The Liminal Library: Making Our Libraries Sites of Transformative Learning
LILAC 2015, Newcastle University

Abstract:

Librarians have devoted a great deal of time, passion, and creativity to helping students understand their place in the world of information, as can be seen from the archives of this conference. We believe that information literacy matters, not just to complete a course assignment or to earn a degree, but for personal growth and social engagement. Our libraries are places where we hope to nurture in students a sense of belonging, a tickle of curiosity, and a growing sense of confidence that they have a voice to add to the conversations that give rise to meaning and an active role to play in shaping society.

This kind of learning is complex and involves many moving parts: student motivation, social pressures on universities and the communities they serve, faculty assumptions and expectations, and rapid changes in the information environment itself. We'll unpack the recent debate in the United States over the new Framework for Information Literacy, we'll explore the results of a small-scale study of what faculty from multiple disciplines felt were threshold moments their students experience as they learn to navigate knowledge, and we'll discuss how to make a case for the practical and long-lasting value of critical information literacy not just for our students but for the world that they are entering.

I heard the phrase "threshold concepts" for the first time two years ago at the LOEX conference. There, Lori Townsend and Amy Hofer gave a compelling preliminary report on the Delphi study they were conducting on the kinds of thresholds students face as they learn about information and how it works. They explained to us what a threshold concept is and described how they were developing a list of them for information literacy by asking library practitioners and scholars what concepts they feel qualify for the conditions that define a threshold concept: that they are transformative, integrative, irreversible, troublesome, and bounded.

What really caught my imagination was their focus on identifying those moments when students make a significant breakthrough in their understanding, a breakthrough that changes the relationship they have with information. If we know what those moment are, we can think about how our teaching

practices can either help students work toward those moments of insight—or perhaps inadvertently hinder them by describing a simple step-by-step process that defuses troublesomeness to make it more manageable.

Though I hadn't heard of threshold concepts until that conference, I had noticed over the years that certain undergraduates somehow moved into a different sense of self in relationship to information. They are excited about their own ideas. They have started to think of the articles and books they've been reading not as things but as messages from people, people with whom they can have a conversation. They have gained a certain sense of authority, of self-authorship, that gives them a position from which to examine and critique other people's authority. They talk about the authors they are citing in a paper or thesis as if they are on a first-name basis. They can see patterns in the ways people approach a topic. They often have also developed a sense of belonging to a particular way of looking at issues by virtue of identifying themselves as a member of a discipline that uses particular methods to approach certain kinds of questions. They are excited and engaged and eager to talk about their own discoveries. It's a change that's both cognitive and affective. It's a big step forward.
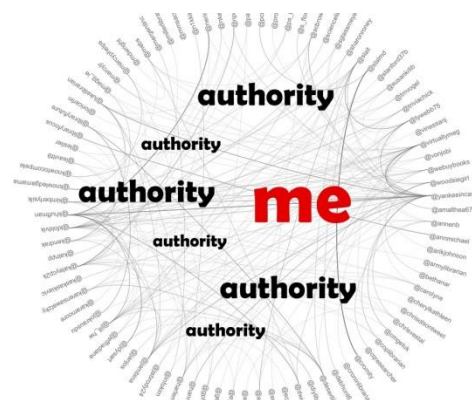
This is so different from the students we meet usually in their first semester. It's quite common in the U.S. for students to take a writing course in their first semester, usually with a relatively small group of students–fifteen or twenty–so that the teacher can spend time working with each of them on learning how to write to academic expectations. It's very common for these courses to include a library session so that students can get an early overview of how the library can support their course work by asking them to find sources for some sort of writing assignment. For many libraries, this is where a large percentage of instructional interactions happen because it's relatively easy to connect with instructors in such a program and it gives us a chance to meet with nearly every student at least once. But there's a limit to what students can learn at this stage. Authority is a black box. The students I've worked with at this beginning level tend to be very focused on practical matters: How do I find the sources I need as quickly as possible? How do I know if they are scholarly, whatever that means? They are often impatient to get on with it and not at all interested in anything theoretical because there's no experience to which that theory can attach itself.

Their attitude to authority is that it's found in stuff that was manufactured through some mysterious process, stuff they have to obtain, mine, and deliver to the teacher. The Citation Project, an ambitious study of these first year writers, has looked at the way students in these introduction-to-college-writing courses use sources in their writing. They tend to quote rather than paraphrase or summarize, they often choose quotations that aren't representative of the main point of the article they're citing, and they typically draw their quotes from the first or second page of the article, which

suggests that they stop reading as soon as they've found a line or two that they can use. Their papers tend to be a patchwork of other people's words and may include very little of the students' own writing—as much as three quarters of a paper might be direct quotations. This practice, by the way, is not a product of the internet. A similar study conducted in the states before the sources students used were electronic had very similar findings even though the copying they did was by hand.

So when students first try their hand at finding and using sources in a written argument for a college course early in their education, most of them place themselves outside the realm of what is authoritative. They think of knowledge as something you find, not something you make. The students' role is minimal, simply gathering and organizing stuff other people have written.

But some students somehow, as their education progresses, develop a sense of agency, students who get the conversational nature of knowledge. Something profound has happened to them between that initial foray into writing about ideas and the moment when she sees knowledge as collective and provisional and feels like a participant in constructing new knowledge. So the question is: How does that happen? What can we do to help them approach and cross those thresholds? And what can we do to make sure as many students as possible experience those moments?
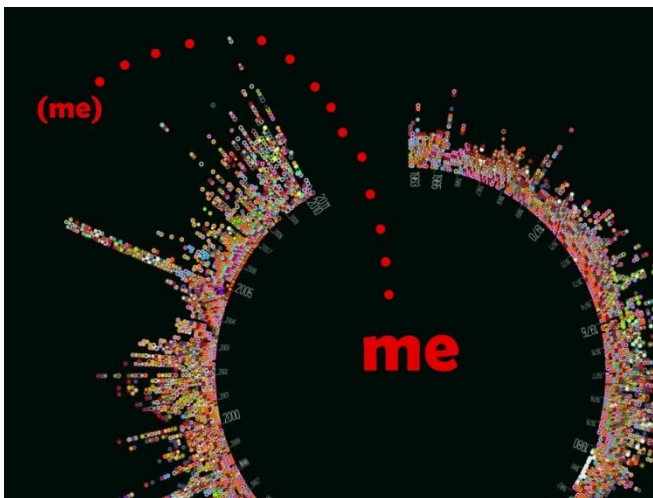
So I returned home from that conference full of curiosity and enthusiasm for this new thing, threshold concepts, having no idea it was soon going to be at the heart of a national conversation.

I work at a small institution that is very much focused on undergraduate learning. We only have six librarians, and we all teach, so it's relatively easy for us to grab hold of a new idea and experiment with it. We began by reading an article about the work Townsend and her colleagues were doing. We all agreed that the idea of threshold concepts was promising—with one reservation. We were not convinced about the notion that the kinds of thresholds we're interested in are bounded, that they are unique to any one discipline. We aren't teaching information literacy in a vacuum. It's situated in disciplines and in other communities that make and share information. We aren't even the primary designers of this kind of learning. Faculty in the disciplines are. While librarians may be the group on campus most committed to the idea that every student should have an opportunity to develop their information skills as an essential piece of their education, we have relatively limited contact with students as they put these skills to work. Our work depends on partnerships with faculty. For that reason we thought perhaps the researchers were asking the wrong experts. We thought it would be more helpful to ask our faculty what they think the thresholds are. So that's what we did.

We got a seed grant to hold discussions with ten faculty members drawn from across campus as well as hold a workshop for librarians who work at colleges like ours. We ended up working in parallel to the work of a national task force that was revising our information literacy standards with threshold concepts in mind. I'm going to tell you what we learned from our faculty and then talk a bit about the new Framework.

Our first conversation with faculty was a bit muddled and difficult for two reasons. One was that they had never heard of threshold concepts, or had only heard about them in passing. The other was that they weren't sure what we were looking for. Were we interested in difficulties students had in using the library? Or were we interested in the concepts that are foundational for their disciplines—geology, mathematics, studio art, and so forth? In short, they craved a bit of boundedness.

We explained that we were looking for transformational moments students experience as they learn to work with information regardless of their discipline. Information literacy isn't just the ability to find and evaluate information. It's a collection of experiences and skills and dispositions that make our students ready to engage in the world by being prepared to both use and create information. The experience of a biology major will be quite different to that of a history major. What we were wondering was whether there were common points in all disciplines where students had to grapple with their relationship to knowledge. We were hoping to get at foundational concepts that would matter in any discipline and beyond college. So one challenge was finding common vocabulary. At a fundamental level, how does the work a student learning to paint or perform in the theatre relate to a biology student who is planning an experiment? Are there some core ideas about knowledge that we want our students to grasp regardless of the discipline they are studying?

We finally arrived at some concepts that seemed important to all disciplines. What follows is a summary of the things our faculty came up with. I've tried to match them to similar elements of the new Framework.

FACULTY SAID . . .	ACRL FRAMES
Knowledge is made by people (and made for particular purposes).	Authority is constructed and contextual
Every exchange of information requires exercising judgment.	
You will encounter things that challenge your view of the world and call into question things you believed to be true, which can be uncomfortable.	
Understanding the concept of audience matters when creating or using information.	
Information needs to be organized, and how it is organized makes a difference.	
Knowledge evolves, so context and chronology matter.	
Everyone's view is partial. Sometimes those limits are invisible to us but not to others. Sharing perspectives and imagining others' viewpoints helps.	
Research is a recursive process. What you learn will lead you to ask new questions which you may not be able to answer them conclusively.	Information creation as a process
Vulnerability is required. It takes courage to go "out where the buses don't run." Many students have been discouraged from taking these risks.	
There is a physical and emotional aspect to threshold-crossing. "Aha moments" can be exhilarating and even addictive.	

Appreciating those moments and the feelings they inspire may help you understand yourself and discover what you want to do with your life.	
The purpose of research is to pursue understanding while recognizing that absolute understanding is inevitably elusive. The economic value of information is not necessarily related to its actual value. (Many faculty were dismayed that monetary value of information would be considered important, though they understood that the economic barriers to knowledge are significant. They did not consider citation practices particularly value-related but more tied to the social, collaborative nature of research.)	Information has value
Research involves posing a question and proposing an original response. Researchers must approach questions with an open mind.	Research as Inquiry
Research is guided by ethical principles. These principles vary depending on the context of the research and disciplinary practices. Good researchers represent others' ideas accurately and fairly and acknowledge where those ideas originated. Knowledge is social and collaborative. It's made by people working together (or side by side) over time and is influenced by economic and social contexts. Agency matters: "I have something to say and can explore things I care about."	Scholarship as Conversation
??? (Our faculty weren't particularly concerned about the strategies students developed when conducting searches; they also didn't draw a distinction between searching for information and creating it.)	Searching is strategic exploration

We saw a lot of alignment between what our faculty came up with and the frames that the ACRL task force arrived at, which I think is a good sign. Our faculty in the past had not been enthusiastic about our previous Standards. They faulted them for being too mechanistic, too focused on finding and using information, too lacking in words like "creativity" or "original thought." This seems a much closer fit to their way of thinking.

The chief difference that jumped out at me when I put them side-by-side was that the Framework seems relatively focused on information itself and the systems we have devised to generate and share it and how to make those systems clear to students. In contrast, our faculty were really focused on students' subjectivity. What were students struggling with? How did they feel? In what ways did their sense of self change as they crossed these thresholds?

This new Framework for information literacy, under development as we held our conversations with faculty, radically reshapes the standards approach to information literacy. Two key ideas influenced the work of the task force: threshold concepts, which we've been talking about, and metaliteracy. Metaliteracy is a phrase meant to broaden the definition of information literacy to include

finding, producing, and sharing content in the participatory and fluid environment of the digital age. It emphasizes critical thinking and collaboration in a variety of settings, not just academic ones. The task force was also shifting from a somewhat linear list of competencies, starting with determining an information need, working through finding and evaluating information, to using it without falling afoul of the rules, to a set of conceptual frames that are not sequential, that overlap and are fairly abstract.

The new framework went through several public drafts, collecting responses from librarians with each new version. A lot of commentary focused on practical matters: How are we supposed to use these frames? How can we teach these ideas or know whether students are learning them? Given that the standards provided the scaffold for our instructional efforts for many years, influencing everything from planning a particular library session to assessment of student learning, how are we to make the shift to a completely different approach? There were also complaints about the new Framework being too complex, too full of jargon, too abstract. When the final draft was approved this past winter, enough resistance had built up that for now we're keeping both the Standards and the new Framework until librarians are more comfortable with the practical applications of the new document.

You might say we are in a collective liminal state at the moment. And that strikes me as a place that is troublesome in some productive ways.

What do I mean by liminality? This is an intriguing aspect of threshold concepts. It's the place where we are between understandings. It's the borderland we're passing through as we move from a familiar place to an unknown place. It's where we are unsettled, where we might turn back because it's just too uncomfortable—or where we might feel exhilarated by the challenge.

While I was getting ready for this conference, I came across a paper that Ray Land gave at an event last summer as I was trying to define this for myself that really illuminated the importance of liminal states and made me even more convinced that threshold concepts are a good fit for what we're talking about when we talk about information literacy. The idea is that being in this liminal state is good preparation for the ambiguous and uncertain places we will encounter in the future. Seeing oneself as capable of making the crossing to a better understanding can be empowering and even exhilarating.

Rather than focusing our efforts on bringing student to a place where everything makes sense, the learner becomes practiced at navigating uncertainty. As Land put it, "Troublesomeness is less a barrier than an opportunity for learning" (p. 8).

This capacity to figure things out can operate in an unbounded state. That is, a student who studied history but went on to work for a city planning office not only learned to think like a historian but also may have learned how to join an unfamiliar community and become a member of it. A learner may also grasp the material to be learned but choose to take a critical stance rather than become a convert to a particular way of knowing. The ability to manage transitional states might be, then, a transferrable learning experience, one that involves increasing self-knowledge and confidence. I want to believe that
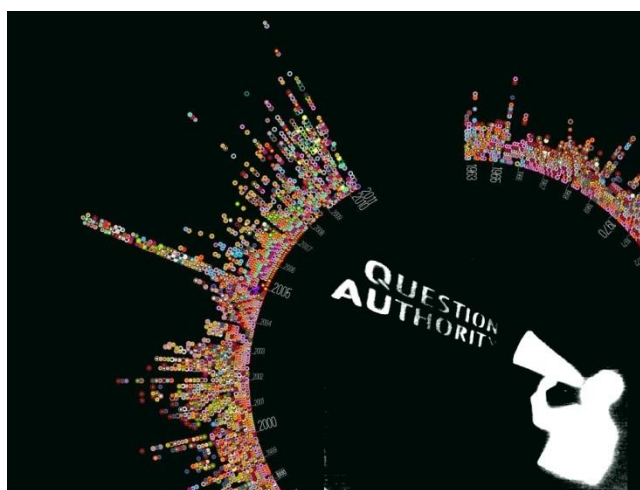
"thinking like a historian" or "thinking like a biologist" has value after graduation whatever profession that student ends up in—or, for that matter, in situations that have nothing to do with job preparation but with participation in society more broadly – thinking like an activist, thinking like a person who wants to make positive change and believes it's possible. For me, this is the piece of threshold concepts that speaks to preparation for lifelong learning.

We see this liminal state in our current debate. Librarians who are grappling with a shift from a familiar set of standards to a significantly different way of thinking about what our students need to learn are having to think hard about why they support one or another document. They're having to explain to each other why one approach makes more sense to them than another. Resistance itself is an opportunity to learn, because it requires a close examination of existing practices. Things that have been habitual and unquestioned are suddenly open to closer scrutiny and critique. And that's all to the good.

Let's compare two definitions of information literacy. According to the standards, information literacy is "a set of abilities requiring individuals to 'recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.'" This definition is drawn from a report first published in 1989. At that time, the case being made that we needed information literacy because of the rise of information technology and the challenges it posed for accessing and critiquing a growing body of information. We need information literacy because computers. Now the idea isn't so much that something is changing, but that we can't predict the future; we can only be ready for whatever comes next – and whatever comes after that.

The task force working on the new Framework went through several iterations before arriving at this much more complex definition: "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." That's quite a mouthful, but it goes beyond the individual as an information consumer to understanding the systems of communication within which people participate in making meaning. The argument made here is that information systems will always change. The content our student learn will change. We need to identify foundational experiences that will have enduring value.

The debate about the Standards versus the Framework has been quite heated at times, but it has highlighted for me the need for us to work closely with our teaching faculty rather than rely on a disciplinary definition of what students need to learn. My belief is that librarians don't teach students how to be information literate. This isn't a failing. It's the nature of the thing we want students to learn. It has to be learned in multiple contexts, because information always comes in contexts that matter. It has to be learned over several years, because it's complicated and needs lots of practice. It's experiential learning that involves skills, dispositions, emotions, and varying degrees of intrinsic motivation. You learn how information works by encountering, using, and creating it. Having good guides helps, but this kind of learning only happens in the doing of it.

I don't mean to say our commitment to teaching is a sham or that the time we spend in classrooms is wasted. I'd argue instead that we have an important teaching role on our campuses that's quite different to that of faculty in the disciplines. We're the guardians of an intellectual common ground where all of the disciplines come together. We invite students who take courses in multiple disciplines to make connection among them. We design our libraries to be inviting places where our students can feel a sense of belonging, right in the middle of innumerable ongoing conversations,

conversations that they have the right to join. The library as a social institution is a safe liminal place, a site that appears orderly but where ideas come into conflict, where there are lots of answers, none of them definitive, a place a colleague of mine once called "the palace of ambiguity." Our libraries embody that liminal state of questioning and probing.

These between-places also remind us that this questioning goes on the world beyond academia. As a discipline uniquely focused on the importance of being able to understand information, we have the potential to remind our non-librarian colleagues that the experiences our students have at university can prepare them not just to participate in academic discourse but to participate in a world that isn't organized around faculties and disciplines, but where evidence-based reasoning and ethical argument still matter.

Now, I'd like to think a bit about how we can help students navigate these troublesome, transformative moments in their learning, before saying why I think this matters so much.

When students are just starting out, trying to find their way through a bewildering system full of confusing resources—how are you supposed to make good choices among scholarly articles when you don't understand most of the words in their titles?—we can be on their side. At times, faculty make assignments forgetting that so much of the knowledge they have about how to interpret texts, which journals are essential and which are marginal, how to skim a scholarly article before deciding to read it more closely, how to recognize a good question when you see it—were all learned at some point in the past. In our position as non-specialists, as savvy outsiders, we might be able to help faculty articulate that tacit knowledge or, at the very least, help students understand that yes, this isn't easy, and no, they aren't doing it wrong.

We can honor students understandable need to compete assignments as efficiently as possible while also avoiding language that presents research as purely consumerist behavior of shopping for sources. I've had a couple of small epiphanies that helped me make small changes to the way I talk to students. One was when the writing instructor Doug Downs wrote in an email, "sources are people

talking to other people." It's important for students to realize that books and articles are not inert things manufactured at some knowledge factory, but are the thoughts of people like them, people who are trying to make sense of the world. People who decide as a community what kinds of questions are worth asking and how to go about answering them in a fair and even-handed way. Communities that might well welcome students if they can find a way in. One of our professors encourages his students to think about sources as people talking to other people by insisting that they refer to articles by the authors' names, not by the title of the article. "That's how scholars do it," he says, but it also brings home the idea that these things were created by people—people very much like them.

Another term that I am using more carefully is the word "evidence." I have often told students that the reason you want to pick good sources is because you want the best sources on your side to

confirm what you have to say. You're selecting them to serve expert witnesses. However, I've realized that metaphor reinforces a tendency to think of research as a way of winning an argument by cherry-picking material that will support your claims, an unethical practice we see too often in our politically polarized climate. It seems to me important to describe research as a process of learning about an issue, weighing people's insights, and applying your own critical and moral choices as you make up your mind. I want students to be prepared to rethink their assumptions if what they learn leads them to change their minds. I also want them to realize that addressing challenges to their ideas can strengthen them. As one student said to me years ago, "If you're going to stick your neck out then you have to be ready for and be able to deal with what you find." That's an important part of finding your own voice.

Now, this process of standing up for your own ideas requires a kind of vulnerability, a willingness to be proven wrong. It's hard for students who don't necessarily feel welcome, who have a hard time finding holes in an argument that uses words they don't know and assumes all kinds of background knowledge the student doesn't have. Somehow we have to help students recognize the rules of the game while also helping them understand how those rules are sometimes arbitrary and sometimes rigged, that joining a conversation may involve a certain amount of mimicry before you're allowed to speak your mind. At the same time, we have to find ways to help students believe in the value of their own voices, their own experiences, their own authority. As a faculty member told us, it's really important for students to believe "I have a voice. I have something to say."

The good news is that it's far more interesting for students to see themselves as participant in making knowledge rather than to simply be taught which buttons to push. Our students have all used and created information before college. Using an academic library for academic purposes is at first overwhelming, but it's also (according to a Project Information Literacy report) really exciting. We can tap into that excitement by minimizing our emphasis on how to search (something they don't find all that challenging, anyway, even if they don't do it the

you are here

way we would) and spending more time helping them think about what they are looking for and how to rethink a search based on what they've uncovered.
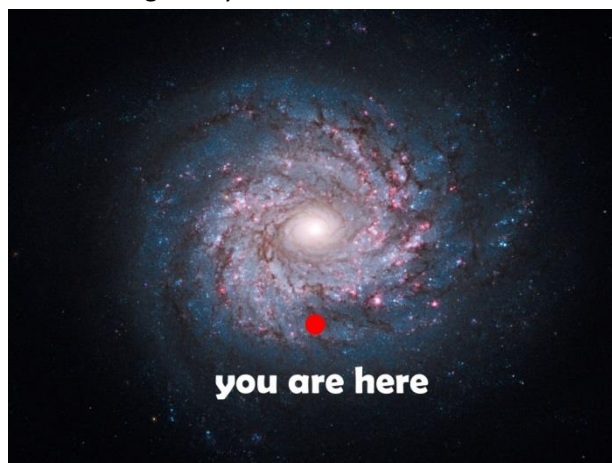
Beyond that, where I think we need to refocus many of our efforts is in providing faculty a place to discuss their pedagogy, to share ideas, to learn from one another. It's not enough to get a bit of class time carved out for us. We end up working with students at a point here and a point there during a messy, complex learning process during which their relationship to information changes profoundly. Instead, we can use our time and skills to help the faculty help one another to figure out how this kind of learning will take place across campus for all students, wherever it can be practiced in their courses, in their majors, or in general education. As we learned with our threshold concepts project, faculty love having opportunities for conversation, particularly with colleagues from other departments. Any chance we have to give faculty opportunities to share their teaching ideas will pay off – potentially far more than those chunks of time we coax out of them for us to meet with their students.

Of course, the frustrating thing about reaching out to faculty is that we tend to get people who are already creative in their teaching and committed to transformative student learning. But if we can target people in different parts of the university who are involved in teaching courses where we can expect student to get stuck, where some might experience crossing a threshold, we can make good things happen. And those good things sometimes catch on with other faculty who may not have been interested at the start.

The critical work of information literacy is empowering students by making libraries theirs, by making them feel at home in liminal state, by helping them see knowledge being made by communities they can belong to and shape, and doing this as a prelude to being active members of the world they are entering after their formal education is complete. As Paulo Freire wrote, education should be "the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world." The library, as a liminal space, can serve as the classroom for this education. They are spaces where our students can practice freedom.

Image credits

Circular visualization, white background – jer Thorp
Circular visualization, black background – Jer Thorp
Twitter visualization – Daniel
Question authority – Helder Mira
Shelves – Blaine O'Neill
Speech bubble – V J Beauchamp
Spiral galaxy - NASA