

The Tyranny of Tradition: How information paradigms limit librarians' teaching and student scholarship

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Introduction

The changing nature of scholarly information can primarily be attributed to a move away from the print-based paradigm that favors hierarchies established and maintained by academic publishers toward an environment in which authors share knowledge openly, even if it is undeveloped or unpopular, without the need for the approval or support of traditional publishing mechanisms. The ramifications of these changes, which call into question traditional processes for classifying and accessing scholarship, are often manifest in librarians' teaching through a renewed and revised focus on information evaluation. The impact of scholarly communication on discrete library instruction initiatives may not seem important, until one considers the greater information literacy movement and its potential for furthering education reform by subverting the dominant print paradigm that has heretofore shaped library instruction.

In the higher education context, information literacy adopts the roles and responsibilities of teaching ethical and effective information use within specific scholarly discourse communities, for which practices vary from discipline to discipline. Unfortunately, it can also serve to perpetuate the commodification of information and the negation of student empowerment by reinforcing age-old practices of information seeking and evaluation based on the privileging of certain information sources over others. In order to flatten information hierarchies and lend agency to scholars whose work goes unrecognized or unapproved by traditional mechanisms of peer review, librarians must embrace their roles as advocates and educators in order to upend the process of knowledge creation as an economic endeavor that allows product to trump purpose. This chapter identifies and justifies the ways in which librarians may apply the principles of scholarly communication to information literacy, with a focus on information democratization and student empowerment, to address the breakdown of traditional paradigms.

A Democratic Education

Library instruction programs must be examined in the context of which they are a part—universities and colleges. The goals of such institutions inform the objectives of information literacy instruction. So what exactly is the value of higher education? Naturally, the precise answer to this question varies by geography, by institution, and even by individual. That said, we believe that there are some steadfast principles that do, or at least ought to, guide all activities in institutions of higher education. A core principle of higher education is democracy. Democracy in this sense does not simply imply that everyone is entitled to an education. It also speaks to the nature of the content and delivery of instruction. Instruction should not be used to cement given

patterns of knowledge; rather, it should allow for the questioning and subversion of those very patterns through the nurturing of a critical stance toward information (Claus, 1981; Dewey, 1929; Molander, 2002; Weinstein, 2004). This Socratic model of instruction enables students to succeed academically and, moreover, ensures their preparedness for successful participation in a democratic society. The cultivation of critical thinking is imperative to democracy as it allows the individual to step outside of their given paradigm to evaluate it from a perspective that is more authentically their own. Only in this way can the perpetuation of dominating claims to truth be undermined, allowing for the emergence of new ideas. Clearly there are social implications to the powers of critical thinking beyond the development of a new scientific method or a unique reading of Shakespeare. Higher education has the capacity—indeed, the responsibility—to cultivate individuals who will question unjust or oppressive social structures and practices. Weinstein (2004) writes, “Civic education must, first and foremost, create citizens who are educated into a system that allows for rejection. It should teach that the power of the state is neither primary nor absolute” (p. 239). Higher education is tasked with preparing students for responsible citizenship, not merely conveying decontextualized systems of knowledge or isolated skill sets (Freire, 1985).

One way for higher education to achieve the democratic ideal is to reposition the student at the center of the learning process. This move, already taking place in many college classrooms, entails shifting from a top-down instructional style—what Freire (2000) calls “narrative sickness,” in which “[t]he teacher talks about reality as if it were motionless, static, compartmentalized, and predictable” (p. 71)—to a bottom-up style that privileges student experience and perspective. This latter approach bears more of a resemblance to an encounter with Socrates than a typical lecture-based course. It favors dialogue and questioning above the dissemination of facts. A bottom-up approach serves first to break down the student-instructor power relationship, supporting a more equitable learning partnership, one that Jaros (2009) defines as “co-construction of knowledge” (p. 192). Secondly, it legitimates a multiple-perspectival approach to information evaluation and interpretation, giving power to student experiences. Thirdly, it encourages good habits: questioning, exploration, and curiosity. According to Dewey (1929), “education is itself a process of discovering what values are worth while [*sic*] and are to be pursued as objectives” (p. 74). Dewey advocates education as a tool for discovery, not merely the dissemination of facts. The value of higher education then, is that it provides a safe-haven for exploration in a society that is often more focused on ends than means.

What this suggests for libraries, and particularly for those librarians who provide information literacy instruction, is that we cannot simply proceed with business as usual. Librarians must be proactive in breaking from the paradigms of scholarly communication as it is currently taught. The values inherent in the scholarly publishing community enforce the authority of the academy, while excluding learners and their use of information. Bourdieu (1967) writes that education creates mental patterns and categories that situate individuals in and toward culture. We must ensure that the frame we provide for the learner is one of freedom and authority, not oppression and coercion. It is necessary for instruction librarians to employ a user-centered approach to information literacy in order to establish authority in its proper home—with the student.

Use-Centered Instruction

Bizup (2008) writes,

If we want students to adopt a rhetorical perspective toward research-based writing, then we should use language that focuses their attention not on what their sources and other materials are (either by virtue of genres or relative to some extratextual point of reference) but on what they as writers might *do* with them. (p. 75)

Bizup shifts the focus from the information *source* to the information *use*. The locus of control is reallocated to the student as an author, moving us away from traditional structures of scholarly authority that prioritize the nature of the information source itself. If we are to fully inculcate students into the world of scholarship, it would be wise to emphasize use more consistently in information literacy instruction.

Although as information professionals we have long known that information cannot effectively be evaluated out of context, actually implementing a use-centered approach is quite a different task. It entails a certain unbalancing of expectations, creating what Weinstein (2004) terms “cognitive conflict.” Cognitive conflict is the agents’ awareness of their ability to choose among competing options, and the parallel knowledge that such a choice will not lead to any resolution or cognitive relief as such (p. 242). Rather than simply equipping the student with a set of skills, information literacy instruction ought to embrace a model that supports the creation of cognitive conflict. It is in this space of choice and uncertainty that students can fulfill their potential as scholars and truly engage in dialogue with their peers. This process shares many of the characteristics of “tacking,” a sailing maneuver that allows boats to sail into the wind. They sail first toward starboard, then toward port, and back again in a zig-zag motion that can seem chaotic, but is in reality a purposeful strategy for moving forward through adverse conditions. Similarly, the state of cognitive conflict allows students to progress toward genuine reflective thinking—not in a straight line, but with detours along the way that serve to push them into roles of responsibility and empowerment.

The principle of cognitive conflict is by no means new. Vygotsky’s (1978) “zone of proximal development” (p. 86) approach advocates the benefits of discomfort as a means to kick-start learning. Peers and experts (in this case, instruction librarians) serve as support for students as they navigate new experiences, but ultimately these mentors must provide only enough assistance to prevent students from entering into a state of anxiety. The zone of proximal development provides an opening for students to push beyond their current level of understanding and ultimately gain intellectual independence. It is in this space that students will realize they even have the option to engage with and alter structures they previously assumed to be permanent mainstays of academia (Weinstein, 2004). If we want to produce individuals that are contributors to, not just consumers of information, this is a necessary state to induce in them. It moves students from static observers to dynamic participants in learning. As the term implies, any process that involves cognitive conflict is bound to be an uncomfortable one – and one that is undoubtedly difficult for students and instructors alike. As educators, we want to ease frustrations, instill skills, and provide answers. But it is precisely the space of questioning that leads to more effective information evaluation. Ultimately, it allows students to become fully embedded in the world of scholarship and to embrace the ideal of self-authorship. This is the direction in which information literacy ought to move. Rather than providing students with an

external point of reference, future scholars need to explore their own goals as primary focal points for information gathering and use.

The rhetorical process espoused by Bizup advocates the power of language to structure students' thinking and orientation toward themselves and scholarly materials. Green and Smith (1999) note a similar trend in their interviews with first-year composition students: “[W]e need to account for the ways in which writers use language to represent tasks, a language that is all too often based on a legacy of schooling that privileges recitation of received information, not the purposeful use of information” (p. 151). It is the goal of information literacy to shake students out of the big-T “Truth” mindset and into the flexible and often frustrating world of genuine scholarly communication. Information literacy is not a toolbox you can flip open and select the “right” tool to find the “right” source. It is much more chaotic and uncomfortable. It is a process that students are continually building upon as they work to become more fully themselves.

Empowered Authorship

In order to properly empower students to take responsibility for their education and enter the world as fully prepared and responsible citizens, it is necessary to create a sense of authorial identity that extends beyond the classroom. Authorship is a state that has repercussions for more than just the writing process. It is a state that works to inculcate a sense of authority in students in which they see themselves as primary players in scholarly dialogue (Pittam et al., 2009; Christensen, 2011; Gerald et al., 2004; Green and Smith, 1999; Hodge et al., 2009; Kapitzke, 2003; Magolda, 1999) as well as the dialogue of liberal democratic citizenship itself (Weinstein, 2004). Magolda (1999) states that “[Self-authorship] is simultaneously an ability to construct knowledge in a contextual world, an ability to construct an internal identity separate from external influences, and an ability to engage in relationships without losing one’s identity” (p. 12). Self-authorship, then, is not just about writing better five paragraph essays or choosing more appropriate sources, but instead about preparing students for membership in the world as conscientious and empowered citizens—citizens capable of making decisions reflective of internal beliefs, not swayed by dominating and potentially oppressive social patterns. In terms of information literacy, this means cultivating students’ ability to evaluate sources from a perspective that is their own rather than one that is conferred on them from outside persons and institutions. This requires a dramatic mental shift on the part of both student and instructor. Often it requires students to throw almost two-decades worth of imposed authority into question before they realize they can be contributing members to information structures. The goal is to create equitable relationships between students and educators, rather than relationships of power. The re-situation of students with respect to academic publishing patterns is a powerful way in which to reorient student authority inwards. The creative force of authorship, in which students put pieces of themselves out into the world and become part of the fabric of the world, provides the ultimate source of scholarly empowerment. Authorship is a locus of power that imbues students with a unique authority and perspective in and toward the world. It is in this way that we can legitimate student scholarship and give them entry into discourse in a meaningful way.

Crafting this sense of self-authorship requires giving students a voice in the classroom and enabling a genuine democratic discourse between students, instructors, and experts in the field. Students must see themselves as a creative force, not just a receptive one. In order to give students voice we must respect and acknowledge the ways in which they currently receive and

filter information. Dialogue requires that all parties are acknowledged and that their “primordial right to speak their word” (Freire, 2000, p. 88) is honored. Kapitzke (2003) writes that “youth in consumer societies negotiate and construct their interests and identities” through multiple channels that are often not considered academically sound (such as music, text messages, YouTube videos, and the like) (p. 51). Before we can expect students to engage in new ways of communication and enter into academic citizenry we must first legitimate their existing modes of communication as reasonable entryways into the world of information. Librarians must recognize students’ knowledge claims as a valued starting point for exploration, if we are not to alienate them from the scholarly process. The lines we draw between peer-reviewed and not, or between scholarly and popular send the message, “This is legitimate; you are other.” We need not open up the world of information uncritically, but we must respect and be aware of the ways that students orient themselves toward information in order to empower them to use it more responsibly. Academia is only one culture among many with its own traditions, languages, and rites that are by no means monolithic. There are institutional and cultural issues at play that subvert other legitimate forms of literacy that arise outside the accepted realm of commodified academic publishing. That does not mean that academic literacy as currently practiced is *illegitimate*, only that it is not the *only* legitimate form of literacy (Henderson and Hirst, 2007; Kapitzke, 2003). By allowing students the freedom and space to question a given authority, we enable them to construct new forms knowledge.

New Information Paradigms

The proliferation of online information and the resulting implications for scholarly communication allows us to approach information literacy from a student-centered framework, unlike the earliest proponents of information literacy whose educational approaches were primarily driven by information access as stipulated by publishers and corporations. Paul Zurkowski (1979) was among the first to conceive of information as a commodity that should be treated as a national economic asset, stating that it was incumbent upon academic and governmental agencies to ensure access to information via information aggregators and publishers. Having accounted for the important role of the private sector in information literacy education, he equated an individual’s and a nation’s “wealth” as one that generates information, and therefore power and prosperity, for all its citizens (Badke, 2010). Such privileging of information systems as the constructs that control not only access to information, but the power it can bring, becomes increasingly less relevant in a non-print based model of information creation and dissemination in which readers, researchers, and authors now take a more direct role in the flow of information beyond the strict structures of publishing. New texts are fluid (Gounari, 2009) in their form, content, and audience, which undermines previous conceptions of information as a rules-driven, one-way mode of communication. In this emerging information paradigm, positions of power are shifting to accommodate for the ubiquity of information and the increasingly egalitarian process by which information is created, disseminated, and evaluated.

New information technologies also necessitate a contextual approach to information seeking, use, and evaluation that can be construed as a departure from the format-based approach that previously guided the means by which various types of knowledge were produced and reproduced (Gounari, 2009). In an environment that allows immediate and far-reaching access to knowledge, the act of evaluating or judging the quality of information cannot be based on any

singular factor, but on a broad-based understanding of the process by which knowledge is created, shared, and revised in an open community. In this process, peer review maintains its governance as the premier process for the validation of new ideas. However, more egalitarian modes for producing and sharing information have brought about similarly open methods of review that question traditional notions of expertise. Even in the scholarly information environment, changes to the nature and structure of information blur the lines between formal and informal publication types and content creators in such a way that information quality is no longer simply a question of provenance or authorship.

In speaking of traditional methods of information evaluation, librarians often refer to those that were prevalent and relevant in an age of information in which format dictated quality, due to the strict structures of scholarship imposed by academic publishers. Fundamental to this system was the notion of *authority*, a common criterion for evaluation of information for both novice and experienced scholars. Widely acknowledged as the phenomenon by which the work of specialists is judged by other specialists (Wilson, 1991), authority perpetuates the elite nature of scholarly communities to the extent that new voices or opposing ideas are not always welcome. Often manifest in the form of peer review, this power of authority is so widely accepted as to become endemic to the culture of academe (Mark, 2011b). Unfortunately, information seeking that is guided by authority, rather than what the knowledge creator hopes to do with the information, does not always serve to propel scholarship into original and creative directions. In addition, acknowledging research from experts and the sources through which they communicate as “the best,” alienates novice researchers, strips them of agency, and denies them access to participation in the conversations of specialists, thereby limiting their potential for genuine learning through the research practices unique to scholarly communities. Being acknowledged and being able to participate in social practice is necessary for identity development (Riedler & Eryaman, 2010); in this way meaning is negotiated such that the playing field levels between teachers and students, between expert and novice researchers.

The historical and cultural conventions of scholarly environments that celebrate and reward the successful review by experts in a particular field are prevalent in the nature and structure of scholarly information today; however, these conventions are being called into question by new generations of learners and new modes of information access. Based on a traditional paradigm in which librarians set up dichotomous frameworks for interpreting and evaluating knowledge, including scholarly vs. popular, dominant and non-dominant, and authoritative and non-authoritative, the print-based structure of identifying scholarship is weakened in a web-based world of information (Swanson, 2004), because it promotes source format as the criterion for selection and evaluation above all others. Such simplified mechanisms for understanding knowledge structures and practicing information evaluation are rendered irrelevant by the seemingly straightforward searching made popular by Google and adopted, more recently, by academic libraries through meta-search and discovery services. This method of information retrieval creates a new information gathering strategy, defined by Marcia Bates (1989) as “berrypicking.” Throughout this process, a student would gather information in small increments, which would then lead the individual further until their personal store of information grows like berries picked and placed in a bucket (Williams, 2007). The berrypicking practice of information gathering is especially common with digital content but can render non-traditional information sources difficult to evaluate for meaning and quality. Researchers who rely on

evaluative criteria from the print-based information paradigm in order to make sense of the complex digital world of information will come up short. Accordingly, learning the processes for information evaluation that are based on checklists are no longer a service to students whose world of information is not easily defined by elements such as authority, currency, relevance, and publisher. Such criteria limit students' creativity and curiosity in discovering new knowledge, as well as in their application of ideas that fall outside the approval process of established scholarly communities.

Instead of suffering disappointment when faced with students whose evaluative decisions do not reflect those of previous generations of researchers, librarians should be among the most vocal advocates for students to make choices based on the contextualization of information for their own research and writing. As information mediators, librarians are well acquainted with assignments that only serve to alienate students from the research process by setting it up as a linear exercise of asking questions and finding answers. As described by Norgaard (2004), the traditional research paper is focused on product, rather than process. Helping countless frustrated students navigate research assignments that require a certain number of scholarly sources without reason or justification, librarians are uniquely positioned to understand and support new frameworks for information evaluation that could allow for students to be more engaged and responsible for decision-making in the access, selection, and use of information for their own research and writing. Ceasing to acknowledge traditional scholarly information structures as the definitive guidelines for information evaluation allow research-based assignments to become an opportunity for learning, rather than an exercise in finding specific types of information sources and struggling to weave them into a coherent narrative.

Faculty and instructors design research assignments with strict parameters regarding the type of sources students should consult; these requirements are often put in place to encourage students' use of the "best sources" for their research needs. Few, if any, librarians would disagree with the value in students' use of quality sources, but it is time for us to redefine our notions of quality to encompass knowledge that is created in social spaces and ideas that are formulated and proven beyond the traditional means of scholarly peer review. If librarians stop simply equating quality sources with "library-vetted" sources (Mark, 2011a), students will learn to recognize, assess, and value the subjectivity inherent in most forms of scholarship. Understanding that sources communicate hard facts in addition to personal meaning will challenge students to evaluate information contextually, including the influences and circumstances of the author, publisher, and selector of that information. Students who employ this inclusive approach to assessing information will determine source quality based on the facts they read and the meaning they intuit, as well as how the source might be used according to their own individual research and writing needs. Personalizing the research process in this way will encourage students' active participation as scholars in a context in which information seeking and use may have a greater purpose in improving the world and their place in it, rather than as a means to an end (i.e. find a particular number of scholarly sources). In this new paradigm, source use, not source type, would ideally guide students' choices.

Information Literacy Revitalized

Looking at librarianship through a lens of activism and progressivism, evidence of revolutionary movements is apparent through the increasing acknowledgement of alternative

modes of research, publication, and review. Librarians have a long history of advocating for the underrepresented, the underserved, and the disenfranchised when it comes to ensuring access to knowledge and information (Samek, 2001; Dalrymple, 2002; Preer, 2006; Raber, 2007; Morrone & Friedman, 2009). With near ubiquitous access to digital information, librarians have supported a growing movement toward making online content open to a broader readership. Open access is defined as peer reviewed academic work made freely available online and created without the intention of the author to profit financially (Park & Qin, 2007). The movement toward democratizing information, especially in support of initiatives related to scholarly communication and open access, situates librarians as agents of change in the evolving information landscape.

Open access appeals to librarians' service orientation and progressive sensibilities as a means to make information broadly available, while simultaneously minimizing the role of publishers in the process of bringing knowledge to the masses. Responding to economic influences that dictate the access and flow of information, academic librarians have led the charge on many campuses to challenge the traditions of scholarly publishing and reclaim the work of local communities of scholars. Through the creation of scholarly repositories for digital content, librarians have created a mechanism for authors to maintain a modicum of control over their own works and for libraries to make research available to a broader audience without the intervention of scholarly publishers and their exclusive processes.

With librarians heavily involved in issues related to open access and digital content management in higher education, it would make sense that the democratic values inherent in these projects would trickle down to the teaching of novice researchers, but this is not always the case. Librarians often perpetuate the very structure of publishing which they seek to upend in the development of digital repositories and open access initiatives through information literacy instruction by continuing to hold to the dichotomous paradigms of "scholarly vs. popular," "primary vs. secondary," "refereed vs. not." While not unhelpful in describing different kinds of information sources, these dichotomies superimpose an artificial hierarchy of knowledge, creating haves and have-nots of the information world. Some sources are established as legitimate whereas others are somehow lesser, to be browsed and absorbed, but never mentioned in scholarly work. The *peer-reviewed* limiter that appears in many academic databases represents the epitome of dichotomous thinking, as it does not take into account the various review processes that may fall outside this strictly defined category and it eliminates the student researcher's own thinking and decision-making as a potential participant in the review process.

As educators, we seek inspiration to invigorate our information literacy instruction with active learning and student-centered teaching. While continual renewal and reflection on the many ways in which we engage students in the process of research is good pedagogical practice, a firm grounding in the greater potential and purpose of librarians' teaching is just as important. As the instructional goals of academic librarians continue to engage educators on a broader scale, the need to create a theoretical underpinning, or an informed pedagogical praxis as Heidi Jacobs (2008) recommends, becomes even more important. Such a framework will ensure the centrality of information literacy to student learning in higher education and to the future of scholarship in the digital world going forward. The driving forces of open access, as a movement concerned with power and democracy, are essential to the emerging role of librarians as publishers and

educators. In both capacities, open access principles offer guidelines for engaged and participatory praxis on the part of librarians.

At a minimum, instruction librarians would do well to follow the conversations surrounding the open access movement in order to develop an informed strategy toward educating the next generation of scholars and researchers about their role in securing rights and ensuring access to the knowledge they work so hard to create. Ideally, instruction librarians would also engage colleagues in considering how the fundamentals of open access could be applied to instructional scenarios. It is no surprise that librarians are leaders in the open access movement, but in order to further its success, we must incorporate the tenets of open, social, engaged research into the information literacy initiatives that will shape future generations of scholars. If we take the opportunity to create classrooms and learning environments that acknowledge information as political and learning as a social, collective process in which students and teachers engage in learning together, information literacy will remain a powerful education reform movement.

Empowering students to make informed decisions regarding information sources based on their potential use, rather than on antiquated and de-contextualized evaluative criteria, will complete this newly defined cycle of information creation and dissemination. Like open access, teaching students to engage with knowledge and information in order to shape their unique ways of thinking and their own process of learning is a means of empowerment by placing the onus of the scholarly community squarely back in the hands of knowledge creators. Our ability to see the connections between and across disciplines positions librarians uniquely to teach about the consistencies, trends, and pitfalls in publishing in a variety of subject areas (Knievel, 2008). Having a background in collaborative teaching and consensus building will help librarians create integrative, supportive academic communities with information literacy education and open access principles as their guideposts.

Some of the best ways for instruction librarians to incorporate this new framework into their teaching is to start with what they know: the traditional paradigm. If a literature search formerly asked students to think about a particular topic in a very systematic way that first engaged reference sources and background information, an approach informed by new information environments would subvert the linearity of the process and encourage students to gather and identify information sources from a broad range of perspectives at the very beginning stages of research. This would allow students to engage with a variety of authors to inform their own thinking, without the necessity of having found the sources within a particular information container or from a particular type of source or in any certain order. While seemingly haphazard and rudderless, the approach is actually quite similar to how students will experience information seeking in real-world contexts in which they will be required to engage with a wide variety of ideas, perspectives, and sources.

Similarly, if an instructional scenario in the traditional paradigm were guided by the cycle of information (i.e. what types of sources are created at the various stages of publication after a particular event), then a revised approach would undermine the position of importance afforded the publication process as a determinant for source selection and would instead create an opportunity for sources to be identified and evaluated based on the decisions and desires of the

researcher. In this scenario the context used to provide meaning for the information seeking and evaluation process is not dictated by the publication cycle, but by the purpose of the creative output as defined by the student researcher. This is not to say that students would not benefit from knowing about the formalized structures of scholarly publishing and its associated language. In fact, researchers who are ignorant of labels such as “primary” and “secondary” and how their meaning shifts from discipline to discipline will have difficulty participating in fully formed scholarly communities and information literacy education must account for this. The structures of publishing are a reality of scholarship that demands acknowledgment, as the vocabulary is still used actively in classrooms today. It would be irresponsible not to educate students about the extant structures in the academic community. That said, it is also important to emphasize that this is only one facet of information seeking, not *the* facet. Student-centered information literacy education entails giving students the appropriate tools while simultaneously framing the process in a use-centered way.

Additionally, consider a student who was educated about determining the perceived sphere of influence of a particular author or work by using cited reference searching. If this student were also introduced to the availability and value of alternative value measurements, or alt-metrics, the student would have a well-rounded and progressive approach to information evaluation that would apply to traditional as well as new modes of scholarship. In challenging the checklist approach for information evaluation, Meola (2004) does not recommend that librarians ignore peer review as an irrelevant means of evaluating scholarship; instead, he describes the power of revealing the inherently social nature of peer review and, by doing so, making its weaknesses and drawbacks transparent to student researchers. The same approach can be taken with cited reference searching.

With the instructional approach to information literacy grounded solidly in the open access movement, librarians would have a practical and a theoretical reasoning for demanding that information publishers and aggregators begin to accept these ways of thinking as widely-used and therefore important to include in the search functionality of databases and search engines. Experiencing the philosophical frameworks of open access and information literacy in familiar online search environments would reinforce their value to researchers and serve as a reminder of these approaches until they become common scholarly practice. Linking the philosophies of scholarly communication and information literacy will also serve the profession of librarianship in its quest toward developing a cohesive community of practice with shared guiding principles.

Conclusion

If information literacy is to be the means by which students come to understand the world of information, they must engage as equal and active participants in a conversation that encompasses the creation and dissemination of knowledge in a scholarly context. Students who feel their research output makes a contribution to scholarship in a particular discipline will fully understand and embrace the knowledge and skills that are foundational to information literacy, such as framing a research question, identifying authorship, and acknowledging the work of others, because they are more invested in the research process rather than simply fulfilling the requirements for a particular assignment. While librarians have a significant role in introducing and enculturating students to the process of finding, evaluating, and using information, we may

be doing students a disservice if we do not acknowledge and validate students' research and writing as part this scholarly conversation. Situating students on the same ground as published authors and established scholars empowers them to truly embody scholarship in their own work. By embracing and applying the fundamental principles of open access to information literacy, librarians will find themselves one step closer to developing a pedagogical praxis that is both relevant and radical.

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