



## **Learning in the Library of Babel**

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**Abstract:** Information literacy isn't simply the capacity to find and use information, as if it's a consumer transaction. It's a years-long process of developing habits of curiosity, a respect for evidence, a grasp of the ethics of inquiry, the confidence for students to think for themselves, and a chance to develop a voice that will help them share ideas to make the world a better place. We'll explore how this kind of learning in a fast-changing information environment can help USF graduates succeed in their lives and participate in fashioning a more humane and just world.

I have to admit I got quite charged up when reading USF's mission and vision statements in advance of this visit. I know these are a strange genre of vague aspirations tinted with a desire to produce stand-out branding, but the inclusion of doing justice and a desire to educate students to make the world a better place really resonates with me. I think this is what higher education is for, though you wouldn't know it from the way we talk about workplace readiness and return on investment. I also think this is what libraries are for, and why I care whether the learning experiences students have in libraries leads to that kind of learning. A colleague of mine calls our library "the palace of ambiguity." Good experiences in libraries can help students feel at home in a world that is inevitably ambiguous. If it works, they leave the university with a well-furnished emotional library of their own, where they feel capable of negotiating differences, making wise decisions based on good evidence, and where they have the confidence to express their own ideas as citizens and activists.

The world has changed a lot since I first started working in an academic library. Back then, students who wanted to find, say, published psychology research had to work through volumes of abstracts and then figure out which journals were available locally. Getting an article through interlibrary loan took a week or more. And we didn't have the web. Now students at my small institution

have quick access to very nearly everything published thanks to interlibrary loan, authors who make their scholarship freely available online, and large checks sent to large publishers like Elsevier and Wiley for articles that we can't get any other way. To a large extent, library systems have shifted from describing local collections with ways of reaching beyond them, to being a kind of vast shopping platform. It's the high-tech neoliberal way. We've made it easy to find five scholarly sources on just about anything in under two minutes. To put it another way, we give students a lot of trees before they understand what a forest is.

Yet that ease and abundance arguably makes it harder to trace ideas and grasp the big picture. We're turning students loose in something like Jorge Luis Borges's 1941 story, [The Library of Babel](#), a vast and boundless library that is exhilarating because everything is in it, but depressing because the thing you want is there, somewhere, but always out of reach. Many of the books in the library are inaccurate copies, and it's very hard to find a bathroom.



Vannevar Bush, a scientist involved in the administration of the Manhattan Project, published a different vision for taming the abundance of knowledge in 1945, [postulating a machine called the Memex](#), where researchers could store books and articles of interest, link them together, and share "trails of association" that would provide other researchers a path to follow. All of this could be accomplished through the miracle of microfilm. But one complication he failed to account for is copyright and Stewart Brand's paradox: information wants to be both free and expensive. That paradox will haunt our graduates as they lose access to the expensive information that your library provides, but they will still need to sort through the abundance of what is accessible.

Learning how to think about information and how to position oneself as a knower in a world of knowledge is one of the primary outcomes of liberal learning. One thing I am convinced of is that all of the massive changes in how we share information that have occurred since the late 20<sup>th</sup> century have not altered the fundamental learning experiences that undergraduates must go through as they practice the skills and habits of inquiry. Way back in 1990, [I interviewed students](#) who faculty identified as successful researchers about their research process, in part because I questioned the way librarians tended to describe research as using a sequence of tools to find and synthesize other people's ideas. What I found (and what I suspect many of you will recognize) is that students, when they get it, don't see finding stuff and writing about it as the purpose of research. A huge part of their process involves getting their bearings in an unfamiliar landscape before being able to develop and refine a question. This process of finding one's place in the landscape of the topic is much harder for students just starting out than for scholars who have been immersed in their literature for years and know where the gaps lie. The other big idea I took away from these conversations with students who got it is that they see themselves as having the agency to propose novel ideas themselves. Rather than assuming they must hide their identity and let other authorities speak for them (a practice that the Faculty Learning Community on information literacy calls "author-evacuated prose,") they took stands. They took risks. They felt their ideas mattered. They had a confident voice.

I repeated these interviews in 2000, when everything had changed. We had electronic resources; we had the web. I assumed those changes would alter students' research processes. Their responses were entirely consistent with the pre-internet interviews. The only real difference was that they could get information faster. The big challenges of scoping out the landscape, developing a question they cared about, and finding their own voice – those were exactly the same after the digital revolution.



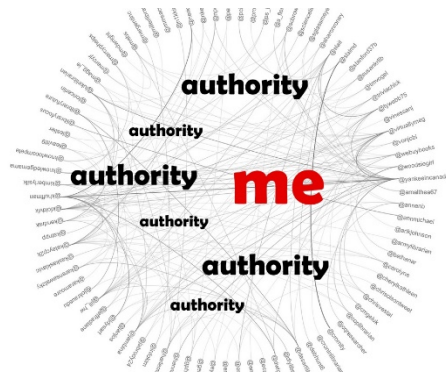
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stitch together random quotes extracted out of context from the first or second pages of the exact number of sources they are required to use. In spite of the enormous difference isn't between the way it used to be and the way it is now, the real issue is the difference between students who perform this kind of author-evacuated quote-mining and those students who feel they have joined a conversation and have developed both the curiosity and the sense of authority to believe they have something valuable to add to it. This is the gap we need to cross. It takes time. It takes experience. It takes a lot of mentoring. But I think it's key to graduating students who can do justice in the world.

I'd like to take a pause here for a public service announcement: I want to make a pitch for working with your librarians in whatever way suits your goals. Librarians care a lot about this stuff, and are very happy to help students get these transformative experiences. We also have a perspective that is a bit closer to where students are because of our profound ignorance about your disciplines. Like your students, we don't have all the tacit knowledge you have. Like your students, we have to figure out how to find good stuff without knowing which journals are the most respected, what authors are important, which theories are totally out of date or cockamamie. We can cut through some of the complexity of dealing with unfamiliar disciplinary discourse as well as simplify the byzantine complexity of information systems.

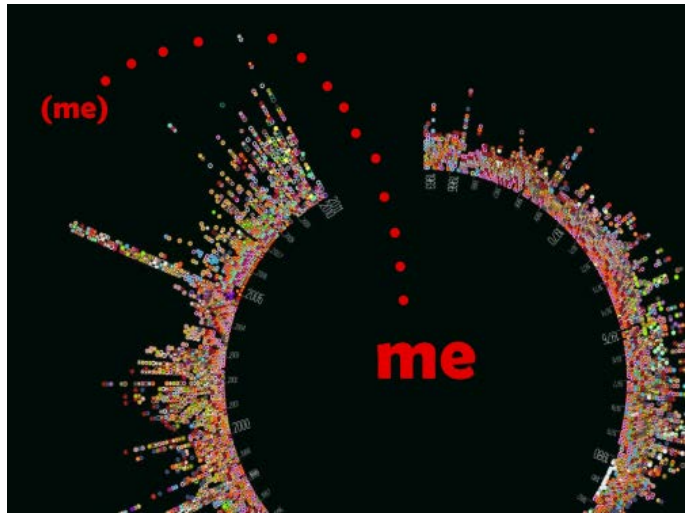
There's an awful lot that has to happen in any one student's undergraduate education. They need to learn how to be college students, which includes understanding how to write about and document sources in a largely unfamiliar way, how to follow rules and how to function when the rules demand that you take risks, and how to manage what can be time-consuming work when your paper isn't due until the week after next, but your chemistry test is tomorrow. They also need to reconcile

Now, I chose to focus on students who felt comfortable as researchers, but scholars of students who fail have seen the same thing: problems students encounter have persisted from print to digital. [Composition scholar Jennie Nelson](#) did extensive research with first year students exploring their research processes before everything went digital. Their behaviors map closely to the findings of the more recent [Citation Project](#), which depressingly reports that many first year writers



their sense of self with the academic person they are being asked to perform. This can be emotionally difficult when that involves reconciling beliefs from home with new ways of thinking, setting up a kind of loyalty test. My question is how do we get them get established without letting the relatively trivial but difficult things – like citing sources in a particular format – take up the foreground of their learning?

At some point, students may begin to identify with a disciplinary identity, and over time are able to embrace the values and ways of knowing that matter in their major. When things go well, they take up a place in the conversations of the discipline and can do rigorous and original work. They've found their feet. They belong. They have a voice, and it's an appropriately academic one. One of the things I've learned over the years is that students love opportunities to talk about their passions, to have an audience beyond the classroom. And they have such interesting things to say. Giving them public platforms for this work can really help reinforce their sense of agency and identity.

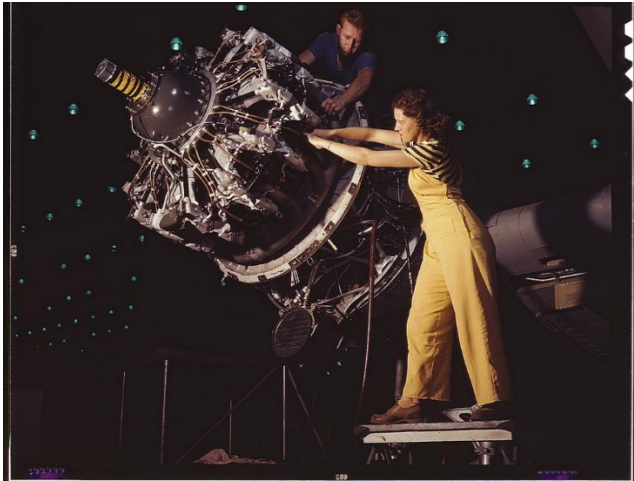


But then, there's the next step. How will they transfer what they've learned about how knowledge works and how they can participate in making it to new situations where the disciplinary discourse and standards for evidence are different and probably not made explicit? Can they extract the fundamental things they've learned while constructing their academic identity and apply them in new situations? [Some research](#) done by Project Information Literacy suggests that students can transfer that kind of habits-of-mind knowledge to new situations, but they have trouble connecting with the new community they are in and feel overwhelmed by deadlines and demands. The project will be putting out a much [more detailed report](#) on this subject in December and I think it will provide us all with much to think about.

We're just beginning discussions about a new curriculum at my college, and my personal interest will be in figuring out if we can find ways to make these stages of learning better articulated and integrated – particularly that last step: how will the experience of writing a senior thesis or creating a digital project or working with a scientist in the lab help a student who goes on to work for a nonprofit or at a bank or who joins the Peace Corps or becomes a cook at a homeless shelter? When faced with a new setting, will that learning seem relevant and useful? As busy as students are just completing their degrees, how can we help them with this transfer? The promise of liberal learning is to become free human beings who look out for the freedom and dignity of all human beings. How do we help our students put these pieces together as they go out into the world?

To bring this down to things we can actually do without crafting the platonic ideal of a curriculum, there are a few things I keep turning over in my mind. One thought is students so often get the wrong message about why we cite sources. They are things you find and capture and they have to come from the scholarly aisle of the library megastore. With a little practice, you can recognize scholarly sources by their appearance. Having the right number of them and being able to create the ingredients

list according to obscure regulations is really important. Those rules are complicated, and you could get expelled if you do it wrong. Why not save that for later and instead ask students to draw on and identify sources the way essayists and journalists do, integrating the necessary information into their work? It won't be easy, but might get the idea of the value of good evidence across better. An alternative – ask them to track down cited sources. Students who work hard to compose proper references rarely know how to read them. We're emphasizing the wrong thing.



Another idea that is on my mind is the importance of every student having to do something big, something that really stretches their capacity to be a person who poses complex questions and can propose answers. At my college, this is built into some majors but not all. Some students get a great experience doing science in a lab with their teachers, but only the most gifted and motivated may get that experience. I'd really like to know how to logistically scale things up so that every student has some kind of capstone challenge, even

though providing the kind of one-on-one mentoring required is really hard and costly.

And then there's that "what now?" question. As our students leave for parts unknown, how can we ensure that they will be able to transfer the experiences they had conducting authentic inquiry to new situations? Will they be able to carry with them the values and habits of mind that underpin how we know and how we build new knowledge? I really don't have an answer for this one, but it's my fervent hope that what happens in the library doesn't stay in the library, that when the library is the world itself, our students can claim their place and have the tools and the will to change it for the better.

Image credits

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