



CHAPTER 19

Practicing in Public:

A Social Constructivist Approach to Research Skills Work in Online Discussion Boards

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Introduction

Imagine a dance class. The instructor asks the students to execute a combination of steps and they do so, each working at the appropriate level, listening to feedback, observing each other, and trying different approaches to find what works best for each of them. Ideally, the atmosphere is serious, yet positive, relaxed, and playful, so students feel able to experiment in front of each other. The students are at different levels of proficiency, but each of them attempts every exercise. Failure is accepted as part of the learning process, which takes place in an atmosphere of mutual respect. The instructor's feedback and the design of the class help students learn, but they acquire and reinforce their skills mainly through individual practice, shared in a community of other learners. This scenario may not seem to have much to do with information literacy instruction, but I propose that the conscious practice, in a community of peers that encourages experimentation and even failure, is well adapted to motivate students to improve their research skills.

I was inspired to develop the exercise described in this chapter by my dance background, which taught me that practical skills are best acquired through intentional, shared practice; my observations as an online student that effectively designed online discussions offer an opportunity for shared learning that can surpass in-person interactions; and my awareness that stu-

dents need significant hands-on experience with online searching to move beyond their existing search habits. By incorporating elements of communities of practice and positive assessment, the exercise uses a social constructivist approach to motivate students to engage with the material and obtain a robust amount of practice.

The exercise asks students to practice their acquisition of research skills in plain view of each other by using the online discussion boards provided in my institution's learning management system (LMS). The exercise gives students a structured assignment, asking them to perform specific tasks in a search interface such as a web search engine, a library database, or a discovery service, and it requires them to report back to each other on their actions, their search results, and their overall experience. It also asks for documentation of their search, so the instructor can give individualized feedback in private. Students' discussion board posts must include specific details, such as the keywords and database expanders or limiters they used, and I encourage them to report on their difficulties as well as their successes. They benefit from the clarity about their searches they gain from describing them to their peers and from experiencing each other's searches vicariously. If we return to our imaginary dance class, this is parallel to learning a difficult skill, such as pirouettes in ballet, where practice is needed to cement learning; some failure is likely before success can be reached, and learning happens in view of the rest of the class.

While the nature of the tasks students complete in this exercise is not unusual, sharing their search experience with the full class is less common. The exercise contemplates a shift in the learning environment to one that values engagement over results, welcomes experimentation and failure, and promotes peer-to-peer learning. Students engage not only with the material but with each other, preparing them for the communities of practice they will participate in. This approach gives students more power over their success and reduces the gap between student and faculty authority, allowing students to develop the self-motivation required for the twenty-first-century learning environment and workplace.¹ This chapter provides a brief overview of the exercise, then full details of the exercise itself, and will end with a discussion of how this approach can motivate students and a look at the relevant literature.

The Lesson Plan

Overview

This exercise asks students to use a search interface with specified search parameters and report back about their experience to their classmates using an online discussion board. The example I give below uses EBSCO Discovery

Service, but any search interface will do. It is relevant to the frame “Searching as Strategic Exploration” from the ACRL Framework for Information Literacy and is particularly helpful in developing the following knowledge practices:

- design and refine needs and search strategies as necessary, based on search results;
- understand how information systems (i.e., collections of recorded information) are organized in order to access relevant information;
- use different types of searching language (e.g., controlled vocabulary, keywords, natural language) appropriately; and
- manage searching processes and results effectively.

The exercise is also connected to the framework’s view that information literacy is part of a social landscape and moves students toward participating in a community of practice (Authority is Constructed and Contextual).

Learning Outcomes

Learning outcome 1: By the end of the exercise, students will be able to apply specified search techniques to retrieve topically relevant information sources in a specified search interface.

Learning outcome 2: By the end of the exercise, students will be able to clearly and specifically describe the success and failure they encountered while searching to an audience of their peers.

Learning outcome 3: By the end of the exercise, students will be able to assess peers’ search strategies for strengths and weaknesses and offer substantive, courteous feedback.

Lesson Preparation

This exercise takes place online. You will need to prepare the exercise in your institution’s Learning Management System (LMS). I have most recently used Canvas, though the exercise should work well in any LMS.

Lesson Plan

Setup: Before the exercise begins, you will need to provide students with information on the search interface chosen for the exercise and its features, using any format that suits your situation, such as tutorials, lectures, or visual aids. Students then complete a search using specified parameters, submit a screenshot documenting their search, write a discussion post describing their search and reflecting on the experience, and, finally, write a reply to at least one other student post.

Discussion board prompt and search documentation: The discussion prompt you prepare for this exercise must be specific and detailed, yet as brief as possible. Bullet points, bold fonts, and other formatting tools can make the directions easier to read. Students should use a topic that is both college-level and meaningful, such as a topic connected to coursework or one they choose, probably with some restrictions to ensure their topics work well for the assignment. In the discussion board prompt, ask students to use a specific search interface, such as a web search engine, an OPAC, any database, or a discovery system, to search for resources connected to their topic. Give instructions that ensure they use the interface's search features, encourage them to play, and give them a measurable goal, such as reducing their results below a given number or finding an article with specified characteristics. Require them to reply to at least one other post, so that they read each other's work, and include a clear statement of expectations about online etiquette. Reminding students to be kind to each other and to be courteous when they disagree sets a tone of mutual respect in the discussion boards and encourages participation.

Requiring documentation of the search in addition to the discussion board post is necessary to ensure that students actually do the search; many students can do a reasonable job of describing a search they didn't do. The documentation can take one of several forms, such as a printed or submitted article, a link, or a screenshot. Asking students to submit screenshots of their search screens allows the librarian to see their actual searches and facilitates private, personalized feedback on their search choices; it is also a useful technological skill for students to master.

Once the exercise is underway, your role is to be available for questions, either in person, via email, or via your participation in the discussion. Keep your role encouraging more than corrective. Your general comments to the whole class can encourage them or steer them away from common mistakes, but students' main focus should be on interacting with each other, not with the librarian. Your substantial feedback can go to individual students, privately.

Time to complete: Allow one to two hours for the students to complete the assignment, in addition to the time they spend becoming familiar with the search interface.

Example exercise: The following example explanation and discussion prompt are closely based on an exercise I give my students using EBSCO Discovery Service, called OneSearch, at my institution. I have made minor revisions to make it more easily adaptable.

The Exercise, Part 1: Search Instructions and Documentation

In this exercise, you will explore the library's single search box, OneSearch. You have read about it; now, you will use it!

- Go to the library home page (URL) and explore OneSearch. It's kind of like Google, and just like with Google, you need to focus your search carefully to get good results. How to explore:
- Look for information on your topic. You are searching most of the library's resources, millions of articles, books, and more. You need to be specific to find the good stuff, so use at least three to five keywords to search. Just use the nouns instead of typing in a question. For example, "nutrition" would be too general; you need a specific issue connected to nutrition, such as "protein" and "vegetarians" and "adolescents." BUT just use the nouns instead of typing in a question such as. "Can vegetarian teens get enough protein?"
- Then, use at least two of OneSearch's features to limit your search. Full text is already the default. Try limiting by format, subject, time period, database, or any other feature that strikes your fancy. You can also use quotes around an exact phrase.
- Try to limit your options to the point where you have fewer than 500 results, either by adding more specific keywords or by using the features on the left. Play with it! Take a screenshot of your final search screen. Example below.
- Choose an interesting-looking article that looks like it could add something to your topic and click on it. You will be taken to that article in its database and will be asked for your user name and password if you're off campus. Take a second screenshot of the actual article.

For this assignment, you need to turn in two screenshots: (1) your search screen in OneSearch, and (2) your article.

The Exercise, Part 2: Discussion Prompt

For this discussion, report on your searching with OneSearch. In your post, tell us

- which words you used at first in OneSearch
- which OneSearch features you used
- how your numbers of results changed
- why you were interested in the article you chose, and
- what you think of the experience compared to other searches you have done. Could you easily find results that looked useful? Did the changes you made have the effect you wanted?
- Remember to reply to another post! Also remember that I love specific details!

Remember the rules of online communication:

- Be positive, courteous, respectful, and supportive of each other.

- Feel free to disagree. Really. Just be respectful about it.
- Remember that sarcasm and humor don't read well online.
- Emoticons (happy faces, etc.) are fine; bad language, even in abbreviated form, is not.
- You don't need to be very formal in your posts, though you should be polite. Think of it as an in-class discussion and write the way you would talk.
- The best way to make sure you have interesting posts to reply to is to post something interesting yourself early in the week.

Use the Reply button below to write your post. Don't be scared—the discussions are graded on EFFORT and DETAIL, not being right. There are no wrong answers! As long as you follow the instructions and do the whole thing, on time, you'll get 100%. You get 70 points for each main post and 30 points for your reply.

Feedback and Assessment

The assessment for this exercise focuses on engagement rather than success. Instructor feedback can be given in private to individual students, and a good grade should be within reach for all students. As long as students attempt the entire exercise, describe their efforts, and reply courteously and specifically to another post, they should receive full points, even if they struggle with the search or get poor results. Correcting writing mechanics or style is outside the scope of this exercise and can have a chilling effect, especially for students outside the majority culture. Fear of making mistakes can inhibit their participation; we learn at least as much from failure as from success. While assessing student work for their engagement with practice instead of their results may seem amorphous or subjective, I have found it to be surprisingly straightforward in practice. Similarly, courtesy may seem difficult to assess but its absence is so rare that it is not an issue. An example rubric is below.

Figure 19.1 Example Rubric

Main Post			Reply to another post		
Inadequate	Needs Improvement	Meets Expectations	Inadequate	Needs Improvement	Meets Expectations
Absent or responds to less than 50% of prompt	Responds to more than 50% but less than all of prompt; vague or too brief	Responds fully to all parts of prompt with specific details	Missing, very brief, or generic; does not contribute to conversation with courtesy	Present but brief or vague; limited contribution to conversation; may be courteous	Responds fully to post with specific details; advances the conversation with courtesy.

Evidence-Based Rationale

The design of this exercise focuses on requiring the class to practice searching in a structured way and asking the students to observe each other searching, so they will improve their understanding of the features offered by different search interfaces. While assessing their work, I look for their completion of the requested tasks, their consciousness of the choices they make while searching, and their ability to articulate their search experiences to each other. In other words, the assessment focuses on whether the students can complete and then describe the assigned search, not the success of the search or the quality of the results. The exercise focuses on search skills, the “apply” level of Bloom’s Taxonomy, as revised, although “higher” levels of “analyze” and “evaluate” come into play, especially in connection with their reactions to each other’s work.

I assign this exercise as part of a semester-long graded information competency course, which is a co-requisite to a college composition course taught in the English department. The same students are enrolled in both classes, with a few exceptions of students who have passed one but not both courses in a previous semester. The classes have different instructors, a librarian, and an English faculty member, and receive separate grades.

In fall semester 2016, I taught three sections of the information literacy course. Of eighty-nine students, forty-nine consented to have their discussion board contributions analyzed, as long as their personal information wasn’t used. This sample may not accurately represent the entire course since it doesn’t include those students who were absent from the paired in-person English class when the forms were distributed. These students are more likely to have low grades in the class. Six students who did not pass the class gave their consent, so some struggling students are represented in the sample.

Of the forty discussion board posts submitted, only four were vague or incomplete. The remainder described the authors’ use of the search interface’s features to limit their search with specificity. None violated the etiquette of the discussion board. Very few students have shown any disrespect toward other students over the seven years I have taught this course, on average less than one per year, even though I teach an average of close to 100 students each semester. If there is a disrespectful communication in the discussion board, I communicate with both students, and, if the communication is clearly hurtful, remove it from the board. (Discursive footnote: In these interactions, I assume that the students do not intend to be hurtful and phrase my comments in terms of how their posts could be misunderstood. Something that seems clearly and intentionally disrespectful to me may well be inadvertent or may not bother the student I’m concerned is the target. While it’s important for the discussions to be free from disrespectful speech, it’s also important to allow

for the perspective of the students, which may differ from mine. If a student is adopting a corrective tone towards other students, I will ask privately for corrections to be reframed as questions. If students disagree with each other but remain respectful, even if disagreeing is uncomfortable for them (and me!), I congratulate them on disagreeing with courtesy.) The screenshots confirmed that students were engaging with the discovery service's features. Most made positive statements about OneSearch's benefits, such as ease of use, access to relevant, reliable, and full-text materials, and convenient limiters for focusing their search. Students would be unlikely to focus on these issues without this structured exercise. Of the three students who stated a preference for Google, one cited the difficulty of using keywords in other search environments and two cited familiarity. The prompt does not ask students to choose a preferred search interface, but most of them do. Overall, the students whose posts were detailed and specific show an understanding of how to use OneSearch's features to engage with their topics instead of adjusting their topics in response to their search results. Their posts show a sense of agency and an understanding of the way their choices can affect their search results. While assessing "courtesy" may seem difficult, in practice I have had very few entries that were in any way problematic; there were none in this sample. I do not assess students' writing mechanics or style, since welcoming their differences is an important component of this exercise.

A few selected posts follow:

So I searched up "Plastic Bag Ban" and TONS of search results came up, more specifically Thousands of searches. I chose that topic because not only am I doing a paper on this, but because a new law just passed that plastic bags in grocery stores are now coming to a ban. Lowering my search results to 500 was a little tricky, but I finally narrowed it down to Academic Journals in the past year. I figured since the new law was passing, that articles in the past year would be more relevant. Being that there was thousands of results to begin with, when I narrowed down the search to 2015 to present, it help out my searches a lot.

[Reply to another student:] I experienced the same thing with the search results. I thought that this unit was very helpful, because it helped me to learn new ways in looking up topics. I also found it very cool that "One Search" is like a google for databases.

At first I used time management as the main search and the “and’s” I used the words activity and health. I did not get a lot of result and none that appealed to me. I redid my search with stress management and the “and” as activities and I got much better results. I used the filters like crazy. I chose to filter my search to full text, published within the past year, academic journals, research, and adjustment. My numbers went from over 6,000 to under 400. I was interested in this topic because in college we all have jobs and are going to school so life can be pretty stressful sometimes and I wanted to find some tips to help relieve stress. I personally would choose to do a google search over this any day of the week because it searches a little bit of everything and thats good enough for me. But I will admit I do like the quality of results I get from using the OneSearch or like EBSCO.

The one search features I used were the the date in which I made sure the year was more current so that the research wasn’t outdated. I also made sure to only limit the formats to academic journal no books and no magazines and such. Also chose the to apply the social linguistics subject. At the first the results were around 400,00 then with each feature I narrowed it to under a hundred which is something I found useful to find the exact article.... I decided to try out new ways of researching by using this class and using my interest in sociology. Compared to google and such I would use this to find well written articles that I could actually read. I wouldn’t necessarily use google to look for an available article. I also think that the expanders were very helpful and something not a lot of search engines have.

The first words I used were, “impact of media violence on children.” Then, I got around 730,000 results and changed my words to just nouns and put, “media violence children.” I was a little confused when I still had so many results and I did not know how else to limit my search. There were still about 1,000 results so I tried check marking a whole bunch of options and found the column where it said, “limit by subject,” and check marked children and aggression. After checking those my results lowered to 400 and fewer which made it easier for me to look for an article that seemed in-

teresting to me.... At first, using OneSearch was confusing because I had difficulties limiting my search to less than 500 but clicking the options on the left side it became easier. I actually did like how there were a lot of articles to choose from that were specific whereas other databases are vague.

Motivational Techniques in Play

This exercise uses the social constructivist concept of communities of practice and a design (and approach to assessment) that reduces the role of the instructor and encourages learners to interact with each other. In promoting peer conversation, the exercise provides them with an opportunity to acquire real-world skills in a community that is accepting and positive.

Why Is Motivation Necessary?

Students perform research in their personal lives on a daily basis, often using web search engines. Why, then, do they need motivation to engage with research in an academic context? It may seem like a disingenuous question, but there are some specific reasons behind students' discomfort with research. A large body of extant research indicates that many students experience anxiety or discomfort when faced with using academic library resources. The sources of these feelings vary among students but can include insufficient preparation, deficiencies in libraries available to students before entering college, and uncertainty about how to begin research or use library resources; the result is often less engagement with the library and its resources.² An ethnographic study of Illinois Wesleyan University (IWU) undergraduate and graduate students found that many students were unfamiliar with the best databases for their topics, used simple searches suitable for web search engines in other search environments, were easily discouraged by too few or too many search results, let minor barriers prevent them from obtaining a desired source, and would change their topic quickly if they couldn't find the information they immediately wanted instead of making a serious effort to answer their initial question.³ The study found that "many students described experiences of anxiety and confusion when looking for resources."⁴ Library anxiety is a recognized phenomenon, first articulated by Constance Mellon in 1986 and developed since then; anxiety about using library resources is a recognized component of it.⁵

Carol Kuhlthau's work on the Information Search Process (ISP) emphasizes the insight that some parts of the research process necessarily produce feelings of uncertainty, and that this uncertainty, while uncomfortable, is

productive over the course of a research project.⁶ Information retrieval systems can overwhelm searchers with large numbers of undifferentiated results all at once, making it difficult for searchers to go through a research process that embraces complexity.⁷ Personalized results in web search engines, social media sites, and many other open web resources lead students to expect lightning-quick results with a minimum of effort and encourage them to be passive, unreflective searchers. They tend to rely on familiar yet ineffective search techniques, such as typing a few words in a search box and selecting from among the results without seriously evaluating the usefulness of their sources.⁸ In a 2008 reassessment of the continuing usefulness of the ISP, Kuhlthau, Jannica Heinström and Ross J. Todd found that because searchers expect the process to be easy, they have become even more likely to avoid uncertainty.⁹ Students' initial negative feelings about research are connected to "lack of knowledge and insecurity as to how to proceed."¹⁰ Kuhlthau, Heinström, and Todd advocate for librarian or teacher interventions at points in the research process where students might try to avoid uncertainty by staying at a more superficial level.

Overall, many students demonstrate discomfort with academic research, often because of unfamiliarity or lack of skills in using academic resources, and find it difficult to engage with them. This exercise was developed for community college students, who are especially likely to experience these barriers to engagement with the library; many are the first in their family to attend college, they are often underprepared by their education to date, and they also face the competing demands of work and family.¹¹ In California, community college students' barriers to perseverance and success include family responsibilities, excessive hours spent at work, administrative difficulties, and the cost of books, transportation, housing, and food.¹² The success rates for the course I teach vary between 61 and 70 percent, largely due to these factors.

Communities of Practice and Information Literacy

The concept of communities of practice has received increasing attention in educational literature generally, and the conversation on information literacy specifically, as a model to encourage students' authentic engagement with acquiring information skills. It originated in describing workplace learning in which workers build the knowledge they need by collaboration, instead of turning to outside authorities such as instruction manuals.¹³ Andrew Cox, in a 2005 review of four major articulations of communities of practice, noted that the four approaches give "community of practice" a variety of interpretations, some of which share few features, but that they all consider meaning to be created through social interaction, and that participants' identity is "cen-

tral to learning.”¹⁴ Some “communities of practice” in the corporate world exist to serve the interests of management, while offering limited, coercive self-determination for the participants.¹⁵ Cox ascribes the imprecision of the phrase to ambiguities in the meaning of both “community” and “practice,” and notes that the word “community” has uniformly positive yet ill-defined associations and can refer to anything from a tightly knit group of people in the same physical space to a loose online group.¹⁶

The community of practice model holds that knowledge isn’t acquired in isolation but is inherently social. In “What Is a Community of Practice and How Can We Support It?,” Christopher Hoadley ties theories of communities of practice to educational goals and proposes that knowledge is created by “practice in authentic contexts by communities.”¹⁷ Anne[maree] Lloyd specifically applies Lev Vygotsky’s social constructivism to information literacy instruction, and proposes that changing perspectives to see information literacy as a social activity causes it to assume a “different shape.”¹⁸ Michael Olsson and Annemaree Lloyd distinguish between two different ways of understanding how people acquire information: “*information behaviour*, [is] constructed as a problem-focussed, individual, purposive and cognitive process” while “the *information practices* literature acknowledges how people engage with and are shaped by existing and ever evolving discourses through social practices.”¹⁹ They hold that knowledge is created through active practice in a social environment. As such, they look at the role that the physical body, including the use of senses such as sight, smell, and touch, plays in information acquisition.²⁰ In the introduction to a volume devoted to communities of practice and information literacy, Dora Sales and Maria Pinto link the concept of communities of practice to sociocultural learning theories and critical information literacy.²¹ Barber, King, and Buchanan also point to the role that collaborative activities can play in motivation, knowledge formation, and students’ adaptability to new situations.²²

In 2008, Benjamin R. Harris critiqued the Association of College and Research Libraries’ (ACRL) 2000 Information Literacy Competency Standards for Higher Education because they, in contrast to earlier iterations of similar standards, omitted to recognize the vital role that social interaction plays in information literacy acquisition.²³ ACRL’s Framework for Information Literacy for Higher Education (“framework”), adopted in 2016, instead includes “communities of learning” in its definition of information literacy. Several parts of the framework refer to the role of community, and “participating in communities of practice” is part of the knowledge practices associated with the first frame, Authority is Constructed and Contextual.²⁴ Lloyd had earlier questioned standards-based information literacy instruction, pointing out that it omits to prepare students for the different, more socially constructed information landscape of their future communities and workplaces, and rec-

ommending that librarians engage with workplaces, consider the practice of affordance through which more experienced practitioners bring novices into a community of practice, and adopt an integrated approach instead of relying on one-shot instruction.²⁵ She recommends the development of “more collaborative approaches to information skills development through the use of assessment tasks that focus on group information seeking and use.”²⁶

Alfred P. Rovai, Michael K. Ponton, and Jason D. Baker make a distinction between cooperative learning (which involves active learner participation in groups with a strong instructor presence, assigning roles, monitoring, and intervening) and collaborative learning (which is based on the social constructivist perspective and recognizes that a hierarchy with the teacher at the top can inhibit peer-to-peer learning).²⁷ In collaborative work, there is no one correct answer. They delineate several relationships learners can experience: learner-content, learner-instructor, learner-learner, learner-interface, and self-talking, in which learners silently deliberate.²⁸ Online discussion boards offer unique opportunities for collaborative learning, providing “all students with an opportunity not only to interact but also to observe and learn from the comments of their peers and instructor.”²⁹ Online discussion boards can foster intrinsic motivation by reducing student isolation, providing an opportunity for both individual and class-wide feedback, and allowing hesitant students to participate in an asynchronous environment which may be less intimidating than the classroom setting.³⁰ In face-to-face classes, discussions may be dominated by more confident or extroverted students, and it is more difficult for instructors to reduce their presence so students can focus on interacting with each other. Even students who share personal information easily through social media may feel hesitant to do academic work in front of their peers. This exercise takes place in the context of a closed class open only to students, not to the general public. This smaller stage “will help to build trust within the community of inquiry and promote open interactions and a sense of community.”³¹

Reducing the size of the instructor’s role in order to foster peer-to-peer learning and student motivation has implications for feedback and assessment. Trudy Jacobson and Lijuan Xo point out that extrinsic motivation, such as a grade, can motivate students to complete requirements but often works against true engagement with the material and can reduce the quality of their learning.³² Grading runs the risk of focusing students’ engagement on the instructor instead of each other. Intrinsic motivation, by contrast, takes place within the students. The feeling of accomplishment from gaining a new skill or performing successfully in front of one’s peers is an example of an intrinsic motivator.³³

Praising students to foster their intrinsic motivation seems like a natural approach. In examining why some students persevere in the face of adversity

while others give up, Claudia M. Mueller and Carol Dweck (well known for her work on the growth mindset) found that praising students for their intelligence could, counter-intuitively, damage their self-efficacy by making them unwilling to take risks for fear of losing their “intelligent” status.³⁴ Meanwhile, praising students for effort, which is in the students’ control, made them more able to tackle challenging tasks.³⁵ Dweck’s work was specifically in my mind when I developed this exercise, though I use it loosely. Instead of verbal praise, I use written feedback in the LMS and am careful to praise students’ specific actions instead of their overall success. Their grade for each discussion depends on how thoroughly the students complete each search exercise, not on whether their searches are correct or effective. I want each student, no matter how “good” at searching or comfortable with technology they are, to be able to move through these exercises with as little fear of failure as possible so that they will be more able to weather any feelings of uncertainty that arise. By ceding control over their success to the students, I avoid falling into the trap of coercion and increase their motivation.³⁶ Giving students more control also demonstrates my respect for them and the different backgrounds and experiences they bring to the class.

In a recent interview, Dweck commented on “false growth mindset,” in which students can be misled into continuing ineffective behaviors by praise for efforts that aren’t successful.³⁷ In order to avoid this trap, I give students individual comments and suggestions based on their screenshots, so they won’t continue using ineffective search techniques. Approaches to assessing collaborative work are less developed than those relating to standards-based assignments.³⁸ Alfred P. Rovai suggests using positive assessments to raise the status and increase the motivation of students who aren’t part of the majority culture and may therefore face additional barriers to motivation.³⁹ Rovai, Ponton, and Baker point out the dangers of assessments that perpetuate a Eurocentric perspective and advocate designing assessments, and by extension entire assignments, with students’ background in mind.⁴⁰ In this case, focusing on students’ effort allows for a multiplicity of student voices to be correct. Students are successful at the exercise I describe in this chapter if they stay with it long enough to gain confidence and satisfaction by improving their search skills and to gain mastery of new search environments. In themselves, these are motivating factors.⁴¹ This exercise does not use peer assessment. A discourse analysis conducted by Geoff Walton and Jamie Cleland, for example, found that students’ assessment of each other tended to reinforce received ideas of good information literacy practices and did not encourage critical thinking.⁴² I assess students individually and give individual feedback privately, along with a summary of issues and insights to the entire group. Making mistakes in public can be stressful, and my goal is to encourage students to take these risks. Overall, thinking in terms of students’ effort instead of

the correctness of their response involves a shift of perspective similar to that Anne[marée] Lloyd noted in moving toward a view of learning as socially constructed. In this context, assessing students based on the extent of their engagement with the act of practicing is both meaningful and quantifiable.

Using structured exercises in a supportive environment to give students hands-on experience with different search interfaces can act as the equivalent of exposure therapy. This scenario gives students time with library resources in a low-risk setting so they will be less likely to let fear determine their choices when faced with an actual research assignment. Situating information literacy skills acquisition in a social context improves students' success with research while also giving them a more realistic view of how others search for and find information.

Adapting This Exercise

The exercise described above using EBSCO's EDS discovery service (OneSearch) is one of many possible similar exercises, limited only by your imagination and the resources available to your students. I use similar structured discussion boards when I ask students to

- explore potential topics using reference databases;
- use Google Advanced Search;
- search in both the library catalog and an ebook database;
- report on their search experience using one of two general academic databases (Academic Search Complete and Proquest Research Library); and
- use a subject-specific database, such as PsycArticles or JSTOR.

The general structure of a detailed search assignment, with documentation and a discussion, can be adapted for a free-standing online information literacy module or in conjunction with an in-person instruction session. Using a flipped classroom model, librarians could ask students to complete the exercise before an in-person session, so students arrive with focused search experience. As colleges and universities offer more fully online courses, libraries need to develop fully online methods for delivering the equivalent of a one-shot instruction session. One-shot instruction is an extremely limiting format, especially when promoting the development of a community among the students but may be the only format available to librarians. In order to foster collaborative learning within the limited structures sometimes available, I recommend focusing on two things: (1) the principles of facilitating peer-to-peer learning in a large group context, and (2) positive assessment that focuses on effort, not accomplishment, and welcomes multiple experiences and perspectives. This approach also helps bridge the gap between traditional

information literacy instruction and the socially constructed information environments students are likely to find outside formal instruction.

Endnotes

1. Wendy Barber, Sherry King, and Sylvia Buchanan, "Problem-Based Learning and Authentic Assessment in Digital Pedagogy: Embracing the Role of Collaborative Communities," *Electronic Journal of E-Learning* 13, no. 2 (2015): 60, <http://files.eric.ed.gov/fulltext/EJ1060176.pdf>; Wendy Barber and Sherry King, "Invisible Pedagogy: Developing Learners' Self-Responsibility in Digital Environments through Problem-Based Learning," *Proceedings of the International Conference on E-Learning* (January 2016): 29, Education Research Complete, EBSCOhost (117804578).
2. Marisa McPherson, "Library Anxiety among University Students: A Survey," *IFLA Journal* 41, no. 4 (2015): 317–20, <http://dx.doi.org/10.1177/0340035215603993>.
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