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Loaded questions

The Framework for Information Literacy through a DEI lens

lust after our university published its **J**Diversity, Equity & Inclusion (DEI) Strategic Plan, I found myself driving home from the "Engaging with the ACRL Framework" Roadshow. My head was full of converting knowledge practices into learning outcomes1 when the frames began to emerge through a DEI lens, and threshold concepts became questions. The very asking of a question inherently invites diverse, individual perspectives. Published before current higher education DEI efforts, the Framework prompts us to ask questions and pursue answers, especially from unheard or systemically silenced voices. It encourages us to challenge elitism, racism, sexism, ableism, and biases within the entire information ecosystem.

After donning "DEI glasses," and perusing emerging literature on the interrelationship between social justice and information literacy, each frame begins to raise questions.

- *Information Has Value* asks how the deprivation of access to information for those without financial means creates the digital divide, and its consequences.
- Authority is Constructed and Contextual questions the value and diversity of authors of "scholarly sources" and which voices go unheard.
 - Research as Inquiry probes whose

questions get asked and researched. Does everyone have the means to conduct research about topics important to them?

- Scholarship as Conversation queries who is privileged to participate in those conversations. Does the information created reinforce the perspectives/experiences of the participants, potentially excluding voices systemically marginalized from the institutions that generate scholarship?
- Information Creation as a Process examines access to that process and its value within different cultural contexts.
- Searching as Strategic Exploration gives rise to questions regarding search technologies, their encoded biases, and the cultural capital required to navigate existing knowledge organization systems.²

Interpreting the ACRL Framework through a DEI lens enables librarians to elevate their own critical information literacy (IL) when approaching the design of IL instruction.

Configuring the Framework as a guide for question-asking enables us to adopt a critical stance in how we approach IL instruction within our own contexts through

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DEI concepts. This stance expands "information literacy" to include racial literacy, ³ algorithmic literacy, ⁴ media literacy, digital literacy, intersectional literacy, financial literacy, data literacy, and perhaps countless yet-to-be-named literacies embodying concepts like neurodiversity.

Critical thinking, the backbone of metacognition, is the starting point for any of these literacies. It is about asking questions regarding the seemingly obvious. Referencing Paolo Friere, James Elmborg noted in his seminal article "Critical Information Literacy: Implications for Instructional Practice," that "by developing critical consciousness, students learn to take control of their lives and their own learning to become active agents, asking and answering questions that matter to them and to the world around them."

Asking and answering personally valid questions is the heart of education, and of teaching IL. The Framework directs us to question the embedded cultural/social/political assumptions and context that underlie "facts," data, self-described evidence, research questions, methodologies, and conclusions. It invites us to "poke the bear" through questioning and awaken discussion of systemic inequality within knowledge creation, access, evaluation, use, and dissemination.

From its inception in 2015, the literature has challenged the Framework for not explicitly making connections between information literacy and social justice, and not providing avenues for action once an understanding is achieved of the underlying issues of power and privilege within the systems that produce and disseminate information.⁶ As use of the Framework evolves, it is becoming clear that it can serve as a tool to generate key questions and subsequent actions that are meaningful to challenge the embedded structures of power and privilege in learners' immediate contexts.

The Right Question Institute's Question Formulation Technique (QFT)⁷ may be employed by librarians, educators, and

collaborators reading the Framework to generate learning outcomes that reflect diverse ideas surrounding information creation, organization, dissemination, and use, while embracing social justice, equity, and inclusion. Nicole Branch used a similar process grounded in critical pedagogy theory to develop learning outcomes for the Information Has Value frame with a group of academic librarians. Her conclusions emphasize the twin crucial elements of collaboration to maximize perspectives, and understanding resultant objectives are uniquely relevant to the participants' context.8 As teacher librarians, we need to approach our Framework question-asking collaboratively, with representative community members, for learning and action appropriate to our unique situations.

Employing the initial brainstorming step of QFT, below are questions prompted by each frame through a DEI lens. Collaboration with colleagues and learners would yield deeper and broader lists with greater relevance for our local context to guide instruction and subsequent action.

Authority is Constructed and Contextual (ACC)

While emphasizing the interrelatedness of all the frames, Michael Dudley argued (in this column) that they "all derive from and depend upon the foundational ontological nature of ACC, which is to say, our understandings of what exists, the terms we use to describe what exists, and those on whom we rely for these descriptions." He demonstrates how structural biases built into knowledge organization systems and processes like peer-review can reinforce conventional wisdom and preclude the introduction of new or previously silenced voices of wisdom and perspective.

- What constitutes authority, and who grants it?
- Does Google assign authority for us? What role do algorithms play, and how are they created?

- How does personal context and identity influence expertise, the questions asked, and the research conducted? Can anyone acquire expertise?
- Who decides which questions get researched, and about whom?
- Can authorities on the same topic disagree? How?
 - How do we decide who to believe?

Research as Inquiry

This frame articulates the value of question-asking for exploration, discovery, and evaluating gathered information to generate further questions. In a research methods class students used SIFT (Mike Caulfield's media evaluation tool)¹⁰ to determine if they thought an article¹¹ about a study involving racialized perceptions of online images of "humanoid robots" was credible.

One student traced the original study¹² and ignited a firestorm of questions from the group: Are the participants in the study representative if they're recruited using a social media app? What size sample is needed to constitute valid results? If "humanoid robots" are nearly all depicted as white in Google Images, does that mean only white people create robots? What percentage of robot engineers are people of color? These students intuitively generated questions in the iterative nature of the research process, organically delving into DEI issues. Critical thinking and questionasking are the essence of Research as Inquiry.

- Where do research questions come from, and how is it decided which are worth investigating?
- Are biases reflected in the questions asked?
- Is Googling a type of research? Is Google biased?
- How is a research sample confirmed as representative and its findings valid?
- Would poll participants on social media be considered a randomized sample?

• Can government decisions affecting large, diverse groups derive from research conducted on small, homogenous groups? Why might this happen, and how might it be changed?

Information Has Value

This frame questions access and ownership of information, tugging at the dichotomy between private gain and public good. It questions types of value from profit to learning, persuasion, and power. All information has value to someone, somewhere, for some purpose. What is essential is discerning the motives for information creation in a particular format to meet an information need. This frame explicitly questions social justice implications of information systems, access, and creation, particularly in regards to privilege, profit, and power.

- What is my "information privilege?"
- What are the consequences of unequal database access across colleges?
- Why do some articles in Google Scholar require payment to read and others don't? Why are they so expensive?
- Why, how, where, and for whose benefit was citation created?
- If the purpose of research is to help improve lives, why isn't it freely available? Who funds conducting and disseminating research?
- Do academic publishers exploit scholars as authors/reviewers?
- What is "personal information," and why do I need to protect it? Why, by whom, and for whom is it "collected" and "sold"?

Scholarship as Conversation

This frame acknowledges novice learners, though experts may participate in the interactive process of scholarship. However "established power and authority structures may influence their ability to participate and can privilege certain voices and information."¹³ Structures of scholarship

such as "peer review" may limit the entry of alternative perspectives and reinforce widely accepted theories, even if they are inaccurate. Political, social, and economic barriers to participation in scholarly conversation are embedded within the culture of American higher education and the structures of intellectual production.

- Must you have a terminal degree to be a "scholar"?
- Are full-time faculty and adjuncts heard equally by their disciplines?
- How do peer-reviewed journals select writers of editorials on their journal content?
- What criteria are used to necessitate the retraction of research studies (such as retractionwatch.com)?
- How might emerging scholars or interested public influence the direction of research within a discipline?
- How might paradigms be challenged, particularly by those adversely impacted by established ways of thinking?

Information Creation as a Process

This frame speaks to the complexity of information formats and delivery and the ever-evolving creation processes underlying them. A decade ago, no one would imagine international relations would be conducted over Twitter, a platform designed for abbreviated comments.

While technology has provided avenues for broad participation, it has also deepened the inequities present in society. Information, like technology (including AI), is created by people and will therefore embody their biases and misconceptions. Management literature is saturated with data-driven decisions, elevating data to a form of information royalty, yet the decisions surrounding design, collection, aggregation, interpretation, and presentation of data are reflections of human attitudes and ways of thinking with all the compromises those entail.

• Who does/doesn't have access to information creation processes and why?

- Can data be interpreted in different ways, with different conclusions depending on the interpreter's context and beliefs?
- Am I "creating" information when I post on social media? What impact do my contributions have?
- How do social media influencers become such? Should they accept a higher level of responsibility for their communications?
- How might headlines contribute to misunderstandings or racism? "Black Americans dying of COVID-19 at 3X the rate of whites" conveys the idea that race constitutes biological susceptibility to COVID-19 instead of circumstances resultant from systemic racism.

Searching as Strategic Exploration

"Experts (searchers) realize that information searching is a contextualized, complex experience that affects and is affected by, the cognitive, affective and social dimensions of the searcher."14 This frame neglects to state that the search experience isn't just about the searcher. The challenges of searching might be exacerbated by knowledge organization systems that reflect dominant culture mindsets inaccessible by marginalized populations, and blatant "algorithmic oppression" within the design and execution of search technologies.15 "Strategic exploration" would need to include fluency in the academic language of the historically white, male, wealthy, "ivory tower," and a highly refined capacity to question the very technologies being used in the search process.

- What do successful searchers need to know about how knowledge is organized?
- How might search algorithms reinforce biased attitudes?
- How are search results prioritized in search engines?
- Why does the federated search not search everything? Does Google search everything?

• How does commercialism manifest in library databases?

Conclusion

Prompted by the Framework viewed through a DEI lens, generating questions collaboratively and inclusively in a local context provides potential for IL instruction that delves into issues of power and privilege embedded in the established systems of information creation, dissemination, and consumption. The Framework remains situated within an existing culture of Western, neoliberal, post-secondary education, and calls for an examination of that context, while spurring inquiry regarding all realms of knowledge creation and acquisition, and their corresponding embedded power structures. Librarians are well positioned to initiate a collaborative community of inquiry within their institutional contexts using the Framework to elicit a broader understanding of the information ecosystem through a lens of DEI and social justice.

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Notes

- 1. "Framework for Information Literacy for Higher Education," (Chicago: ACRL, 2015).
- 2. Amanda L. Folk, "Reframing Information Literacy as Academic Cultural Capital: A Critical and Equity-Based Foundation for Practice, Assessment, and Scholarship," *College & Research Libraries* 80, no. 5 (2019): 658-673, https://doi.org/10.5860/crl.80.5.658.
- 3. Winona Guo, "Toward a Culture of Racial Literacy," *Harvard Political Review*, Harvard University, 2019, https://harvardpolitics.com/harvard/toward-a-culture/.
- 4. Alison J. Head, Barbara Fister, and Margy MacMillan, "Information Literacy in the Age of Algorithms: Student Ex-

- periences with News and Information, and the Need for Change" (San Francisco: Project Information Research Institute, 2020), https://www.projectinfolit.org/uploads/2/7/5/4/27541717/algoreport.pdf.
- 5. James Elmborg, "Critical Information Literacy: Implications for Instructional Practice," *The Journal of Academic Librarian-ship* 32 (2006), https://doi.org/10.1016/j.acalib.2005.12.004.
- 6. Andrew Battista, Dave Ellenwood, Lua Gregory, and Shana Higgins, "Seeking Social Justice in the ACRL Framework," *Comminfolit* 9, no. 2 (2015): 111–25, https://doi.org/10.15760/comminfolit.2015.9.2.188.
- 7. "Right Question Institute: A Catalyst for Microdemocracy," Right Question Institute, 2020, https://rightquestion.org/.
- 8. Nicole Branch, "Illuminating Social Justice in the Framework: Transformative Methodology, Concept Mapping and Learning Outcomes Development for Critical Information Literacy," *Communications in Information Literacy* 13, no. 1 (2019): 4-22, https://doi.org/10.15760/comminfolit.2019.13.1.2.
- 9. Michael Dudley, "Exploring Worldviews and Authorities: Library Instruction in Indigenous Studies using Authority is Constructed and Contextual," *C&RL News* 81, no. 2 (2020), https://doi.org/10.5860/crln.81.1.66.
- 10. Mike Caulfield, "SIFT (The Four Moves)," Hapgood, June 19, 2019, https://hapgood.us/2019/06/19/sift-the-four-moves/.
- 11. Matt M. Miller, "Study: Humans Hold Racial Bias against Robots," *The Daily Signal*, accessed May 30, 2020, https://www.dailysignal.com/2019/08/10/study-humans-hold-racial-bias-against-robots/.
- 12. Christoph Bartneck, Kumar Yogeeswaran, Qi Min Ser, Graeme Woodward, Robert Sparrow, Siheng Wang, and Friederike Eyssel, "Robots and Racism," 196–204, HRI '18, ACM 2018, https://doi.org/10.1145/3171221.3171260.
 - 13. ACRL, "Framework," 20–21.
 - 14. Ibid., 22-23.
- 15. Safiya Umoja Noble, Algorithms of Oppression: How Search Engines Reinforce Racism (New York University Press, 2018).