Infinite Archives, Infinite Possibilities: Learning Research and Databases with Archive of our Own

B. Austin Waters
University at Buffalo School of Law, bawaters@buffalo.edu

Alayna Vander Veer
State University of New York at Oneonta, alayna.vanderveer@oneonta.edu

Introduction

In 2019 the iSchool at Syracuse University and the Syracuse University Libraries partnered to offer a program to select Master of Library Science students. This program, titled the Information Literacy Scholars Program (IL Scholars Program), was created to provide students "with critical teaching experience, while also increasing the libraries' capacity to teach information literacy to undergraduate students" (Delevan et al., forthcoming). The specifics of the program entailed weekly meetings to discuss and learn instructional pedagogy as well as the opportunity for hands-on instructional experience. Students in the IL Scholars Program (the IL Scholars) were first paired with an instructional librarian to observe library sessions with the undergraduate students. From there the IL Scholars co-taught these sessions with a librarian, before moving on to solo teaching. As part of the program, they also developed their own workshops to help deliver key lessons on research and library resources to the undergraduate students at Syracuse University.

Alayna Vander Veer and B. Austin Waters were both students in the IL Scholars program during their tenure at Syracuse University. This was partially during the University's 2020 shutdown of in person instruction. With undergraduate instruction moving solely to an online format the IL Scholars Program and the Syracuse University Libraries began seeking new ways to deliver information to the undergraduate students via distance learning. This was the origin of the Learn@SUL workshop series. The workshops covered different topics ranging from research basics to white papers. Participants could self-select what workshop they would like to attend, giving them some agency on what topic they learned. The IL Scholars were encouraged to create online workshops for this series.

This article details the workshop developed by Vander Veer, Waters, and a fellow student in the IL Scholars Program Lauren Earl. The workshop, "Learning Research and Databases with Archive of Our Own" was created by Vander Veer, Waters, and Earl as a way to deliver foundational level research instruction to undergraduate students who had never been to the Syracuse University Library. The workshop was built on ideas of Social and subcultural Capital, their own experiences with the fanfiction database Archive of Our Own (AO3), and the principles of the transfer of knowledge between skills.

This article will first give a brief overview of relevant teaching strategies to connect student experience to instruction, the principles of subcultural capital, and the use of knowledge transfer to support high-impact instruction. The following sections will detail the workshop, its development, and the topics it addressed. Finally, there will be a discussion on the feedback the Instructors received after the

workshop and tips for the development of similar workshops at other universities and libraries.

Connecting Student Experience and Interest to Instruction

An engaged, supportive classroom needs learner-focused instruction to support student comprehension. This student-centered approach is a crucial element for impactful learning and retention of concepts beyond memorization. There are many tips, tricks, techniques, and tools for instructors to utilize in order to foster greater student engagement with the goal of increased learning, yet instructors often fail to facilitate students' understanding or investment in class content when they do not make content relevant to students' interests or lived experiences. An ineffective teacher does not make the instructional content relevant to the students, imparting information without encouraging students' engagement with that information. This places the burden on students to find value and relevance in the topic, which negatively impacts their ability to learn or retain what they learned.

Paulo Freire (1970) described the traditional method of teaching to be akin to depositing coins into a piggy bank. Traditional teaching strategies presume that rote memorization of content is the main learning objective. With this perspective, content is not incorporated into students' existing experiences or made relevant to their lives and authentic learning is obstructed. Authentic learning is learning that has personal relevance or meaning to the learner, which is then incorporated in their world schema (Klipfel, 2015). Relevant teaching strategies, which foster students' personal connection to content, help engage students and reinforce attainment of learning objectives, which in turn facilitates an impactful learning experience.

The importance of integrating relevance and student interest in instruction is illuminated by Knoster and Goodboy's study. This study measured students' experience of lessons that incorporated relevant teaching strategies (Knoster and Goodboy, 2021). The study randomly assigned students to one of three teaching methods that either 1.) taught the lesson content in a relevant manner, or 2.) made no effort to teach the lesson as relevant, or 3.) taught the lesson in an irrelevant manner, using outdated references or examples that students wouldn't identify with. Afterward, students were given a post-lesson quiz first to gauge their level of learning within these relevant/not relevant lessons and then to measure their perception of the instructor and lesson's connection to them. This experiment was replicated with two different subjects, one on the evolutionary psychology of love and one on how to email. This was done in order to ensure that the teaching methods were being assessed rather than the interest generated by the topic itself.

The study concluded that teaching in a relevant manner, no matter the subject, increased students' affect for the instructor, connection to course content, and positively impacted their learning (Knoster and Goodboy, 2021). Interestingly,

this study also found that students still reported greater perceptions of content relevance when the instructor taught course content irrelevantly, or used relevance ineffectively, than when the instructor made no effort to teach relevantly at all. (Knoster and Goodboy, 2021). Knoster and Goodboy write, "trying to be relevant may nevertheless be better than simply not trying at all," implying that students perceive and value when the instructor attempts to make course content relevant (2021). When instructors use teaching strategies that stress the relevance of content or connect content to popular culture, recent events, or personal interests, students feel more engaged and gain better comprehension of the topic. Relevant teaching strategies are successful because it clearly communicates the value this information will have for students, including them as active participants in meaning making.

Knoster and Goodboy draw upon John M. Keller's ARCS (Attention, Relevance, Confidence, Satisfaction) motivation model to direct the relevant teaching strategies they employed within the study. Keller identified that students' motivation to learn was connected to the value they perceived to get out of that interaction (2010). Students' impressions of content relevance are influenced by the type of value they believe that instructional content offers them. These values are "personal-motive value," in which students identify content as satisfying a need or desire, "instrumental value," which allows students to achieve a specific task or goal, and "cultural value," which has social relevance and aligns with a student's cultural group (Keller, 1983, in Knoster and Goodboy, 2021). When instruction is able to articulate or clarify these values to students, students become more engaged with the content. Pedagogical strategies for enhancing relevance to instructional content and fostering value to students include "familiarity strategies," which connect content to students' lives, "goal orientation strategies," which frame content as ways students can achieve their goals, and "motive matching," which gives students agency over the structure of the class to match their own motivations (Keller, 2010).

Muddiman and Frymier's (2009) study, cited in Knoster and Goodboy, echo Keller's ARCS motivation model, explaining the need for instructors to frame the relevancy of content. Muddiman and Frymier outline the main categories of relevant teaching strategies. These include "outside course relevance," which connects content to students' personal interests, needs, or goals, "methods and activities relevance," which creates an in-class activity or assignment that is relevant to students, and "teaching style relevance," which employs a teaching method that facilitates relevance (Muddiman and Frymier, 2009). Relevancy in instructional content and teaching method is crucial for instructors to support students' connection making between topics and their interests.

Relevancy in library instruction one-shots or workshops is equally as (if not more so) essential for successful student learning. Klipfel, in the first empirical study illustrating the impact of authentic learning on student engagement and

learning in information literacy education, found that students' motivation to learn increased when the librarian instructor facilitated students' interests in the classroom activity (2014). The classroom exercise Klipfel described encouraged students to examine and develop a research topic about a subject they were personally interested in. Students who had this "authentic learning" experience reported higher confidence and saw an overall increased retention of information literacy skills (Klipfel, 2014). Library instructors face many obstacles when teaching one-shot sessions, but incorporating an authentic, relevant lesson that maps to an instructional value and resonates with students is one strategy to foster student learning.

Social Capital and Subcultural Capital: Building Bridges to Students

One way to promote authenticity is to utilize the concepts of subcultural capital. To understand the idea of subcultural capital, it is important to first understand the relationship of information and social capital. Originally conceptualized by Pierre Bourdieu, social capital is a way of understanding the construction of cultural hierarchies and how these hierarchies have a "real concrete consequence of installing and reproducing social hierarchies on the basis of differences in social agents' ability to master the codes of the legitimate culture" (Jensen, 2006). There are a variety of examples of this phenomenon that most if not all have experienced. Examples can include engaging in the 'correct' TikTok trends or what cut of blue jeans are popular. Ability to master "legitimate culture" can range from the simple to the complex.

This ability to essentially "fit in" has real -world consequences on acceptance into hierarchical groups. That acceptance is further seen as a type of "capital" that can be converted into different resources to further a person's position in their group structure. In Bourdieu's work "capital is only capital to the extent that it can be converted into other types of capital – that is, in so far as it can be conceived as a resource that can be utilized in different struggles or strategies" (Jensen, 2006). We can also conceptualize this conversion as a means of "trust or reciprocal sharing tak[ing] place in those relationships" between members of the same group (Rempel & Markland, 2018). Information is only one example of this capital conversion or sharing.

The flow of information is one of the numerous benefits to the hierarchical group structure. That being said, "although social networks can be a great place to gain insider knowledge, the dynamic of reciprocal sharing can stifle the flow of information" (Waters, 2023). Because "insider" status within the group dynamic is dependent on conformity and understanding of the shared values, acting outside of these shared norms and values can mean lack of acceptance or a rejection of insider status. These dynamics among students may mean conforming to an idea of what a

successful student is supposed to look like. This can look different from culture to culture and can even be dependent on the specific culture of an individual university or program. What this may mean for students is an unwillingness "to admit when they don't understand how to do something" (Rempel & Markland, 2018). Power dynamics can especially affect minority students who are more likely to be affected by the same power dynamics of culturally dominant groups, even within their universities or classes (Rempel & Markland, 2018). This furthers the disconnect between instructor and student as instructors by definition, are not part of student insider groups.

Not everyone will seek out inclusion in whatever dominant group they are related to. Subcultural capital is a way to understand the effect that cultural capital has on certain groups of people who may be unable or unwilling to seek inclusion in more dominant groups. Originally discussed by Thornton in her book on the youth underground music culture, subcultures are a way various groups have of interacting and working through their relation to more dominant groups, especially related to class hierarchy (Jensen, 2006). Further the creation of various subcultures is a reaction which "allows people in underprivileged social positions [to] create culture when attempting to resolve, handle, work through or 'answer' shared problems" (Jensen, 2006).

Inclusion in a subculture works in similar ways to inclusion in a dominant culture under the ideas of cultural capital (Jensen, 2006). Additionally, subcultural capital allows members of a subculture to engage in the same kind of capital conversion that is seen with cultural capital (Jensen, 2006). Subcultural capital is developed in familiar ways. Subcultures, just like dominant cultures, maintain their cohesion as a group by "enforc[ing] community norms, reward[ing] individual contributions, and mark[ing] quality work" (Rafalow, 2018). Additionally, privileges and benefits are gained from being a part of the group. These support networks "fuel learning by providing knowledge, support, and feedback" (Rafalow, 2018). These networks of subculture groups participate in a kind of "open-access peer-to-peer sharing communities [which] require rarified forms of cultural capital for full participation" (Rafalow, 2018). By necessity of their creation, subcultural support networks are closed to outsiders and so, the flow of information and what Rafalow describes as "a culture of peer learning" are unavailable to anyone not recognized by the insider group (Rafalow, 2018). With the subcultural networks, especially niche ones, "networks become havens of people who "get it," in which young people can debate esoteric topics with a specialized lingo incomprehensible to outsiders." This shared knowledge and space creates close bonded relationships (Martin, 2018).

What that means for instructional purposes is that subculture and subcultural capital can create inroads to connect with students not as a librarian or instructor, but as a fellow member of the same subculture with the same privileges

of information sharing and trust. Although these relationships are not often utilized in educational settings to develop connections to students, "when these connections are made, however, they are powerful because they are anchored in deeply held interests and affinities" (Martin, 2018).

The Transfer of Knowledge

Connecting to students as fellow members of subcultural groups may offer solutions to the problem of skill or knowledge transfer in education or instruction. According to a National Academies survey in 2012, there is little evidence to show that skills learned in one class are actually transferable to other classes taken by students or in their day-to-day life outside of school (Martin, 2018). The idea that students can "save up" knowledge in school and "cash in" later in life is unlikely to be accurate to the experience of most students (Martin, 2018).

This poses a serious issue to the types of instruction that librarians frequently engage in. Many librarians do not have the chance to teach semester long classes. Some librarians do not even have the chance to teach more than one class on a particular subject to a group of students. For many librarians in the United States, a frequently used model of instruction is via "one-shot" sessions. These one-shots generally consist of a librarian meeting with a class from a general education course in the freshman or sophomore curriculum. In this class, the librarian's goal is to imbue the students with the essential research skills they need to be successful throughout the rest of their tenure in their programs. These classes are constructed with the assumption that students will learn the skills needed in one, or at best, a few class sessions and then know how to apply those skills as they go along. As seen above, that is not necessarily true. There is often no connection between what students are learning in the one-shot session and the rest of their schooling. "A lack of connections between the classroom and the wider world is particularly harmful for students whose interests and identities do not align with the dominant culture of schooling" (Martin, 2018).

What Martin calls "affinity-based learning" or learning connected with subcultural networks can create the connections necessary for students to see the relevance of what they are learning. "A growing body of research suggests that successful transfer requires connections and conversion points between a learner's in-school and out-of-school settings" (Martin, 2018). As Martin goes on to suggest, "a growing body of research demonstrates that when young people are able to connect their interests to opportunities for civic, academic, and career achievement, the effects can be transformative" (Martin, 2018). One of these ways is the subculture of fandom and fanfiction.

Developing AO3 Workshop: Implementation and Features

The workshop was developed with relevant teaching strategies and the principles of subcultural capital with the goal of encouraging the development of foundational research and information literacy skills. Vander Veer, Waters, and Earl (the Instructors) developed the workshop as part of their time in the IL Scholars program at Syracuse University. As part of the IL Scholars Program, the Instructors participated in instructing multiple library one-shot sessions and workshops geared at teaching freshman or sophomore-level students the basics of research. Through those instruction sessions, the Instructors developed the main subjects for the workshop through their experiences teaching students the tools they needed to be successful. The main learning objectives of the workshop were the understanding of how to use a standard academic database and knowledge of the different filter options and their meanings.

In developing the AO3 portion of the workshop, they utilized the ways in which they had become comfortable with research. All three of the Instructors grew up reading and writing fanfiction and were part of the same subcultural fandom group. When they started doing academic research they realized they had an increased familiarity with the research process due to their time learning how to find fanfiction. Because fanfiction on AO3 is organized in similar ways to standard academic databases, the Instructors decided that their workshop would be aimed at encouraging the development of academic research skills of students who were part of the fanfiction subculture.

The workshop started first with a discussion on the history and characteristics of fanfiction to get participants engaged in something they were familiar with. By discussing the shared history of fanfiction, the Instructors aimed to establish themselves not just as instructors, but as members of the same subcultural group as participants. From there, the Instructors established the connection between AO3 and the research database ProQuest by drawing analogies between the various search functions (see Figure 1).

Standard correlations between databases included the similarities between tags and key terms as methods of finding articles/fanfiction in areas of particular interest, filters and limiters (such as complete works only or peer-reviewed works only) as ways of narrowing results, and the concept of "kudos" or reviews as similar to the peer review process which can help researchers understand the "quality" of a piece of work. The goal of this section of the presentation was to show attendees that their interest and experience finding and reading fanfiction is helpful to them as researchers and that their skills in their personal lives are transferable to their student lives.

Figure 1

Similarities between AO3 and ProQuest

The next part of the presentation involved a search demonstration of AO3. The Instructors took time to remind participants of how each part of a search done in AO3 has a correlation to how they will be searching in academic databases. The Instructors showed in their sample search the various information that is cataloged on AO3 which makes it easier to find what a searcher is looking for (see Figure 2, Figure 3, Figure 4, and Figure 5). The Instructors paid particular attention to identifiers such as Title and Author which have direct correlations with academic databases, as well as less direct correlations such as series as related to book chapters or journals, description as related to abstract, and "works inspired by" as related to articles that cite to each other (e.g., "times cited" on ProQuest). Additionally, the Instructors showed the difference between filter options and results in a "basic search" versus the options available via the advanced search function. This was another feature that has a direct correlation to ProQuest and other academic databases. Finally, the Instructors showed attendees how the information contained on the work page when a fanfiction is selected has many similarities to the article page on an academic database such as author, description, date, and parts of a series.

Figure 2

AO3's important organizational features such as title and author as well as the filter options from a basic search
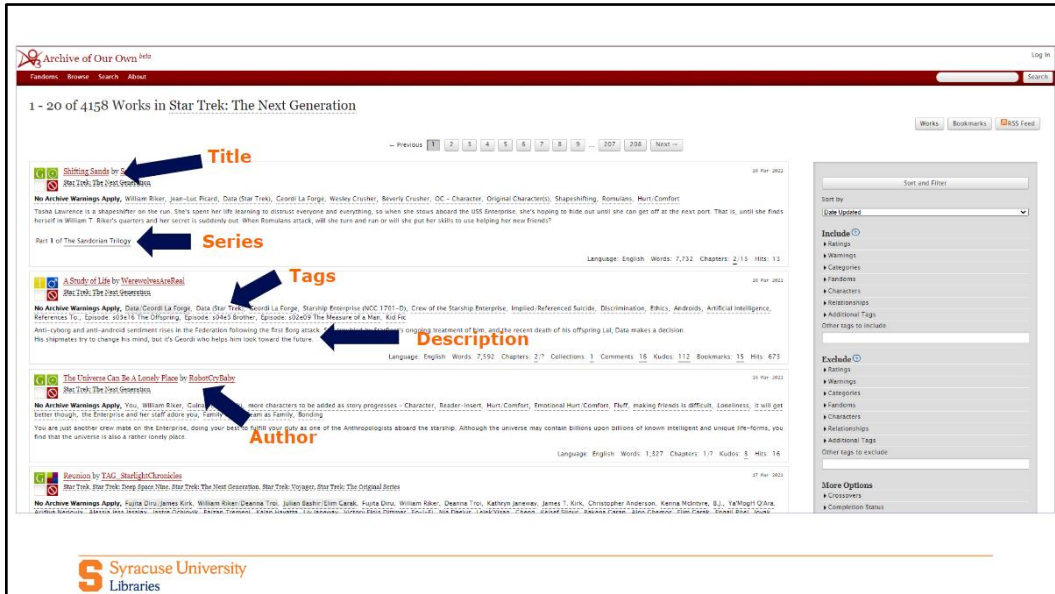

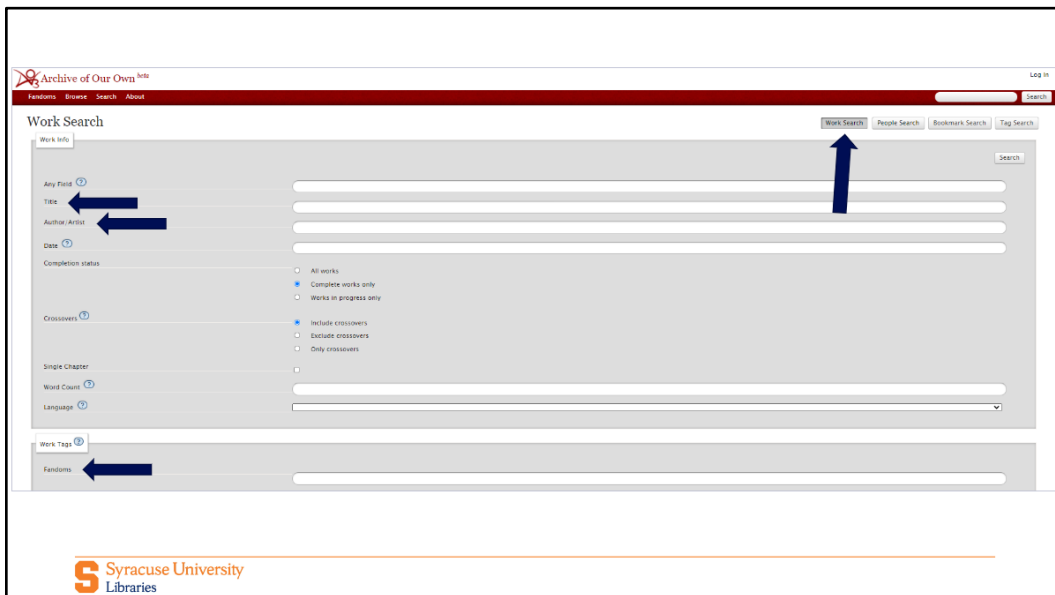**Figure 3**

Advanced search functionality on AO3

Figure 4

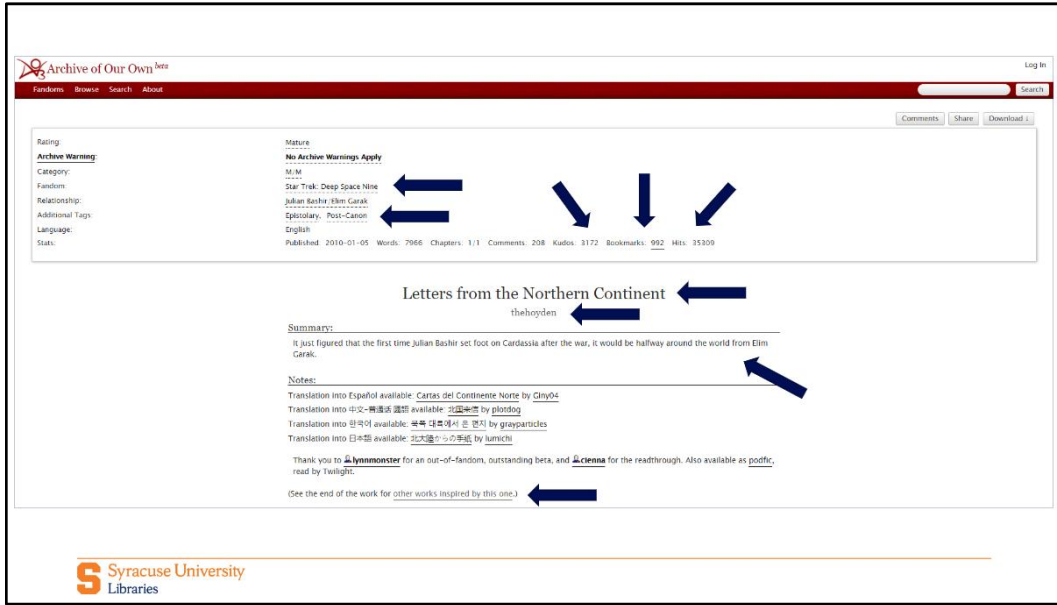*Information available on the work page such as author, date, and description*

Figure 5

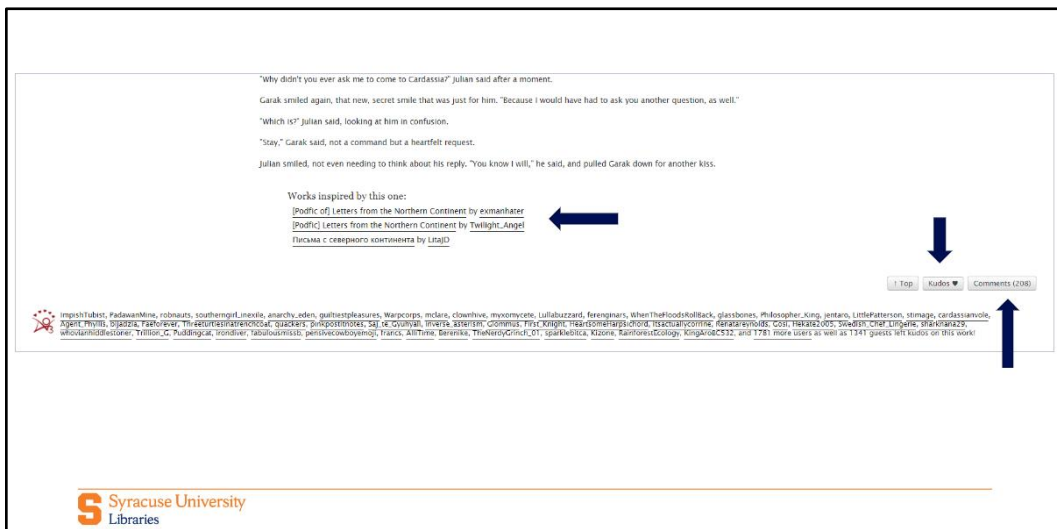*Information available such as works inspired by, kudos, and reviews*

Figure 6

The information available when a work is part of a series on AO3

   The last part of the workshop was the academic database demonstration. Before the participants were asked to do their own search on ProQuest, the Instructors gave them a brief demonstration of what the search in ProQuest would look like. This served two purposes. First, to show participants first-hand the correlations between AO3 and academic databases that were discussed. This was used as a kind of scaffolded learning that would help participants understand the foundational research concepts in the workshop. The second purpose was to familiarize participants with the functions and visual aspect of ProQuest so they were not lost when asked to do their own search. In the ProQuest demonstration search the Instructors highlighted similar information to the AO3 search such as author, title, and narrowing by peer-review as well as the differences between the basic and advanced searches (see Figure 7 and Figure 8).

   Afterwards, participants were asked to do their own search in ProQuest on a topic related to a class or research project they were currently engaged in. The Instructors were available for questions as the participants did the activity and checked in with them regularly. At the end of the activity, the Instructors allowed for questions and responses from participants regarding the activity or the workshop as a whole.
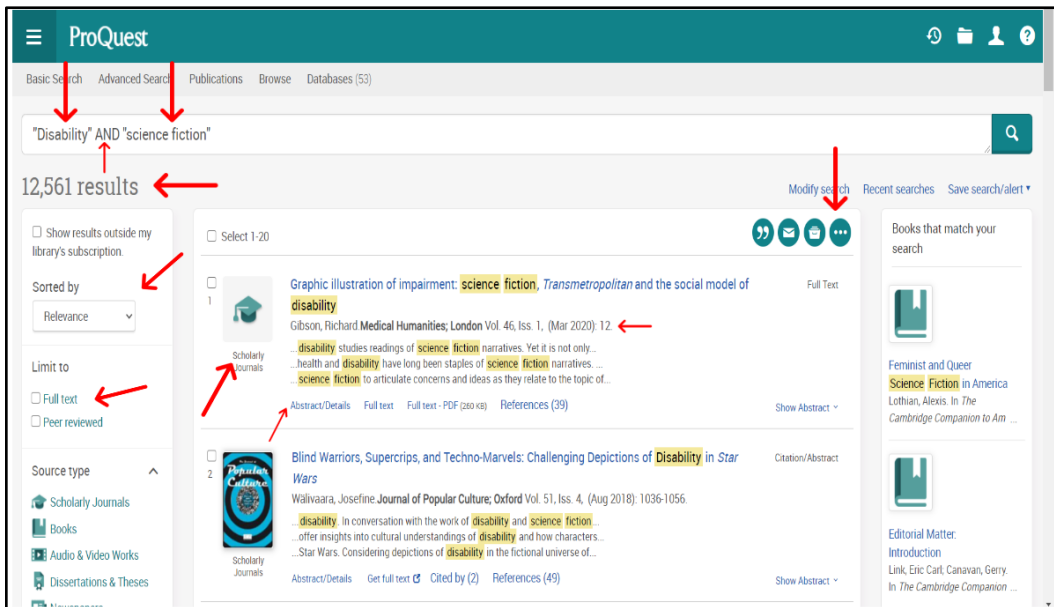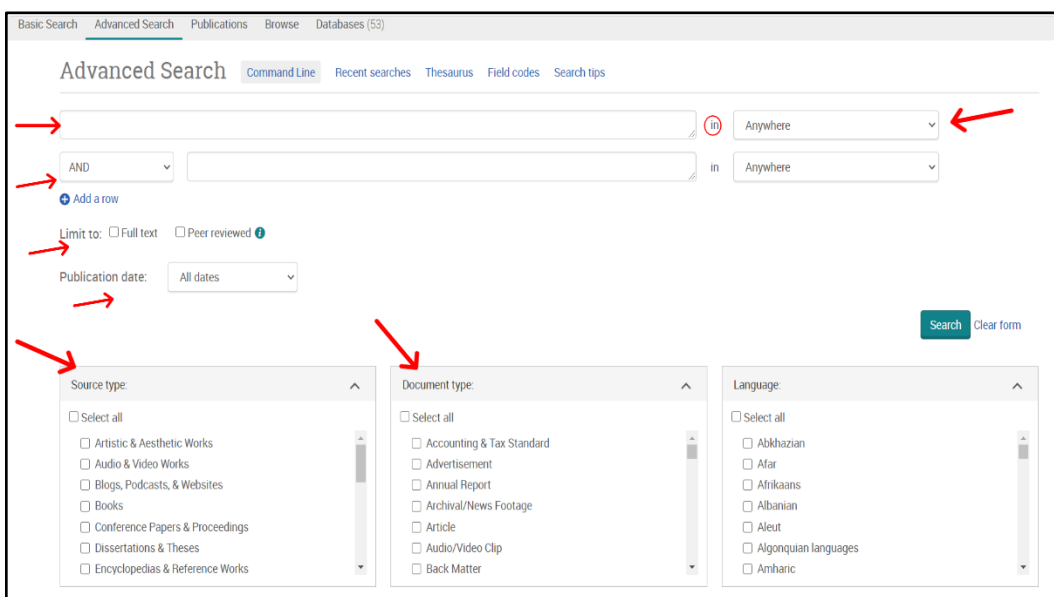
Figure 7

Example of search features on ProQuest

Figure 8

Example of advanced search features on ProQuest

Reception of the Workshop

The overall reception of the workshop was favorable. Although a lack of clear advertising for the Learn@SUL workshop series as a whole and the difficulties of Covid-era instruction hindered the attendance of the workshop, the participants were interested and engaged. Participants asked questions regarding the subject matter and participated in the exercise at the end of the workshop.

An unforeseen outcome was the diverse pool of participants who attended. The workshop received students and professionals alike. The Instructors expected student attendance due to the target audience of the Learn@SUL workshop series. However, the professionals were an unexpected addition. These participants were primarily composed of professional librarians and archivists who were interested in utilizing AO3 as a means of instructing students or were simply curious about AO3 itself.

Implications for Implementation

A challenge to incorporating students' lived experiences and interests into a library instructional session is discovering student interests or experiences. Given the nature of library one-shot sessions, library instructors often have no familiarity with the students and are viewed by students as a fleeting guest lecturer in the classroom. However, incorporating students' interests and relevant examples into class activities or demonstrations can have a positive impact on students' attainment of important information literacy skills.

As we developed the AO3 workshop, we communicated the value this instruction could have for students in the workshop description and by employing relevant teaching strategies in the workshop itself. We included "outside of course relevance" or "familiarity strategies" to connect content to students' personal interests, namely fanfiction and/or the internet fanfiction archive AO3, "goal orientation strategies," to frame the workshop as an opportunity to learn skills that will help students' succeed, and "teaching style relevance" or "motive matching" to frame Proquest and AO3 as similar in terms of search features and source retrieval (Keller, 2010; Muddiman and Frymier, 2009). These strategies also foregrounded the "personal-motive value," "instrumental value," "cultural value" of the workshop (Keller, 2010). The structure clarified the purpose and value this workshop would have for participants. Due to the student-focused structure that utilized relevant teaching strategies and subcultural capital, the workshop's participants were highly engaged. These teaching strategies can be incorporated into any library one-shot session or workshop to maximize attainment of student learning outcomes.

It is important to note that the participation in the workshop was voluntary, so many students and other participants self-selected our workshop. This mitigated the challenge of discovering student interests and focused the integration of instructional content to a certain sub-group's interests. Moreover, the self-selective aspect gave students agency to choose the instructional experience that best fit their interests, goals, and needs. Participants in the workshop responded positively to our clearly mapped, student-centered learning objectives and agenda. Given the voluntary aspect of workshops, incorporating relevant teaching strategies and maintaining student interest has less obstacles.

If library workshops of this nature are offered, it is essential to advertise to interested participants. One way to communicate the workshop is to advertise to potential audiences such as student clubs, student organizations, and other offices on campus such as the office of student activities, writing center, student learning center, etc. Advertise the workshop well ahead of the date across multiple communication platforms such as email listservs, social media, flyers, the library website, and directly with potential interested groups listed above. Ensure that these communications provide the description and purpose of the workshop to align with potential instructional values for students. This communication strategy targets essential audiences and supports their interest in attending.

A workshop is an active learning experience. A hands-on activity gives students a chance to engage with the content in a way that is meaningful to them. The hands-on activity should align with student relevance values and incorporate relevance-maximizing strategies. One way to maintain relevance is to allow students to use their own interests, questions, and topics during the activity. Encourage students to bring their assignments or whatever they are working on to the session. Allow students to be co-developers of the lesson. This gives students agency in their learning and increases their perception of relevancy if they can tailor the lesson to their needs, interests, or goals. Additionally, allowing students to utilize their own interests and work may allow you to connect with them via shared subcultural networks.

Conclusion

The chance to incorporate students' interests and prior knowledge into a workshop was an opportunity to engage in relevant teaching and utilize subcultural capital to support authentic learning within a brief library instruction session. Unlike prior scholarship on incorporating student-centered learning in library instruction, this paper outlines a workshop that focused on a specific subculture-group's information behaviors, and how these skills map to the academic database usage. Instructional content was directly aligned with students' interests, goals, and needs to fully engage them in the learning process. Whether attendance in an instruction

session is voluntary or involuntary, utilizing these methods can help connect with students. As seen in the work of Knoster and Goodboy, even employing references or examples that may not be relevant to all students can support all students' trust and sense of importance in the classroom setting. Instructor's position in the same or similar insider groups can further build a feeling of belonging and community between instructor and student. The conscious effort to create a relevant instructional session resulted in an authentic learning experience where participants' prior skills were acknowledged and their interests valued.

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