Abstract: What does it mean to be information literate in a world in which “publish” is a button, publishers and authors are suing libraries for sharing too much, and every week brings us new revelations about how the state is collecting and mining our digital lives? What can we do to help our students make sense of their world and prepare them to engage with information after they graduate? We will explore ways to invite students to hack the library and claim it as their own meaning-maker space as we explore the values of libraries – and how those values could change the world for the better.

Many years ago, when Umberto Eco spoke at a ceremony honoring the municipal library in Milan, he contrasted two types of libraries. One was governed by 21 inhospitable rules, including the catalog must be made difficult to use, interlibrary loan should take months, refreshments are forbidden, and to the greatest extent possible there should be no toilets. In the other, good coffee and comfortable chairs would be available and open stacks would encourage serendipitous discoveries. They are slightly disorganized stacks – books are constantly removed and returned, often to be shelved in the wrong place, and researchers face constant distractions and unexpected discoveries. But that unpredictability, that lack of order and control, is a feature, not a bug. “This way,” he said, “the library is an adventure.”

There’s a paradox here: this conference is about charting a course for adventure, but almost by definition, adventures happen when you aren’t quite sure what will happen next, when you are exploring territory that hasn’t yet been mapped, when you deliberately and with purpose head into the unknown, to places where you don’t know the rules. This can be scary or it can be fun. A lot depends on whether you have a sense of direction and points of reference. Celestial navigation, after all, depends on being able to see both the stars and the horizon.

For many of our students, using an academic library is the scary kind of adventure, at least at first, and their experience of research may resemble Umberto Eco’s nightmarish, rule-bound library, a place that is unwelcoming, inhospitable, and full of rules that seem designed to discourage exploration.
Margins must be one inch. You must cite at least five peer-reviewed sources. Don’t cite Wikipedia. Cite every source you use. State an original thesis, but every claim you make must be backed up with evidence from an authoritative source. And if you do it wrong, you could flunk the course of even face expulsion.

This way, the library isn’t an adventure; it’s a minefield. Exploring the unknown becomes threatening because it’s both unfamiliar and full of risk. Getting it right means mastering a set of complex and arbitrary rules. Deviating from the rules to follow one’s curiosity is asking for trouble.

This sets up problems for those of us who want the library to be a place of adventure, a site of exploration and discovery, a place where students can follow serendipitous trails and gain the confidence and navigational skills to set their own course. How can we balance our broad goals of information literacy for lifelong learning with students’ practical need to complete an assignment, pass this course, survive college? We owe it to our students to help them survive the system they are in. But we also know that the system is rigged in favor of those who arrive at college already knowing the rules.

And we know how often being able to follow the rules of the system doesn’t mean actual learning. The findings of the Citation Project (and of many previous studies of student writing) suggest that many students, at least in their first year at college, have no idea why scholarly sources matter to their instructors, though they get how important they are for completing tasks and earning grades. How many times have you had a student with a truly original idea decide to change topics because she can’t find a source that will say it for her? Students get the impression that research means demonstrating that you can find what other people have to say – that original thought is against the rules. Students can’t have valuable ideas, because they aren’t authorities; authority is always vested in other, more important people. So often, assignments put so much emphasis on seeking authority in publications that are dressed a certain way, authority that the student new to college has never encountered before. So much depends on how a finished assignment should look, how many sources need to be cited, and how stiff the penalties if they do it wrong that it’s not surprising that students think research is a matter of seeking out and documenting quotes, not a process of discovering and negotiating meaning.

We need to help students find their place in the world of knowledge so that they can feel secure enough to have adventures. They don’t need a set of rules; they need a map, one that tells them where they are but which also offers a glimpse of where they can go, and even places at the edges where the known world gives way to mystery. They need a place where they feel at home in the world of knowledge, where they can find their place, so that they can wonder what’s out there, over the horizon.

I first thought about this connection between a sense of place and a sense of space when I encountered a book by Yi-Fu Tuan, a humanistic geographer who taught at the University of Wisconsin
for many years. In *Place and Space: The Perspective of Experience*, he explored how we use our sensory experience of place – what’s above and below us, what’s behind and ahead, what’s to our sides – to imagine how things *might* be in places we’ve never been. “From the security and stability of place,” he writes, “we are aware of the openness, freedom, and threat of space.” In a sense, when we move into space and pause there, it can become a place, secure and stable, ours. Because we are rooted in personal, sensory experience, that sense of place belongs to us in a way that knowledge imparted from authorities doesn’t. As Tuan points out, “learning is rarely at the level of explicit and formal knowledge.” It’s not just about acquiring information, it’s about how our experiences help us connect our identities to ideas and helps us feel at home among them – and safe enough to venture into the unknown.

In order to conceptualize space – that is, to understand what we don’t yet know – we must be able to locate ourselves in relation to the world first by being rooted in personal experience, in a sense of belonging. Knowing our place gives us a reference point for experiencing space. I have always thought that the academic library, as a physical place, as an invitation to belong, can provide for students a sense of rootedness, a safe place to begin. Without a physical sense of belonging in an admittedly limited world of knowledge, the vast space of the unknown is harder to explore because we lose our bearings. There is, of course, a social aspect to this sense of belonging. We are people who belong in the library, in a particular community that wears gang colors on occasion, often has animals as totems, and either accepts you and your experience of the world – or not. You belong, or you are a trespasser, an outsider trying to pass. In that case, your place may feel uncertain, the world you’re navigating a threatening space that belongs to others who make the rules.

To use another analogy, students think of libraries as places where they go to get work done, but ideally they are places best suited to play, because play is essential for learning. *Play* is a word rich with meaning. The printed version of the *Oxford English Dictionary* has four pages of fine print devoted to these meanings. It can mean room for movement or the dramatic performance of a story or what you do with a musical instrument. It can mean to ridicule or mock, to amuse oneself, to engage in a game, to joke, to set in opposition, to mimic, or to have fun. Perhaps the most familiar meaning is “to engage in activity for enjoyment and recreation rather than for a serious or practical purpose; to amuse or divert oneself; to engage in fun, games, or merriment; to frolic, dance.” To which is added the dispiriting note, “now chiefly used of children or young animals.”

Generally you can sort these multiple meanings of the word “play” into two categories: one relates to performance or mimicry, the other to freedom. These map to two different kinds of play that engage different parts of the brain: epistemic play, which focuses on repetition and rehearsal in order to accomplish goals, and ludic play, which is exploratory, improvisatory, engaged in the moment rather than in a future goal. To think of this in geographic terms, perhaps, epistemic play is following directed to get somewhere. Ludic play is *being* somewhere.
To relate this to what happens to students as they learn about the world of information, one kind of play is geared toward learning the rules of the game and how to mimic the motions of scholarly inquiry and collect points toward a goal. There’s nothing intrinsically wrong with that. This is not only a necessary survival skill in college, it’s also useful in the development of habits related to the often arcane ways in which information is shared.

There’s nothing particularly playful about how call numbers work, for example, but if you’ve used them enough times, finding a book becomes relatively effortless. You can stop focusing on whether interpreting a citation and using that information to find a book or article is hard work, until you’ve done it often enough that it’s routine and undemanding. Ludic play in a library is learning to play with ideas and see where they go. It’s not learning the rules, it’s breaking them – or at least, breaking free of them. It is to become like a hacker, “a person who looks at systematic knowledge structures and learns about them by making or doing,” to quote Tad Suiter. Come to think of it, that’s not a bad definition of information literacy.

For students who haven’t learned how to relax and play in the library, research is procedural. It entails visiting the library as if it is a bank of knowledge where they will withdraw the information they need. They then arrange quotes, quite often lifted directly from their sources, and document them to demonstrate exactly how safely unoriginal their thinking is. Failing to document a source properly is the equivalent of property theft, a crime that carries heavy academic penalties.

This practice is closely related to Paulo Freire’s banking concept of education. He used that phrase to describe a process of depositing information into the heads of students, a kind of teaching he felt was deliberately oppressive. It first tells students their job is to listen, not to create or question. It second suggests that knowledge is something concrete, immutable, not subject to change. Students can have no effect on it and have nothing worthwhile to contribute. In contrast, problem-posing education, he felt, gave students the freedom to ask questions and to engage in answering them, a kind of education that is “the practice of freedom” – which is what liberal education is meant to be. When students think of knowledge as stuff they acquire from Google or the library’s various information shopping platforms, if that is what they believe information is for, we have moved from the bank into the shopping mall. We like to think that a really big shopping mall of knowledge gives us freedom of choice, but that’s not
genuine freedom. Knowledge remains something that belongs to others, and our role is only to be consumers.

Faculty, as insiders, as authorities who know their place very well, see knowledge in social and conversational terms. Sources are written by people and are addressed to groups of people. These people know one another through disciplines, a tribe of experts who engage in a long, ongoing conversations of common interest. Each publication is documentation of a contribution to that conversation, one that locates itself within the conversation by naming previous contributors. A literature review is both a way to mark which conversation this new contribution belongs to and to demonstrate in what ways this publication contributes something new to it. For a contribution to have value, it first must establish that there was a gap in the conversation that needs filling before explaining how it fills that gap, often ending with suggestions about what work still needs to be done. The literature review, itself, is a map of how ideas have taken shape through collaborative work. It argues that knowledge is constructed out of many voices, and that those conversations have a meaningful shape: this group of scholars has developed one school of thought; those scholars have gone off to address a related set of questions; a third group of scholars has splintered from the dominant group and is proposing a radically different approach. The conversations split, diverge, loop back, and over time collectively take many different approaches to questions, adding to and challenging what is collectively agreed-upon knowledge within a disciplinary community. This is how knowledge is made, collectively and critically.

This has a profound influence on the process scholars use to find things out. Sources aren’t containers full of knowledge. They are people with ideas who are developing those ideas over time and within a community. Disciplines are a key category, in that members of a discipline share assumptions about what we know, how we know, and what questions are appropriate to ask. They are further subdivided by interests and theoretical foundations. Members of disciplines develop a tacit grasp of how a discipline divides into subdisciplines and where bridges between disciplines can support interdisciplinary inquiry that may, in time, form disciplines of their own. On any college campus, the boundaries of disciplines are delineated in departments and programs, with interdisciplinary programs typically holding a more precarious position when it comes to resource allocation.

This can, at times, contribute to lack of understanding or false assumptions about other disciplines that does not make it easier for undergraduates, who routinely cross disciplinary boundaries to meet general education requirements because we, apparently, think border crossing is good for you. Students have to distinguish what matters to their instructors in disciplines with different expectations and vocabularies. These differences can be as clear-cut as requirements to use different citation rules. Students may have to format citations according to three or more different style manuals within a single semester. Often the differences are more subtle. What is called a “primary source” in a student’s history
class is defined differently by a biology teacher insisting that she find and use a “primary article” in her research. It’s rare for a faculty member to define a term such as “primary” by contrasting it to how other disciplines use it. Their disciplinary conventions are normative and so deeply familiar that they may not realize that their discourse conventions are not universal.

This is where we come in. Like students, we’re outsiders. We sometimes accuse one another of trying to turn students into little librarians by spending too much time studying our rules and regulations and practicing nifty search tricks, but when we’re doing it right, we’re serving, in the words of Michelle Holschuh Simmons, as “disciplinary discourse mediators.” That sounds a little heavy, but it’s what we do: we help students see the structures and understand the jargon, and give them ways to navigate the borders and local customs of different disciplines, none of which feel like home, at least not at first.

David Bartholomae memorably described the complexity of the tasks we set for students by saying we ask them to “invent the university.” We expect them to assume a privilege they don’t have, to speak in someone else’s voice. Learning at this stage, he says “becomes more a matter of imitation or parody than a matter of invention and discovery.” Students can’t join the conversation until they learn to sound just like us. They can’t play with ideas until they’ve practiced playing a role, trying on a voice that isn’t theirs. I want to help our students do more than invent the university. I want them to develop a critical understanding of how information works, because that’s one thing that will serve them after they leave college. They may not ever have another occasion in which their mastery of a database matters, when exactly five peer-reviewed articles is required or when knowing citation rules will make a difference, but they will become citizens of a nation that faces many challenges, many of them related to information policy, all of them better decided if citizens inform themselves about the issues. This is why information literacy matters.

When students begin to realize that sources are people talking to other people in an unfinished conversation, and that they themselves can be part of that conversation, their very relationship to knowledge can change profoundly. The shift from being a consumer of information to being a creator of knowledge is empowering. It may be one of the most profound changes a college student can go through, and it is a change in identity that is fundamental to lifelong learning. It primes students to become active, involved participants in the troubled world that they will graduate into. It is also a significant transformation of their understanding of how information works, which is a necessary part of intellectual development. No longer is truth something absolute and external, or merely defined by other, more powerful people; our understanding of the world is socially situated, constructed, and subject to change.

Learning to inquire isn’t a matter of learning how to use library databases, obtain intellectual property efficiently, and produce stuff according to spec. It’s about joining and contributing to
communities of inquiry and creativity – communities that aren’t defined by geographic boundaries, tax districts, or university campuses, communities made up of people who see themselves as participants rather than identifying themselves as either “consumers” or “producers.” We need to think in terms of supporting our students’ entry into networked conversations, not just to survive school but to be free human beings in a world where freedom is challenged daily.

This isn’t just a matter of being able to find and use information to produce new things. We need to think about what it will take to create a free and fair infrastructure for these networks. The only way we will be able to do that is if we stop thinking of ourselves as providers of stuff to a narrowly-defined community and collectively help people in our communities connect to the networks that matter to them. As Christine Pawley has argued, we need to rethink our assumptions about information consumerism and instead think about “individuals and groups of people actively shaping the world as knowledge producers in a way that renders the consumer-producer dichotomy irrelevant.” We librarians need to work collectively across our borders to put our infrastructure and our efforts where our values are. Though we have many core values, we’ve over emphasized one, often at the expense of the others, in a move that mirrors our consumerist society. We need to stop letting access and service trump other, equally valuable, far more rare values.

Of course, scholarly communication is one area where we have been long-term activists. We are finally seeing real progress on making knowledge open access. However, if we don’t look smart, a new infrastructure that preserves the business model of the old one will be enclosed in a different way, through high barriers to entry. They’re high enough already, but if scholars have to not only do their own research but secure ways to fund its publication, too, while maintaining the current publishing industries, we’re not making much progress. In the UK, the Wellcome Trust funds a great deal of research, and they insist that it be open access. Last year, they paid about $650 in open access fees. A whopping 82 percent of that money went to hybrid journals, ones that charge libraries subscriptions but will ransom a single article’s freedom for a free that can easily top $5,000. Surely there are better ways for libraries to pool their considerable talents and resources to support genuine alternatives. Besides, scholarly communication is just one aspect of the information infrastructure that matters. We’re living in an era when it’s easier than ever to share things. However, this sharing is built on an Internet that has adopted surveillance as its primary business model. Free has nothing to do with freedom, in this scenario. It’s simply a price, made of an infinite number of micropayments of personal information.

Not long ago, Cory Doctorow spoke about “GLAM and the Free World,” arguing that we can’t simply work hard to adapt our local situations to this commercial way of imagining the logic of human affairs. “Our cultural institutions,” he said, “exist to tell us who we are, where we have been and where
we are and where we’re going.” For that reason, he argues we have a special role in shaping what our technological future will be. “We are presently building the electronic nervous system of the modern world . . . We dwellers on the electronic frontier have it on our power to establish the norms, laws and practices that will echo through the ages to come.” Think about what’s going on with copyright, data mining, net neutrality. This is a critical moment. If we let go of that power to establish norms, if we capitulate to a corporate mentality, if we don’t propose an alternative that is focused on the public good, the world will suffer. The world needs a lot more than access and service today. It needs defenders of intellectual freedom, privacy, social responsibility, and the other values we tend to neglect. It needs not just defenders, but hackers, people like us to build a new infrastructure for sharing that isn’t based on artificial scarcity or on surveillance.

Values, like ideas, are not depleted by sharing. We don’t have to worry that we’re in competition for market share with Google when what we’re promoting is a renewed commons and renewed sense that we can do this together. So what might this look like in practice?

- We can help students stop thinking in terms of producing papers to exchange for a grade and instead help them become passionate about ideas, their ideas, ideas they want to share to make a difference. We can work with faculty to help students frame inquiry as a social act rather than as info-shopping, as an invitation to authentic learning that is so much more inviting than “ten double-spaced pages using five scholarly sources.” We see students at work, crossing disciplinary boundaries and struggling to find their place, and we can help faculty learn from our observations. Not only would they love to have better papers to grade, they really want students to benefit from their assignments.
- For our faculty and their own scholarship, we can help them shift the conversation from being productive individuals whose work is measured in publications to being active citizens in a republic of knowledge, citizens whose expertise is sorely needed. They want their work to matter, not just to count toward productivity quotas. We see the big picture and we know what’s wrong with it. We can help them change the system.
- For librarians, we can change our public identity from being a purchasing agent and a middleman delivering commodities from the vast corporate farms of knowledge, the places that really create and preserve the stuff, to being a master gardener cultivating our local gardens, with an eye on the health of our global knowledge ecosystem.
- For the library itself, we can stop thinking about it as a retail outlet and shopping platform and instead think about how we can foster a community based on making and sharing and make our libraries local nodes in a healthy global knowledge commons that values freedom.

While it may seem an impossibly quixotic to try to reinscribe our institutions with values that don’t fit the dominant cultural narrative of our time, libraries are highly valued and remain a well-accepted model for sharing information for the greater good. We are well positioned to remind our communities what we are here for and to model how our intellectual commons can work – and that this, in fact, is what libraries and higher education are truly about.
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