



Text of a talk presented at the annual LOEX conference, held in Nashville, May 3, 2013

Abstract: Developing both the skills and the disposition to engage in inquiry is a ubiquitous if ill-defined goal of higher education. Libraries are a space, physical and social, where students practice a number of inquiry skills they can use after graduation to make a living – and, more importantly, to make a difference. But it's hard to take the long view. Students are focused on completing assignments as efficiently as possible. Faculty want to cover content. Administrators want strong retention and completion rates. Who has time to think about what comes next? The information universe that librarians invite students to use is so complex that learning just enough to complete academic tasks saturates our instructional efforts, distracting us from a fundamental question: what experiences do we provide that support long-lasting and meaningful learning? How will what students learn in our libraries today help them make meaning in the information universe of the future?

I'm delighted to have a chance to be at LOEX again. I first attended LOEX in 1990. A few things have changed since then, but some important things have not. New students keep coming, and they bring with them challenges that were on my mind all those years ago. Luckily, librarians keep having good ideas about how to help them learn. I was blown away when I read through the descriptions of sessions we'll enjoy here. What an amazing lineup! How will we ever choose among the options? It's a bit daunting, knowing that I am in front of some of the most inventive, thoughtful practitioners in the field. Frankly, I doubt I know anything you don't already know, so what I want to do this morning is ask

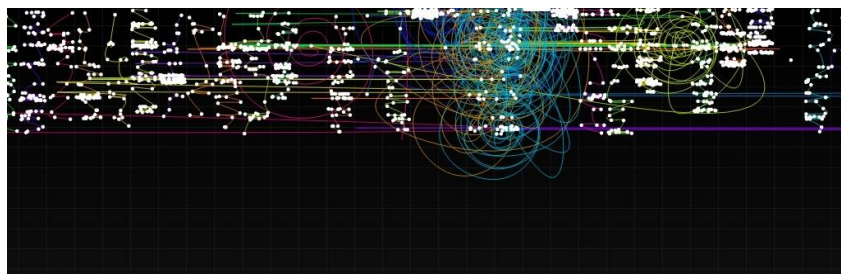
some big questions, make a few outlandish claims to make us think, and speculate about how we can fulfill our goals as educators. We librarians are in a unique position to see the big picture and to think about how our students will fare after graduation because the library is the common ground of the university, a place where all of the disciplines come together, where students can learn how to learn, where they can become not just consumers of knowledge but makers of it. Unlike faculty in other disciplines, we have the luxury of thinking beyond the boundaries of programs and majors and can imagine how all of the pieces of a student's education fit together so that they are ready for a life of learning and discovery. That's our job. So, let's dive in with the big questions.



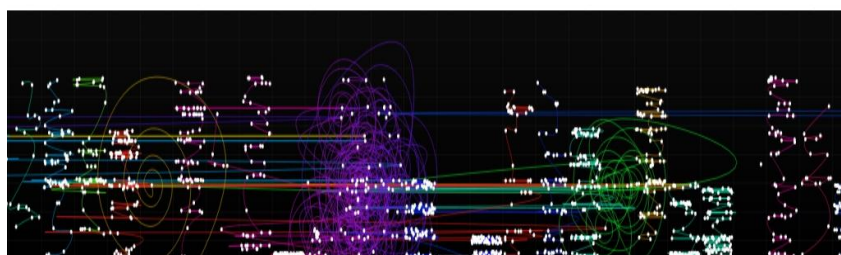
First: what are libraries for? That's an open question these days. Sometimes it's an administrator asking – why do we need a library now that it's all online? Sometimes it's a faculty member: I don't need the library anymore. I just need somebody to pay for the stuff I want to use. More often than not, though, it's a fellow librarian asking, and sometimes loading the question: How doomed are we? What can we do to escape irrelevance? How do we prove we have value? My question isn't a loaded one. I ask this question because thinking about our larger purpose can help us decide what to do on a day to day basis.

Since I work at a small college with an undergraduate focus, my answer to "what are libraries for" tends to focus on student learning. In what ways does my library contribute to what our graduates learn? When we talk about information literacy, what we really mean by it is preparing students to keep learning, to participate in society, and to have the skills and habits that will help them make the most of their lives and contribute something valuable to society. This means helping them not only to decode how to find and use information – that's the easy part – but helping them discover within themselves the ability to create new knowledge; to develop the skills that will not only help them recognize authority, but to become, themselves, authors of the world they're stepping into when they graduate. We have a tendency to respond to the needs that present themselves, and those tend to focus on helping students be successful students. But we need to keep our eye on the ultimate purpose of

information literacy: to be able to use critical skills for inquiry wherever our students land, knowing that for most of them, it will be in a very different place.



what are **universities** for?

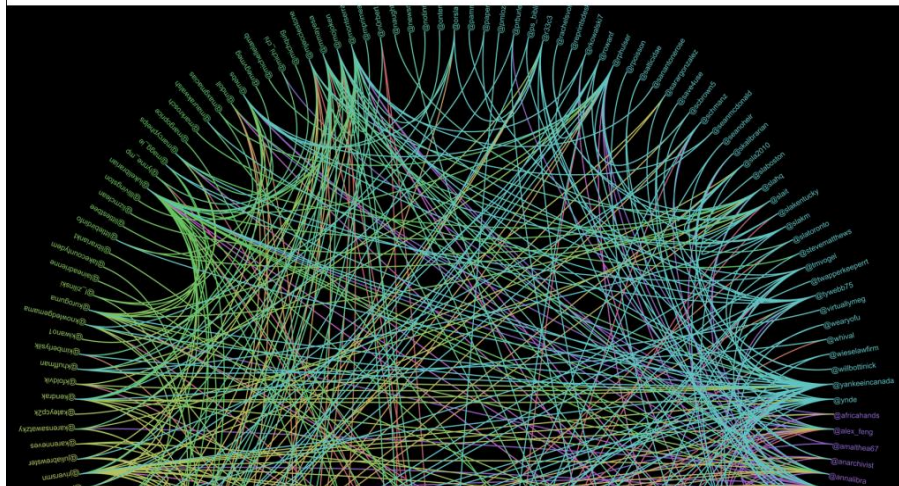


Now, let's back up and ask a slightly larger question: what are universities for? Every day, we're being challenged to think about the value of a college education is, and whether we are doing it all wrong.

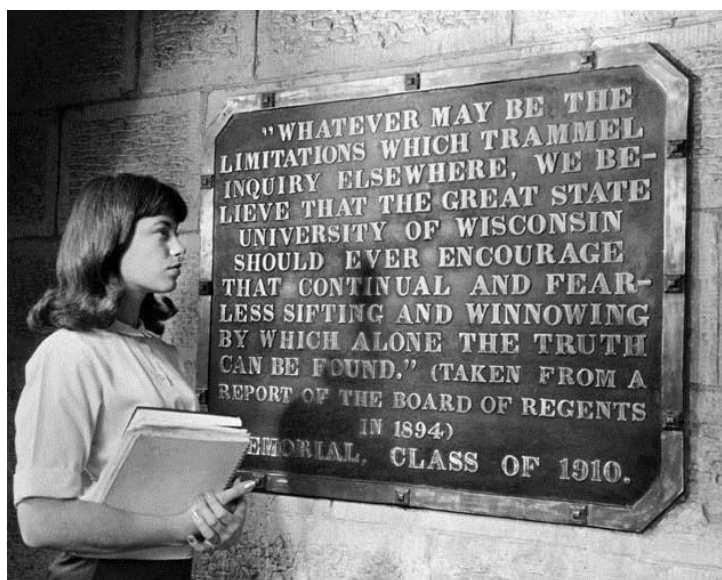
Politicians in Texas and Virginia have proposed a particular and, I believe, shortsighted answer: the purpose of the university is to provide graduates with well-paying jobs within one year of graduation. That's not at all a bad thing, and I certainly hope a job with good wages is in the near future for our graduates, but it's such a limited vision, limited both for society and for our students. They are so much more than their first job. Another answer we hear from time to time is to conduct research that keeps American industry at the forefront. This leads to faculty worth being measured in terms of dollars brought in and number of publications – which we know doesn't measure what's important. It also leads to certain disciplines being deemed valuable and others not, with anthropology, sociology, gender studies, multicultural studies, and all of the humanities being singled out as unnecessary extravagances, even as study after study tells us that employers want students who can think, communicate, and solve problems – the aims of a liberal education.

It's no accident that "liberal learning" and "liberty" share a Latin root. The purpose of higher education is to advance knowledge and to share it for the greater good, to preserve and promote the conditions for a free society. That means sharing information with as many people as we can, defending the rights that allow people to explore ideas without risk, and helping people join the conversations that gives rise to knowledge. The purpose of a university is rather like the purpose of a library – to promote without prejudice both learning and discovery, to support the creation of new knowledge, and to preserve and pass down what we know.

what is **knowledge** for?



Now, let's adjust the aperture once more to see something even bigger: what is knowledge for? I'll go out on a limb here and appeal to values that are very old indeed: we seek the truth not because it will help us outperform our competitors or because we can leverage it for greater productivity, or because it will help us get a better job, but because knowledge will set us free. Knowledge liberates us from the ignorance and prejudice and helps us make sense of the world – and this is why we have universities, why we have libraries. To quote from an 1894 report from the University of Wisconsin's Board of Regents, we should "ever encourage that continual and fearless sifting and winnowing by which alone to truth can be found." This is a bold project of the modern university, and we mustn't lose sight of that public trust.



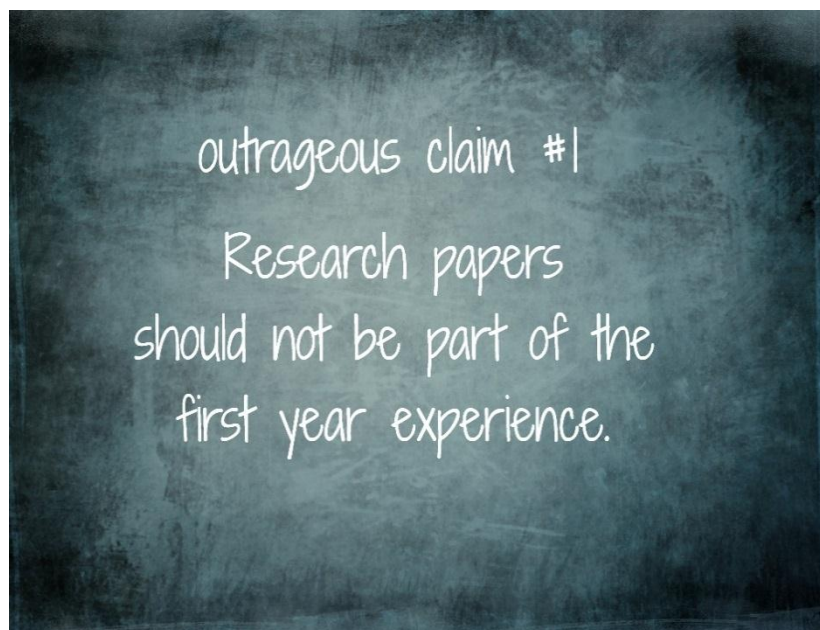
Now, that's all very abstract. What does this mean for our students? What do they need from us? What do we see as the ideal outcomes of our information literacy efforts? What ultimately do we want our graduates to know, be able to do, and believe? Those are abstract, difficult questions, but ones we should ask so that we can design our programs to lead to those outcomes.

We're now going to move on to the outrageous claims I promised you. Let me preface this by saying I believe what we do is tremendously important and that what students learn to do in libraries is perhaps the most important learning that they experience in their entire education. What I'm simply trying to do is question our assumptions about what that learning could look like.

But before we do that, let's take a look at a student's-eye view of research. There's a clever piece of software on the market that explains very clearly how many students perceive the practice of putting together a research paper, because it's designed to help them do it as quickly and efficiently as possible. It's called [Citelighter](#) and it lets students go to webpages, grab quotes, save the bibliographic information so citations can be generated from it, and offers a space to glue them together in a document. The video on the website explains how it can make your life better. You go to your favorite sources, highlight the facts you need (and everything you find in a source is described as a "fact"), arrange them, add your own thoughts, and push a button. Your paper is done. Better yet, this process is socially networked so you can share your collections of facts and borrow them from others. No need to search out and read any sources at all. Perhaps more dispiritingly, the video shows how a student with dreams and an urge to create something meaningful is finally able to do that – once he has completed that tiresome paper.

It's a clever app for doing more efficiently what students apparently think they should be doing. And we have evidence that this is, in fact, exactly how many students perceive the practice of writing research papers, in the [Citation Project](#), an ongoing study led by Becky Howard and Sandra Jamieson. They led an effort to gather and analyze first year writing samples from multiple institutions, largely in an effort to understand student research writing behavior to help them avoid plagiarism. What they found is that most students avoid paraphrasing or summarizing the source they use. Instead, they grab quotes and don't bother to interpret them. They grab them mostly from the first or second page of articles. They grab what works, whether or not it's in any way representative of the main point of the article. And they use those quotes as building material glued together with a thin mortar of their own words. Most of the work reviewed in the study is "patchwriting" rather than analysis or argument. The study suggests students are able to find the kinds of sources we hope they will use—that's the good news. The bad news is that they don't read them. Reading is not required when you think the point is to harvest and arrange quotes. By the way, this is not a product of our digital era. Jennie Nelson studied undergraduate writers some years ago, back the quotes they mined had to be copied from books, and concluded almost exactly the same thing: most first year writers gather material and quote it without engaging in the recursive process of reading, writing, and making meaning, the very process that we are trying to promote with these assignments.

So why do we keep making the same mistakes? This leads to my first claim.

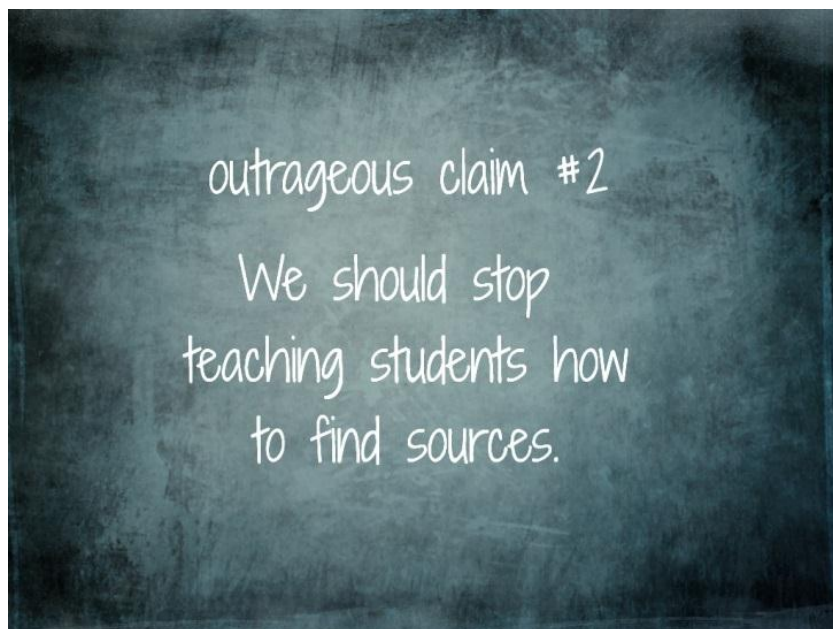


Assigning research papers without a lot of scaffolding and sequencing of tasks – and I mean a *lot* – may do more harm than good. One finding of [Project Information Literacy](#) is that students learn a process early on and stick to it. This approach to information behavior treats knowledge as stuff that is manufactured somewhere else, inert material to be acquired, stored, and exchanged. The library's website is a shopping platform for those pieces of authority. Students are often told by their instructors to use scholarly sources, which is kind of like being told to look for "organic" on the label at the grocery store – and of course we can show you the organic aisle with the click of a button. When they're done arranging the goods they selected, they need to list their ingredients in the kind of label that's required by law but which nobody actually reads. Unfortunately, we're not just talking about student behavior. We have a tendency to treat research as the production of monetizable lumps of intellectual property; publications are tokens of productivity exchanged with publishers for personal advancement. Education is either an industry or an investment, depending on whether you are a producer or consumer. When we think of knowledge in terms of production and consumption, creativity and collective agency – essential for how knowledge works – get left out.

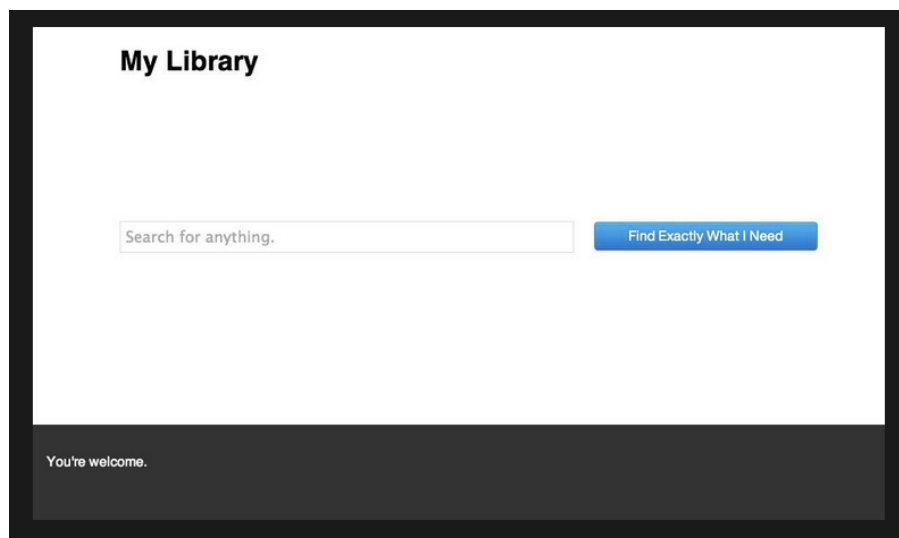
The dismal reports from the Citation Project and similar studies shouldn't be interpreted to mean that students can't read, can't think, can't understand sources rhetorically or put them to good use. They can do these things when they have an authentic purpose. Andrea Lunsford and other researchers at Stanford [have found](#) that undergraduates who are lackluster authors of research papers are sophisticated about the rhetorical moves good writers make when writing something for a reason that matters to them.

We may be too quick to assume that the job of first year writing assignments is to practice writing in a certain formal mode, using certain kinds of sources that are documented in a particular academic way. The real question we should ask ourselves is what do we want them to learn? Is research primarily a matter of sounding stuffy and formatting footnotes correctly? I think it's more critical that students learn how to make sense of other people's arguments and get the hang of writing about ideas in an organized, thoughtful way. When they're ready, it might not hurt to throw in a task that asks them

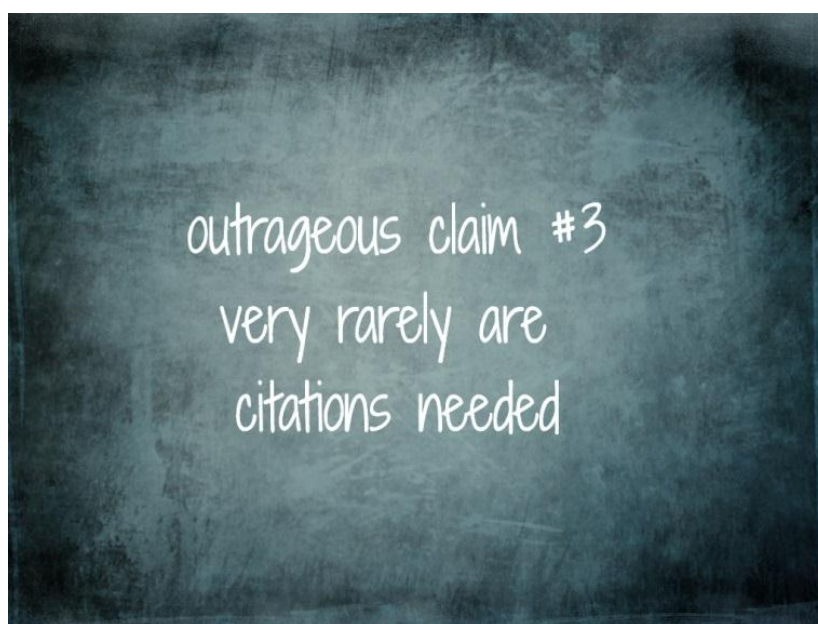
to find stuff out on their own. But when we ask them to do all of these things at once, often using assignment prompts that are very explicit about what the finished product should look like but without much information about how the process should work, they will think research is about producing a certain kind of peculiar writing they will never encounter outside of school; that research is a school thing; that nobody else seeks out the work of scholars to make up their minds or create something new.



My next claim is about how much emphasis we librarians put on finding sources. Though we are all on board with active learning and constructivism, and we don't fill our time with database demonstrations, we still (and I include myself in this "we") focus a lot of our time with students on how to use library tools to find stuff, mainly because when we typically meet with students, they aren't deeply into their research. We're lucky if they've read the assignment and have some idea of a topic they might search for. Yet we know from [Project Information Literacy](#) and a number of other studies that students actually have little trouble with this part of the process. Framing questions, seeing patterns in the literature, weighing evidence, seeing the gaps – that's what's hard, yet those are the activities that will make all the difference in whether or not students begin to see themselves as people who can make knowledge, as makers, not just consumers of other people's stuff. When so much of our work with students is devoted to finding, we inadvertently make it seem as if displaying what you can find is the point of research. And of course, it implies that finding the perfect source is the point. Matt Reitsma designed this nifty user interface that would be a huge hit with students. It's designed to locate the perfect source.

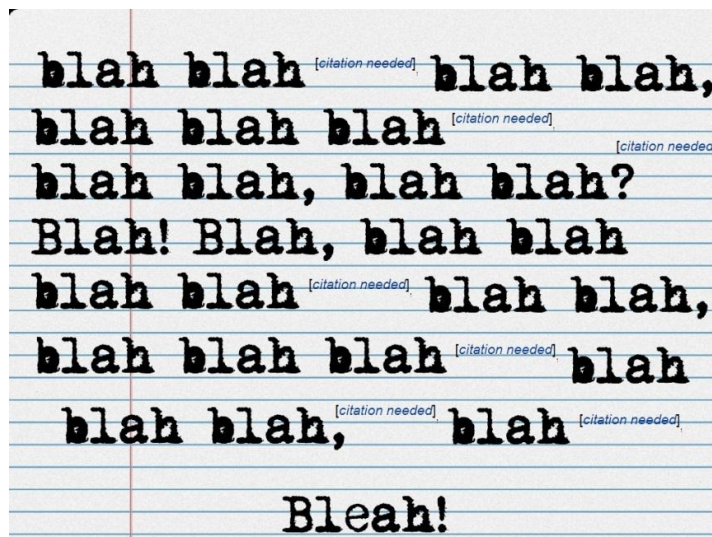


This focus on finding the source with the answer detracts from the idea that sources are for inspiration, for information, to bounce your ideas against while *you* construct the meaning you are looking for. *You* are the author of the perfect source.

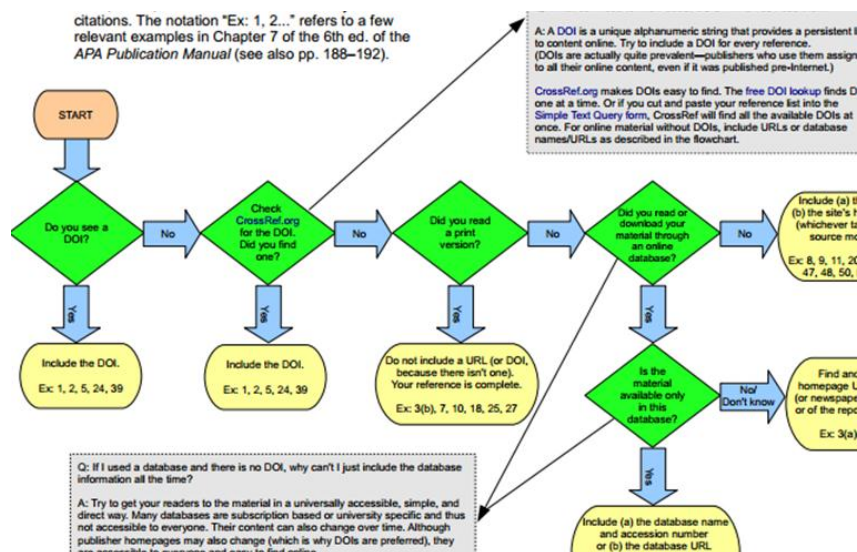


Another claim: very rarely outside of school are citations needed. I don't mean that using sources and acknowledging where the ideas came from won't be important post-graduation. But the emphasis on the construction of citations tends to hide what citations actually do: lead readers to the sources you have drawn on and give them some indication of whether you're full of hot air or not. Basically, they are laboriously-coded, extremely slow hyperlinks. Requiring students to learn how to code these links – or to adopt software that does it for them – is, in a way, lazy. They can get away with info dumps. They can let the citation stand for having read a source.

They are not necessarily learning that a lot of writers use and acknowledge sources. Just look at a story in the *New York Times*, or a piece in *Harpers*. Sources are consulted, acknowledged and woven into the story. Learning how to weave ideas together relies on understanding them and thinking about how they are in conversation with each other, and how they contribute to the story you're telling. This



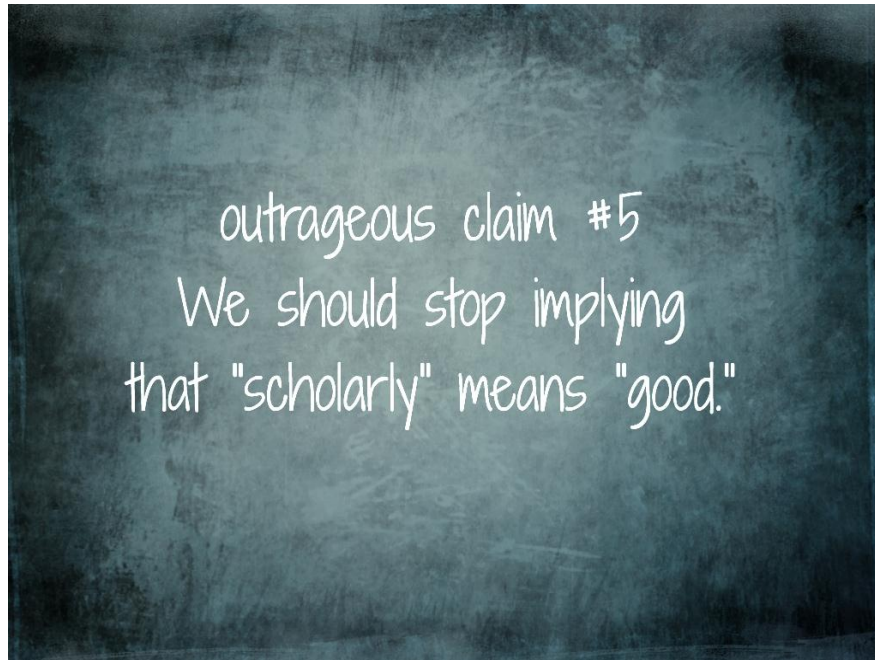
takes time. Instead, students have to spend their time figuring out what elements of a citation belong where and whether there's a period or a comma between them. This kind of hand-coding makes much more sense in an advanced course in which students are not practicing research writing, they're actually *doing* research.





A related claim: We should stop policing plagiarism. I got in some trouble when I asked on ILI-L why teaching students about plagiarism and how to create citations has become our job. [Esther Grassian](#) thought I was missing an opportunity for librarians to prove our value, or perhaps suspected that I was shirking work I didn't want to do. Actually, it was an honest question: what is the relationship of our profession to citation styles and the policing of plagiarism? Why is creating knowledge so tied up with intellectual property regulation? How can we expect students to participate in the co-creation of knowledge when at every turn we're warning them that they could be busted for theft if they're not really, really careful? When we put so much emphasis on proper documentation and careful use of sources, we make the library a place where rules matter more than creativity, where every use of information could get you in big trouble, where knowledge belongs to other people. More importantly, this focus does not lead to students having a better understanding of the value of supporting claims with well-chosen evidence or with even understanding what citations are for. The fact that students spend hours and hours composing citations, but cannot read them should give us pause.





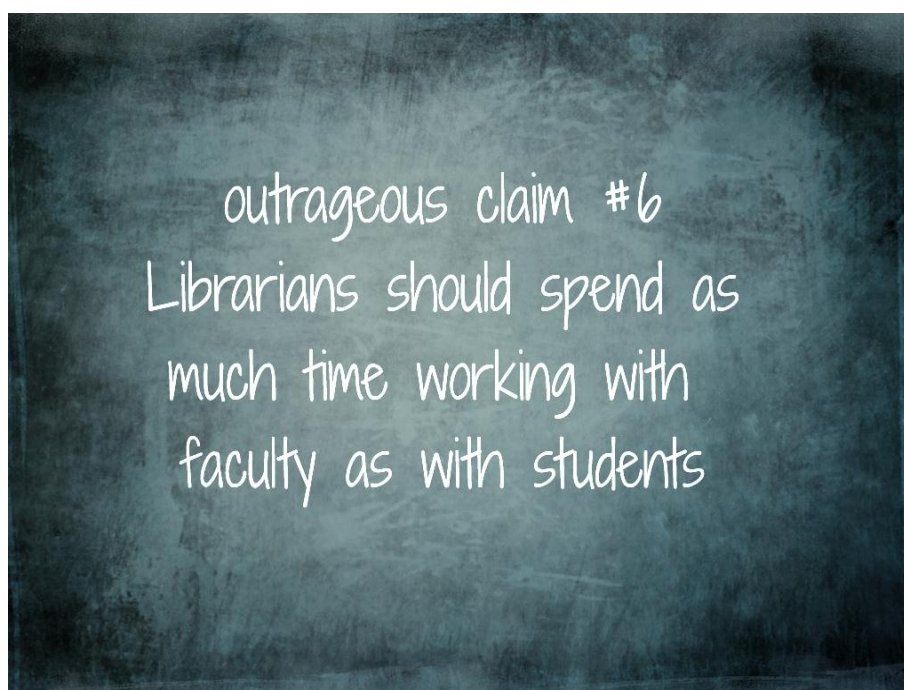
We too often sort the world of information into popular and scholarly and suggest that *by definition* anything published in a scholarly journal is superior to every other kind of information. This is simply untrue. Recently, a paper by two economists which has had a huge effect on public policy was criticized by a graduate student who discovered they had made a fundamental error in the way they handled data in an Excel spreadsheet (among other things). Nobody until then had tried to replicate their results. Nobody, apparently, had even looked closely at their data. Retraction Watch provides a running commentary on how often scholarly sources get it wrong. So do news operations. We can't expect undergraduates to fact-check every source they use or look closely at the data and methodology, but we can resist the oversimplification that you can tell a good source by how it looks.

Whenever we work with faculty who insist that first year students should use peer-reviewed research for their papers, we need to raise the problems with this approach. Novice researchers are not prepared to scan through hundreds of results to find something significant that they can understand. One simple way I've made that point in a workshop situation is to have faculty write down a topic that a student might write about in one of their classes, then have them trade those topics with a faculty member of another department and then say they have ten minutes to find five good scholarly articles. Though it seems sort of obvious, this brings home how challenging it is to make these kinds of choices about difficult subject matter. Where do I look? How do I know who is worth paying attention to? Is this a good journal or not? What I think faculty really mean when they tell students to use scholarly articles is that primary research matters, that scholars interpret the world in useful and meaningful ways, that when you're trying to figure something out, it's worth asking an expert. Unfortunately, that's not what students learn. They learn what a scholarly article looks like so that they feel safe grabbing a quote from it. It's really working at cross purposes with developing respect for evidence-based reasoning.

Of course, it can be delicate work suggesting that asking first year students to find scholarly sources is perhaps a . . . um, well, stupid idea. Yet embedded in this conundrum – how can we diplomatically and helpfully question a faculty member's pedagogical approaches? – is an interesting

truth that we know too well. Faculty hold all the cards with students; we don't. Students learn far more about information literacy from their course instructors than they ever will from us. Yet because we see how students struggle, because we witness their difficulty transferring knowledge from one setting to another, because we know there are times that students face an assignment for which they are totally unprepared, we have insights that could help faculty teach things that they consider important. Though few faculty use the phrase "information literacy" in their everyday speech, I believe it would be hard to find many faculty who don't believe an important outcome of any undergraduate education is the ability to find, evaluate, and use information.

Now, that doesn't mean they teach those skills well. Many do, but some feel they have enough to do to cover necessary content or have classes too large for them to provide adequate feedback and scaffolding for student work. Others try to teach their expert methods to students who are not experts, forgetting how much tacit knowledge comes into play when filtering results and rejecting sources that aren't worth pursuing. Yet if it's an important outcome for student learning, we must find the time to do it well.



And that, I believe, means we should spend at least as much time working with faculty as we do with students. I should add in the interest of full disclosure here that I haven't found an adequate way of doing this myself. Faculty are busy people. Increasingly they are contingent – 76 percent of faculty today are not full-time permanent employees. How do we work with these busy, stressed people to effect real change?

Think about a really good interaction with a faculty member. Where were you at the time? How did it start? What was it like? My guess is it was informal, equal, improvisatory, and exciting. What we want to do is provide an environment that fosters more interactions like that one.

If you have a robust and well-respected faculty development program, that might provide a forum for these kinds of interactions. If not, see if you can create your own program. The key to working

well with faculty is to avoid the “let me explain this to you” scenario. That never goes down well. We’re talking about work that faculty do day in and out, and we should avoid sounding as if we know more about it than they do, because we don’t.



Providing faculty a place to discuss their pedagogy, to share ideas, to learn from one another is a better approach. Faculty appreciate opportunities for conversation. By all means be prepared with ideas, with suggestions – but let the questions and ideas bubble up from the conversation. This work we do needs to be a common cause. Any chance we have to give faculty space to think will pay off – potentially far more than those chunks of time we coax out of them for us to meet with their students.



However we accomplish it, this collaborative work is critically important. It's not enough to get a bit of class time carved out for us. Dividing time into class-shaped blocks usually means we work with students at one point of a messy, complex process during which their relationship to information changes profoundly. Instead, we can 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, in general education. We can help them think about how these complex activities – reading critically, identifying claims, sorting through the record and selecting which leads to follow up, organizing your own thoughts, learning how to participate in unfinished conversations – can be nurtured and practiced over and over.



We librarians are in a position to help students survive their college years, and that's a worthy cause. We want them to succeed, we want them to graduate. But keeping them enrolled long enough to give them a diploma isn't enough. We are also in a position to ask, over and over again, *so what?* Why do we ask students to find and use sources? What will this learning mean after graduation? What aspects of this experience will stick, will continue to matter five years from now, or ten?

We may feel we're in a difficult position, with so little time in the classroom, with so little power on campus to influence change. But the fact is libraries are a powerful cultural symbol and librarians have more social capital than we might think. Most faculty care about these issues, too, and would love to have the chance to engage them with other faculty. We've made huge strides making our libraries sites for student learning; why not also make it a salon for faculty conversation, for discussions about learning, for articulating what it is that we do and why it matters?

Because we are generalists, not specialists, because we care about how knowledge can be used for the greater good, we can be the conscience of our institutions. Our libraries are not just the common ground of our campuses but a reminder that we are preparing students to be custodians of the commons in future. We hope to make our students more curious, more able to frame questions and seek answers. We can also be the people on our campuses who encourage our colleagues to look up in wonder and ask "what is this for? Why does it matter? How can we prepare our students to participate as free human beings in a complex world?"

More resources can be found in the [Zotero Teaching Inquiry group library](#).

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