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Meet them in the proximal zone

Introducing framework concepts to “novice learners” using reference sources

Striving to foster critical thinking and metacognition in relation to information literacy is the penultimate goal of instruction librarians. Yet, all effort to do so is futile if students are not being met in their own proximal zone of development. Within the descriptions, knowledge practices, and dispositions of the frames in the Framework for Information Literacy for Higher Education,¹ the “novice learner” is often referenced and compared to the “expert learner.” So while first-year college students begin their journey into higher education with varied levels of experiences in academic research and writing, many are these novice learners referred to within the Framework. Recognizing, and more importantly, accepting where these students are within their own levels of information literacy development can help to determine how to best scaffold instruction by using appropriate teaching tools and pedagogy.

The proximal zone

To transform a novice learner into an expert learner, a singular one-shot instructional session will not suffice. This process, especially when taking into account the vast array of interconnected concepts that constitute the Framework, will take years of learning to come to fruition. Over the course of a student’s undergraduate education there are multiple touchstones,

with and without the librarian, for the development of the knowledge practices and dispositions associated with the frames. Undergraduates can encounter Framework concepts through student engagement experiences, and many professors infuse assignments with components that will guide students towards information literacy. Therefore, librarians should not allow a fear of limited teaching opportunities to influence instructional design, a fear that results in lessons that approach novice learners as if they were experts. Rather, instruction librarians should consciously assist in building a firm foundation from which students can strive in the latter part of their college coursework.

While this line of thinking, grounded in the main constructivist theories of learning, such as L. S. Vygotsky’s social constructivism,² may seem logical and evident upon consideration, is it being applied within those early instructional interactions or are instruction librarians teaching past the students’ zone of proximal development?

According to Vygotsky, an educational theorist and founder of social constructivism, there is an “actual development level”

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and a “zone of proximal development” that learners may inhabit in relation to content or skill sets they are attempting to learn.³ A learner’s zone of proximal development is defined as, the “distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under . . . guidance or in collaboration with more capable peers.”⁴ This mental model encourages instruction librarians, especially those working with first-year or lower-level undergraduate students, to think about the types of learning experiences students may have had in secondary education before entering college. It also advocates for librarians to embrace a guiding role in the teaching and learning of information literacy, a role Vygotsky refers to as the “more knowledgeable other.”⁵

For an information literacy class session to yield the highest impact on students’ learning, it is essential to acknowledge and accept that many of these novice learners may not yet inhabit an actual development level that encompasses a strong foundational comprehension. In turn, the lack of a strong foundational comprehension disallows the upwards assembly of higher-order critical information literacy concepts.

For instance, students need to understand what an academic journal is before critiquing the power structures that underlie scholarly publishing. They need to know how to locate factual information through traditional scholarly venues before articulating which unconventional sources will add depth to their research.

And, perhaps most significantly, when students are beginning to enter into the discourse of their discipline, they need to understand how to unravel their perspectives from ideas encountered within the works of established scholars before realizing the value inherent within their own scholarly voices.

Since undergraduate students may be first introduced to college-level academic

research upon entering an information literacy session led by an instruction librarian, it is imperative that their librarian meets them in their zone of proximal development rather than where it is assumed they should already have been actualized. If unaware and not instructed within the base fundamentals of scholarly communicative practices, how can students possibly succeed in grasping the higher levels of critical thinking to achieve information literacy?

Reference sources and the Framework’s novice learner

Through purposeful reflection of self-practice, conscious application of constructivist theory, and continual observation of student knowledge gaps, reference sources emerged as ideal teaching tools to introduce Framework concepts and to fulfill many of the students’ learning needs in their early years of higher education. But do students really comprehend what the intention of reference sources are, beyond being able to identify types (dictionaries, encyclopedias, etc.) or list examples (Wikipedia, WebMd, Britannica, etc.)?

A reference source has been defined as, “a source of factual information (originally a printed work, but now also an electronic resource) intended for research or consultation on individual matters rather than continuous reading.”⁶ All aspects of this definition prove valuable for students’ understanding, such as the factual nature of the content within a reference source, proper usage of the source for consultation rather than deep reading, and, especially, the intended reason for publication and creation of reference sources as research tools.⁷

An analysis of indications of the novice learner, the expert learner, and the contrast between the two throughout the descriptions, knowledge practices, and dispositions of each frame elucidates the crucial role that reference sources play within

teachable opportunities for lower-level college students building their information literacy foundation.

For example, according to the description of the Authority is Constructed and Contextual frame, “novice learners come to respect the expertise that authority represents while remaining skeptical of the systems that have elevated that authority. . . .”⁸ It can be inferred that students upon first entering college are not yet able to respect this expertise while simultaneously remaining skeptical. This is a disposition that students must work towards throughout their multiyear journey in higher education.

Further on, the description continues to note that these learners, “. . . may need to rely on basic indicators of authority, such as type of publication or author credentials.”⁹ The application of reference sources to fulfill this novice necessity of reliance on traditional measures of authority will surely fall within the students’ proximal zone when considering there may be an ignorance of the deep array of subject encyclopedias that exist to satisfy this research purpose.

One disposition of this frame suggests that learners when finding sources will recognize, “that authority may be conferred or manifested in unexpected ways.”¹⁰ This proves an impossible undertaking if students are wholly unfamiliar with what the expected ways are.

Reference sources are the underpinning of all conventional and traditional means for academic research. Students need a firm working knowledge of authority as presented in these resources in order to grasp nuances of economic and social power within such authority. Thus pushing students forward into unconventionality without an established understanding of conventions from which to provide comparison is foolish and counterproductive.

The interconnected nature of the frames is more apparent in some juxtapositions than in others. The Information Creation as

Process and Information Has Value frames contain some obvious overlap, providing an optimal place to begin foundational instruction about the classification and identification of scholarly sources. The description of the Information Has Value frame states that the “novice learner may struggle to understand the diverse values of information in an environment where ‘free’ information and related services are plentiful.”¹¹ The main impetus driving the guidance of college students from within their information literacy proximal zone of development into their actual development level is recognizing how and when these struggles will occur as related to academic research.

By beginning with a move towards student comprehension of the basic types of information formats used within academic research, metacognition can then be fostered when students identify and think upon source type when conducting their own research.

Accordingly an expert learner, in regards to the Information Creation as a Process frame, will, “look beyond format when selecting resources to use.”¹² Thus conversely, the novice learners are not yet able to assess beyond source formats and need guidance in knowing and recognizing the types of format that are relevant and appropriate for their coursework.

Perhaps the professor that imposes strict guidelines in the requirement of source format in these early stages of higher education should not be criticized as antiquated or unoriginal, but rather commended for meeting the students in their proximal zone of development as related to their level of understanding for format types. Reference sources are a critical source type to engender students’ learning of the information creation process, as the editorial process can be ascertained from the entries within these works replete with their own citation lists. Source type is also discussed in the description of the Searching as Strategic Exploration frame as “novice learners may

search a limited set of resources” and “tend to use few search strategies.”¹³

In this case, reference sources can be identified as a purposeful tool for the students’ research within a controlled and limited assemblage of quality resources that does not overwhelm. Furthermore, using reference sources, in and of itself, is a foundational strategy for those seeking information to fill knowledge gaps and for edification on unfamiliar topics.

A knowledge practice that instruction librarians may hope to influence within students as related to the Research as Inquiry frame is in posing and developing a topic of study “based on information gaps.”¹⁴ The curious and intrinsically motivated students will look to their own personal knowledge gaps to drive their selection of research inquiry. Reference sources, the ideal tool for procuring factual information as related to knowledge gaps, would undoubtedly fulfill an information need for a narrowing of broad knowledge gaps to determine specific foci for academic research.

Additionally, novice learners can better enter into scholarly conversation by “[d]eveloping familiarity with the sources of evidence, methods, and modes of discourse in the field,”¹⁵ according to the Scholarship as Conversation frame.

It could be argued that the field lower-level undergraduate students occupy, prior to being entrenched in the coursework of their chosen major, is general education. An essential component to general education programs in many institutions of higher learning is the establishment of students’ fundamental understanding of how to conduct academic research. Reference sources here could aid in students’ understanding of those fundamentals and also become just as applicable and relevant when these students emerge from their general education program to enter the conversations within their specific communities of scholarship.

Conclusion

Meeting first-year and lower-level undergraduate students within their zones of

proximal development requires instruction librarians to approximate the appropriate level of activities, tools, materials, and assessments that will guide students into new actual development levels of information literacy. A key tool in achieving this goal is the vast array of reference sources that are available through our collections. If instruction librarians are not teaching these novice learners, about and exposing them to, the existence of these resources and guiding them through their use, it’s very likely that no one else will. Forgoing the use of reference sources creates an instability in undergraduate students’ information literacy foundation that will inevitably lead to the inability to confidently participate and effectively engage within all scholarly communication happening across higher education.

Notes

1. “Framework for Information Literacy for Higher Education” (Chicago: Association of College & Research Libraries, 2015).

2. L. S. Vygotsky, *Mind in Society: The Development of Higher Psychological Processes* (Cambridge: Harvard University Press, 1978).

3. Vygotsky, *Mind in Society*, 86-87.

4. *Ibid.*, 86.

5. Vygotsky, *Mind in Society*.

6. OED Online, s.v. “reference work (n.),” accessed June 14, 2018, www.oed.com.ezaccess.libraries.psu.edu/view/Entry/160844?redirectedFrom=reference+work#id124039420.

7. Kristin E. C. Green, “Dust off Those Encyclopedias: Using Reference Sources to Teach the ACRL Framework Concepts,” *Internet Reference Services Quarterly* 22, no. 2–3 (April-September 2017): 84.

8. “Framework for Information Literacy for Higher Education.”

9. *Ibid.*

10. *Ibid.*

11. *Ibid.*

12. *Ibid.*

13. *Ibid.*

14. *Ibid.*

15. *Ibid.* ❧