding that systems of power and oppression are inherent in societal structures (Elmborg, 2012). These structures have resulted in information that may privilege certain voices, such as that of the elite cisgender, heterosexual, White male. While the political focus of critical information literacy is not germane to this study, critical information literacy has extensively situated information literacy is not germane to this study, critical information literacy has extensively situated information literacy is not germane to this study.

Tuominen, Savolainen, and Talja (2005) first conceptualized information literacy as a sociotechnical practice, noting that information literacy practices are inherently connected to both the social nature of information as well as the networks and technological tools that are used to conduct information literacy practices. An example of this is searching an

academic database to find peer-reviewed articles and needing to navigate through multiple technological systems in order to overcome the embargo period for articles that have been published in the last year. Tuominen et al. also build on Kapitzke's (2003) argument that treating information literacy as an autonomous set of skills divorces it from the political, cultural, and historical contexts that are crucial to its very being. Savolainen (2007) later wrote about the need to clearly delineate information practice from information behavior, as well as the need for a clear definition of both terms. Understanding these "umbrella concepts," as Savolainen writes, can help researchers become more reflexive and prevent being "trapped" in one's own self-made discourse (p. 127).

Mackey and Jacobson (2011) acknowledged the need to update the traditional definition of information literacy to incorporate critical thinking and technology. Their concept of metaliteracy situates itself as an overarching concept combining the ideas of new literacies (New London Group, 1996), visual literacy (Burmark, 2002), digital literacy (Gilster, 1997), and media literacy (Potter, 2018). This framework played a major role in the development of the new ACRL *Framework for Information Literacy in Higher Education* (ACRL, 2016). An in-depth analysis of the *Framework* substantiates the understanding that information literacy is inherently social. The use of the phrase "knowledge practices" (p. 2) instead of skills is indicative of this very shift. Foasberg (2015) provides a thorough examination of this shift in pedagogical thinking through a comparison of the *Information Literacy Competency Standards for Higher Education* (ACRL, 2000) with the *Framework*. Her analysis provides a starting place for understanding part of the current theory-to-practice gap.

Lloyd has examined information literacy as a social practice through several articles and one book devoted to the subject. Street's (1984) conceptualization of literacy as a social practice, and not a set of autonomous skills, informed Searle's (2003) explanation of literacy, which served as the basis for Lloyd's (2010a) discussion of workplace information literacy. Lloyd then used workplace information literacy to begin to understand information literacy in contexts outside of the academy of higher education, such as in communities of practice. This is best demonstrated through her own definition of information literacy:

Knowledge of information sources within an environment and an understanding of how these sources and the activities used to access them is constructed through discourse. Information literacy is constituted through the connections that exist between people, artifacts, texts and bodily experiences that enable individuals to develop both subjective and intersubjective positions. Information literacy is a way of knowing the many environments that constitute an individual in the world. It is a catalyst that informs practice and is in turn informed by it. (Lloyd, 2010a, p. 26)

Lloyd has numerous studies (see Fafeita & Lloyd, 2012; Lloyd, 2005, 2011) that help make the case for her mid-range model and theory of information literacy (Lloyd, 2017). This mid-range theory attempts to connect theory and practice by positioning researchers and practitioners in the same landscape of information literacy with "literacies of information" providing a "practitioner entry point" and "information environment" providing a "researcher entry point" (Lloyd, 2017, p. 100). This model is informed by Lloyd's work studying information literacy outside of the academic library environment, such as with firefighters (Lloyd, 2005) and chefs (Fafeita & Lloyd, 2012). Her work on information literacy landscapes (Lloyd, 2010a) makes her current theory one of the few that can bridge the gap between theory and practice.

Other studies situate information literacy as a social practice. Among these is the work of Papen (2013), who explored the information-seeking practices of pregnant women and discovered that social networks and trust were important factors in those practices. Schreiber (2014) explored the practices of students completing assignments with regard to available information resources. She found that students did perform information literacy practices such as evaluating information and determining their information need, alongside learning processes when completing written assignments. Kitzie (2019) applied an information literacy landscapes approach to examining the information literacy practices of members of the LGBTQ+ community as they navigate their changing identities.

Papen (2013), Schreiber (2014), and Kitzie (2019) all demonstrate the social nature of information literacy, distinctly separating it from an autonomous skill set that is transferrable among many different social contexts. Furthermore, the studies have implications for librarians who work with information literacy when they acknowledge that information literacy is an object of learning in addition to an object of teaching (Limberg, Sundin, & Talja, 2012). Perhaps it is this alternative conceptualization that will help librarians shift their practices regarding information literacy and then consider how students learn the social practices that comprise information literacy and then consider those contexts when developing information literacy sessions.

Conceptual framework

The conceptual framework for this study stems primarily from Lloyd's (2010a, 2012, 2017) mid-range theory and model of information literacy, which attempts to bridge the gap between theory and practice. As such, both the concept of information landscapes and practice theory are important in understanding the conceptual basis of this study.

Information literacy landscapes

Lloyd (2010a) explains information literacy landscapes in detail, noting that they are socially constructed. That is, each landscape is somewhat different from previous landscapes. While there may be features of the information environment that are similar, such as the concept of journal articles, there may be even more features that are new, such as discipline-specific discourse to understand. It is these new pieces of the specific information landscape that make navigating it tricky. In order to successfully navigate this new information landscape, students must learn both the skills that are necessary to accomplish tasks as well as the ways in which accomplishing that task are valued. An example of this is when a student learns how to search for peer-reviewed articles in their first-year writing seminar and then transitions to upper-level research in a social science field. Those who take an autonomous skills approach to information literacy would work from the stance that the skills of finding a journal article are easily transferrable between the two different courses. On the other hand, a person who takes a social approach would not make those assumptions. In this case, the new disciplinary context is a discrete information landscape which has its own values and practices. Whereas

a generic discovery layer may have worked for the first-year writing seminar, this resource may not work in an upper-level social science course. It is the known truth of disciplinary librarians that specific tools are likely preferred over generic discovery layers for searching sources within a given discipline (Dahlen & Hanson, 2017). Additional new aspects of the information landscape would involve knowledge of citation styles, containers of knowledge (e.g., whether knowledge is represented mostly in books, journal articles, or raw data), how that knowledge is accessed (e.g., quantitative or qualitative studies).

Practice theory

A second component of the conceptual framework at play is that of practice theory. Lloyd (2010b) provides an overview and rationale for integrating practice theory into her research, noting that practices include tacit knowledge that must be learned in order to engage a social community. In addition, Lloyd (2010b) acknowledges Schatzki's (2001) notion that practices also belong to the body, for it is the body that enables us to undertake other practices.

When integrating learning and practice theory, Lloyd points to the work of Lave and Wenger (1991) on communities of practice, or communities that are engaged in a common set of socially defined activities. The community of practice serves as a way for novice members to interact with experienced members and learn the ways of being that are shared among that group. One joins a community of practice as a novice, and over time, through engagement in the community, one develops an identity related to that community (Lloyd, 2010a). This framework is a relevant application of practice theory to the field of information literacy, for there are two main identities that librarians attempt to develop when delivering an information literacy instruction session. An example of this concept in the field of information literacy would be that, first, practicing instruction librarians welcome students into their community of practice of expert searchers, fostering skills essential to the searcher identity. However, with the focus of many information literacy sessions focusing strictly on skill development, practicing librarians might be making the tacit knowledge of searching increasingly opaque. Librarians find themselves combatting already existing schemas that affect the students' identity as a searcher. To start, the concept of library anxiety plays a major role. Through a grounded theory study of library users, Mellon (1986) found that many students experience anxiety around using the library effectively to complete their academic assignments. According to Mellon, students bring with them the preconceived notion that they should already know, by virtue of their previous experiences, how to use an academic library. Then, when they are uncertain, their anxiety prevents them from approaching librarians to seek assistance. Building on this schema, McAfee (2018) proposes shame as another mitigating factor in why students might show disinterest in developing their identities as library users. By attenuating shame, McAfee argues that librarians can better connect to students. In turn, this would help librarians build students' identities as searchers.

Methods

This study used grounded theory to understand librarians' beliefs of information literacy as a social practice. According to Creswell and Poth (2018), "the intent of a *grounded theory*

Classification	n
Doctoral institution	82
Master's-level institution	36
Undergraduate/4-year degree	44
Community college/2-year degree	36
Other	1
Total	192

Table 1: Classification of institution for questionnaire respondents

study is to move beyond description and to *generate or discover a theory*, a 'unified theoretical explanation' ... for a process or an action" (p. 133). Because a grounded theory must be co-constructed along with study participants, an anonymous questionnaire and follow-up interviews were used to explore more deeply participants' definitions of information literacy. The use of grounded theory in this study is a direct response to Hicks's (2018) call for grounded theory research of information literacy.

Participants

Participants in this study were recruited through email invitations sent to several major postsecondary librarian listservs (ILI-L, ACRLIFAME, COLLIB-L, and SUNYLA-L). These listservs were chosen as listservs familiar to the researcher. ILI-L is the main information literacy (IL) instruction listserv for the American Library Association (ALA), a large professional organization. ACRLFRAME is a place for college and university librarians to discuss the ACRL *Framework for Information Literacy in Higher Education* (ACRL, 2016). COLLIB-L is another ALA listserv for librarians who are employed in higher education. Lastly, SUNYLA-L is a listserv dedicated to the academic librarians at campuses throughout the State University of New York (SUNY) system. This combination of listservs was chosen for its ability to reach a wide audience of potential participants.

Consent for this study was obtained according to approved protocols by the IRB at the University at Buffalo. The survey was anonymous, and participant privacy was protected to the greatest extent possible throughout the process. The only personally identifiable information collected was the participant's email address, in the event that they consented to be contacted. In order to connect interview participants to their responses, one copy of the response spreadsheet included participant numbers, and a second copy contained participant names. Once all interviews were completed, email addresses were removed from the copy of the spreadsheet with participants' names.

Three rounds of soliciting participation resulted in 221 responses to the questionnaire; however, only 87 responses contained answers to the open-ended questions. Institutional classification is shown in Table 1 for questionnaire respondents. Of those responses, 46 agreed to be contacted for in-person interviews. In order to achieve theoretical sampling

Pseudonym	MLS	Institution type	Setting	FTE
Alice	2015	Community college/2-year degree	Urban	11,000
Jamie	2011	Community college/2-year degree	Suburban	12,000
George	2011	Undergraduate institution/4-year degree	Suburban	5,000
Doris	1996	Master's-level institution	Urban	4,500
Elizabeth	2010	Master's-level institution	Urban	4,456
Jane	2013	Undergraduate institution/4-year degree	Rural	4,600
Joanne	1996	Community college/2-year degree	Rural	4,700
Joanna	2013	Master's-level institution	Suburban	10,000
Molly	2006	Doctoral-level institution	Suburban	15,000
Anne	2010	Doctoral-level institution	Urban	31,000
Francine	2013	Doctoral-level institution	Suburban	24,346
Colette	1993	Master's-level institution	Rural	8,500
Grove	1980	Doctoral-level institution	Urban	17,000
Evan	2015	Doctoral-level institution	Suburban	30,000
Phoebe	2009	Doctoral-level institution Suburb		19,000
Lenny	2008	Community college/2-year degree Urban		42,000
Sue	2017	Doctoral-level institution	Urban	18,500

Table 2: Participant information for interview participants

(Leedy, Ormrod, & Johnson, 2019), every participant who agreed was contacted for an interview. Of the 46 that agreed to be contacted, 17 individuals responded to the request and scheduled semi-structured interviews. All participants were academic librarians with responsibility for instruction. The conferrals of their MLS (or equivalent) degree ranged from 1972 to 2019 for the questionnaire and 1980 and 2017 for the interview. Table 2 provides details of the interview participants.

Interviews

Semi-structured interviews lasting approximately one hour took place over Zoom, where they were recorded to the researcher's local computer. In alignment with the IRB approval, video files were then deleted and only audio files were retained. Audio files were labeled with an interview number and chosen pseudonym of the participant. Additionally, during the interview process, the researcher took notes that could also be used to emphasize anything that might be lost during the transcription process. The interview questions were developed independently by the researcher after consulting Robinson and Leonard (2019) and were exploratory in nature. The interviews began with introductions to acquaint the researcher and the participant, such as "Tell me a little about your background as a librarian." From there, participants were asked to confirm their definition of information literacy from the

survey. Once this was confirmed, participants were asked to explain how they developed that definition.

After learning from participants how they developed their definition of information literacy, the researcher asked participants to consider excerpts describing the work of literacy researcher Brian Street and his 1984 reconceptualization of literacy as a social practice, using a quote by Bloom and Green (2015), who summarize his work as follows: "literacy cannot be separated from what people are doing, how they are doing it, when, where, under what conditions and with whom they are doing it" (p. 20). Participants were then asked to connect that reconceptualization to the information literacy classroom. This method was used specifically to investigate librarians' beliefs of information literacy as a social practice in a way that would not be hindered by the politicization and reception of the *Framework for Information Literacy in Higher Education* (ACRL, 2016).

After making connections between the field of literacy and information literacy, participants were asked to unpack an excerpt from Lloyd's (2017) concept of information landscapes, as well as her description of the role of information literacy. For each excerpt, participants were asked to read along with the researcher and then reflect before responding about the applicability and/or usefulness of the material to the daily practices of information literacy instruction. In order to mitigate automatic agreement with the researcher on this topic, discussions were held with each participant to acknowledge that a participant might not agree with the assertion, or that it might not apply. Participants were encouraged to be truthful in their responses and were informed that value would be gained from both a positive and negative reaction to each excerpt. One excerpt, modified from Lloyd, Bonner, and Dawson-Rose (2014), was the following:

Information landscapes draw on stable sites of knowledge of relevance to the person ... and knowledge about how to access this knowledge. A significant element of an information landscape is that an individual engaged in that landscape draws other people (family, friends, colleagues) into it. (Lloyd, 2017, pp. 94–95)

These excerpts were used because they demonstrated tangible examples of the concept of information literacy as a social practice, again separate from the ACRL (2016) *Framework*. When it was appropriate, participants were encouraged to reconstruct examples from their teaching that either supported or refuted the connections they had made.

Interview analysis

Interviews were transcribed in preparation for analysis using Atlas.ti version 9. Analytic memos describing the researcher's impression of the interview as well as emerging connections and themes were also completed within two days of the interview or a review of the audio recording. Member-checking of responses was done both at the time of the interview, as a follow-up question, as well as separately over email to ensure that each participant's voice was captured correctly by the researcher (Leedy et al., 2019).

Each interview was analyzed individually in its entirety. In order to stay true to the grounded theory methodology of this study, the recommendations of Bryant and Charmaz (2019) were followed. First, the interviews were coded using open coding. Next, codes were

collapsed and combined to develop determine axial codes. Then, open codes were collapsed and combined to form axial codes, which resulted in categories. After categories emerged, selective coding was used to confirm those categories and to pull meaningful quotes from a variety of participants in order to support the development of the category. Open coding consisted of both descriptive and in vivo codes (Saldaña, 2016). During coding, the unit of analysis varied, as is a common practice in grounded theory analysis (Corbin & Strauss, 2015). This is different from what Bryant and Charmaz call constructivist grounded theory, where each word is analyzed separately. The initial list of 130 open codes was collapsed to a more workable list of 30 codes, and then three categories arose.

Trustworthiness and ethical considerations

In order to garner trustworthiness in this study, the researcher abided by checkpoints provided by Creswell and Poth (2018). This study aimed to meet those checkpoints through transparency of alignment with the research question and research method, explicit acknowledgment of sampling, data-collection procedures, explanation of the questionnaire and interview questions, the use of theoretical sampling to the greatest extent possible given the limitations of the study, data analysis that is congruent with grounded theory methodology, and a thorough description of the resultant theory in the subsequent section of the report. Additionally, the researcher strove to show the relationships between the major categories and subcategories and thoroughly describe the theory diagram in the subsequent section of the report as well.

Findings and discussion

The researcher conducted interviews with 17 participants ranging in length from 14 to 67 minutes. The median length of interview was 55 minutes. MLS conferral dates for interview participants ranged from 1980 to 2017, with a median date of 2010. From the question-naire question asking participants to define information literacy, participants' responses were fairly even, with eight individuals giving a skills-type response and nine giving a practice-based response.

Interestingly, every respondent could make connections between a statement regarding literacy as a social practice and what participants do in the information literacy classroom. The specific statement discussed described the work of Street (1984) and was written by Bloom and Green (2015), as detailed above. This statement describes the shift in literacy from being seen as a set of autonomous skills to a set of social practices. This finding demonstrates that librarians may understand that literacy is not a set of autonomous skills, and yet it also sheds light on the fact that the word "literate" is used nonetheless.

Relevance of Lloyd's work

Not a single participant was familiar with the work of Annemaree Lloyd. One participant mentioned, "I know the name," but did not recall any further information about Lloyd's work. Participants did discuss other sources that they had engaged with about information literacy, but they focused on sources that were explicitly pertinent to their job as an academic instruction library, such as the *Framework*. Participants much preferred to engage in

conference attendance than read academic journal articles, unless they were working on literature reviews as part of publications required for promotion and tenure. Despite this, participants were all enticed by discussions of Lloyd's definition of information literacy and description of the idea of an information landscape. Participants largely agreed with Lloyd's description of an information landscape. Fifteen of the 17 respondents affirmed that the concept of an information literacy landscape was useful to their work in the information literacy classroom. One participant, Collette,¹ agreed that the idea of information landscapes gave her language she had not yet found. Another participant agreed with the concept but disagreed with the specific words used by Lloyd. The remaining participants expressed a divergence from the concept of an information landscape. For the vast majority, information landscapes were relevant to their jobs, even if they had never encountered Lloyd's work before. This finding provides strong evidence for the inclusion of Lloyd's work in the information literacy curriculum for pre-service librarians.

Regardless of a participant's affinity for the newly learned idea of information landscapes, every participant expressed agreement with Lloyd's (2017) definition of information literacy:

Information literacy is a practice that is enacted in a social setting. It is composed of a suite of activities and skills that reference structured and embodied knowledges and ways of knowing relevant to the context. Information literacy is a way of knowing. (p. 94)

When discussing Lloyd's definition, one participant, Jamie, focused on the dispositions necessary to enact information literacy: "Information literacy is a disposition. It's an attitude. Um, this and it is ... not only a discrete set of skills, but it includes a discrete set of skills that are necessary to perform the disposition." This acknowledges both parts of Lloyd's definition. First, by naming the disposition and attitude that are necessary, Jamie describes "structured and embodied knowledges." Secondly, his use of the phrase "discrete set of skills" matches exactly with Lloyd's definition. Another participant, Lenny, supported this definition through sharing that "you have to teach habits of mind and mentalities and inquiry processes and all these different sorts of things." Again, these are "structured ways of knowing." A third participant, Elizabeth, gave support for the idea that information literacy is a way of knowing. She stated, "I think overall it's more of a mental workflow you go through and that sort of is created organically and is different person to person." This mental workflow is the way of knowing. The concept of a workflow implies many different decisions that must be made when thinking through an information literacy need.

During discussions of the usefulness of information literacy landscapes, one finding that emerged from the data was the idea that a context-focused approach helped to explain why learning transfer does not occur across contexts in the information literacy classroom. A social practice—oriented approach to information literacy instruction takes the viewpoint that each context is unique. This is connected to Bloom and Green's (2015) summary that "literacy cannot be separated from" people, places, things, or time (p. 20). To take this approach into the information literacy classroom means that a third-year undergraduate student coming to a discipline-specific information literacy session is arriving in a different



Figure 1: Working theory of the threshold concept of information literacy as a social practice

context from when that student was taking her college composition class. To the learner, the two situations are discrete. Doris described this context-specific approach as follows:

Giving students some context about the academic arena is more useful than trying to demonstrate, or walking a student through, using a tool because the tools have evolved over decades into fairly similar user interfaces.

This statement acknowledges that the skills-based approach of teaching limiters in a database is less useful than helping students understand the context of the academic information environment. Francine echoed this sentiment when she said,

What's so tricky is [that] information literacy in the social sciences does and should look a little bit different than it does in the humanities, than it should and does in the sciences, even though there's gonna be strong similarity.

Francine's quote expresses that while there are similarities, there are differences between broad disciplinary arenas. Recognizing this difference is crucial to help understand why transfer of practices may not occur between distinct information literacy instruction sessions.

Information literacy as a social practice: A threshold concept

As a result of grounded theory analysis, the following theory is proposed: Understanding information literacy as a social practice is a threshold concept. The theory is illustrated in Figure 1 below.

This theory has three main components: beliefs, information literacy as a social practice, and tensions. Each of these areas will now be discussed in detail.

Librarians' beliefs regarding information literacy are informed by several factors

To unpack their beliefs surrounding information literacy, participants were asked to provide a written definition of information literacy for the questionnaire. Then, during the interview process, participants were read back their definition, asked to confirm that their definition

Subcategory	n	Codes
Key texts	12	ACRL Framework, AACU Rubric, ACRL Standards, articles, books
Experiences	11	Previous jobs, previous teaching, collaboration, professional organizations, travel, coursework
People	10	Colleagues, stereotypes, mentors, legacy librarians
Identity & attitudes	8	Professional, personal
Institutional factors	7	"University's view of the library," support, students, assessment, general education

Table 3: Qualitative codes resulting in the category of beliefs

still rang true for them, and then reconstruct for the researcher how they came to that definition. Table 3 details the categories and number of participants for whom this category applied, along with example codes that constituted the category.

The factors that influence librarians' definitions of information literacy are varied. However, the findings provide insight into how educators and professional development providers can engage librarians in ways that can affect their understandings of information literacy. For instance, the theory-based key texts mentioned by participants were limited mainly to articles read during participants' time in graduate education. Participants reported that conference sessions at practitioner-focus conferences were more likely to engage them with new theories, even though they have likely already been published in research-focused journals. The full detail of the factors that influence librarians' definitions of information literacy will be described in a subsequent publication.

Crossing the threshold

This theory posits that that information literacy as a social practice is a threshold concept. A threshold concept, as defined by Meyer, Land, and Baillie (2010), is a concept that, once grasped, prevents the learner from seeing the world in the same way they once did. That is, once they have crossed the threshold, there is no going back. The learner can then begin to construct new knowledge based on this new worldview. The concept of threshold concepts is deeply integrated into the *Framework for Information Literacy in Higher Education* (ACRL, 2016). When speculating about why some librarians who approach information literacy from a social practice orientation have such a vehement disagreement with the concept of information literacy as skills-based, Phoebe said,

I do think the idea ... of information literacy ... not as ... a checklist of skills, is a threshold concept. If you if you can wrap your mind around that, then you can't ... then it becomes really challenging to go back to the skills like "here, do this!"

When second cycle coding was being used to determine categories and then those categories were arranged in a way that helped generate a theory, this theory was born. Selective coding then confirmed the researcher's findings (Bryant & Charmaz, 2019).

When Phoebe explained what helped her cross the threshold, she said, "I can't listen to myself do this again!" And then, after crossing that threshold, she described an urgency to change her instruction:

I still found myself being very skills based in my instruction, and I don't necessarily do that now. And so then one summer, I was like, I have to change this! I can't do this [anymore].... I have to redo all of my instruction! Um, and I have to do it this fall. I can't keep doing what I've been doing because it's so boring.

Phoebe's desire to change things immediately supported the inclusion of a threshold in the theory. Once Phoebe crossed that threshold and imagined her approach to instruction in a different way, she could not return to the idea of information literacy as only a set of skills.

While Phoebe was the key interview that helped generate the theory, the idea that there is a threshold that must be crossed was supported through other participants' interviews. While other participants such as Alice did not specifically mention a threshold concept, she did share the following:

[If] you do it just kind of an abstract of here is the skill set that is out there, they don't care. They're not going to listen. They're not going to retain the information. If you connect it to an assignment or something that's really for them, though, like, "Here's how to actually use Google better for your own personal searches," or, "Here's how you can get an A on this paper." Then they pay attention.

Alice provides a more subtle example of a practice-oriented approach, but she still demonstrates the same concept as Phoebe: She realized that the skills-based way simply did not work to keep the interest of her students. A practice-oriented approach is further described here by considering the importance of context for students. Even when describing a skillsbased approach, Alice notes that it comes off as "abstract" when not explicitly connected to something of value for learners.

Tensions pull librarians back to focus on skills

This theory posits that a social practice—oriented approach to information literacy is a threshold concept. A key tenet of a threshold concept is that once one has crossed the threshold, one can begin to chart a new path forward as a result of seeing the world in a new way. While that rings true for the participants in this study, they also noted that tensions did exist that prevented them from fully enacting a social practice approach to information literacy instruction. When they were exploring why a social practice—oriented approach is not always feasible or possible, several different subcategories emerged, as shown in Table 4.

The tensions mentioned by participants were not new, but they confirmed what other researchers have found to be true about the nature of information literacy instruction in higher education (Julien, Gross, & Latham, 2018). The most significant tension was the construct of one-shot instruction sessions and a general view of participants that they do not have enough time in a one-shot instruction session to be able to interject discussions of the discourses that shape information literacy, especially with introductory-level courses.

Subcategory	n	Codes
One-shots	8	Time, model, skills as value
Power dynamics	7	Instructor/librarian, library/administration, faculty status
Place of IL in curriculum	7	Ownership of IL, IL as domain/subject
Effort	6	"Easier," "laziness," inertia
Unprepared	4	Pedagogical knowledge, theoretical knowledge, advocacy

Table 4: Subcategories that describe tensions pulling librarians back to a skills-based approach

Implications

It is problematic that no participant was familiar with the work of Lloyd and her notion of information literacy landscapes. Participants did mention engaging with scholarly literature as part of their graduate-school experience and related to publishing for tenure and promotion. With little emphasis on information literacy theory as part of most graduate programs, this outcome is not surprising (Julien et al., 2018; Valenti & Lund, 2021). It may also be likely that Lloyd's work was not seen as relevant to practitioners, since it explores information literacy outside academe, and lack of perceived usefulness is a key reason that practitioners do not adopt theory (Hider, White, & Jamali, 2019; Pymm & Hider, 2008). Nevertheless, there is much to be learned from how Lloyd approaches information literacy itself, as well as research concerning information literacy. In addition to Lloyd's conceptualization of information literacy, future academic instruction librarians may find it useful understand how shifts in the field of literacy have influenced the development of information landscapes.

Discussing this threshold concept in pre-service librarian coursework related to information literacy would be beneficial. The first step in addressing a theory-to-practice gap is to discuss the existence of the gap as well as the potential reasons it came to be. Teaching information literacy as a social practice aligns with current theorization of information literacy, and by doing so, librarians are beginning to close this particular theory-to-practice gap. Pre-service librarians also need to be prepared to acknowledge and mitigate the tensions that exist when attempting to teach information literacy as a social practice. This awareness and knowledge may help future librarians navigate these discussions. Julien et al. (2018) provide an interesting starting point for these discussions. Finally, this threshold concept can be used as a tool to help pre-service and in-service librarians understand why they may see information literacy differently than disciplinary faculty if they discuss information literacy as a set of autonomous skills. This knowledge may help guide librarians' collaborations when integrating information literacy across curricula and confronting one-shot models of instruction.

Limitations

This study is not without its limitations. First and foremost, this theory is predicated on the shared responses of 17 participants. Although theoretical saturation was attempted as

part of the recruitment process, the number of participants did not allow saturation to be reached. Second, this research was conducted by a sole researcher and data were coded only by the researcher. To mitigate the lack of inter-coder reliability, member-checking was completed both during and after the interview process. Third, this study consists only of interview data that might indicate that participants may have not been as forthcoming or willing to say anything that might disagree with the researcher. This was partially mitigated through assuring anonymity and privacy to the greatest extent possible, as well as creating a low-stakes environment where participants were encouraged to be as open and honest as possible.

Conclusion

This study examined the beliefs about information literacy among those responsible for providing information literacy instruction to students in postsecondary education in the United States. The study consisted of a questionnaire and follow-up interviews with participants to explore their views of information literacy as a social practice. Through a grounded theory analysis of the interview data, a proposed theory of a threshold between a skills-based approach and a practice-based approach was presented. The four main components of the theory were then discussed and supported with evidence from participants. Finally, implications for library and information science curricula were proposed and limitations of the study acknowledged.

In order to create a sustainable future, as suggested by Todd (2017), more concrete work needs to happen to bring researchers and practitioners together to further develop the proposed theory. The concepts of information landscapes and, by extension, the notion of information literacy as a social practice could serve as a useful starting point. Additionally, research should be conducted to examine if this theory pertains to faculty members and those outside of the realm of library and information science. If it is found to be true, it may help librarians in the plight of overcoming the one-shot model in favor of a more integrated approach to library instruction.

Logan Rath is a recent PhD graduate from the University at Buffalo as well as a librarian at SUNY Brockport. His research interests include the intersections of literacy, information literacy, pedagogy, and technology. Email: Irath@brockport.edu

Note

1. All names are pseudonyms.

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