

Robin Ford

The long conversation

Reflections on science librarianship

As you read this column, feel free to get up and move around. Make access for yourself. We are in dialogue, and we should all be comfortable to nurture this conversation.

As an early career science librarian, it can be challenging to incorporate the ACRL Framework for Information Literacy for Higher Education into my work. In the STEM fields (Science, Technology, Engineering, Mathematics, Medicine) students, faculty, and staff are pressed for time and are focused on skills, data, and gaining familiarity with specific resources. In this column, I reflect on the frame Scholarship as Conversation, and draw on it for inspiration and guidance in my practice. I highlight examples of this discussion with this frame and how it informs my instruction, collection development, and outreach efforts.

I consider my work to be part of a long conversation in librarianship that is becoming more critical and reflective in the ways in which we as a profession simultaneously reinforce and also seek to disrupt racism, sexism, homophobia and transphobia, ableism, and other forms of oppression.

Instruction

I work to provide accessible and inclusive workshops, orientations, and instruction sessions, both in person and online, with math, computer science, and natural science departments at a small liberal arts college. I collaborate with faculty to tailor library instruction plans to their students' needs, while supporting the rigorous undergraduate science curriculum. The frame Scholarship as Conversation¹ can be effective in bringing

reflective and inclusive practices into teaching, by centering this work as a conversation. This conversation can take place where it works best for participants—in the lab, library, or online. Weaving the STEM fields with the social sciences and humanities is essential to create safer spaces for learning, debate, and personal growth. The introduction to this frame—"Communities of scholars, researchers, or professionals engage in sustained discourse with new insights and discoveries occurring over time as a result of various perspectives and interpretations"² sets the stage for how I discuss library research with students. I support students in understanding the issues and ethics surrounding knowledge creation, organization, dissemination and consumption, the peer review process, and publishing.

Often in the STEM fields, solutions to problems focus on beginning and end as part of the scientific process. However, science is part of a long conversation. Ethics and morals around science are a component of a conversation that does not end once results are published. This discourse happens with people of different backgrounds, expertise, and perspectives contributing. In school I was never told that I could write a scholarly article or that I could be a member of a scholarly community. That always seemed far off and exclusive. For this reason, I share with students that they are

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already valued members of this conversation, even if they never publish a scholarly article, because the conversation includes more people than just professors and researchers. I tell them, they might be part of the conversation and not understand everything that has been said before, and that may mean it is time for more listening, but that doesn't diminish in any way their contributions. From the Frame's dispositions, students "recognize they are . . . entering into an ongoing scholarly conversation. . . ."³

When I taught undergraduate engineering library instruction as a graduate student, I encountered an example of student recognition that they were "entering an ongoing scholarly conversation." Students were tasked with writing about a current engineering topic and coming up with possible solutions. Many students were interested in autonomous vehicles or drones. As they searched engineering databases, I could see their worry, the titles of their found articles discussed the programming, materials, or physics of these machines. The titles were not only incomprehensible to me, but also to them. I don't want students to feel discouraged by interactions with the literature, the conversation of their chosen field, so we discussed how they are at a particular part of the conversation. And to ease into it, they should look for titles that made sense to them at that time.

It is still important to prioritize acquainting STEM students with the trusted resources in their fields, such as SciFinder in chemistry or MathSciNet for mathematics, but also they need to have opportunity to explore how they fit into and want to contribute to the scholarly conversation. We often tell our students that citing others' work is about avoiding plagiarism. Citation is more than that. It is how we can pick up the threads of meaning and connections in science's long conversation. I emphasize that being a valued contributor to this long conversation is understanding how citations reinforce particular knowledge, and how future researchers may converse with those in the present. Thus, I believe science librarians must foster critical thinking skills

and self-reflection on the systems of power that influence who is cited or not.

As part of the knowledge practices for this frame, there are two main points to be made: the ability of a student to "cite the contributing work of others in their own information production" and "[p]rovid[e] attribution to relevant previous research is also an obligation of participation in the conversation . . . [and] enables the conversation to move forward and strengthen one's own voice in conversation."⁴ These are radical acts. Who one chooses to cite and learn from in this conversation is not neutral. Sara Ahmed explains, in terms of citation, why the conversation (and I suggest here *science*) is always shifting, and that listening and being changed by it is necessary to its continuation.

Ahmed states, "citation is how we acknowledge our debt to those who came before; those who helped us find our way when the way was obscured because we deviated from the paths we were told to follow."⁵ This statement is true in the sciences, in regard to scholarship that upends tradition. Students can find insight, new directions, or challenge past scholarship based on new or conflicting evidence. Eve Tuck, a co-creator of the Citation Practices Challenge, based in part on Ahmed's thoughts on citation, also asks us to reflect on why we choose whom to cite and whom we should no longer cite.⁶ Being intentional and thoughtful about our citation practices in the sciences is essential to continuing the conversation.

I share with students how citation is an important part of Scholarship as Conversation. It is in an effort to be adaptable to the needs of those I support and learn from. I meet them where they are now. I am present with them, while also affirming their experiences, expertise, and knowledge, which align with the knowledge practice from within the frame: Students are "[d]eveloping familiarity with the sources of evidence, methods, and modes of discourse in the field assists novice learners to enter the conversation."⁷

Part of participating in this conversation is also sharing about ourselves and our rela-

tionships to power. This honesty makes the human element of scholarship more real. It demonstrates to students that the other people in the conversation are also multidimensional. It is an entry point for students to also “see themselves as contributors to scholarship rather than only consumers of it. . . .”⁸ I encourage all of us in instruction sessions to share about ourselves, even if it is as simple as one’s pronouns and a love of LEGOs.

Collection development

Making science personal by making the people within science more approachable is another avenue to bring Scholarship as Conversation and its meanings into collection development and management. Meeting people where they are, while embracing the accessibility of physical and digital spaces and resources, is meaningful to create a library that has collections that are equitable, useful, and representative. This approach is vital in the sciences, because inclusion, openness, curiosity, transparency, and sharing are what sustain the conversation that is science. Conscientiousness in the conversation of scholarship is important when being attentive to collection development and management. De-centering whiteness, making space for native voices and those outside the West, while having a foundation rooted in accessibility is necessary to nurture the conversation of scholarship.⁹ Taking the time to reflect on our own privileges, ignorance, and defensiveness surrounding structural inequalities is a start to the ongoing process of reflection and action to co-create libraries that deserve all people.^{10,11,12,13}

My approach is to be an active listener and advocate for those who are often not included in the conversation of scholarship. I am assertive in promoting the work of women, people of color, and others in the types of materials we offer in the sciences. Consulting with students, faculty, and staff about what gaps they recognize in library collections, and then taking shared action, must be a top priority. The effort to decolonize our collections is a long, complicated conversation. To support this conversation I include participant voices

not just when they wear the mantle of scientist or researcher. We all bring ourselves to work, and sharing who we are outside of research may seem to conflict with where we think the focus should be. By knowing people outside of their publications, we have the opportunity for entry points into understanding who they are and what their work means on a greater scale. I intentionally purchase biographies by folks not usually known within their field or outside of their work, e.g., scientists, mathematicians, physicians, nurses, botanists, citizen scientists. I also suggest reflection on the different ways in which information is shared in the sciences outside prestigious journals and databases, like videos, zines, and tweets. Videos of experimental methods or zines on how to handle the thesis process are additional ways of sharing meaning, which can lower barriers to understanding.

Outreach

When examining my outreach efforts in the sciences through the frame Scholarship as Conversation, I consider the well-being of students, staff, faculty, and myself as vital to continuing this conversation. I started this article with an access statement. Margaret Price, professor of rhetoric and disability studies and advocate for accessibility in academia, uses an access statement for all presentations.¹⁴ It is a simple thing at the beginning of any library instruction, workshop, or meeting, to encourage people to make themselves comfortable, to be ready to settle in and engage in the long conversation. Accessibility is everyone’s responsibility. Insisting on microphone use is a small action to enable greater participation in the long conversation. Promoting accessibility is especially necessary if we are to ensure that all voices are nurtured in these long conversations. I continue to seek out accessibility resources and share them with colleagues.¹⁵

My current institution has a required thesis for all undergraduate students. In the sciences, the thesis is a student’s opportunity to “contribute to scholarly conversation at an appropriate level, such as . . . undergraduate research. . . .” However, the high stress environment, such as Reed College’s intensely academic one, means

that many struggle with scholarly demands. This is why I view myself as an additional support person in students' undergraduate experience, one who can help them set realistic expectations for library research, while also encouraging their participation in the conversation of science.

Nurturing the entire person and recognizing that their well-being affects their engagement in meaningful scholarship is crucial to creating space for all of us to learn, grow, and share. I practice (cultural) humility to support myself and others having the space to engage in Scholarship as Conversation. The value of humility is having the courage to say, "I don't know." It is creating spaces where people feel valued and free to ask questions—those that sometimes there are no answers for.

For me, humility also means that I check my ego. I give people the benefit of the doubt. I tell my truth. I don't police tone. I listen to the message and withhold judgment. I promote sustainability in relationships, while not prioritizing my health and well-being over others. I also practice self-care and encourage others to do so. I take accountability for my actions and impact. Humility is understanding we are interdependent on each other. I did not get where I am just on merit. I am here due to the support, mentorship, relationships, and emotional labor of others. Reciprocity is part of this work. Humility for me is creating space for myself and others to admit they don't know, admit they are wrong, and will do better. Effort is required by all of us so that we can engage in Scholarship as Conversation.

Conclusion

As a librarian in the sciences, I am a learner, interpreter, mentor, collaborator, communicator, and partner with library staff, faculty, and students to make the sciences approachable and accessible. By considering science to be a long conversation, one that does not end, we can collaborate to ensure we are reflective, rested, and ready to engage in Scholarship as Conversation, while taking our responsibilities and obligations to ensure diversity, inclusion, and social justice in libraries are foundational practices.

Notes

1. ACRL, "Framework for Information Literacy for Higher Education," January, 2016, <http://www.ala.org/acrl/standards/ilframework>.

2. Ibid., ACRL, "Framework for Information Literacy for Higher Education."

3. Ibid., 21.

4. Ibid., 20.

5. Sarah Ahmed, *Living a Feminist Life* (Durham: Duke University Press, 2017), 15–17.

6. Eve Tuck, K. Wayne Yang, and Rubén Gaztambide-Fernández, "Citation Practices Challenge," accessed August 19, 2019, https://docs.google.com/forms/d/e/1FAIpQLSdpbmsJDZ3-zwca-dgGjfePrT_6koBTZRWlvh80fmoYYQRrIw/viewform?usp=send_form&usp=embed_facebook.

7. Sarah Ahmed, "Making Feminist Points," Feministkilljoys (blog), September 11, 2013, <https://feministkilljoys.com/2013/09/11/making-feminist-points/>.

8. ACRL, "Framework for Information Literacy for Higher Education," 20.

9. Ibid., 21.

10. Robin J. DiAngelo, *White Fragility: White It's so Hard for White People to Talk about Racism* (Boston: Beacon Press, 2018).

11. Rose L. Chou and Annie Pho, eds., *Pushing the Margins: Women of Color and Intersectionality in LIS* (Sacramento, CA: Library Juice Press, 2018).

12. Gina Schlesselman-Tarango, ed., *Topographies of Whiteness: Mapping Whiteness in Library and Information Science* (Sacramento, CA: Library Juice Press, 2017).

13. Eve Tuck as quoted in: Zuroski, E. (2018, April 5). Holding patterns: On academic knowledge and labor. Retrieved July 3, 2018, from <https://medium.com/@zugenia/holding-patterns-on-academic-knowledge-and-labor-3e5a6000ecbf>

14. Margaret Price, "Access Statement for Presentations," accessed August 12, 2019, <https://margaretprice.wordpress.com/access-statement-for-presentations/>.

15. Mahadeo A. Sukhai, *Creating a Culture of Accessibility in the Sciences* (London: Academic Press, 2016). 