

The Struggle is Real: Facilitating Information Literacy Learning by Being Leaders of Failure

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Making It Look Easy

One day in the spring of my first year of librarianship, I was sitting in my office when a frustrated student popped in to ask for my help in searching for an article. She noted her surprise at how difficult she was finding the process, because I'd recently visited her class to show some quick pointers, and "you made it look so easy then!"

That statement stopped me in my tracks. *Oh*, I thought. *That's not what I meant to do at all*. It was a complicated assignment, and I was allowed only 20 minutes to "show them the databases" in class. I prepared to do just that: I chose a topic that gave me plenty of options, figured out the search terms that would bring obviously relevant results to the top of the page, and pre-selected an article out of those results that matched the assignment requirements so perfectly it was as if I had written it myself. Preparing for the class took me about two hours, but I breezed through my search process in front of the students in just twenty minutes. By making it look so easy, I'd unintentionally concealed behind the curtain of an all-knowing "perfect search" all of the struggle, messiness, and trial-and-error I had encountered on the way to pulling together an idea that actually worked.

As librarians, we know successful research is often the product of a complex mixture of understanding, skill, persistence, and luck. But among library instructors, particularly those early in their career, I've sometimes observed a tendency to gloss over the difficulties of research—by pre-selecting examples of too-perfect topics, by modeling our own research processes in front of the class instead of asking students for theirs, by creating checklists of criteria—in order to cover everything we want to cover in the typically short amounts of time we're allotted. When we cut out the hard parts, I fear that we don't accomplish much more than proving ourselves as competent researchers. But if we recognize failure as a valuable teaching and learning tool, we can simultaneously improve learning experiences while reducing the instances in which students face library anxiety. As teachers in a low-stakes, neutral classroom environment, I believe we have a unique opportunity to improve students' cognitive and affective relationships with research by being leaders of failure.

Students Stand to Gain from Our Failure

One way humans learn is by making mistakes and reviewing what went wrong. Kapur (2016) notes that what he calls "productive failure"—which occurs when students engage in unguided, open-ended problem-solving that is just challenging enough to be engaging (p. 292)—has been shown to maximize performance in the longer term, if not necessarily producing stellar visible results in the short term (p. 289). I want to help my students fail (at least initially) in the classroom in order to be better researchers later, yet students are hesitant to visibly struggle in front of their peers or authority figures (Nickerson, as cited in Matthews, 2010, p. 201). If failure is normalized by myself (as the supposedly all-knowing instructor) and intentionally built into my pedagogy, that can give students the space and permission to experiment and persist in the face of research struggles. Modeling failure, according to Brown and Ramsey (2015), "sets an important example for learners to follow" by demonstrating "the iterative process of research" and how to navigate the roadblocks they may encounter (p. 17). A classroom where failure is encouraged is a classroom where persistent learning can happen.

When I make myself vulnerable and take ownership of my own flaws as a researcher, the affective environment of the room changes. Numerous studies have been done explicating the existence of library anxiety and its impacts (Blundell & Lambert, 2014; Brown, 2011; Cooke, 2010; Mellon, 1986), but if I can demonstrate the messiness and complexity that even I face, I can help make research seem less of a daunting endeavor and ease my students' worries about research. A librarian who has a learning disability like dyslexia, for instance, may try to keep that part of themselves hidden. But when they bring that to light, it can be incredibly powerful (Brown & Ramsey, 2015, p. 17). When we "model our own fallibility" (p. 17), we tell our students that our mistakes and failings with respect to research are normal and surmountable—and that theirs are too. In contrast, seeing a librarian engaging in database searching and coming up with the perfect results may make a student feel even more nervous and discouraged when the time comes to do their own research and they don't strike gold on their first try.

What We Can Do

We can help our students become better researchers, producers and consumers of information, and overall

learners when we willingly share our failures and empathize with our students. Though undergraduate studies and first encounters with research assignments were a long time ago for some of us, remembering how it feels to be uncomfortable with a task due to a lack of skill or understanding can help us begin to identify with how our students may feel in our library classrooms. Furthermore, we can use our experience as instructors and the assessment we've conducted in our classrooms to pinpoint where students may struggle most. Wiggins and McTighe call for teachers to “predict potential misunderstandings and rough spots in learning” (2005, p. 10) in order to better facilitate big-picture understandings of major concepts. These anticipated learning “rough spots” provide an entry point for us to share any misperceptions we've had about the concepts students themselves may have trouble with and help them avoid the mistakes we and previous sets of students have made. With this in mind, I've outlined some strategies for how we can integrate sharing our failures into our teaching.

Tell Stories

Storytelling can be an effective teaching tool in nearly any teaching situation, but it can be especially impactful when sharing our failures with our students. I have told stories to illustrate mistakes I'd made as a student (like taking auto-generated APA citations without correcting them), things I struggle with as a librarian (like how it sometimes takes me hours of battling with databases before landing on any truly productive search strategy), and how I would feel if I were in their shoes as students (like telling them their research assignment is tough even to me, and what I would probably need help with most if I had to complete it myself). For those who don't feel comfortable publicly broadcasting their own shortcomings, storytelling can still be an effective way to share and celebrate failure with some small modifications. What was once personal can be framed instead as having happened to “a student I knew a while ago.” Simply hearing out loud that they're not alone in their struggles or confusion can sometimes be enough to alleviate students' library anxiety and prepare them for the ambiguity and experimentation of the research process.

Can the Canned Search

I came across this delightful phrase on the University of Texas at Austin Libraries' Teaching & Learning blog, which discusses the concept of “modeling stupidity” or “mak[ing] transparent difficult processes like research” and revealing gaps in our own knowledge (Brandt, 2015, para. 1). The author identifies the “canned search,” wherein the library instructor pre-selects a well-suited research question and search strategy for retrieving articles that could answer it, as a barrier to facilitating stu-

dents' understanding of the research process. The blog post justifies this stance by citing a similar scenario to what I encountered with the student who came into my office last spring—“we show a perfect search, then students feel badly when their searches aren't perfect” (para. 2). To avoid the canned search in my teaching, I try to invite opportunities to authentically model the search process—mistakes, backtracks, and all.

Furthermore, avoiding the canned search gives students an insight into the challenges they may face when researching as well as strategies for overcoming those hurdles, all of which we can identify as a class. This method of instruction can take time; Brandt's post suggests making that time active by having students guide the search (i.e. “what should I do next?”) or, if a pre-selected search is necessary (e.g., there are certain search pitfalls you want to highlight by “accidentally” running into them), making it explicit that the search was screened before class (ideally using an actual student topic gained from the instructor ahead of time) and that their own topic may have different levels of initial success. Focusing on process and making it transparent enables students to learn with us and recognize the complexities of research (Douglas, 2016, para. 4), which demonstrations of the “perfect search” tend to hide away.

One example of a time I put myself on the spot in front of a class was when an athletic training student suggested searching for articles on football concussions. “Football concussions” brought up tens of thousands of results, and I didn't have an immediate strategy for where to go next (I'm not a sports person). However, by making searching a group effort where students meaningfully contributed, it helped ensure the students were engaged in clueing us into what we need to know about a subject in order to search for articles about it. I learned about the difficulties surrounding diagnosing sports concussions, which helped us decide to focus on finding information about new strategies and technologies for concussion detection. More importantly, the students learned first-hand about the iterative process of research and how background knowledge is essential for developing meaningful search strategies.

Capitalize on Teachable Moments

Opening ourselves up to failure—whether admitting to past mistakes or putting ourselves in a position where initial failure is a possibility—provides us with opportunities to model and encourage the important skill of metacognition. Metacognition, in this case relating to recognizing errors and being able to reason why they happened and how to fix them, has been shown to increase retention and transfer of learning (Mathan and Koedinger,

2005). We can seize the teachable moments that reveal themselves when we fail in front of the classroom and talk through our mistakes, and we can involve our students in creating their own reasoning, too. This can spur further reflection and discussion about what we can do next time to avoid running into similar difficulties. Even accidentally-on-purpose failure can serve this objective. For example, I've seen librarians type in long, detailed search strings into a library database only to "wonder" why they got zero results. Similarly, I'll sometimes intentionally use the "non-scholarly" terminology for a concept in a search strategy, like "global warming" instead of "climate change." Then as a class we can try to determine why we're not getting many scholarly articles using these terms, leading to valuable lessons on why vocabulary matters so much when doing research. Students having the explicit and intentional chance to see the limits of their own knowledge and explain their struggle to expand that knowledge necessarily draws back the curtain and prompts them to think about the underlying processes of research (Bransford, Brown, & Cocking, 2000)—a process that they don't need to think about when all goes well. Making the struggle visible opens up opportunities for deep thinking and learning that we may not afford our students when we're focusing on hiding the vulnerable parts of ourselves away.

Don't Fear the Failure

There are myriad reasons why I would want to give off the impression of expertise and self-assuredness as an instructor, ranging from the political (I want faculty to respect me) to the personal (it feels more comfortable). Yet I feel that I do my students more favors when I grant them at least a glimpse into my own research struggles and failings. I am able to facilitate greater opportunities for them to truly learn, and I demonstrate humility and compassion by acknowledging myself and my students as human beings approaching this sometimes-scary process together.

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