PRACTICAL ACADEMIC LIBRARY INSTRUCTION

Learner-Centered Techniques

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Introduction

Teachers have three loves: love of learning, love of learners, and the love of bringing the first two loves together.

—Scott Hayden

In the mid-2000s, I was exploring alternatives to my teaching career when I came upon the idea of being a librarian. I had taken an educational approach to my previous supervisory jobs at Western Michigan University Library, where I worked in technical services. I shifted my career to teaching high school in 1999, which eventually broadened to middle school and home-based learning. As an instructor, I knew that I wanted to continue working in an educational environment and loved working with learners, whether they were toddlers at story time in a bookstore, traditional middle school or high schoolers, or the seniors who occasionally enrolled at the alternative high school, which was my first teaching job.

I had no idea at the time how much instruction was involved in typical academic librarianship. I am fortunate to currently have a small subject specialist role as a children's literature librarian, as well as a larger role as an instruction librarian, or, in the U-M Library's terminology, learning librarianship. Between those roles, I probably teach more than other librarians at my institution and most other places. I have learned in conversations with librarians that the educational mission of the university commonly plays a central role in their

work. I am pleased to have the opportunity with this book to share some of my educational experience with my colleagues.

Most techniques in this book can be used for one-shot library instruction. The primary focus is on face-to-face interactions in a college classroom setting. This is not to say that technology does not play a role in in-person educational experiences. Technology tools such as course learning management systems, survey software, and screen-capturing equipment can enhance teaching in the classroom.

Throughout this book, I try to combine my own teaching experience with research from both the education and library science fields. The principles put forth in teacher education programs often rely on the future educator's opportunity to build longer-term relationships with their students than what library educators can possibly do. Yet some of the foundational principles of education can be applicable in almost any instructional setting. As a profession, librarians must glean whatever they can from the vigorous tenets put forth in the science of teaching and learning.

As the Making Thinking Visible team of researchers advocates in their work (which you will see more of throughout this book):

> How does one learn to teach? More to the point, how does one learn to teach well? We have to say the more time we spend in education, the more vexing we find this question. Not because there aren't ready answers out there, but because the answers often seem to be too ready, too simplistic, and self-perpetuating in nature.[1]

While there are many books, blog posts, and articles about how to teach in various settings—including instruction occurring in the library—this book is designed to offer classroom management tips and can serve as a refresher professional development tool for someone who has either taught for a while and is looking for new ideas or is returning to teaching after being away from it for a while. It is not an academic or comprehensive treatise on how to teach in the library. You can find more complete approaches to this sort of teaching in works by William Badke, Esther Grassian, and Joan Kaplowitz, and I encourage you to consult their many useful texts on library instruction. This book can be read from beginning to end in a linear fashion to find ideas for the beginning, middle, and end of class. It is also arranged like a reference book in that you should be able to quickly consult it for support for typical library instruction needs or strategies.

This book is structured into parts with a beginning, middle, and end according to a typical storytelling frame of reference, which is highlighted in chapter 2, "Guiding Principles." I do not believe that teaching always follows this structure, but using this framework can help you organize your thoughts and plans. Teaching is not always a linear process, and what follows logically

for one learner may not apply to another. You might have success with some of the techniques described in part II of this book if you use them initially in your instructional practice, while something from part III might better fit your end-of-class routine. Adjust the techniques suggested in this book as you see fit, and be reflective about how they work for you. Chapter 11, "Looking Back on Your Teaching," suggests some concrete ways that you can structure your own practice to make your instruction better for everyone.

The first chapter in this book defines a few terms and concepts that I find central to the work of library instruction. A key component in the second chapter is a list of *guiding principles* that direct my instructional practices. While each of us has our own approach to teaching, I find that defining and following a personal mission by identifying core guidelines can elevate my instructional practices. I'm sure that the guiding principles enunciated in this chapter are not comprehensive. I have a lot of teaching experience, but I still find that my practice is evolving. Some of the instructional practices that are described in the book may not seem relevant to your own experience, but I encourage you to keep your own guiding principles at the forefront of your mind when you are designing and conducting class.

Critical information literacy theory and critical pedagogies in general are prominent in the academic library conversation. I consult resources on these topics as part of my ongoing professional development and reflect upon them in my practice. My approach in the book is to incorporate critical principles into the instructional techniques I suggest. I am grateful to the many education and library professionals who research, respond, and advocate for critical information literacy approaches to library instruction. I hope my application of their ideas here fairly represents their work.

The goal of this book is to provide advice on treating students as individual learners so that we as a profession can all make that shift. You will find many learner-centered techniques throughout the book. A central component of the teaching in your classroom is the guiding principle of trusting students and having positive expectations of their engagement with the content. If you begin your instruction with deficit thinking—with the idea that students don't care about library instruction or are unable to grasp the concepts that you teach—it will be harder for you to create a meaningful experience for them. How can they make any kind of connection to your instruction if you think they don't want to?

The techniques in this book rarely characterize students as either passive or reluctant learners. Instead, it's important to view students as active learners who continually learn and evolve. For example, Paulo Freire in his seminal work *Pedagogy of the Oppressed* advocates for an inquiry-based approach to education that "affirms men and women as beings in the process of becoming—as unfinished, uncompleted beings in and with a likewise unfinished reality."[2] Students are not "missing" something like motivation or information

literacy skills, they are merely "unfinished." In this book, we follow this more inclusive approach, which moves the teacher librarian beyond classroom management into the roles of classroom partner and facilitator.

How do we move from understanding the notion of students in the process of "becoming" to putting that idea into practice? We will delve deeper into the answers to this question as we focus on working *with* students for the development of a learning mindset. For example, chapter 7 highlights the role of each participant in a class discussion and how the manner in which the discussion is conducted can foster a caring student environment. At my institution, it was important to change the title of instruction librarian to learning librarian because the word *instruction* focuses more on the role of the teacher, while the word *learning* focuses on the student. Giving thoughtful and personal feedback to students' questions shows how much you value what the students have to say in class. Many librarians' instruction considers larger course goals as well as particular assignment instructions. Putting that amount of thoughtfulness into your instruction shows that you care about the students. This approach is based on a perspective that you can trust students to grow with you. In thinking about trusting your students, having high expectations of them shows that you care about them and think they can do well.

You do want to teach the students about relevant materials that will help them succeed both inside and outside of the classroom. I try to provide techniques in this book that are based on some of the fundamental tenets of the science of teaching and learning. In her book *The New Science of Teaching and Learning: Using the Best of Mind, Brain, and Education Science in the Classroom*, Tracey Tokuhama-Espinosa outlines five well-established educational concepts based on a comprehensive review of research in the fields of neuroscience, psychology, and education. These five concepts are:

1. Human brains are as unique as faces.
2. All brains are not equal: context and ability influence learning.
3. The brain is changed by experience.
4. The brain is highly plastic.
5. The brain connects new information to old.[3]

To me, these basic precepts mean that learning can and will happen if you work with students to design relevant, thoughtful, and learner-centered experiences. Prior knowledge, metacognition, classroom discussion, and active learning are all woven into these five concepts. I truly believe that the suggestions in this book should be able to work for anyone. I am not suggesting that everyone should teach exactly the same way as I do. I am merely offering you some alternatives to what you have already put into practice.

NOTES

1. Ron Ritchhart, Mark Church, and Karin Morrison, *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for All Learners* (San Francisco: Jossey-Bass, 2011), 25.
2. Paulo Freire, *Pedagogy of the Oppressed*, 50th anniversary edition (New York: Bloomsbury Academic, 2018), 84.
3. Tracey Tokuhama-Espinosa, *The New Science of Teaching and Learning: Using the Best of Mind, Brain, and Education Science in the Classroom* (New York: Teachers College Press, 2010), 27.

PART I

The Basics

1
Words Matter

Defining Learning, Library Instruction, and Motivation

Promoting thinking isn't a nice extra but is central to learning.

—Ron Ritchhart, Preface, *Making Thinking Visible*

The art of teaching is the art of assisting discovery.

—Mark Van Doren

Sí, se puede.

—Motto of the United Farm Workers of America

Taxonomies, thesauri, authority records, glossaries, and classifications . . . Librarians know how important word choice is. We categorize the subjects of library materials and then organize various information systems accordingly. Let's begin by defining three fundamental concepts that are referred to frequently throughout this book: *learning*, *library instruction*, and *motivation*. In many cases, my definitions of learning, library instruction, and motivation strive to focus on students and their relationship to what happens in one instructional setting: the classroom.

WHAT IS LEARNING?

One of the first things a new teacher is taught is how to create learning objectives. Professors want you to consider the goal of your instruction before you map out what will happen when you teach so that you can have a firm reason for what the students are doing in your class. When I was taught to create learning objectives in my teacher education program, I was actively discouraged from using the words *understand* or *think* in those objectives because it is difficult to measure those kinds of cognitive processes. In my instructional practice, some library instruction is measurable point-and-click content, but much of what library instructors are trying to teach involves thinking and understanding or, to put it another way, making meaning out of complex ideas, which sometimes includes creating something new. The process of constructing that meaning is *learning*.

There are six levels of learning in the 2001 revised Bloom's Taxonomy, a major framework that is used to categorize the learning objectives in many school curriculums across the country. These levels show a progression from simpler to more complex learning. The three uppermost of the levels are Analyzing, Evaluating, and Creating. Teacher educators encourage teachers to strive for educational experiences that involve these three more intricate processes as students encounter and work with different types of knowledge.[1] Teacher educators provide verb charts so that future educators can more easily create learning objectives using these processes. These upper levels have been identified as higher-order thinking skills, encompassing cognitive processes that represent critical thinking. At the highest level, Creating, complex thinking is essential. In order to create something new, you might have to estimate what you need to solve a problem, predict the future implications of your work, or imagine a completely new way of addressing a situation. The goal of defining these critical thinking skills in something like Bloom's Taxonomy is to make explicit what can sometimes be difficult to describe—what does thinking or learning look like? Taxonomies and pedagogical advice books, such as this one, illustrate the methods that an instructor can use to foster thinking and understanding. Thinking through a problem, concept, or idea is akin to learning it.

Learning is not about teaching students *what* to think, it's about teaching them *strategies* to use, so they can make sense of the information around them and better engage with what they read, see, and hear in ways that will help them both in their course and in the larger world. In their book *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for All Learners*, Ron Ritchhart, Mark Church, and Karin Morrison describe six thinking moves or strategies that will help students to understand new concepts or ideas across multiple disciplines:

1. Observing closely and describing what's there
2. Building explanations and interpretations
3. Reasoning with evidence
4. Making connections
5. Considering different viewpoints and perspectives
6. Capturing the heart and forming conclusions[2]

It's important to provide opportunities in the classroom for students to practice these thinking strategies. In doing so, these six thinking moves can be defined as ways to teach or parts of a librarian's instructional methodology. They distill Bloom's Taxonomy into the essential components of learning, which to me involve thinking through a concept or idea. As students incorporate things like observations, making connections, and forming conclusions into their own practice, they are learning. Chapter 2, "Guiding Principles," will illustrate even more tenets of learning, teaching, and what the cognitive process of learning requires of the library instructor and the students.

WHAT IS LIBRARY INSTRUCTION?

While the *Making Thinking Visible* team discovered the six thinking moves through evidence, experimentation, and observational research of students in traditional, long-term educational settings, their principles also apply to library instruction. Library instruction can be conducted in multiple places: in a classroom, at a reference desk, at a consultation, or online. It usually involves a library instructor, with or without a library degree, and, in my case, a learner enrolled at an institution of higher education.

Annie Downey, in *Critical Information Literacy: Foundations, Inspiration, and Ideas,* defines *information literacy* as a category distinct from what library instructors are often asked to teach.

> Information literacy is often confused with computer literacy and information retrieval. These two skill sets, while they can inform information literacy, are very different. Computer literacy and information retrieval are focused on the technical aspects of using technology and finding information, while information literacy is focused on the content found with the technology and information retrieval systems. Information and library literacy are also often confused with one another or used interchangeably. Library literacy and information retrieval are much narrower in scope than information literacy.[3]

According to ALA, *information literacy* is the ability "to locate, evaluate, and effectively use information that is needed."[4] A student can easily be shown or told where to find facts. A library instructor can easily measure instructional success if the goal of a library session is for students to be able to find and download an article from a database. But library instruction, even in a one-shot session, is an experience where students discover meaning beyond the words and images on a screen. They learn ways to think about and assess information whether it is in the news, in a scholarly journal, on social media, through statistics, or some other source. This is information literacy.

What happens during library instruction? Learning often happens in the form of thinking about something from multiple perspectives. Students learn to think about information. Library instructors can ask themselves whether they are introducing instructional concepts that foster *Making Thinking Visible*'s six thinking moves. Librarians can even employ metacognitive language that articulates these moves, such as "I'd like to show you how to find information about your controversial topic so that you consider different viewpoints and perspectives in your writing." Or they can ask students to show them the best way to search a database, and then ask the students the reasons why that is the best way, in order to demonstrate the thinking move Reasoning with Evidence. The rest of this book will describe techniques that will help you have a successful library instruction session, and many times these techniques will focus on the thinking that is occurring in those sessions.

Library instruction is the intersection of the student's desire to make meaning of (or learn) the information around them and the course instructor and library instructor's ability to foster an environment for that learning to happen. In its *Framework for Information Literacy for Higher Education*, the Association of College & Research Libraries (ACRL) has put forward an approach that considers information literacy more broadly as "the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning." This approach centers students in a process that helps them think in new and different ways.[5] The library instructor can facilitate an atmosphere where learners are able to engage with the six threshold concepts (or *frames*) outlined in the Framework: (1) Authority Is Constructed and Contextual, (2) Information Creation as a Process, (3) Information Has Value, (4) Research as Inquiry, (5) Scholarship as Conversation, and (6) Searching as Strategic Exploration. What some call the *content of the class* is defined as both information literacy and the abilities showcased in the six frames.

In defining *library instruction*, I include more than the main content and objectives that are being taught. It is also the ways or methods that we use in our teaching and our larger instructional philosophies. What are students *doing* with what we teach? Why do students do things the way they do? How will they make sense of the information presented, and my instruction overall,

and how will all of this fit into their worldview? Learning includes experiencing, studying, realizing, questioning, applying, making, analyzing, knowing, and so much more. A brief glance at any Bloom's Taxonomy chart of active verbs will show you many cognitive and behavioral processes that represent learning in some way. For me, there is a central component in all of these processes in a library instruction session. Through all of the actions that these verbs represent, whether they are internally or externally accomplished, students are conducting some sort of deliberation, even if briefly. My definition of *learning* and *library instruction* is that they are processes whose main goal is to foster thinking and understanding about all of the things that information literacy represents. How do we, as library instructors, get learners to join us on a journey that fosters thinking and understanding in new ways?

WHAT IS MOTIVATION?

John M. Keller's work provides a strong foundation for understanding how to keep students interested in learning, and I think it relates to the learning that happens in library instruction. His work on motivational design focuses on what is called the ARCS Model of Motivation. His research suggests that instructors should focus on **A**ttention, **R**elevance, Learner **C**onfidence, and Learner **S**atisfaction. These conditions have to be met for students to become motivated and persist in the learning experience, so he defines them explicitly:

> *Attention:* Instruction should capture and sustain students' attention without overstimulating them. Keller points to research that students have sensation-seeking needs and knowledge-seeking curiosity.
>
> *Relevance:* Students need to know why they are learning course material. Relevance not only connects to the course material, but it can also come from the way that material is taught. The instructional method itself may map to an educational characteristic that is highlighted in the course.
>
> *Learner Confidence:* Learners need to feel that they are successful in some way. Keller highlights that a student's fear of failure may be stronger than a teacher realizes.
>
> *Learner Satisfaction:* Students should feel good about their accomplishments.[6]

Intrinsic and extrinsic motivation are often highlighted when discussing whether students are satisfied and feel good about their achievements. Intrinsic motivators are things that inspire students internally to persist in learning. Extrinsic motivators are external rewards. I discuss some ways to use extrinsic motivators in chapter 4, "Starting Class," as well as how they might assist you

in the more difficult parts of teaching in chapter 9, "Problem-Solving Instructional Dilemmas."

I include *motivation* as a foundational concept along with learning and library instruction because I think motivation is sometimes taken for granted, even though it can be difficult to achieve in one-shot library instruction, especially when you don't know the students. Practical teaching techniques for library instruction need to include motivational aspects in order for students to not only engage initially with library instruction but also persist with that engagement. Suggestions regarding attention, relevance, confidence, and satisfaction are woven in throughout the book and are especially prominent in chapters 4 and 9.

PUTTING IT ALL TOGETHER: LEARNING, LIBRARY INSTRUCTION, AND MOTIVATION

ACRL's definition of *information literacy* explicitly states that library skills are an integrated set of abilities. Searching for library sources or materials, knowing how to assess and evaluate the information in them, and making something new out of it is a complex process. Students may struggle to learn or think through these sophisticated concepts. There are many times when students will not find exactly what they want or need. They may find too many articles, not know how to narrow what they see, and become overwhelmed. They may not be able to understand scholarly articles. They may be looking for a statistic that doesn't exist. Conversely, other students have a lot of experience with research, and they can get bored in class and not be open to new ideas in the college classroom because they had to complete an extensive research project in high school. They may feel that they have already learned all there is to know from library instruction, so they may not feel motivated in your classroom.

Students in a library instruction session may have a wide diversity in research experience, and it can be difficult for library instructors to balance such a broad range of needs. Because librarians usually have minimal time in a classroom, library instruction may include a canned search that shows exactly what the librarian is looking for. Librarians are not modeling true research when we find exactly what we are looking for the first time we search in a library database. Students may be learning that research is easy to do in the class when they see this kind of model, and then feel a disconnect when it is more difficult to find what they want later. Students may not see the thinking part of the instruction. How can students feel confident or satisfied in relation to the ARCS Model of Motivation if they have seen the librarian find what she wanted the first time and then they don't have that same experience in their own searches? It's almost as though we are setting them up to fail because

even I rarely find what I'm looking for the first time I try. How can we motivate students to complete such a challenging task?

In some instances, adversity can be an excellent motivator. We have all heard stories of people who have overcome extreme hardships and had great success. But perhaps hardship is not what you want students to experience in the short time you have with them. It may even affect your rapport with the students by undermining your authority with them. The students might not see you as approachable if you give them tasks that are extremely difficult without also giving them a way to shepherd themselves through difficult times (see chapter 4 for more information about developing rapport with students). Discouraged researchers can be difficult to motivate. Some inexperienced students may need extra encouragement to do something that they have never done before. Others are intrinsically motivated to learn more.

More advanced researchers often have a greater tolerance of the iterative nature of research that is the result of not finding what you want the first time. This tolerance may mean that their confidence and satisfaction do not wane as quickly when they experience difficulty searching for information, and they may stay more motivated throughout the search. Library instruction for more advanced researchers in a group setting usually happens in a more intimate class with fewer students. I find that I can be more conversational in these settings, and often the students exchange ideas and learn from each other. In any case, students in upper-level courses are usually receiving library instruction that is related more closely to their fields of study. They are more intrinsically or internally motivated to learn about topics that will advance their personal knowledge of the field. Don't bore them with a lengthy instructional experience on the basics. Acknowledge and respect their expertise because this will build rapport with them. They will be more confident and satisfied if you work together with them to advance their knowledge. These students often have other, more powerful external motivators—like soon receiving their degree, or advancing their expertise in their field in order to get a better job—and factors like these tend to enhance the learning that occurs in these kinds of classes.

Is your library instruction interesting because you change the classroom activity occasionally and provide variability for the students? Do goal-oriented students see that the workshop will be useful for future research? In both cases, you are increasing the chances that students will be motivated to learn because you have engaged their attention and made your instruction relevant. Working on rapport and minimizing distractions will help with student attention and relevance as well. (See chapter 4, "Starting Class," for more information on techniques that foster connection and engagement.)

The motivational components of learner confidence and learner satisfaction can be harder to address when you don't know the students. In your library instruction, how can you make sure that learners are confident in their

own success and give them a chance to be satisfied with the library instruction experience? One small thing that you can do is to provide constructive feedback early on to students when they accomplish something at the start of class. If a student faces some sort of challenge during the session, give them some guidance so that they can increase their confidence in their information literacy skills by applying a new strategy successfully, and thus do better. Moreover, students may feel satisfaction when they see that all the students are being called on in class in an equitable manner. All four components of the ARCS Model of Motivation are important throughout the class session, but they can be essential at the beginning of the session to get the class off to a positive start.

NOTES

1. "Bloom's Taxonomy," Vanderbilt University, https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/.
2. Ron Ritchhart, Mark Church, and Karin Morrison, *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for All Learners* (San Francisco: Jossey-Bass, 2011), 11.
3. Annie Downey, *Critical Information Literacy: Foundations, Inspiration, and Ideas* (Sacramento, CA: Library Juice, 2016), 36.
4. American Library Association, *Presidential Committee on Information Literacy: Final Report* (Chicago: American Library Association, 1989), http://www.ala.org/acrl/publications/whitepapers/presidential.
5. Association of College & Research Libraries (ACRL), *Framework for Information Literacy for Higher Education* (Chicago: ACRL, 2015), www.ala.org/acrl/standards/ilframework.
6. John M. Keller, "Development and Use of the ARCS Model of Instructional Design," *Journal of Instructional Development* 10, no. 3 (1987): 3–6.

2
Guiding Principles

You've got to stand for something or you will fall for anything.

—Anonymous modern proverb

What if I told you that reading a PowerPoint aloud is not the same as teaching?

—Popular internet meme

When I was a pre-service teacher (what used to be called a student teacher), I had to create a personal teaching mission statement to include in my official teaching portfolio. Throughout my career, I have taught in a variety of settings, and my philosophy of teaching has evolved and expanded to become more relevant to teaching in any environment. Over the years, school principals, teachers, and librarians would approach me about the way I taught, and I could always point to a few phrases or guiding principles that help me focus on what I hope is authentic teaching. I have spent some time in this book defining my own guiding principles and have used them throughout to illustrate how certain techniques reflect my philosophy of teaching. It is likely that your teaching philosophy has changed as well. What you thought was important at one stage in your career may not seem as important at another because you are working with a different student population, technology has impacted your teaching significantly, or you are simply teaching a different subject requiring different principles.

Just like creating learning objectives or goals in lesson planning, you should articulate your own personal philosophy of instruction in order to be intentional about how you teach. Even if you haven't created your own guiding principles or philosophy, your words and actions probably already illustrate your personal mission. Take a moment to step back and see if you can articulate your own approach to teaching in order to teach intentionally to your personal philosophy, instead of letting it happen by accident through your actions.

This chapter explains the guiding principles that influence my personal instructional outlook—the phrases that I tell myself and use to advise others. While these principles are personal to my experience, you might consider using them to start a list of your own. I believe that these truisms provide purposeful direction for instruction, as well as inspire and encourage me when I inevitably encounter difficult teaching situations.

FIRST, DO NO HARM

While Hippocrates didn't really say "First, do no harm" and librarians don't have to make any kind of pledge to join the profession, I do think that you can commit yourself to this well-known promise. Be mindful in your interactions with students to refrain from an educational approach that can interfere with student learning. More than being "not harmful," I encourage you to actively promote a culture of learning in the classroom in ways that map to your own guiding principles and to what you know about students' needs. Many of the techniques in this book will foster that kind of atmosphere.

Sometimes we may be willing to promote a positive culture of learning, but we unintentionally cause students to have negative learning experiences. Or students proceed into the library classroom having had a negative library experience in the past. As library instructors, that impact, regardless of intent or past experience, is profound and should be acknowledged. Prior educational harm affects present and future learning—it hurts the student, and you don't want to be a part of that. For example, the power dynamic in the classroom may cause barriers to student learning. If students think you are the expert and you present an intimidating demeanor that inhibits questioning, they may not engage with you, or they may refrain from participating fully in class. One of the ways that you can address an unbalanced power dynamic is by starting off your class in an open and approachable manner, which I discuss in chapter 4, "Starting Class." There are multiple points throughout this book that provide advice on how to engage in discussion and conversation with students in a more equitable manner. In any case, it is likely that you will have to engage in professional development throughout your career that reveals how some approaches to teaching actually obstruct learning.

It can be exhausting to have to regularly be so self-aware and engage so intently with issues of professional improvement. At other times, though, it can be energizing. I am constantly learning from my colleagues about alternative teaching methods, and I find this refreshing because, for me, I like these kinds of challenges. I want to be in a profession where I am not doing the same thing every day, semester, and year. I would get bored if I taught the same thing in the same way all of the time. Having a bored, disinterested, or automatic approach to my job would be harmful to me.

The other guiding principles that are discussed below will foster an environment that promotes student learning rather than harming you or the students.

TEACHING IS NOT TELLING

While the lecture style of instruction has been getting some bad publicity over the last few years, some librarians are excellent storytellers and can easily convey library instruction through clear, thoughtful, direct inputs such as lectures and monologues. I know through my own interactions with students over the years that I can tell meaningful stories and give memorable examples that help students recall how to do library research for their assignments. However, for me, teaching is not just recounting stories and telling students what to do. I'm not interested in playing the role of an old-school army sergeant who wants students to follow orders and do research like I tell them to. Many college students bristle at that kind of direct, commanding approach at this stage of life, when they are exploring what the world means to them.

Paulo Freire in *Pedagogy of the Oppressed*, his classic treatise on the fundamentals of education, characterizes this narrative approach to education as based on what he terms the "banking concept of education":

> Narration (with the teacher as narrator) leads the students to memorize mechanically the narrative content. Worse yet, it turns them into "containers," into "receptacles" to be "filled" by the teacher. The more completely she fills the receptacles, the better a teacher she is. The more meekly the receptacles permit themselves to be filled, the better students they are.[1]

The last thing I want to do as a library instructor is to encourage my students to be meek. Students want to know the purpose of their actions. Delivering a speech to them discussing the reasons behind what they are doing is not as constructive or as engaging for me as a librarian. I want my students to become empowered thinkers, not meek receptacles who are told what to do. So if teaching isn't telling, what is it? It is reflection, practice, trying, failing, conversation, application, and transformation. That is what this book is all about.

I want to create a learning experience for the students that will be more significant in their memories and have more impact on their research practices. What does this look like in the classroom? What kind of environment do I, as the instructor, need to create in order for learning to happen? I am reminded of Elaine Howes's work that focuses on ways of knowing tied to feminism and constructivism:

> The very idea that my students' ideas would *shape* what they learned altered my vision of teaching from one in which my responsibility lay in accurately relaying intriguing ideas to one in which my role was to provide learning contexts within which students would create *their own* ideas, as individuals, and as a social group. I cannot stress enough how much more fascinating, complex, and challenging this simple concept of students as knowledge-makers makes the work of teaching.[2]

The idea of teaching and learning as something that is generated together by both students and teachers maps directly to ACRL's latest definition of information literacy: "Information literacy is the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in *creating new knowledge* and participating ethically in communities of learning" (emphasis mine).[3] I think of it as analogous to going to the beach. It's as though I, as the teacher, am providing students with a way to get to the coast. The sand is there and I might provide some tools, but students can decide whether they want to build a sand castle or do something else at the beach. If a sand castle is built, students will decide how to make it. Teaching goes beyond the transmission of knowledge. Learners, both teachers-as-learners and students, construct something new from the experience whether they write a research paper, create a website, or merely consider a new thought or idea.

"IF THEY CAN BUILD IT . . .": CONSTRUCTIVISM AND ACADEMIC LIBRARY INSTRUCTION

Constructivism is a major component in my personal philosophy of any kind of instruction. Those who follow a constructivist approach to teaching assert that students create their own understanding of the world around them by experiencing their environment and reflecting on those encounters. Constructivism aligns strongly with my idea that teaching is not telling.

When I taught high school social studies, students would reenact battles in our classroom and gym. If I taught about any kind of financial or economic policy, I would often ask students to stand up and physically divide themselves into particular categories in the hopes that they might see the impact of these policies. Afterward, I asked students to write about how the people who

fought in those battles or what an economic policy might mean for today's world. In a high school classroom, I had more time to thoughtfully create a learning ecosystem. It can be more challenging to create a learning experience in a one-shot library workshop, but I believe this kind of inquiry-based learning experience is worth the effort in library instruction.

How can you create a meaningful, inquiry-based library instruction session that is appropriate for a 50- or 80-minute time slot? If you are teaching students about evaluating information, you might ask the students to create their own list of questions that should be asked about every source of information before they use that source in their research rather than lecturing them about the characteristics of a good source. (Remember . . . teaching is not telling!) Instead of demonstrating how students should search in a database, have them first explore the database on their own by giving them a specific research question, and then let them tell you (and the class) what is important about that database. Constructivism allows students to use their own prior knowledge as a starting point for new learning. A constructivist approach shows the students that you respect their past experiences and that their past skills can be adapted in a new setting.

LIKE AND RESPECT YOUR STUDENTS, AND REMIND YOURSELF THAT YOU LIKE THEM

I have been an educator for a long time. Occasionally, I encounter a teaching professional who does not like students. The teacher may not articulate this feeling directly, but they show it in their conduct and demeanor. They are antagonistic toward students. They think negative thoughts about student behavior. They always leap to the worst conclusions when it comes to students' actions.

I do not think it is realistic for librarians to like or enjoy being around all of their students all of the time. But I do think that librarians have to find a way to respect students so that the hard work that goes into teaching them feels worthwhile. It is hard to stay motivated to complete the difficult tasks of instruction if you think you're putting a lot of work into something for people you don't respect. You might let yourself feel this way a couple of times a semester, but if you find yourself thinking or saying negative things about students more often, you might want to take a break or find some other way to remind yourself of the value of what you're doing.

I honestly believe that most students want to learn. There are many ways that you might refresh your memory about this. You can regularly tell yourself a story about a student that you did like and respect in order to show that you have made an impact on someone. If you have difficulty recalling something like that, imagine that you are teaching someone who you care about and respect. Librarianship usually requires a lot of work, but occasionally you

should do something with students outside of the classroom or away from the reference desk in order to get to know students as individuals.

Don't let the exception become the rule! We have all had difficult situations with students. I personally have had many challenging situations. I still think there are more students in college who like and want to be in school than students who don't want to be there. When you have those difficult classes, remind yourself of the times when you have made an impact in order to make teaching more enjoyable for you.

MAKE TEACHING ENJOYABLE FOR YOU

Students know when you're doing something that you don't like to do. They have been in school for a long time and can read the room, and they might just see that you don't want to be in their class if that's the way you really feel. You might, for example, rush through the session in an effort to just get it over with, in which case the students don't have time to absorb new ideas. Or you might be dismissive or unresponsive to questions, thereby discouraging the students from participating. You don't have to be overly enthusiastic if that doesn't match your personality, but you do have to find a way to make the experience palatable because it is difficult for students to learn something from someone who doesn't like teaching. And it is hard for you to be there too, so everyone loses.

If you don't like teaching but have to teach occasionally, what would make the experience more enjoyable for you? How could you work toward that experience? Can you use example searches that are really interesting for you? Can you co-teach with a colleague with whom you enjoy working? Do you like doing your own research? Might you design an original research project about teaching that would incorporate your instruction?

If teaching is not an enjoyable experience for you because you're uncomfortable or nervous while teaching, consider finding a way to reward yourself after you're finished with the session. Maybe you consistently have negative thoughts about your teaching abilities. If so, change that self-talk to words of encouragement to build your confidence. Focus on your breathing to calm your nerves, and slow down your speech in case that nervousness is conveyed to the students through fast talking. Process your instructional experiences after class using a Plus/Wish mindset: What worked well and why? What do you wish you had done and why? Come back to those reflections before you teach again to remind yourself of how you might approach a new class. (There is more information about the Plus/Wish reflective approach as it pertains to teacher self-reflection in chapter 11, "Looking Back on Your Teaching.")

Finally, you should consider teaching less in person if you have tried the ideas above and they haven't worked. In such cases you can talk with your supervisor and perhaps channel your energy into creating meaningful and

high-quality digital learning experiences for your students. But if you do like being in front of students and telling enjoyable stories, and students truly learn and engage in that approach, you should tell stories more often because that will make teaching more enjoyable for you.

LEARN SOMETHING NEW AS OFTEN AS YOU CAN TO REMIND YOURSELF WHAT IT'S LIKE TO BE A STUDENT

Sometimes librarians get in a teaching pattern where they do the same thing over and over again, and instruction begins to bore them. If your lesson is not engaging for you, it is likely to be boring for the students too. To remedy this, new ideas and technologies can improve your teaching. Finally, you may need to remind yourself what it is like to not know something, especially about topics in which you know a great deal.

Mary De Young, my mentor teacher during my teaching internship, gave me some great advice when she encouraged me to honestly put myself in a student role regularly throughout my life. If you are consistently in situations where you don't know something, this can remind you of how confusing and frustrating it is to work through a problem. (Reflective practice is key here, so see chapter 11, "Looking Back on Your Teaching.") You should not only put yourself in new learning situations, but also be reflective about them. When did you feel stuck during this learning experience? What did you do to get through that difficult situation? What did you enjoy about the instructor's teaching? Is there an aspect of their instruction that you can emulate? How does their pedagogical approach relate to library instruction?

PRACTICE CAN SORT OF MAKE PERFECT: TEACH AS OFTEN AS YOU CAN

It might seem counterintuitive, but for some people, doing an unpleasant task more often can actually help them figure out how to enjoy the task more and complete it better. This might actually be the best approach in situations where that task is something that they are required to do. You might just need more experience to work your way through a difficult experience.

For example, if you are nervous and uncomfortable when you teach or you don't teach that often, it might be more difficult to feel relaxed because teaching might feel new to you every time. It is challenging to increase your comfort level with something if you are not involved in that experience regularly. You might also think about other times when you have had to work through an onerous situation, and think of that as practice for teaching. If there are not that many opportunities for you to teach at the library and instruction is important to you, you can find more opportunities to teach somewhere else.

Offer to teach something you enjoy at the public library, the YMCA, your place of worship, or somewhere else, and then be reflective about how that experience might relate to your library instruction. Finally, some teaching professionals may struggle with issues of anxiety and depression, and I don't want to ignore the significant impact that these can have on work and life. I hope you can take a break or talk through things with a trusted support person if needed. Everyone wants a healthy work/life balance; if you are in a job that requires you to substantially do something that you can't or don't want to do over a long period of time, think about how you might try something else or shift your responsibilities.

REFLECTIVE PRACTICE FOSTERS A CULTURE OF LEARNING

Thinking through what I am teaching and how I am engaging with students is a key ingredient to successful teaching for me. I learned this in my teacher education program where I first watched others teach, and then I applied the lessons learned from those observations to my own practice. I then had to keep a journal about my own teaching experiences. This diary reflected both successes and failures in the classroom. I would take a step back occasionally and look for patterns in these diary entries to try to get a bigger picture of what I was doing. I talked through these reflections with my college instructors, fellow teacher education students, and my mentor teacher. My mentor teacher even gave me a new journal that I still have because it was such a powerful experience for me.

Integrating reflection not only in your own practice but also thoughtfully into students' experiences can be helpful as well. Sometimes students don't have a lot of experience in "thinking about thinking," or metacognition. You may have to provide some nudges to get them to step back from the current moment and determine the meaning of what is happening. I often use this type of reflection in my classes about fake news. I first ask students to imagine what someone else might think about a situation before having them write about their own reaction. I then ask them to compare the two reflections and see if they can learn anything from that comparison.

Reflection is so essential to my teaching philosophy that I incorporate it into all of my classes, both credit-bearing ones and one-shot instruction. You will find that many parts of this book will illustrate reflective techniques to improve your classroom instruction.

TRUST STUDENTS AND HAVE POSITIVE EXPECTATIONS

One of the most difficult aspects of library instruction is the realization that anything can happen in the classroom, especially when you are not the

instructor of record for the class. Student behaviors can be difficult to predict, technology can fail, and students might be easily distracted. A coping mechanism for me is to tell myself that students really do want to do well in school. I don't want to approach my class with a deficit-thinking mindset—a mindset that students can't or don't want to learn. I don't want to blame them if something isn't going well. Sometimes when students are especially quiet and seem unresponsive, I tell myself that they need time to think through the educational concept. These are all behaviors which illustrate that I am trying to believe the best in the students and trust them.

Freire tells us that "[oppressors] talk about the people, but they do not trust them; and trusting the people is the indispensable precondition for revolutionary change."[4] Trusting students and expecting the best from them actually frees you to work through situations that are more complex. For example, you can ask students thoughtful and difficult questions and then let them talk through the problems with each other. If you just ask them easy questions, they might feel that you don't expect them to know anything really challenging, and then they are less likely to put in effort later in the class when the work becomes more difficult. Students might think that a librarian who asks easy questions is trying to trick them, and students who think you're laying a trap for them will find it difficult to trust you. Think-Pair-Share exercises for difficult inquiries allow students time to articulate their thoughts and brainstorm with each other before being in the spotlight during a discussion that involves the whole class. Think-Pair-Share exercises, where students work on their own, talk through their work with one other person, and then with the class, can help students feel more confident in their own ideas before sharing them with the class.

Your expectations of students are powerful. If you believe something about students, these thoughts about them are likely to come true. If you think students will do poorly in your class, will not be able to do research, or will not respect you, you are not creating a safe space for students to come to you when they need help, so they might not do well with library research. I have seen these self-fulfilling prophecies come true time and time again. If you don't think students can think critically about evaluating sources, and you don't try to develop that kind of thinking in the classroom, students may not think deeply about their sources because you haven't indicated the value of that process by devoting time to it. On the other hand, if you design an activity that truly challenges students to discover the value of many different types of sources, you will find that they have a more nuanced approach to using the information in those sources to create new knowledge in interesting ways.

Your actions speak louder than words. Do you stare at the students when they don't know the answer to your question? Your tone of voice can also convey your lack of trust and low expectations. If you talk to students in a patronizing manner, they will have low expectations of their experience with you and maybe even with librarians in general. This can make it more difficult

for them to trust you and come to you when they have a question. If you don't trust students, they are likely not to trust you. Students might not put themselves into situations where they can actually prove that your notions of them are mistaken—they won't try to be trustworthy and meet high expectations, thus reinforcing your potential negative views of their work. Why not set the educational bar high and then expect the best from them? You only have them for a short time anyway.

TREAT EACH STUDENT AS AN INDIVIDUAL

Are you the same as every other librarian on campus? Does everyone in your library teach the same way? Of course not. The students on your campus are different from each other too. The college student population is more diverse in a variety of ways than it has ever been. According to the American Council of Education, there has been an increase in students of color on college campuses from 29.6 percent of the undergraduates in 1996 to 45.2 percent in 2016. Students of color among the graduate student population increased from 20.8 to 32.0 percent in the same time period. Despite these changes, the council characterizes college faculty, staff, and administrators as predominantly white.[5] Diversity in race and ethnicity is only one way to describe the range of students. Students bring their own backgrounds and research experiences into your classroom. Considering equity and diversity as you plan your instruction increases the opportunity for your teaching to resonate with students who have a wide range of backgrounds.

I find that this lack of individualized thinking is often illustrated in teaching styles. Librarians might teach only in the style in which they would like to learn. Unfortunately, just because you like to learn from reading or from a lecture doesn't mean that everyone likes to learn that way. Alternatively, if you feel like you can only learn by doing, you might want to be careful about applying that methodology to every single learning experience. You should mix up your instructional repertoire in order to diversify your teaching portfolio.

My recent experience with this approach is with *gameful pedagogy*. I personally do not respond well when situations become competitive. In fact, I tend to completely withdraw in any situation that resembles a combative experience. But I am learning that I need to incorporate gameful pedagogy more often in my instruction because I have learned from my colleagues how some students respond incredibly well to this approach. While I would want to incorporate multiple methodologies in an individual session, I need to think more about the individuals who appreciate gameful learning approaches and include that style more often in my instruction.

Beyond particular pedagogical approaches, there are other ways that you can intentionally treat students as individuals. Consider if you are comfortable

with looking directly at individual students around the room while teaching rather than looking more expansively at the class in general. Greet students at the door when they arrive and say hello individually to them. You don't have to engage in mindless small talk every time you teach, but if you notice something that you might have in common with students, it can be okay to mention that commonality. Show the students that you too are an individual by letting your personality and identity be part of your instruction in some way. Acknowledge your mistakes when you teach and then move on to show that you are not the sage on the stage.

CONTEXT IS IMPORTANT

While teaching is not telling, the experience of learning can be positively compared to experiencing a story. I don't know if it's because I am also the children's literature librarian for the university, but the analogy of instruction as storytelling resonates strongly with me. I don't think of instructional storytelling in a static way. I don't think of it as merely words on a page, a voice speaking through in-person instruction, or an instructional video playing online. I think of instruction as the process of many experiences or layers of stories coming together to create the next chapter of knowledge. Remember Tracey Tokuhama-Espinosa's basic educational precept that context influences learning. These layers include the students' life experiences as well as my own. It involves the academic need of the moment as well as lifelong learning. There are multiple storytellers. Students, librarians, and course instructors all play a role in telling the story. This instructional experience is a collaborative storytelling effort that has an unknown ending. The instructor provides context for this story.

When you plan your instruction, it is important to provide signposts so that students know where they *are* in the story. They need a logical order when they learn something new in order to make sense of the experience, and I will suggest how to incorporate these signposts later in the book. Too often I see library instructors ask students to listen to or watch unconnected directions, factoids, and demonstrations. The students are then directed to complete an activity that they don't see as related to what came before the activity. Worse still, students are not provided with the context that explains why what they're doing is important to their assignment or to life outside of the classroom. Helping students make these connections is a primary goal of many educators and will not only help students recall important information from your class, but also help them critically think and apply the information in new contexts. (I address issues about the lack of direction in some library instruction in chapter 9, "Problem-Solving Instructional Dilemmas.")

SOMETIMES YOU WILL NOT SUCCEED . . . HOW ARE YOU GOING TO HANDLE THAT?

If you follow or adapt some of these guiding principles and consider all of the other advice in this book, there may still be times when your instruction is unsatisfactory to you. Teaching is a human endeavor, and our expectations of perfection are unrealistic. Even the best library instructor with a lot of experience will fail occasionally.

You should plan now for how you might respond when a library session doesn't go well. You should prepare to reflect honestly about what didn't go well and maybe even keep a journal or online document to record when your library instruction is unsuccessful. Ask yourself if you really had control over the unsatisfactory situation. If you did, what can you do differently in the future? If there were factors that were out of your control, think about how you might distract yourself from the things that you couldn't have anticipated. Can you talk about your teaching struggles with a trusted colleague or supervisor? Do you need to remove yourself from the library for a little while to clear your head? Can exercise or meditation help you? How can you work through these unsuccessful sessions so that you can feel confident about instruction when you are inevitably asked to teach again?

PUTTING IT ALL TOGETHER: HOW SHOULD YOU USE THESE GUIDING PRINCIPLES?

I wish that I could follow the guiding principles I have enunciated all of the time, but I know that I don't. I dwell on instruction activities that are disjointed and flop in the classroom. I get frustrated with students who wait until the last minute to do their research. I hang on to outdated terminology in my instruction or use old handouts that should be revised and refreshed. Sometimes I get into a tired routine instead of practicing new ideas in my class. Other times I feel like I don't have enough time in a session, so I lecture on specific steps that all the students must take to complete their research.

I keep the guiding principles on a whiteboard by my desk. I encourage you to think through your own teaching philosophy or guiding principles, and perhaps the principles listed here can spark some ideas for your own practice. Reflective practice techniques discussed later in this book will help you think through the basic tenets of your own instruction. As I am teaching, I remind myself that students aren't perfect and neither am I. I debrief with my colleagues and my supervisor after teaching, and even vent my frustrations about my teaching mistakes on social media. Then I try to learn from the experience and treat the next session as a new opportunity to work with students so that they can be more information-literate, a trait that I think is important not just for their next assignment but also beyond the classroom.

NOTES

1. Paulo Freire, *Pedagogy of the Oppressed*, 50th anniversary edition (New York: Bloomsbury Academic, 2018), 71–72.
2. Elaine V. Howes, *Connecting Girls and Science: Constructivism, Feminism, and Science Education Reform* (New York: Teachers College Press, 2002), 13.
3. Association of College & Research Libraries (ACRL), *Framework for Information Literacy for Higher Education* (Chicago: ACRL, 2015), www.ala.org/acrl/standards/ilframework.
4. Freire, *Pedagogy of the Oppressed*, 60.
5. Ben Dedman, "College Students Are More Diverse Than Ever. Faculty and Administrators Are Not," Association of American Colleges & Universities, March 1, 2019, www.aacu.org/aacu-news/newsletter/2019/march/facts-figures.

PART II

The Starting Point of Class

3
Preparing for Class

Intentional Teaching and Lesson Planning

You can have a plan, but you have to be flexible. Every day is unpredictable, and you just have to go with the flow.

—Jane Krakowski

This may seem like a contradictory statement, but you need to be both rigid and flexible in your planning process. In order to prepare for class, you need to deliberately plan what you will teach. You should also make time in class for spontaneous learning should the opportunity arise. Intentionality in your preparation process will help you feel more comfortable in both of these situations. Part of that intentionality is making sure that your instruction reflects your larger philosophy of teaching or the guiding principles that you think are important to any educational experience. If you know why you want students to learn the content, it is likely that serendipitous learning will fit comfortably into any lesson. This student-centered approach can take the pressure off of you and reduce any in-class stress you might feel while facilitating the learning experience.

While planning for the learning that will happen in the class, consider the following questions to guide your preparation.

1. What do you want the students to learn?
2. Why do you want them to learn it?
3. How well do you want them to learn it?
4. How can you get them to where they have learned it?
5. How do you know they have learned it?

WHAT DO YOU WANT THE STUDENTS TO LEARN?

A key strategy for teaching preparation is outlined in the foundational text *Understanding by Design* by Grant Wiggins and Jay McTighe.[1] These authors have expanded on the idea of Backwards Design to provide a structured approach to planning instruction. A basic principle of Backwards Design is to begin with a plan of what you want students to learn. If you are deliberate with your instruction, you are more likely to have intentional, rather than accidental, results; that is to say, if you deliberately teach what you or your students think they should learn, it is more likely that the students will learn that content. For example, you might be more likely to reach a diverse student population and consider your students more individually if you articulate that goal to yourself, and then include authentic diversity instructional components in your lesson plan. Knowing what you want students to learn at the very beginning can provide an important foundation for you when you're trying to figure out what to include in the lesson. It will help you see gaps in your instruction. It will also help you see when you have focused too much on one concept to the detriment of your other important goals or objectives. Teaching is a bit like building a house—it is hard to build a house without an architectural plan. You are more likely to forget something if you don't have at least an outline for what you want to do. Remember that context is important, and sometimes you can build that context by having a plan. (Chapter 9, "Problem-Solving Instructional Dilemmas," will delve more deeply into how creating some sort of order or signposts can help construct learning in the classroom.)

You don't have to build an entire house with your library lesson. Backwards Design is an instructional design method that is best suited for curriculum or unit planning because the scale of meeting lofty goals is more easily met when you're able to have extended time and space to achieve those goals. Think of your lesson as one of the building blocks in that curriculum's instruction, and then use course syllabi, faculty conversations, and departmental goals to guide the creation of your objective. On the other hand, beginning with the end in mind is still relevant for teaching at the one-shot scale. When you don't have a lot of time for your lesson, you should be precise and intentional about what you want students to learn.

Many people use the words *goal*, *objective*, or *outcome* to describe what they want students to learn. There are many websites that can teach you how to write goals that are smart, are clear, or use some other term that will help you write concise and measurable objectives. Debra Gilchrist has done some great work in describing how you should create library instruction learning outcomes. Her formula of "Verb or Action Phrase + IN ORDER TO + Why = Great Outcomes" can be a good equation for beginners to follow.[2]

Many librarians and educators have favorite activities that they like to incorporate in class. They have used these activities many times and students may have even indicated their enjoyment of these activities, but without tying these activities to learning objectives, how do you know that they work? How do you know if students are learning from these activities—how can you assess these activities—if they are not linked to a goal, even if that goal is broad or general in nature? In addition, if you are more activities-oriented in your teaching rather than objectives-oriented, it could be possible that you're not exploring other activities that might better meet your learning objectives. This is not to say that activities are a bad idea for instruction, but rather that the learning purpose is more important than just doing stuff in class. For example, I used to ask students to pair up and write a list of the criteria that they use to evaluate sources on the erasable walls in one of our library labs. I loved getting students out of their seats, and I sensed that they really liked writing on the walls, which is usually a taboo activity. However, when ACRL's *Framework for Information Literacy for Higher Education* was adopted in 2016, I began to realize that I was teaching evaluating sources in a much too simplistic manner. Now, this part of my instruction is discussion-focused. I don't think my learning objectives were being met when students just made a list of characteristics that they look for in a "good" source because we didn't talk about things like the nature of authority when we talked about scholarly sources. Students got the idea that evaluating sources was a checklist type of activity, and it is much more nuanced than that. I can convey that nuance more deeply in conversation with them. I haven't given up having students write on the walls, but I need that activity to complement my learning objectives. Getting the students out of their seats, away from the computers, and talking is still important because sometimes they need a break, so I think of other prompts for wall-writing. I might ask them to write the most useful thing they learned in the workshop so far in the middle of class as an assessment or reflective activity. Students need to be writing on the walls for a good reason.

Communicating those goals directly to students at the beginning of your session as well as along the way can help provide students with a clear connection between your lesson and the other course content. Creating signposts to help tell the story of your instruction will remind students where they are in the learning process. In addition, they may need this context in order to figure out how to transfer library instruction concepts from your session into other situations. If you don't convey what students need to learn, how will the students know when they have learned these concepts? If you remove this uncertainty, students can feel more confident about why they are attending your session and can better focus on the content itself. (You can learn more about signposts and creating a logical order for your library instruction in chapter 9, "Problem-Solving Instructional Dilemmas.")

WHY DO YOU WANT STUDENTS TO LEARN IT?

There are some easy surface answers to the question, "Why should students learn library skills for a research project?" Students, in general, do want to get good grades on their assignments, and good information literacy skills may be crucial to passing the class. Maybe the faculty member has signaled the importance of your instruction by devoting valuable class time to learning about finding and evaluating good sources for their assignments. In addition, the library profession has created standards and key threshold concepts that are essential for lifelong learning. Hopefully, you can use the language from the ACRL Framework to help you communicate why the students should care about learning the session's content.[3]

Sometimes I am very direct about using language from the Framework. For example, when I am talking with students about evaluating sources and students insist that only scholarly information is trustworthy, I might say something like, "Why do you have so much confidence in scholars or researchers? What have they done to earn that trust?" As they discuss the credentials scholars must earn and the rigors of scientific research, I will connect this to the idea that in acquiring those credentials and in conducting meticulous research in their chosen fields, these experts have achieved some credibility for their conclusions. I'll point out to students that in other contexts completely unrelated to their chosen field, those same researchers may not possess the same authority. In having this conversation, I am tying what we are discussing to the frame Authority Is Constructed and Contextual, not only because ACRL has identified this idea as a foundational concept, but also because students need to experience this kind of critical thinking and metacognition.

The fake news around the COVID-19 crisis has been another great example of why students need to examine the nature of authority and how it influences credibility. If "authority is constructed in that various communities may recognize different types of authority," as the above-mentioned frame indicates, then students can more truly understand how different people value different types of authority.[4] If you can use real-life examples (like COVID-19 misinformation) that illustrate why the session's content is important, students may better connect with the lesson and be more motivated to learn. It can also create self-reinforcement to remind you why it is important to focus on your lesson's objectives. Finally, there may be a more practical, top-down reason to include these objectives: crucial components in the regional accreditation process may require that students learn what you are teaching.

But what if there is an even better reason why you want students to learn what you are teaching? What if what you are teaching is meaningful to you personally and professionally? There is an important component to this question. The question is not, why does someone else want students to learn these concepts? The question is, "Why do *you* want them to learn it?" Why do you care? One of my guiding principles is to make teaching enjoyable for yourself.

If you don't see the reason why you're doing what you're doing, why are you doing it? I cannot assume that everyone is passionate about teaching. You may be doing this job because you need to pay the bills or move forward in your career to something else. If so, you should focus on how instruction is helping you with those goals and figure out a way to make teaching more palatable for you. Figure out why what you're doing is important for the students (remember my advice about liking students?) and then remind yourself that you won't have to teach forever if teaching is not a permanent goal of yours. You can also reflect on why these concepts are valuable in the larger scope of things and remind yourself of that reasoning when you inevitably struggle with instruction. Connect your objectives to larger goals, both for you and the students, and the teaching and learning will come easier.

If there isn't a good reason for a student to learn your identified objective, you should ask yourself why you're teaching that concept. Is an activity just fun for you? If so, could you channel that enjoyment into another part of the lesson? Not having a good reason for teaching the course content jeopardizes your relationship with the students, the faculty member, and the department. You shouldn't put yourself into a position where your teaching becomes irrelevant to the students, faculty, and, most of all, to yourself.

HOW WELL DO YOU WANT THEM TO LEARN IT?

I don't think we, as a profession, ask ourselves this question often enough. There are so many factors that influence how well someone needs to learn a particular concept. Do students need to complete a one-off assignment or something more in-depth and difficult? Is this class partnering with faculty members to complete research for grant-funded projects that have specific deliverables? Are you introducing yourself and the library resources in a doctoral seminar class to first-year PhD candidates? Will students have other library learning opportunities so that your instruction at this moment should provide an introduction to basic needs, and later instruction will be more advanced? A faculty member for the class could reinforce what the students learned in your workshop in future class sessions and extend that learning into a specific context. Are you advancing prior knowledge about information literacy so that students can easily transfer the skills you teach them in class to a broad range of settings?

Systematically teaching information literacy skills can be difficult in many institutions of higher learning because these skills may not be intentionally or explicitly learned throughout an educational program. Many colleges and universities do not have concrete information literacy goals or objectives articulated at an overarching level. You may not be able to systematically teach all of the students at your institution. This may cause you to feel pressure to cover the entire gamut of library services in a typical 60-minute session because you don't know if you will ever see the students again.

This question about depth of learning focuses on flexibility. There can be times when a thorough lesson is necessary, but there are other times when you are meant to just introduce an idea. Do students need to be able to recall this information for just one cursory assignment, or should you use metacognitive methods and ask students to predict when they might need these skills in other classes or settings? Logistical concerns may even drive this question. If you have only a short time with students, they won't be able to absorb a lot from that face-to-face instruction. If you have more time, you might be able to create deeper learning opportunities.

In any case, you should ask yourself how well the students really need to learn the content, and give yourself an honest answer. Have a forthright discussion with the faculty member or someone from the department and manage your—and their—expectations accordingly. Don't let students walk away thinking that they are supposed to know something deeply when you have just introduced them to an idea. Conversely, if needed, prepare the students in advance that your instruction session is going to be comprehensive and that they will leave with a thorough understanding of how to both consume and produce information.

HOW CAN YOU GET THEM TO WHERE THEY HAVE LEARNED IT?

Only after you have asked yourself the previous three questions should you start to create a lesson plan. The previous questions require you to reflect on many aspects of your learning goals for the students. These questions compel you to think about your intention for the class; therefore, you are more likely to be intentional in your instruction, which leads to more intentional learning. For example, might you be more likely to use a critical pedagogical approach to your instruction if you intentionally think of those strategies ahead of lesson planning? Learning can happen by accident, and perhaps incidental learning has happened with your students in previous instruction sessions. There is value in serendipitous learning because it may indicate a need you didn't know was there. But it's not worth taking a chance that your efforts might accidentally result in learning. Purposeful learning is more easily measured, so you can better assess if your teaching has been successful. Accidental learning has more vague outcomes. If you can articulate your objectives, reasoning, and degree of instruction, the students and faculty will have a better sense of why they are participating in your lesson and be better able to recognize whether they have learned the content. They will better understand the story of the instruction.

One of the best things you can do, besides planning your instruction intentionally, is to follow the guiding principle of regularly learning something new. When you are in a new instructional setting, be mindful of how the other instructor is teaching. Consider whether you could incorporate components of

this other person's instructional methods into your own lesson plans. Do you like something about their style of teaching—maybe how they conduct class discussions or ask probing questions of students? If so, try that new method in your instruction, maybe even more than once, and reflect on how it works for you. In addition, how are the students responding to learning something new? Are they frustrated? Why? Is the pace of the class too fast or slow? Why might the instruction be happening at that pace? What can you learn from this experience to be a better teacher? Overall, how has this experience helped you understand what it is like to be a student?

There are some logistical factors for you to consider in your plan before you start outlining your lesson. You should be aware of the space requirements and limitations that exist in the classroom setting available to you. Is it too hot or cold in the room? Is there enough table and chair space? In addition, you should be familiar with the technology capabilities in your instruction space. Will the students have internet access or even laptops to follow along with your instruction? Does your institution allow for unlimited access to the databases about which you want them to learn? Will all of the students be able to hear you and each other? Is there a projector or a presentation computer in the room? How might all of these factors influence your instruction? If you can plan on these factors ahead of time, you will be better able to address any problems they may cause during class and then use your class time more efficiently and effectively, rather than having to use valuable workshop time troubleshooting these issues.

In addition, you should find out as much as you can about the students in the class. Remember to trust the students and have positive expectations no matter what you learn about them from others. Also, consider your students individually and find out whether all or most of the students in your workshop have the same major. Is it likely that there may be some nontraditional students in your class? How might that affect your instruction? Can you have a conversation with the faculty member about how much students have participated in class discussions in the past in order to know whether that might be a successful strategy for you? Getting students to where they have learned your content is about so much more than an outline of steps you are going to take and demonstrating a sample search in a database.

I recommend both the ADDIE and Hunter models of lesson planning. The ADDIE model is an instructional design method that reflects a constructivist approach to learning. The acronym ADDIE stands for Analyze, Design, Develop, Implement, and Evaluate. In summarized form, the lesson designer must

Analyze: Define the instructional problem, identify the learning goals, and understand the learners and their environment.

Design: Determine a logical arrangement of instructional content, including the subject matter and assessment.

Develop: Create the instructional content described in the Design stage.
Implement: Test the instructional content and conduct the instruction.
Evaluate: Check the students' understanding of the lesson while the class is in progress (*formative assessment*) as well as evaluate the instruction overall.

The ADDIE model is often used for online instruction because prototyping instruction is easily built into the process, but it provides a good outline for the essential components of many different types of lessons. Angiah Davis provides a good overview of how ADDIE can be used in library instruction lesson planning.[5]

The Hunter template for lesson planning has the following components:

Creating Objectives: Using the ABCD (Audience, Behavior, Condition, and Degree) method, the instructor should determine what the students will be able to do by the end of class.
Anticipatory Set: The teacher creates an educational experience or hook to focus student attention and describes it.
Objective: Purpose: The teacher states the goals of the instructional experience.
Teaching: Input: This is the outline of what will happen in class.
Teaching: Modeling: The teacher shows students how to complete a task.
Teaching: Checking for Understanding: Before students can implement any lesson, the teacher should make sure that they understand the content.
Guided Practice: The teacher provides a way for students to rehearse the instructed content under direct supervision.
Independent Practice: The students practice on their own.
Closure: The teacher helps students bring together the instructional content in a way that makes sense to them.[6]

The Hunter model, which is also called the ITIP (Instructional Theory Into Practice) model, has undergone some criticism because there hasn't been much evidence to show that it was originally grounded in educational theory. Others see this type of planning process as too rigid and linear. Some teachers see it as only providing for repetitive or rote learning. In any case, both models are presented here because they provide structured frameworks that can help the novice teacher bring order to what they want to teach. For me, I feel that the Analyze phase of the ADDIE model is crucial to my guiding principle of treating students as individuals. I often try to find a hook with which to start my class in order to motivate and engage the students. I might ask, "Why do

we need libraries anyway?" to provoke them into thinking through the purpose of the class. In addition to outlining the instructional schedule of what is going to happen in the session, I will usually create a contingency plan so that I have a few alternatives already in place if time runs out in class or if the students complete things early.

Both of these models provide semi-structured templates that will help you consider aspects of your lesson that you might forget in the busyness of your everyday work. They provide ways to consider accessing prior knowledge, using anticipatory sets to prepare your students for learning, utilizing various teaching and learning strategies, and incorporating formative and summative assessments. Moreover, you can add contingency planning ideas should something alter your instruction. Contingency planning often means that you create an online or physical handout that includes the workshop's material in case you're not able to address all of the objectives in your original plan. Take some time to look at both the ADDIE and Hunter models and adapt them for your own instructional needs.

Throughout your planning process, you should ask yourself if you are being activity- or coverage-focused and whether you are concentrating on effective learning. In *Understanding by Design*, Wiggins and McTighe caution educators that it can be easy to have students complete engaging activities or present a large amount of content to them because you feel like you have to cover so much in the short time you're with them. Students are not likely to learn effectively if there is simply too much information for them to process. Nor will they learn effectively if there is no connection drawn between the class activities and skills needed for class and the larger story or context. While one of my guiding principles is to make sure that teaching is enjoyable for you, you don't want to follow this principle at the expense of effective learning.

HOW DO YOU KNOW THEY HAVE LEARNED IT?

Most librarians rarely receive the opportunity to determine how well their students have learned workshop content over time. You often don't get to see all of the research papers that are completed for a class workshop that you taught. You may get to attend the defense of a dissertation, but you don't get to watch a PhD candidate look for information and determine how well they are analyzing what they find. How do you know whether your students have learned the instructional content?

I have conducted rigorous research projects in order to assess student learning on both programmatic and individual levels of instruction. I have worked with librarians and statisticians to look closely at learning analytics to see if we can glean information about the broad nature of student learning from our instruction. While you might be able to do a pre- and post-assessment

during class on a small scale to get a sense of whether students are better at a skill at the end of class than they were at the beginning, learning, in general, is a nuanced process, and it can be difficult to feel confident in the cause-and-effect relationship of your instruction to student learning.

I do think that it is important to know whether your students are learning what they need to learn even if it is difficult to draw any kind of conclusion about the instructional success of the workshop. Ask the students to reflect on their own learning. You should check in with the course instructor throughout your workshop to get a more formative idea of whether students seem to understand the workshop's objectives, and then pivot your instructional approach if need be. This assessment method relies on the judgment of the course instructor, someone who will usually know more about the students than you do. You can apply formative, or in-process, assessment to strengthen the possibility that learning will happen in your classroom. (I also include a section on programmatic assessment in chapter 10, "The End of Class.") Most librarians put too much effort into their instruction to take the chance that students haven't learned the workshop's content.

PUTTING IT ALL TOGETHER: SOME GENERAL ADVICE FOR PLANNING CLASS

This chapter is about more than lesson planning. You can look up the ADDIE and Hunter models online to quickly find the various parts to any lesson plan. But preparing for class requires more than outlining the steps you are going to take during direct instruction. It can be easy to fall into an activity/coverage mindset rather than focusing on the students' learning. You should redirect that focus from thinking about what you are going to teach to concentrating on what the students will learn.

You may want to update your lessons if you have been teaching the same way for too long. Maybe you have used the same examples and analogies over and over again and you want to find some refreshing new ones. If you are looking for new lesson plans or ideas, visit the Project CORA collection of information literacy-related research assignments or the ACRL Framework for Information Literacy Sandbox. Consider adapting high school lessons for your instruction. For example, Kate Pittsley-Sousa has a great collection of social studies-related lesson plan sites on her research guide.[7] Many of the lessons in that collection are related to primary sources. Those lessons might be easily adapted to library instruction about special collections. If you are looking to incorporate diversity into your teaching, take a look at adapting some of the Learning for Justice (formerly Teaching for Tolerance) materials for your classroom, especially the materials related to Close and Critical Reading.[8]

Even though you may create a solid plan for your class, there will be unexpected circumstances that require you to adjust and deviate from your

prepared lesson. Follow Jane Krakowski's advice and have a plan, but also be flexible. Be open to teachable moments and learning opportunities that arise organically in class. If you use a Backwards Design approach, you will put your learning objectives at the forefront, and you can easily blend your lesson with the unanticipated learning situations that will arise. You can then create a learning experience that is interesting to the students, fulfilling for you as an educator, and effective in its execution.

NOTES

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4
Starting Class

Setting the Stage for Learning

You never get a second chance to make a first impression.
—Will Rogers

A good teacher, like a good entertainer, first must hold his audience's attention, then he can teach his lesson.
—John Henrik Clarke

Teaching can be a pressure-filled experience. You have to remember your lesson and try to cover a lot of important content. A technology snafu can disrupt the flow of your instruction. You are trying to remember all of the guiding principles while you begin teaching what will probably be a bunch of strangers. But all of this won't matter if you can't keep and hold the class's attention right from the start. The beginning of a library instruction workshop needs to start out like a stereotypical job interview. Give the students a firm metaphorical handshake, and they are more likely to be successful in your class.

These three best practices will help you start your class well and set the stage for learning:

1. Develop rapport with the students as soon as you can.
2. Minimize classroom distractions.
3. Motivate the students to learn.

RAPPORT

Rapport can mean many things. In terms of library instruction, *rapport* can simply mean finding a way to make a connection with the other people in the classroom. Rapport doesn't mean that you have to figure out a way to make the students or faculty member like you. You are not trying to become popular with the students or entertain them (even though John Henrik Clarke found this similarity between teaching and entertaining important). In making some sort of connection with the students, you will find it easier to attract and keep their attention if you are intentional about rapport at the start. When you connect with students, you make yourself more human to them. In most cases, students will be more considerate and learn more deeply from someone with whom they have a more human connection.

Rapport genuinely flows directly from some of the guiding principles. For example, if you figure out a way to like and respect students and remind yourself of this before you walk into the classroom, most of the time, students will sense your goodwill and will respond positively. If you make teaching enjoyable for you, students will easily be aware that you want to be in their class and may react reciprocally by wanting to be with you. Finally, students will notice if you don't trust them or if you have low expectations of them. It is very difficult to develop rapport with someone who doesn't expect much from you, but if someone has confidence in you, you can more easily make a connection with them. Students can more easily learn from someone who thinks they can accomplish their learning goals.

Some librarians may be uncomfortable interacting with students and have difficulty making a connection with them, thereby making rapport difficult. It may help if you can remind yourself that you like students. I often find that students want me to succeed in the classroom as much as I want them to thrive. It's almost like they are cheering me on to do well; this makes me grateful for their support, and I soon feel more comfortable teaching. Perhaps you will feel more comfortable as you teach more often, although this is not guaranteed.

People who feel more in sync with one another are more open to each other's suggestions. If you are making suggestions to students about how to do research, you want them to be receptive to your ideas. Rapport is a two-way street. If you feel rapport with students, you will be more aware when they are struggling or when you can move more quickly in class. The students will become more relaxed and comfortable with you. They may feel better about taking risks in your class, such as raising their hands to admit that they don't know something and need to ask a question. This will make your teaching better, and it will make students learn better.

Connecting with students may be as simple as saying hello to them when they walk through the door. Maybe instead of passing out handouts to the first person at the end of a row or leaving them by a table by the door, you

individually give each student a handout when they arrive and introduce yourself by saying "Hi, I'm Angie." If you feel comfortable with small talk, go ahead and ask the students if they went to the game over the weekend, or ask about the weather. Small talk isn't necessary as long as you make some sort of connection with the students so that they know you're aware that they are there. Maybe you could play soothing music right before class starts. If you ignore the students right at the beginning of your time together—including the time before class starts—it can be harder for you to connect with them later. Why should the students connect with someone who has ignored them up until that point? By introducing yourself individually to students before the class even starts, you will have taken a small step toward connecting with the whole class.

There are other, more subtle ways of building rapport. Librarians who have taken the time to understand the course context can make it clear to students that they understand their needs by referring to texts or concepts in the course and relating those ideas to the library content. This answers a crucial question for students: Why am I here in the library/classroom being taught by this person whom I may not have ever met? They may not understand how your lesson fits in with the story of the rest of the course if you don't make that connection explicitly. Get the syllabus or assignment ahead of time and make the connections clear to them. Students will appreciate that you have customized your language and lesson to their needs and will probably be more responsive to your instruction.

Another more subtle way of building rapport is to signal that you have a plan for the class and are transparent about that plan. A good best practice is to state your goals right at the start of class. As you complete instruction on a particular goal, acknowledge that you have met that goal and mention how the next part of your instruction relates to a different goal. Consider this practice as a way to map out the class for students so that they know where they are going and that you have a plan to lead them there. Students will feel more confident in your instruction if they aren't wondering what will happen next and why they are there. This kind of rapport enhances learning. Instead of spending their energy on determining what will happen next, they are more likely to focus on what you are teaching at the time.

DISTRACTIONS

During library instruction, students may be at the library for the first time. If they are in unfamiliar surroundings, they may easily have their attention drawn in multiple directions and become distracted. Michigan State University's College of Natural Science does a great job on their web page of explaining why minimizing distractions is important. The brain is not designed to switch tasks easily, and students who have their attention pulled in multiple

directions during classes or while studying do not retain what they learn or lose some ability to apply what they have learned.[1] If you conduct library instruction in their regular classroom, they may be less distracted by unfamiliar surroundings. On the other hand, in this hyper-connected age, students may be distracted by posts or texts on social media in ways that were simply not possible before, regardless of where the instruction is taking place. I know that sometimes I have to intentionally silence my own phone while I am teaching so that I don't get distracted. You will want to minimize any distractions so that students can focus on you and your content in this new environment.

Students may also be distracted by non-optimal room temperatures, people coming in and out of your library lab to retrieve printouts, squeaky chairs, or loud heating/ventilation systems. Sometimes you are teaching in a large lecture hall where students feel anonymous, so they can be easily distracted. Other times the room arrangement makes learning difficult because the students are unable to see you or the projector screen, or you can't see them. Maybe you don't even have computers that they can use or a projector where they can see what you are demonstrating, which makes distraction a big temptation for them. Monotone voices can open the door for distraction—if students have a hard time focusing on what you're saying because your voice is tedious, they may be easily distracted by something else. In computer labs or when students are using their own laptops, their attention can be easily diverted to something other than the library website about which you are teaching. Or they can start texting.

Controlling for these distractions can be challenging and may require planning ahead of time. Putting up a do-not-disturb sign on the door will minimize whether people will enter the room in the middle of a session. Maybe you will have to arrive early to arrange the tables into a circle in order to make it harder for students to hide in corners or out of sight lines. I've literally brought old projectors to class and projected onto blank walls so that students could see what I was showing them. I'd like to acknowledge that changing something like your voice is really hard. Record yourself so you can determine if there is any variance in the way you talk. To address other distractions, ask yourself whether students really need a computer for your entire session. Could you teach concepts for evaluating sources by giving them paper copies of various sources, thus removing the temptation of using their computers for something else?

Some distractions can be genuinely out of your control. Even if you can ignore those distractions, don't. Your students won't. Be honest with the students and acknowledge any environmental problem. Show that you sympathize with them (which will build rapport) and can smell that bad smell too. You may have to be flexible with your lesson plan. If they can't hear you over loud construction noise happening on the floor below you, have them work

on their own, and do individualized mini-consultations with them during the class time. Better yet, go back to the classroom (or take them to the library if you are in their class), where there will be less time due to making the move, but the time will be more productive and less distracting.

In a 2016 *Chronicle of Higher Education* essay, "Small Changes in Teaching: The First 5 Minutes of Class," James M. Lang suggests that the beginning moments of classes are often wasted with logistical tasks.[2] Students lose the opportunity to concentrate their minds on the learning at hand. He has many practical suggestions for activities that can be done right at the beginning of class that I think could be adapted for library workshops. For example, he suggests asking a thoughtful or provocative question right away. You could even have this question on a presentation slide that students see when they come in. A question like, "Do we need libraries? Why or why not?" requires students to engage with many of the ACRL frames, including Information Has Value. This is a great way to start class because the students are revealing to one another what they think is important (and not important) about being at the library or using library resources. They may not understand what libraries do, so this gives them an opportunity to learn, either from you or their classmates, how a library enhances the academic mission of the university.

You don't have to ask a provocative question if you don't want to. You could ask them to write about everything they will need to do in order to complete their research project. Or you could ask them to reflect on why they think they are at the library or why a librarian is teaching their class. Having a discussion with these kinds of questions may make students feel like they have more of a voice in what is happening in the classroom. If you use this information throughout the session, the students may even give some direction or purpose to your instruction. The act of asking these questions will hopefully focus their attention on what is happening in class. When you use the answers to these questions throughout class to emphasize the importance of what is being taught, you may even help keep students engaged if they don't understand what is happening and become easily distracted. There are many parts of this book that discuss the importance of student voice and reflection in the classroom. Starting out class with this kind of engagement emphasizes how important it is to you.

Lang is using what educator Madeline Hunter identifies as an *anticipatory set*, an activity that focuses the students' attention before the actual lesson begins. Lang makes the analogy that the first few minutes in class are like the opening of a really good novel—those first sentences grab your attention and make you want to read more. Use your first moments with your students wisely, and you may have students engage more deeply with your content throughout your time with them. They may stay with you until the last page of your lesson plan!

MOTIVATION

Centering students in the instruction can really help show them that you care that they are there. While you don't want to fall into the deficit thinking trap which assumes that students don't want to attend another library workshop, you also don't want to take for granted that they care about library instruction. Students may begin with a willingness to attend the session or a curiosity about library instructional content, but you also have a role in working with them to sustain their interest. As mentioned earlier in this book, motivation is a key component of learning and library instruction.

Remember that Keller's ARCS Model of Motivation emphasizes **A**ttention, **R**elevance, Learner **C**onfidence, and Learner **S**atisfaction. Let's say that you've planned an anticipatory set or hook to get the students' attention, so at the start of class, you help them find relevance in what you're doing by asking them why they need to be in a library instruction session. Following this, how do you create opportunities for success so that students can feel confident and satisfied right from the beginning? You can set up an activity early in the class that will result in all the students finding at least one relevant piece of information for their project, paper, or other information need. I often use reference sources in this context. Library databases like Issues & Controversies, Opposing Viewpoints, or CQ Researcher can give students important background information on a wide range of topics. If students are investigating a topic for class that they care about, they are often relieved at finding information like this. They feel more confident in their knowledge about a topic after reading these reference sources. Sometimes they are worried about representing a particular aspect of their topic authentically. The above-mentioned reference sources often inform students about multiple sides of an issue. Students become satisfied with their learning experience because they have found at least one relevant source, and if they use the references listed in those sources, they have found many more!

The use of extrinsic motivators can be helpful at the start of class and throughout your time with the students. Fostering the students' intrinsic motivation takes time that perhaps you don't feel you have in a one-shot session. If you have to use rewards as extrinsic motivators in your workshop, then do so. I've used them in large lecture halls. When I'm working with students in these halls, I often bring undergraduates who work at the library along with me. Early in the class, I might ask students in the class to start generating a list together about the kinds of things you can do or use at the library. One of the student workers usually records their replies so that they can be projected onto a large classroom screen. The other student staff all have baskets with collections of healthy treats, candy, and school supplies. As the students raise their hands and add ideas to our list, student staff members will let them pick something out of the basket. In the meantime, I am more mobile in the hall so that I can stand in a part of the auditorium where students aren't

participating as much. Throughout this activity, the students don't feel anonymous because their contributions are being acknowledged on the big screen and they also receive a reward for participating, which will hopefully motivate them to participate throughout the session. Perhaps student interaction is central to your instruction, so you want to reward students who participate in a very visible manner. Maybe you don't have a lot of time in class, so you need answers quickly. Be aware that there are times when extrinsic motivators get in the way of learning. Do students give you thoughtful answers in class or just any answer so that they can get a piece of candy? If you always give a piece of candy to students who answer questions in class, will the students, by the end of class, still answer questions if you've run out of candy?

Perhaps you want to use an extrinsic motivator like "borrowing the teacher's authority." You could remind students that they are likely to get a better grade if they use good sources in their paper—and good sources could come from a library database. But you should have a conversation with the instructor ahead of time so that you know for sure that only sources from library databases are required for the assignment. Extrinsic motivation can be helpful or harmful, depending on how it is used. Students have a sixth sense and know when they are being manipulated. Paul Pintrich and Dale Schunk's book *Motivation in Education: Theory, Research, and Applications* does a good job of explaining intrinsic and extrinsic motivation in a more nuanced way than what I can describe in this book.[3]

Most students will experience challenging situations when they do research. Making mistakes and being frustrated are when learning often happens. Your goal is not to entertain the students or give them a false sense of security about research. Most students will be able to do research—librarians know this and may want to keep it in mind. Remember the guiding principle that you should trust students and have positive expectations of them. Your confidence in them can be a successful motivator. If you communicate to them that they can do something as difficult as research, their own confidence may grow. For a more descriptive analysis of motivational design and how it relates to information literacy instruction, read Amanda Nichols Hess's excellent article on the topic, "Motivational Design in Information Literacy Instruction."[4]

PUTTING IT ALL TOGETHER: STARTING CLASS SUCCESSFULLY

Developing rapport with students as soon as you can, minimizing classroom distractions from the beginning, and motivating students to learn in the first ten minutes of class can be extremely difficult. These things are going to take some practice, so remember that you may not be successful every time, and plan how you are going to handle that. You may need to reflect on this part of class sooner rather than later so that you can more easily remember what happened and adjust the next time the class is held. Ask your colleagues or a

trusted faculty member how they start class (or observe them) and see if you can learn from their practice. It can be difficult to recover from a bad start to the class, and this is one of the reasons why I have given it its own chapter. If something goes wrong, the time spent with the students seems never-ending. They might not respond to a collaborative class discussion, or they might tune out from any demonstrations. I highly recommend many of the techniques in this chapter, especially the approaches for developing rapport with students, to begin your class successfully.

NOTES

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PART III

The Middle of Class

5
Prior Knowledge

Promise me you'll always remember: You're braver than you believe, and stronger than you seem, and smarter than you think.

—A. A. Milne

Context is important in the classroom. The logical order of student learning is important in order for students to be able to construct some kind of meaning to what is happening as you collaborate with them. One of the biggest signposts you can construct with them is a "you are here" moment at the beginning and throughout class. Accessing the prior knowledge and preexisting information that the students already have when they show up in your classroom will make them aware of what they already know so that they can more easily fit what they will learn into their existing set of information literacy skills. This may give students some confidence in the knowledge that they are not coming to this experience as complete novices. But this knowledge can also provide you with a sense of how to construct a map that will make better use of the cognitive effort the students will need to undertake in class. Finally, asking students, in some manner, what they already know is a way to show that you respect the whole student. You don't see them as a blank slate. You can show that you appreciate how their past experiences will inform their future learning.

PRIOR KNOWLEDGE: LIBRARY INSTRUCTION EXPERIENCE

You might be more successful in your library instruction if you know about students' current levels of understanding of your lesson before you begin. This will give you some sense of where to start your lesson. You can determine their prior knowledge through pre-session surveys that ask students to self-report what they already know about information literacy skills. You could also approach this as a skills-based, performative assessment in which you ask them to complete certain tasks. Conversely, at the start of class, you can also ask the students to raise their hands if they have already had a library session at some point in the past. Another possible method is to ask more granular questions throughout an in-person session—questions that are targeted to determining specific skill sets ("Have you ever searched a library database before?").

One of the most frustrating caveats of considering students' prior knowledge as part of your instruction is that sometimes you cannot differentiate their previous instruction based on this factor. For example, if most students have had a library session before, you might feel more comfortable beginning at a more advanced stage of instructional engagement. If very few students have experience, you might start at a more basic level. It's when one-third to one-half of the students fall into one of these categories that there is a challenge. It can be difficult to find a middle way for your instruction that can address both advanced and beginning levels of understanding. If you don't respond significantly to student responses to this question, the students may feel that you have not considered their voices in the matter, and then you have lost an opportunity to build rapport with them so that everyone can learn together. For situations where there are a few students in either the low-experience or high-experience category, take note of who they are and make sure that you or the course instructor checks in with them individually along the way.

One way that I address a mix of library instruction experience in a session is to ask those students who have had a library instruction session before to raise their hands. If about half of them raise their hands, I ask the students who haven't raised their hands to go find someone in the room who has more experience so that the students are paired in complementary groups. The key to moving students around like this is to make sure that you don't create an atmosphere where students who haven't had a session before feel that this reflects negatively on their competence. You can avoid having to determine this information in the moment by asking the course instructor this information ahead of time. The instructor can investigate this and maybe even pair up students before you begin your session. Other library instructors have administered pre-session surveys with students and asked this question so that they can be more prepared for a diversity of knowledge regarding the day's lesson. You might be able to obtain even more granular data if you conduct

a pre-session survey and ask the students a question about their previous library instruction experience using multiple-choice responses, such as high school library instruction, online tutorials, first-year college library instruction, and so on.

PRIOR KNOWLEDGE: RESEARCH EXPERIENCE

Another way to determine students' prior experiences with library research is to ask them to describe their current research process. How have they looked for information in the past? One way of doing this is to ask students to draw a concept map or some other visual depiction that represents their research experience. I like this approach because it does not assume that research is a linear process. On the other hand, sometimes students don't know how to begin making this kind of thinking visible, so I might ask them what their first step in the research process is. I might ask them to write out various things they do to find information, without assuming that one step follows another. Questions that enhance this exercise include "Where do you struggle when you are looking for information?" and "How do you know when you are finished researching?"

Students can share this information in pairs so that they can get ideas from one another about the kinds of actions they can take to find information. They can also use an online whiteboard together to share this information. Or, if your classroom walls are painted with a material that allows students to write on them, I encourage you to have students transfer their thinking onto the walls so that everyone can go around and see different research processes in what is called a gallery approach to sharing.

A more public approach to this kind of concept-mapping works when you are struggling to determine where to start your lesson. As you participate in the gallery walk along with the students, you can draw conclusions about the gaps in your students' understanding of research. You can then better target your instruction. In addition, the students are learning from each other when they see others' maps. Finally, sometimes students just need a review of the course content. This approach allows the students to do the review themselves instead of potentially hearing a lecture from you about research or watching a static video.

MOVING FROM PRIOR KNOWLEDGE TO FUTURE NEEDS: EXPLICITLY DETERMINING LEARNING OBJECTIVES TOGETHER

Lesson planning and assessment usually begin by determining your learning objectives. There are activities you can conduct that allow for a more in-the-moment determination of your learning objectives and goals. You can be more

direct with the students by openly having them help you assess what is needed for the class. As they reflect on what they need to know, they could discover that they already know some aspects of the workshop's content, which can be a way to promote confidence in their abilities to conduct library research. This is another way for them to understand the story of their research so that they can see themselves in a particular place where they need help.

You can ask students what they hope to learn in the session. You might even ask them to write this on index cards or on a common online whiteboard. An online whiteboard might even allow students to upvote some concepts, giving you an indication of what they deem important. In any case, there will be commonalities in what is written, so you can emphasize the concepts that multiple students need. Again, this approach requires some flexibility on your part because you might not be able to prepare your lesson in detail ahead of time. You might overplan so that you have something in mind no matter what the students describe, and then the ensuing lesson might feel like a waste of time to them. On the other hand, much of what your students indicate in this exercise will probably be what you would teach anyway. Or they might indicate something that you have taught in the past, so you can easily just recall that experience. In any case, the students are using personal reflection to examine their own prior knowledge and to determine what they need to move forward. This approach does require an intentional response from you. I advise you to use the students' own wording when you are illustrating any concepts on which they would like to focus. You should acknowledge their voice or else you will create distance between you and your students that may make learning difficult.

6
Thinking about Thinking

Metacognition, Guided Reflection, and Formative Assessment

The understanding, like the eye, whilst it makes us see and perceive all other things, takes no notice of itself: and it requires art and pains to set it at a distance and make it its own object.

—John Locke

[Reflection] emancipates us from merely impulsive and routine activity . . . enables us to direct our actions with foresight and to plan according to ends in view of purposes of which we are aware. It enables us to know what we are about when we act.

—John Dewey

The value of a metacognitive approach to instruction is now becoming more widely accepted thanks to researchers such as Tracey Tokuhama-Espinosa, who have completed vast, systematic reviews of research in the neuroscience, psychology, and education fields to find that it is overwhelmingly beneficial for learning. *Metacognition* can be defined as self-regulation or "thinking about thinking." Metacognitive activities in the classroom have the following benefits:

- Changes the fixed versus growth mindset about students' ability to learn.
- Increased student ownership of learning and students taking control over their own learning.
- [Led to] more positive attitudes in relation to school and learning.
- Improved performance not only academic but also in relation to behavioral performance.[1]

Metacognitive practices can be one way to foster a culture of learning in the classroom, and they are a guiding principle for me. I believe that the importance of metacognitive practices in library instruction cannot be emphasized enough, especially in one-shot library instruction, which is one of the most common settings for information literacy instruction. Since librarians don't often have the opportunity to reinforce learning throughout the semester or throughout the academic careers of their students, providing chances for students to think about their information literacy is a way to add one more moment where students can internalize what they are learning at the library. You can watch John Spencer's video "What Is Metacognition? (Exploring the Metacognition Cycle)" to learn more about the characteristics of good metacognitive practices.[2]

One common metacognitive approach to engaging with course content is to ask students to write or reflect upon important concepts in the class. A more direct approach is to actually evaluate students as you go through the class with some sort of formative, or in-process, assessment and then pivot your instruction accordingly. Formative assessment can be performance- or skills-based, but it can also be conducted as a reflective exercise, so I have included it in this chapter. Both of these approaches, reflective and formative assessment, help students see how what they know (or don't know) fits into what is happening in the classroom.

Free writes allow students to make their thinking more visible because they are just brainstorming whatever they are thinking onto a page and trying to make sense of it later. At other times, a more structured reflective approach can better situate their learning in what Tracey Tokuhama-Espinosa calls a "logical order." Metacognition usually addresses at least three of the *Making Thinking Visible* research team's six thinking moves: observing closely and describing what's there; building explanations and interpretations; and making connections.

GUIDED REFLECTION: KWL AND TPE TECHNIQUES

A more structured metacognitive technique than free writing involves asking students to complete a KWL chart. KWL is an acronym where students

respond to the following prompts in order to determine what they need to research next:

- What I already know
- What I want to know
- What I have learned

This activity provides a guided way for students to reflect on their research experience and gives them a chance to determine the direction of their own learning. It situates the course content in students' prior knowledge and (hopefully) their future learning, thereby providing some guideposts on where their learning was before they entered the classroom, what they have gained from being there, and where they can go once they leave. Tokuhama-Espinosa emphasizes the importance of putting learning into context. She writes that "students learn best when what they learn makes sense, has a logical order, and has some meaning in their lives."[3] Providing a graphic organizer such as the KWL chart or guided prompts for student reflection may give order to students' thinking.

Ron Ritchhart, Mark Church, and Karin Morrison suggest that a more successful approach to a KWL activity is something they call Think, Puzzle, Explore thinking routines, or TPE. Students consider the following prompts:

- What do you think you know about this topic?
- What questions or puzzles do you have about the topic?
- How might you explore the puzzles you have about the topic?

The wording used in these prompts can elicit more student responses. Words matter, and how you frame questions can have a big impact on the way students respond. (See chapter 7, "Talking and Listening in Class," for more information about framing your conversations and questions with students.) The *Making Thinking Visible* authors explore this reframing eloquently in their book:

> TPE may seem like only a cosmetic change from KWL, since both have very similar goals. However, the language that teachers use influences students' thinking. What appears to be very subtle changes in word choice nonetheless can have a huge impact on the way students respond. Asking "What do you know about . . .?" can immediately shut down the student who is not confident about the subject, whereas, "What do you think you know about . . .?" gives permission to have a go, and raises possible responses to the question, safe in the knowledge that you are not guaranteeing that you have the absolute facts but rather some thoughts about it. Likewise, discussions of puzzles and wonderings help students to be more open-ended in their framing of questions and can support their curiosity.[4]

Asking these kinds of questions allows students to give more ambiguous rather than certain answers and fosters a classroom where students know that you value taking risks in class. You are aware that they might not know everything for certain, and your classroom can be a safe space for them to explore ambiguity.

GUIDED REFLECTION: PLUS/WISH FEEDBACK

I find that a reflective TPE approach works especially well after completing any active learning exercise. Sometimes, in the flurry of a well-designed active learning experience, students lose sight of what they are learning in the moment and how it applies to their own future needs and larger learning goals. There are other reflective prompts that might also situate student learning after an activity. When I was a crisis intervention hotline volunteer, I received training on guided feedback. One of the most constructive ways that the volunteers gave feedback to one another was something called Plus/Wish feedback. This required the respondent to list at least two points:

- What worked well, including identifying the result of the action or behavior to show that it had a positive effect.
- What you wished you could do differently and why, to illustrate the reasoning for why something could have been approached differently.

The word "because" is often used to articulate the reasoning behind the Plus/Wish feedback in order to facilitate the adoption of the behavior and to motivate respondents to internalize the feedback in other ways. Plus/Wish feedback can be completed either as a reflection on one's own work (which I will discuss more thoroughly in chapter 11) or as a review of how someone else is engaging with an idea, concept, or behavior. In library instruction, a student's Plus/Wish response at the end of class might be: "I'm really glad that I learned how to use the [such-and-such] library database because I found sources that will help me with my paper. I wish I could learn more about how to cite these sources because I need to use a new citation style for this paper." Moreover, after the session is over, the library instructor might be able to create a more authentic learning aid using the Plus/Wish feedback and share that learning aid with the course instructor or via the class's learning management site.

GUIDED REFLECTION: USING STUDENTS' OWN WRITINGS

Some students will take notes as the class progresses to record any information that they might think will be important later in their research process. Other students might want to complete a less structured reflective piece

at the end of your class to record that information. Focused listing, where students write down everything they learned, is in essence having students make their own class handout. You can also flip this idea and ask students to consider how they might make notes for someone who couldn't attend the workshop. I might even ask students to write on erasable wall paint or online whiteboards how they would explain a certain concept to someone else in an effort to have students complete a paraphrasing activity and also get them out of the library website, databases, or even their chairs and refocus their attention. At the end of a workshop, you might even ask students to write for a minute about what the most confusing part of the session was for them or write a narrative about how what they learned will apply to their research project as a whole.

In all of these cases, I encourage you to have students write down this information in a way that will be available to them after they leave, as well as accessible to you for reflection on your own teaching. I get many ideas on how to change my teaching methods when I ask for student feedback in this way. Remember that you're not always going to succeed in your instruction, so getting this feedback can help you adjust your approach. It also gives your students a voice overall in what you are doing. I even give former students credit in future classes when I get ideas from them in these kinds of exercises, as a way to validate the approach to myself and to other students.

FORMATIVE ASSESSMENT

Many librarians automatically think of long-form research projects, learning analytics, or even standardized tests when they think of assessment. Long-form or summative assessments are valuable tools to see the big picture of how what happens in the classroom has an impact on the students, you, and the work that you're doing. A more directed form of thinking about how your students are progressing in class is a formative assessment. Formative assessments are evaluations that check for student understanding at the moment of learning. These assessments allow the instructor to improve her instruction during the class session itself. If formative assessment is implemented in an authentic and critical manner, it can have an immediate impact on student learning.

More specifically, I use the following definition of formative assessment when I think about how to incorporate it in my classroom on a more regular basis:

> Formative assessment refers to a wide variety of methods that teachers use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or course. Formative assessments help teachers identify

> concepts that students are struggling to understand, skills they are having difficulty acquiring, or learning standards they have not yet achieved so that adjustments can be made to lessons, instructional techniques, and academic support.
>
> The general goal of formative assessment is to collect detailed information that can be used to improve instruction and student learning *while it's happening*. What makes an assessment "formative" is not the design of a test, technique, or self-evaluation, per se, but the way it is used—i.e., to inform in-process teaching and learning modifications.[5]

This quote serves to remind me that incorporating evaluative components in my instruction at the moment of learning can be just a regular piece of the learning puzzle. Doing it can still seem overwhelming, though, when I know that students have a lot of skills to develop for their research paper and the course instructor wants me to cover a lot of material. Paul Black and Dylan Wiliam, in their foundational research on formative assessment, set out to determine the value of formative assessment. They wanted to answer three questions:

1. Is there evidence that improving formative assessment raises standards?
2. Is there evidence that there is room for improvement in the assessment?
3. Is there evidence about how to improve formative assessment?

Their systematic review of the research found that instructors clearly can improve students' learning through formative assessment and that it is worthwhile to do so. Simply put, formative assessment improves learning.[6]

One of my guiding principles is to create a culture of learning in the classroom through reflection. Repeatedly testing the students may make them feel like the classroom is a high-stakes inspection rather than a place to explore ideas. While making learning more competitive has garnered some interesting attention lately (see Caitlin Holman, Stephen Aguilar, and Barry Fishman for one successful application of gameful learning), you want to be careful that students don't feel like they are being quizzed all of the time and then disengage in class.[7] Lorrie A. Shepard highlights the role that formative assessment can play in the classroom environment in her article "The Role of Assessment in a Learning Culture." Her work reminds us that one barrier to creating a culture of formative assessment is that some instructors only think of assessment in a summative, end-product way.[8]

This research about instructors' preference for summative assessment shows that any instructor may bring their own biases into assessment, thus rendering the time and effort spent on it useless. If you are testing whether

students understand "the whole" at the end, you might not be able to address the confusing parts they encountered along the way because you don't know where the misunderstanding lies. In addition, a librarian may never see the typical summative assessment used with regard to her instruction: a complete research paper or project. Yet Black and Wiliam remind us that formative assessment is key to in-process learning. Assessment does not have to be a separate mechanism from the learning that happens in your classroom.

I often hear from librarians who are struggling with formative assessment that it requires a flexibility that they don't have the time or the expertise to put into practice. If you discover during an in-class exercise that students are not grasping a major concept, how do you redirect the class when time is limited and there is other material the faculty member wants you to focus on? I would argue that it is better to discover the gap in the students' understanding sooner rather than later so that you can concentrate on the problem while it is still fresh in both the students' and your memories. You might have to pivot the class quickly and use one of the techniques discussed in this chapter, like Think-Pair-Share, to teach differently. If the students don't understand what is happening in the classroom, is it really worthwhile for you to be there? Will the faculty member ask you back? Might you learn something when you try to teach something in a new way that can inform your future practice? I would highly encourage you not to ignore student feedback because doing so will erode the rapport that you develop with students. Why are you there if you're not going to listen to them? The value of implementing formative assessment and reacting to it in the moment should outweigh your desire to get through everything.

You should create a contingency plan in case you have to veer off into a new direction during a class session. Contingency planning can include creating an online or physical handout that includes the session's content in case you haven't been able to address all of the objectives in your original plan. In practice, I often don't have time to focus on meaningful citation instruction when I am engaged deeply in classroom discussion, active learning, and formative assessment during a session. I plan for citation instruction at the end of the session, but I often have to provide a handout instead of addressing it in class. It is okay to move in a new direction if students are struggling in the class. Give them a chance to get help from you while you are there in the moment with them, and then provide follow-up opportunities if things aren't working out.

Creating and incorporating formative assessments can be time-consuming and challenging. It might result in unplanned moments in the classroom, and that uncertainty can be anxiety-inducing. I encourage you to talk through this anxiety with a trusted colleague or friend. It would be easy for me to cite the guiding principle of "practice can sort of make perfect" in this case, but that won't work for everyone. Take whatever time you need to reflect on the experience and try to work out a plan that will help you through these

unexpected moments. I hope that you might try an instructional approach more than once before moving to a different strategy. If you teach students as individuals, you do need to check in with them individually on occasion, so you can make sure that each one is engaged in the learning that happens collaboratively with you. You will learn as much from formative assessment as your students do. You may teach something in a completely different manner that is more responsive to student needs in the future because you took the time with students to really learn from them today. Sometimes, however, you just won't succeed in using formative assessment, and, in this case, you should go back to your plan for how you deal with times when your instruction seems ineffective.

There are multiple ways that you can reinforce or enhance learning in your classroom using other classroom assessment techniques. Many of these techniques are described in Thomas A. Angelo and Kathryn Patricia Cross's seminal work entitled *Classroom Assessment Techniques: A Handbook for College Teachers*.[9] A portion of that work has been summarized in chart form by the University of Michigan's Center for Research on Learning and Teaching.[10] Penn State University's Schreyer Institute for Teaching Excellence has provided a higher-level summary as well.[11]

One of the most integrated ways to reinforce learning through formative assessment that I have seen is the adaptation of Training Boosters, renamed Learning Boosters, by Alex Deeke and Alexandra Rivera for the University of Michigan Library's Summer Bridge library instruction program. In a pilot study, they conducted in-person library instruction to students and then provided three learning booster online modules that followed weeks and months later. While this approach was used primarily for information retrieval tasks, it proved modestly successful.[12] I also recommend *Toward a Critical-Inclusive Assessment Practice for Library Instruction* by Lyda McCartin and Rachel Dineen, which looks at library instruction assessment through a critical lens.[13] In addition, the ADDIE and Hunter models for lesson planning have assessment built into their Evaluation and Closure steps.

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7
Talking and Listening in Class

Classroom Discussion and the Importance of Listening

I used to say: "Do you have any questions?" Then I changed it to: "What questions do you have?" Now I say: "Ask me some questions." Even if students are just asking what my favorite color is, they're learning how to ask and getting used to asking.

—Callie Bush

When a teacher asks a question in class and a student responds, she receives not just the "response" but the student. What he says matters, whether it is right or wrong, and she probes gently for clarification, interpretation, contribution. She is not seeking the answer but the involvement of the cared-for. For the brief interval of dialogue that grows around the question, the cared-for indeed "fills the firmament." The student is infinitely more important than the subject matter.

—Nel Noddings

One way that library instructors can move beyond the banking approach to education—defined by Paulo Freire in *Pedagogy of the Oppressed* as teachers depositing knowledge into receptacles that are their students—is

to have a productive conversation with students where they are talking with each other and not just to you.[1] This can take the pressure and the spotlight off of you, and is an attractive aspect of a more dialogic instructional method. Start off the class with a discussion so that they know that you're going to put into action what you say about discussions. Then they won't expect that you're going to do all of the talking in class.

Sometimes during a class we might think that we are fostering discussion, but in reality the librarian is doing most of the talking. In a true exchange of ideas, students can learn from each other. Students have a conversation with each other, not just a one-directional transfer where a student or a librarian asks a question and the other person answers it. Fostering discussion can be one of the most challenging aspects of library instruction because it so often relies on developing a rapport within the classroom. Librarians often don't have the opportunity to establish long-term relationships with students, so they don't know the students well. If you consider the fact that outside of the classroom, people rarely feel a need to strike up a conversation with strangers, it's easy to see why it might be difficult to engage students in discussion during a library session. Chapter 4 addressed rapport, which will help you foster good classroom discussions, but there are other strategies that will cultivate good classroom conversations as well.

CLASSROOM DISCUSSION

One of the most effective approaches that I have found with classroom discussions is being transparent about the purpose of the discussion. I begin most classroom discussions by revealing why I think having a discussion about a topic is important. I will say something like, "Let's talk about [such-and-such topic] because . . ." Perhaps you just want to get them away from the computer for a while and give everyone a break from the screen. If you really value student voices in the classroom, communicate that early and often to the students and tell them that you value their input as a reason for the discussion. When students know why they are doing something—or when they know why they are learning something in the *way* they are learning it—there is less confusion in the classroom, and the students tend to be more motivated. Students are more willing to work with you if they know why they are doing what they're doing. You should reinforce the value that you place on classroom discussion early on and remind the students throughout the session about what they will achieve with the conversation; this too is a motivational tool.

Managing the students' expectations about classroom discussion fosters transparency as well. Consider what you hope to accomplish with the discussion and then communicate that goal to the students. This could be as easy as reiterating your classroom objectives with the students before beginning the conversation and letting them know how talking something through will help

accomplish that goal. In a longer library workshop, you might even start a discussion about discussions by using a simple survey tool; you ask the students what they expect from a good classroom conversation and then reveal those answers to the class as a way to model what is important about classroom discussions using their actual words. This would be a more collaborative way of setting expectations.

In addition, you might also signal the value of classroom discussion by genuinely expressing gratitude when students participate. When I completed one of my teacher education practicums, I saw my mentor teacher thank students whenever they participated in a discussion or raised their hands in class. This made a powerful impression on me because I saw that the students appreciated her expression of gratitude. It also made other students want to participate. I don't think the students were merely trying to please her, either, because when she thanked the students, she also gave the reason for her gratitude and explained how what they'd said was contributing to the class. She was reflecting back to the students how what they'd shared was important to the course goals.

One of the most common approaches to classroom discussions is the Think-Pair-Share method. In this activity, a teacher usually asks each student to individually consider one question, concept, or problem. The students then exchange ideas about this question with at least one other student and finally have the opportunity to share their ideas with the whole class. In order for this method to be successful, the activity has to be thoughtfully designed and transparently conducted so that both the students and the librarian know their roles in the process. You should carefully consider the question that will center the discussion. Is there more than one answer to this question, and will the discussion of the question genuinely move the learning in the classroom forward? If you can predict that the class will easily reach a consensus answer on the question, then Think-Pair-Share might not be the best instructional method to use. In addition, I often see library instructors skip the think part of the exercise. In some cases, the reason for this omission is because there is limited time in class and the library instructor is trying to find a compromise in balancing active learning with time constraints. I find that students don't participate as meaningfully in Think-Pair-Share without that first step of quietly contemplating a meaningful question. Some students need time to think through the question. They want time to collect their thoughts. ESL students may need time to translate their thoughts into English. The pair and share portions of the class will go much better if the students have time to think on their own first.

You may want to provide discussion questions for the pair portion of the exercise in order to ensure that that part of the exercise moves beyond what students have considered on their own. Ask the pairs of students to find similarities and differences between their ideas, and ask them to make connections to the regular class content. Ask them to describe what surprised them

about the question and explain why so that they can share any insight with their classmate. Move around the classroom during the pair part of the activity to get a sense of what the whole group discussion might include, and then encourage students individually to participate when the whole group discussion begins.

Finally, even when students have been enthusiastically engaging with one another in the pair stage, you might find that there isn't much participation in the share portion of the activity. Some students are intimidated by sharing their ideas with a large group of people, but if you have a sense of what they talked about during the pair portion of the class, you can be more encouraging when you cold-call on that student. One thing that might help is to ask students to share one of the ideas that their partner had. The benefits of this way of sharing are twofold: it takes the pressure off students who might not want to talk in class, but it also gives the opportunity for their ideas to be shared. Another alternative is to have students share digitally on an electronic whiteboard. This digital place for sharing may seem more comfortable for students because they feel more at ease writing than they do speaking in front of the class.

If it is constructed in a meaningful way, I find the Think-Pair-Share exercise very valuable in class. It usually ensures that every student has engaged with the instructional content in a purposeful way at least once, in the think stage. Some library instructors may not feel that they have enough time to complete the exercise, or they feel that the students might not spend their time constructively during the various stages. If I have developed some rapport at the start of class and set up discussion expectations early, I generally trust the students and have positive expectations that they will benefit from the exercise in some way. I may even have students complete a Think-Pair-Share activity more than once so that they can see the value of gathering their own thoughts and sharing them in smaller and larger groups.

If I ask students to participate in small-group discussion, I usually try to assign the groups in some random fashion. In this way, they get practice exploring new ideas in front of others who they might not know as well. This doesn't mean that I always ask the students to physically move in the classroom. I might ask them to talk with the person who is at the computer behind them in the computer lab rather than the person who is beside them. If they are using laptops, they can easily move. I might have students count off and group themselves by number. Or I might use playing cards and have all of the students with a certain suit or face card group themselves together.

The premise of any classroom discussion is vital. Thoughtfully asking questions, posing intriguing problems, or even wondering aloud is fundamental to a good class discussion. Joshua Eyler's refreshing take on the scholarship of teaching and learning, *How Humans Learn: The Science and Stories Behind Effective College Teaching*, begins with a thorough treatise on the importance

of fostering curiosity. He argues that human beings are innately curious and that our brains are wired to learn whenever novelty is presented.

> The mechanisms by which we learn concepts may be a natural result of our development, and question asking would be the cognitive tool that allows us to kick these processes into gear. If this is true, it would suggest that the role of the teacher is (a) to help students learn how to maximize this ability to use questions to learn, and (b) to then get out of their way.[2]

If this is true, then library instructors need to examine the kinds of questions they ask in their sessions. They need to model with their actions, attentions, and behaviors how to ask questions whose answers will foster real learning. While students may often start by asking clarifying questions that have only one or two answers, the library instructor can guide the conversation in a more meaningful direction once those questions are resolved. And many times, if you have structured an open classroom, students will be able to turn the conversation into a more substantial and useful direction themselves. An intriguing discussion question can draw students into joining the conversation when other motivational methods are not as inspiring.

Library instructors need to take a hard look at how often they are asking questions where there is only one possible answer, such as questions that are answered with a specific fact, number, or a yes/no response. Outside of the classroom, we rarely begin conversations by asking questions about things for which we already know the answers. These closed questions often become guessing games if students have not had any experience with the concepts. Students may just try to impress you, the instructor, or their classmates, which can shut down learning. If the questions are too easy, they actually become a barrier to class discussion, engagement, and learning overall. Students may find easy questions insulting to their intelligence. They may think that you're trying to trick them, and it isn't worth the risk of figuring out this trick with someone they don't know very well. And remember that fear of failure is more of a detriment to motivation than we realize, according to John Keller's work. While early success can foster confidence and encourage participation, that success should be predicated on a meaningful experience or accomplishment, otherwise students may feel that the class is a waste of their time ("I already know all of this"). If you find yourself asking closed questions too often, take a step back and reflect. Ask yourself about the significance of that answer. Using a so-what? approach to interrogate yourself about why you want students to know this information can help you generate more thoughtful questions.

The way in which you ask a question matters. As in the chapter-opening quotation by teacher Callie Bush, students learn how to ask questions by interacting with people who ask questions, and they learn the value of those questions in how we all respond. Open-ended questions might start with why and often ask students to uncover underlying assumptions or everyday behaviors.

These kinds of questions might ask students about the significance of a topic. They might generate different points of view among the students. They are questions that have more than one possible answer and students need time to consider them, so you might have to learn to be comfortable with wait time. There is often no right or wrong answer to these questions. The questions come from a genuine place of curiosity rather than exhibiting any evidence of judgment. There is no expectation from the library instructor that an answer is correct or the best answer.

On the other hand, some open-ended questions become so broad that it can be difficult for students to articulate a response. A question such as "What do you think of the library?" may not elicit many useful responses when you want to find out if students know what a library can do for them. A more useful framework might be, "Why do college students need a library?" Connecting your questions to students' lives can be a powerful way to ask questions and develop learning. In my role as a children's literature librarian, I am often asked to talk with future teachers about the importance of diversity in children's literature. While I can show them many statistics about the lack of diversity in the world of children's publishing, the most powerful exercise I do with students is to ask them to remember a book, genre, or TV show that meant a lot to them as children. I connect this memory to Rudine Sims Bishop's concept of windows, sliding glass doors, and mirrors.[3] Soon the students can easily see why making children's books from a wide range of experiences available in their classroom will be important when they become teachers. We have a rich conversation where I probe carefully into their lived experiences and relate their stories to a child's need for a "window, sliding glass door, or mirror."

It can be difficult to find the happy medium between closed and open-ended questions. Remember that practice can sort of make perfect and try to teach as often as you can so that you have more chances to ask more meaningful questions and hopefully feel more comfortable doing so. No one gets it right every time, so look at your plan for when you won't succeed from chapter 2, "Guiding Principles," and learn from the experience. It has taken me several years to develop my lesson about diversity in children's literature, and sometimes it still falls flat. Students experience deeper learning in reflecting on their own experiences when I ask them this question than they did when I simply presented charts about the lack of diversity in children's literature.

There are some questions where there is only one correct answer. In that case, instead of asking that closed question, I might ask a process question. For example, if we are discussing picking a research topic in class and someone starts talking about a topic that meets the assignment criteria, I might say something like "[such-and-such] is a good research topic. Where would you begin researching that topic? What is a good first step?" Once they start talking about places to start researching, I might then connect how that first step relates to the quality of that research topic.

There can be other challenging points in a classroom discussion. Sometimes a student may respond in a discussion with a reply that seems off topic. You, and maybe even some of the class members, may not be able to see the relevance of that student's response. In this case, I usually ask the student why they answered the way they did to see if I can glean something relevant from their response. I often thank any student who participates in a discussion regardless of whether their answer is off topic or might seem incorrect. Finally, some students really enjoy classroom discussion and may dominate the conversation. If you continue to engage with just these students in class, the other students may think that you don't care to hear what they have to say and may disengage from the discussion. Some librarians are worried that moving the conversation away from this person will make that person not want to participate at all, and they don't want to risk not having anyone participate. In these situations, I remind myself that these students have usually been in class together every week, and it is likely that this isn't the first time these same folks have dominated the discussion. Consider replying to the active student with gratitude and then asking for a student in a different row or in a different part of the room for their perspective. You can also ask to hear from someone who hasn't participated yet. I often ask for the non-replying students to participate early in the conversation so that the whole class knows that I value the work of students who aren't getting a chance to talk. Other students become motivated when they see that I am treating everyone equitably in a classroom discussion.

I encourage you to think of classroom discussion as a conversation rather than merely a question-and-answer session. Q&A sessions have their place in the classroom, especially when you want to make sure that students have processed the session's content. Students should have a chance to ask clarifying questions. A classroom discussion doesn't have to be a test where students are trying to get the answers correct in front of all of their classmates. The pressure of trying to answer discussion questions in a high-stakes environment where a student is in the spotlight in the classroom might be a barrier to participation and may make students tune out from the entire session. You may be able to relate to this pressure—it can be difficult to be able to respond to some student questions, so definitely ask other students to respond to questions when they are posed. This will help you move away from the banking concept of education in your classroom. For more information on developing questions, I encourage you to read Joshua Eyler's book. In Grant Wiggins and Jay McTighe's foundational text *Understanding by Design*, chapter 5 describes essential questions that can help you develop new modes of inquiry in your classroom.[4] Jay Howard from the *Chronicle of Higher Education* has put together an Advice Guide about conducting classroom discussions that could also be helpful.[5]

LISTENING

Nel Noddings's quote at the beginning of this chapter emphasizes the role of listening as reflective of an ethic of care that centers the student in the classroom. Intentionally showing that you are listening to a student is the responsibility of an educator as well as a motivator for the student. If you consider that the library instructor in the classroom has to manage many things at once such as speaking, moving around, helping students individually and as a group, communicating with the course instructor, and navigating classroom technology, it might not be surprising how challenging it can be to focus your attention intently on listening to each student. Sometimes you could be teaching with unfamiliar hardware, so you could easily be focusing a lot of your attention on navigating what might be an uncomfortable technological environment. Other times you feel like you can only focus on your plan for what's next, so you might feel that really responding to a student's question will take the session off on a tangent. It is easy to be distracted by the multiple components of library instruction.

Listening in the classroom serves much the same purpose as the focus that your attention has on a patron during a reference interview. When a student asks a question in class, is it clear what they are asking? They might not even have the vocabulary to express what they need. They might ask something like, "There's this thing I need for class that you don't have. How do I get it?" There are many responses to that question, so you need to be careful about making any assumptions about their request. What specific material do they need? How did they determine that the library does not have access to that material? Is there something that would better serve the student's need? Do they need to use interlibrary loan? What does "for class" mean? What will they be using it for? You may need to carefully probe a question in class in order to clarify the direction your response should take. Summarize the answers to your probing questions in the end to make sure you understand the student's actual need before moving forward.

Once it is clear what the student is asking in class, there might be a larger question that is relevant for all of the students. Listening to both this student and others might reveal a gap in the instruction experience that needs clarifying or which could be fruitful for discussion. In order to make your classroom more learner-focused, perhaps you or the student should pose the question in a new way, and then another student should answer the question rather than you as the expert. Reflect back your understanding of the question and then pose the question to the rest of the class. You can model how to engage others in this type of conversation by saying something like, "Who can help your classmate with this question?" or "What do you think the potential response to this question might be?" This reflection and Socratic approach may show the student that not only does their voice matter but also that the other students can make a valuable contribution to the course content.

Reflecting the question to the entire class involves trusting the students. You cannot guarantee the direction of a student-driven discussion, but if you frame open-ended questions, in many cases, there is no one correct answer anyway. The section above about classroom discussions doesn't provide a formula for how to have a class discussion because conversations cannot be predicted. Learning often evolves through engagement with student questions, and this may take you in new and unexpected directions. Students are not just augmenting their learning when they ask questions. It is essential that they ask questions. It is just as important for you to listen carefully to them in order to create a successful learning experience together.

A SPECIAL NOTE ON FEEDBACK

When a student is trying to complete a task in class or is thinking aloud about a concept, they might want reassurance about what they are doing or saying. Remember that learner confidence is important to motivation, and you want to honestly give the students feedback so that they can feel more assured in what they are doing. In a sense, your feedback is either reinforcing or challenging what they are thinking and learning. Constructive feedback requires intentional listening paired with thoughtful questioning followed by a mindful response.

You can reinforce learning during a classroom discussion when a student asks an especially insightful question. If a student is particularly motivated to approach researching a topic in a unique way after you have a classroom discussion about exploring topics, you can encourage that flexible way of thinking by rephrasing their approach and mentioning how it might work in another context. Maybe a student modifies their research argument after searching for information in your class, and you want to reinforce the value of formulating a thesis based on a plethora of evidence. And any time a student asks a question in class, you can reinforce the value of that student's self-awareness and willingness to share that vulnerability when they don't know something. Your positive response to students asking questions may encourage others to do the same.

While it might seem that what I am discussing here is praise, please note that reinforcing feedback goes beyond applauding the student's participation in class (although expressing gratitude for that participation can encourage others to join in—students like to help each other and the teacher too!). Reinforcing learning is about providing feedback to students that not only acknowledges what they have learned, but also presents an opportunity for student learning to move forward. It's a way for students to clarify their learning while learning is in process, but it also provides constructive ways for students to take another step into the learning experience in a safe and productive manner.

For example, a student may ask a clarifying question in class. If one of your learning objectives is that learning is a community-based process, you can redirect that question to the whole class and the students can help each other to move the learning forward. In doing so, you are reinforcing the fact that students can learn from each other in your community-based classroom. In this way, someone else is providing feedback or clarification in the classroom. Especially in cases where students have questions, you want to manage feedback in a caring, thoughtful manner. Not knowing something and letting everyone else in the class know that you don't know it can feel like a huge risk to some students. Making that lack of knowledge visible to the whole group can make a person feel vulnerable. This fear can get in the way of learning. Students may not want to risk showing that vulnerability, and then they are stuck not knowing something important. Creating a safe space and modeling a healthy environment for curiosity and inquiry fosters a learner-centered classroom atmosphere where learning can thrive.

Sometimes I ask students how they are doing with their research, and they just reply, "Okay," yet I know that I can help them because I see that they're not looking in the optimal database for their topic. In these cases, I will go back to my process questions. I'll ask things like, "Where did you start today? What are you finding so far?" At other times, students may want feedback directly from you in a classroom discussion, a person whom they feel is the expert in the room. While you want to manage the power dynamic in the classroom in a way that makes everyone feel safe and empowered on their own, it can sometimes be tough for students to learn in ambiguous spaces where it feels like no one is in charge, especially in the transitory space that is one-shot library instruction. Remember that sense-making is vital to learning, and without some signposts from you or guidance in what they are doing, students may struggle to find that logical order of meaning in a library instruction classroom. Feedback is more than just giving students the right answer or praising them. Feedback is a way to react to what is happening in the classroom compassionately, respectfully, and in a manner that affords growth for everyone—including you—together.

PUTTING IT ALL TOGETHER: THE EXCHANGE OF IDEAS THROUGH DISCUSSION IN THE CLASSROOM

At the end of any session, I will usually end with more questions. I like to ask "why" questions throughout the session, but especially as a way to close our time together to reinforce what has been learned. I might ask, "Specifically, why might you want to use the library for *your* project?" or "What advantage is there to using the library resources for your project?" I might ask "predicting" questions to get them to start thinking about transferring what they have learned and what gaps they still have in their own process. I might ask, "What

will be the challenges for you to complete your project using the library? Why will that be hard? How might you address these challenges?"

The concepts and suggestions in this chapter bring together many of the guiding principles outlined earlier in it. A library instructor can work to have a more inclusive, collaborative educational experience where the students and instructors build a shared understanding of information literacy concepts. Eliciting student views on particular topics is quite enjoyable for me because they often present sides to issues that I have not considered. I like to acknowledge each student's contribution as any discussion progresses, and the students and I seem to grow to enjoy each other's company. Yes, I am giving up some control in the classroom. I cannot predict where the discussion will lead. What if a student says something that inspires a hurtful argument with other students? I trust that students will engage each other respectfully. These approaches don't work every time, and when they don't, I reflect on why and try to learn from the experience. I trust the students and myself to learn together throughout the session.

NOTES

1. Paulo Freire, *Pedagogy of the Oppressed*, 50th anniversary edition (New York: Bloomsbury Academic, 2018), 72.
2. Joshua R. Eyler, *How Humans Learn: The Science and Stories Behind Effective College Teaching* (Morgantown: West Virginia University Press, 2018), 36.
3. Rudine Sims Bishop, "Mirrors, Windows, and Sliding Glass Doors," *Perspectives* 6, no. 3 (1990): ix–xi.
4. Grant Wiggins and Jay McTighe, *Understanding by Design* (Alexandria, VA: Association for Supervision & Curriculum Development, 2005).
5. "How to Hold a Better Class Discussion," *Chronicle of Higher Education*, May 23, 2019, www.chronicle.com/article/how-to-hold-a-better-class-discussion/.

8
Active Learning

Applying Knowledge as Reinforcement

I hear, and I forget; I see, and I remember; I do, and I understand.

—Old teaching adage

Beyond classroom discussions, you will want to think intentionally about what students are doing while they are in your classroom. While students learn through talking and listening with one another, they can also think and learn while completing some sort of task or activity to experience what it is like to apply information literacy skills. Perhaps you will take an inquiry-based approach to your lessons and have students solve a particular dilemma, which is a type of active learning. *Active learning* is an instructional approach in which students are actively involved with the course material through discussions, solving problems, writing, role-playing, and other methods. It places more responsibility on the students, as opposed to passively listening to a lecture. Many of the strategies and techniques discussed in this book involve active learning. There are literally thousands of library science articles describing and assessing active learning in library classrooms. I use resources like the ALA Library Instruction Round Table's "Top Twenty" list to find new ideas for my own instruction.[1]

ACTIVE LEARNING

Every year I spend time reflecting on my own instruction because this is an integral part of my job. Looking back, I often ask myself about student actions in my instruction. One of the things I have to watch out for in my own instruction is thinking that I'm using active learning strategies in my classroom when I'm really not. Tracey Tokuhama-Espinosa cites Charles C. Bonwell and James A. Eison's seminal work about active learning in her book about the science of teaching and learning.[2] Active learning has the following characteristics:

> Students are involved in more than passive listening, display higher-order thinking skills, engage in activities that put less emphasis on information transmission and greater emphasis on developing student skills, are encouraged to explore attitudes and values, and receive immediate feedback from their instructors.[3]

Active learning as it relates to the foundational concepts of learning mentioned earlier in this book requires students to actively *think* while engaging with library instruction. Active learning can motivate students because, if it is designed well, the instruction seems relevant to students' needs. It can promote confidence and satisfaction when students problem-solve during an active learning exercise.

My colleague, Amanda Peters, has been extremely successful with her active learning exercise that teaches students how to use a library database. She splits the students into groups of three or four students each. Each group is assigned one of three databases, which means that multiple groups have the same database.

Amanda then tells the students that one group is going to teach the rest of the class how to use one particular database. All of the databases used in this exercise are appropriate for the course assignment, so regardless of which one is assigned to them, the students will be able to find resources for their project. The genius of this activity is that students often begin to sell their database to the rest of the class so that the students want to learn how to use that other database. Or they compete to say which one is the best. Amanda has a guided handout that helps the students figure out how they are going to present their instruction to the class. She asks for a volunteer group to present so that not all students are required to get up in front of the class—only those students who feel comfortable doing so. The other students who have been assigned that database are called upon to help out the presenting group. In this activity, students are actively discovering the positives and negatives about a library database. They feel responsible for teaching their classmates how to use a resource, so they are motivated to learn deeply about it in order to convey their understanding of that content to their peers. They are not passively listening to the instructor demonstrate the database. They are exhibiting the higher-order thinking skill of role-playing in order to design a lesson

for the other students. They figure out the value of that database and how to communicate that value to the rest of the class, and they receive immediate feedback not only from their instructor but also from each other. This exercise has all of the characteristics of active learning.

The larger question for all of us is whether we are *really* using active learning strategies in our library classrooms. Research supports the use of active learning approaches in order to facilitate deeper learning in the classroom. It might also make teaching more enjoyable for you if some of the work in the classroom is transferred from you to the students. You should provide time at the end of the activity for students to reflect on what they have learned from the exercise and how it applies to their own work moving forward. (Chapter 9, "Problem-Solving Instructional Dilemmas," describes a strategy that incorporates reflective practice and will help you analyze whether your active learning exercises map to authentic learning in the classroom.)

APPLYING KNOWLEDGE AS REINFORCEMENT

One of the wishes most commonly expressed by my faculty colleagues is that they want students to have time in class to practice and use what we have learned throughout the session. In this way, I can be available if students encounter barriers in their use of tools such as library databases or a type of software as they are using them. The students often walk away from the session with at least one or two sources that they might use for their research project, or they have a start on a project for which they are using the new software. They leave the session feeling confident in their skills and satisfied with the library instruction.

One way that I try to merge this application part of the session with a reinforcing methodology is to demonstrate one database and then ask the students to use it on their own. I then shift the instruction so that the students search another database I recommend which uses a different platform or interface. In this shift to a new database, I don't show them how to find access to it, and I do not demonstrate any searches on it. I rely on the students to reinforce their learning by doing these things on their own, and I am available to answer any questions they might have.

It might seem like I am quizzing the students, but I often try to frame this transfer or reinforcement of knowledge in an off-handed way that emphasizes the value of that second database. And if they can't find the other database, I don't take it lightly. I have (hopefully) developed a bit of rapport with the students, so that they feel comfortable asking questions. Or they will ask each other. Either way, learning is happening in a way that situates student agency and responsibility as central to the learning process in the session. The students know that there is more than one database, and they have to find out how to get to the second one. They can apply what they have learned

from the use of the first database in much the same way in this second online environment. If the students can transfer their learning from one situation to another in class, I hope that they will feel more confident about transferring the workshop's content in general when they are on their own.

NOTES

1. American Library Association, "LIRT Top Twenty Archives," Library Instruction Round Table, January 3, 2013, www.ala.org/rt/lirt/top-twenty-archives.
2. Charles C. Bonwell and James A. Eison, *Active Learning: Creating Excitement in the Classroom* (Washington, DC: George Washington University, School of Education and Human Development, 1991).
3. Tracey Tokuhama-Espinosa, *The New Science of Teaching and Learning: Using the Best of Mind, Brain, and Education Science in the Classroom* (New York: Teachers College Press, 2010), 122.

9

Problem-Solving Instructional Dilemmas

Common Overall Challenges While Teaching

Nothing is more powerful than allowing yourself to be truly affected by things.

—Zooey Deschanel

Even the most experienced teachers struggle sometimes. My mentor teacher during my teaching internship was amazing. She was an adjunct at my university and taught us all how to teach in our night courses with her, while she also taught her own high school English class every day, all day. Still, there were days when I could see that students were lost in her class, or she couldn't balance all of the class's needs during the class period. Remember that you're not going to succeed every time you teach, and try to prepare yourself for that disappointment. I offer advice throughout this entire book for many different instructional challenges. This chapter focuses on some of the most common ones that I've seen in my own practice and in other people's instruction.

"I'M LOST": CREATING SIGNPOSTS FOR STUDENTS

I've seen it on my students' faces. I look up from the presenter computer, and the students are confused and whispering to each other, "How did she get *there*?" Or they haven't constructed a research question yet, and I'm talking about details that make no sense to them because they're still thinking about what they're going to do this big research project on. While I will offer advice

about pacing and time management in the next section of this chapter, students can feel lost even when you aren't going through your lesson plan too quickly or too slowly.

Tokuhama-Espinosa's synthesis of research in the neuroscience, psychology, and education fields reveals the importance of putting learning into context. She writes that "students learn best when what they learn makes sense, has a logical order, and has some meaning in their lives."[1] I encourage you to think about your own lesson plan and whether it has these three characteristics: does it make sense, does it have some sort of order, and will it mean something to the students? As a librarian, you have a lot of experience with the concepts that you're teaching, so it can be difficult to make an unbiased judgment about whether what you're teaching makes sense. Your lesson plan might seem clear to you, but your instruction may be missing out on key opportunities to address the students' gaps in knowledge because you already know how to do research—but they don't, and you're not taking this into account. Or, in another case, you might not be able to relate to students who don't know how to find information through the library website. If you follow the guiding principle (set out early in this book) that regularly learning something new can remind you of what it's like to be a student, it might be easier to reflect on whether something is missing from the educational experience you're trying to create.

Considering the steps and logical order of the process with which you are trying to engage the students will also help make your instruction meaningful. Are you addressing those steps, even in a brief way, in your instruction? As to the last of Tokuhama-Espinosa's three characteristics, some librarians find it difficult to make their instruction connect to student life in a meaningful way. Maybe a librarian tries to pick an example of a search topic that she thinks the students will identify with, but that subject doesn't relate to their lives nearly as much as the librarian thought it would. I encourage you to contact the course instructors with whom you are collaborating and ask them for potential topics if you are completing a demonstration in the workshop. Sometimes students have already indicated to their instructor general topics that they are considering researching. You could select one of those topics and revise it in an interesting manner that makes the teaching of the session enjoyable for you and meaningful for the students. You might even ask the students to complete a survey ahead of time and ask them what topic they would like you to demonstrate, thereby showing the students how much you value their voices in the classroom.

When I think of designing classroom instruction, I use the metaphors of traveling and storytelling to make sense of my own teaching. What journey are the students completing with me? How am I telling the story of that journey so that students don't get lost along the way? If my lesson plan is the map for the trip, what signposts have I put in place to signal the direction we

are going so that the instruction makes sense, is in a logical sequence, and connects with them in a meaningful manner?

Like a good story, you can think about whether your instruction has a beginning, a middle, and an end. These parts can be considered the *context* of the story, and remember the guiding principle that "context is important." How do students know where they are in this journey/story? Many instructors communicate their goals at the beginning of an instruction session, but they don't refer to them at any other time in the workshop. If you are using presentation slides in your instruction, consider noting the relevant objectives on each slide. Use section headers to indicate a transition in the story of the session, so students know that it is time to shift their focus. If you are in a transitional moment of the workshop, take time to summarize what has happened and what students might have learned so far in order to provide a structure or logical order to what is happening.

Tokuhama-Espinosa's research provides guidance on making sense of course content in order to enable students to transfer the knowledge they are acquiring in the current classroom to their future needs. The students are not going to be able to complete their entire research project during your workshop. They need to transfer what is happening in your session to future needs. You should create an optimal opportunity for that transfer of knowledge by designing lessons that make sense, are well organized, and connect to their lives.

TIME MANAGEMENT: BALANCING DEEP LEARNING WITH TIME CONSTRAINTS

One of the most frustrating aspects of traditional library instruction is that we often don't have much time with the students to achieve our goals. We might anticipate that we have a lot to cover in the class, rush through an activity, and then have time left over that we wished we could have used differently. This book recommends many teaching techniques that will take your classroom into unpredictable areas. It can be overwhelming to think about trying a new approach, like an expansive classroom discussion, when you don't feel like you have much time to be with the students to begin with. Pairing discussion with a meaningful classroom activity can feel overwhelming. If you add assessment to your instruction, it can feel even more challenging.

Considering the very real pressures that course instructors face and what can seem to many students like an overwhelming amount of work that needs to be done for school, you should do the best you can to manage the expectations of what can be accomplished in your library instruction. If the course instructor can provide only a short (less than thirty minutes) amount of time devoted to library instruction, negotiate with them to reduce the number of

objectives which can be addressed in that time. Together you will have to prioritize what can be covered in the lesson.

Even when you do have more time in class, you should thoughtfully review how you're going to approach the instruction. Cultivating a thinking mindset in the classroom is central to information literacy and will help students not just with their current assignment, but beyond the classroom as well. Ron Ritchhart, Mark Church, and Karin Morrison detail a reflective process that will help you determine whether students are actually grasping the course content. First, they suggest that you make a list of all the actions and activities that students typically do in your class. Then you create three new lists that will help you assess whether students have actually thought through and understood your instruction in the past, based on those actions and activities. These three lists are of:

1. The actions that students in your class spend most of their time doing. What actions account for 75 percent of what students do in your class on a regular basis?
2. The actions most authentic to the discipline, that is, those things that real scientists, writers, artists, and others actually do as they go about their work.
3. The actions you remember doing yourself at the time when you were actively engaged in research within the discipline or subject area.[2]

Do the actions in your first list map to the actions in the second and third lists? If not, the students may not necessarily be comprehending what is being taught in the classroom. Ritchhart et al. have concluded that understanding and thinking can come from two key areas:

1. Behaviors that reflect what people actually do
2. The actions that new learners exhibit when they are working to understand a concept

The authors encourage all teachers to incorporate this kind of a review to promote thinking in their classroom. One way to work with time constraints is to focus on the behaviors from this list because these are the most important ones to foster understanding in the classroom and beyond.

Another component of rich classroom learning involves the way you provide feedback to students when they engage with a concept. If a student is thoughtfully considering their search terms when they are using a database during a classroom session, be specific in your encouragement by replying with something like, "It looks like you're carefully deciding which words you want to search. Why did you choose [such-and-such] to search on?" You are not only providing the student with specific feedback on their actions but you are also giving them an opportunity to be metacognitive about their thinking. Why are they

thinking the way that they are? If they can verbalize it, they may be more able to replicate that thinking in other circumstances. Don't rush through giving students feedback and thereby miss an opportunity for deep learning.

Making space for metacognition or "thinking about thinking" in your classroom is not just a bonus or an add-on to your instruction. According to Tokuhama-Espinosa, it should be a central component of any instruction. Students need downtime in the classroom to process what is happening. Tokuhama-Espinosa cites Barbara Presseisen's work on developing a questioning mindset or habit of skepticism and even applies it to common information literacy concepts in the application of this important skill.

> This means that teachers should cultivate in students a questioning attitude about information and guide them to become critical consumers of data. This is done by constantly asking students, "Where did the information come from?" Students should constantly ask themselves: What biases could the source of the information have? How credible is this source? What other viewpoints are there on this topic? These types of questions guide students toward a better understanding of what they consider "good" information and why. Such reflection elevates general thinking skills and creates metacognitive practices, which mean students become more critical thinkers.[3]

Asking students to wrestle with these types of questions takes time. If you feel like you are going through your lesson plan too quickly, ask a trusted colleague to observe you with this specific concern in mind. Maybe you are talking too fast and don't realize it. An outside observer can be more aware of these pacing issues because they can see you, the students, and the physical classroom at the same time, giving them a larger perspective.

Finally, you can work with the course instructor to be highly selective about what you're going to teach in class, so that you can have time for students to develop their questioning mindset. Let's say, for example, that it is time to flip the classroom and have students learn point-and-click content in online tutorials. If you have to do this in class, go over it briefly, and then give them handouts or point them to an online research guide for future reference. You should use the time in the classroom to go deeper into thoughtful content.

DISTRACTION, DISENGAGEMENT, AND DISCONNECTION IN THE CLASSROOM

Even though you have thoughtfully collaborated with the instructor and designed a great learner-centered lesson plan that incorporates active learning, classroom discussion, and metacognition, there will still be times when your instruction falls flat. Remember that sometimes you will not succeed in

your instruction, and you should have a plan for how to cope with that unsuccessful experience. A student-centered approach means that situations outside of school will sometimes impact the learning environment inside of the classroom. These outside factors are often beyond your immediate control, so try not to take it personally. If you are struggling in the classroom because students are disengaged, you can appeal for assistance from the course instructor. The students probably have a better rapport with their regular teacher, and that person may be able to help you get things back on track.

Disengagement can take many forms. Some students could be looking at unrelated websites on their computers. They could be whispering with one another and not following along. Maybe they have bored looks on their faces. They might even be staring off into space. If you've followed the guiding principles of figuring out a way to like and respect students and if you think of them as individuals, it will be easier to understand and be sympathetic to students when disengagement happens. Everyone gets bored sometimes, and you don't know what else the students might be experiencing, so it could be that they have a really good reason to be distracted. I find a common indicator that students are distracted is when I start talking louder and then even louder. In this case, I am usually talking over students because they are discussing something else, or I think that if I talk louder, I will somehow focus their attention on me. I didn't even realize that I commonly talked louder when students were disengaged until I was observed by my mentor teacher during my teacher education program. I would put blinders on and ignore the distracted students and plow through my lesson plan. Now, if I see that students are not engaged or if I start to project my voice in a loud manner, I know it is time for me to consider trying something new.

I usually approach distraction in the classroom in three different ways: proximity, pivoting, and pausing. One of the most effective ways that I have been able to address distractions is that I don't stand in one place throughout the session. I feel separated from students if I can't see them clearly, and I feel that being separated in front of them promotes a sage-on-the-stage dialectic with which I am uncomfortable. I want to be among students so that I can more easily respond to any nonverbal body language of theirs that might indicate confusion or frustration with what is happening in the classroom. Since I am consistently moving around in class, I often will stroll toward a distracted student (or students) as I am talking. This is commonly called using proximity for classroom management. I try to not make these movements seem threatening to the students. I'm not giving them dirty looks, and I don't race to their sides if they are being disruptive. Disconnected college students are still usually aware of the instructor in class, and my moving into their general vicinity is a gentle reminder to them that they are in a classroom and should be engaged. They have many years of experience in school and know the norms of classroom behavior.

There are other times when subtle reminders like proximity don't address the problem. If I have designed my lesson plan well and have a contingency plan, I can easily pivot the class into doing something other than what we are currently trying to accomplish. If I have been talking for a while and it doesn't seem like they are listening, it might be time for the students to do something more active—work with a partner on something else, or apply what we have learned by searching for information on their own. If I have asked the students to complete an active learning task with a partner and they are not working on that problem, I might bring the class back together to reflect in writing on what they should do next, thereby providing both a metacognitive moment to reinforce learning and a chance for students to consider any gaps in their understanding.

Finally, don't be afraid to stop class and pause in the moment. Many times I will provide instruction for only part of a three-hour class. In those cases, I will often arrive a little early to get a sense of what is happening in the classroom. I arrived early at a class recently, and it became clear that the students were engaged in a deep and contentious discussion about a controversial topic. I felt that it would be difficult for the students to learn with me after they had engaged in a difficult conversation, so I asked the instructor if everyone could take a break before we began. Even though I had to remove an activity that I had planned on completing with the students, I knew that I wanted to spend the time I had with them in a meaningful way overall. Everyone's time would have been wasted if the students were not mentally and emotionally able to focus their attention on library instruction.

You should also consider the suggestions in chapter 4, "Starting Class: Setting the Stage for Learning," to assist you with disconnected students. Setting expectations at the start of class is one of the best ways to prime students for engagement throughout your time with them.

A SPECIAL KIND OF DISCONNECTION: LACK OF MOTIVATION

I cannot emphasize enough the role that motivation plays in successful learning. While other parts of this book define and describe the importance of motivation, what do you do if students aren't paying attention, don't see the relevance of what is happening in the classroom, aren't confident, or are dissatisfied with the learning experience? When I design a lesson plan, I construct the experience in the hopes that I will not discourage students. I also believe that students can learn the concepts that I am teaching. I don't start with deficit thinking, and I have high expectations of students. Remembering this guiding principle, even in the lesson-planning stage, will help focus my attention on keeping the students motivated through high-quality instructional design.

When I first started teaching, I thought of motivation only as something that connected to the students' attention span, and I often relied heavily on sparking their curiosity at the start of the class. I felt confident that if I grabbed their attention at the start of class, I could sustain their interest because I had spent a lot of time designing a high-quality instructional experience. I thought that I could sustain their attention easily if I was thoughtful about my anticipatory set and tried to hook the students' attention right from the start. But while beginning your class in a successful manner can help, how will you sustain their attention throughout the entire session?

You should consider regularly altering your mode of instruction to include the element of surprise throughout the session in order to keep students' attention. I might give students an index card as they arrive and ask them to write down what they hope to get from the session. They may be surprised that I care right from the outset what they want from the educational experience. I might read these index cards right from the start and then change my instruction to make it more connected to the students' needs in the moment. After introducing myself at the start of class, I might direct the students to the whiteboards or classroom walls and ask them to write out everything they already know about the library. Then I would have all of the students walk around the room to learn about the library, instead of having them hear about it from me. I might then ask students to discuss their research topics with the whole class to show that I care about their individual needs and to get material for later demonstrations. All of this would happen before I begin a demonstration of the library website. That demonstration would feel more like a typical lecture, and afterward the students would work on their own to find sources for their research paper and apply what they had learned in class. I could end the class with some kind of marketing video that shows all of the benefits of using the library in order to drive home the earlier point that the library has a lot to offer, and then I would ask students to discuss what surprised them in the video. By using multiple modes of instruction to address all of the services provided by the library, I am asking the students to pay close attention—this session is not going to be like a typical lecture. Hopefully, the contrasts will motivate them to concentrate in class.

In addition, connecting your instructional content to course needs in an intentional manner will also increase student motivation. As to confidence and satisfaction, it is important to be careful not to set expectations too low in an effort to help students feel successful and motivated. Students may actually tune out if you're giving them something that is easy to do. John Keller's work on motivational design is very relevant here. A complete discussion of his instructional model can be found in his book *Motivational Design for Learning and Performance: The ARCS Model Approach*.[4] Krista Reynolds, Lindsay Michelle Roberts, and Janet Hauck provide best practices for incorporating the ARCS Model into library instruction in their article "Exploring Motivation: Integrating the ARCS Model with Instruction."[5]

Another common approach to motivating students is working with the course instructors to identify both extrinsic and intrinsic motivators. Extrinsic motivation is the idea that students sometimes are compelled to do something in order to receive a reward. Doing something because you want to do it rather than because you want to get something tangible in return is a characteristic of intrinsic motivation. I have seen library instructors employ both types of motivational strategies successfully.

In a large class that I teach every fall semester, I bring a wicker basket of healthy snacks and school supplies and reward students who answer questions throughout the short time that I am with them, an activity I explained more thoroughly in chapter 4. My larger goal in the short time I have with them is that they have a positive experience with library-related subjects so that they think of the library next time they have an information-related question. If I demonstrate how to use a database, I often search for information about a topic that relates directly to their course, or a subject that relates in some way to the common good, so that we're looking for research information in which the students will see value.

Using both extrinsic and intrinsic motivations allows a library instructor to utilize the incredible power of positive emotions. Joshua Eyler, in his book *How Humans Learn: The Science and Stories Behind Effective College Teaching*, discusses the research behind the power of emotions and the ability to learn. He advises instructors to authentically and appropriately engage with their students' emotions in order to activate learning behaviors in the classroom. He encourages instructors to think about the emotional angle of one or two of the topics they discuss in class.

> How might [the topic] connect to students' lives and their emotional responses to the world? It's not possible to do this with everything we teach (nor is it desirable), but there may be subjects that would benefit from deeper levels of student investment. Helping our students engage the material in this way could be as simple as telling a story or providing them with a perspective they had not previously considered. We only need to find the places in our curriculum where such an approach will be both appropriate and fruitful.[6]

Eyler encourages us to think that our instruction could even make students feel happy, and happiness is a great indicator that learning is happening. You can even tell (appropriate) jokes if you like doing that. You can discuss how you helped a student in the past and how pleased that student was with what they got out of the session. While you cannot force anyone to feel happy, you might help students feel empowered, confident, or knowledgeable with what happens in the library instruction session, and those emotions can foster constructive learning both inside and outside of the classroom.

Many instruction librarians don't get the opportunity to know their students well. In those situations, the course instructor can be a powerful partner in assisting you with motivation. Why does the course instructor think the students should participate in library instruction? Have the students been exhibiting motivated behaviors before this class? Why or why not? In the course instructor's experience, what have students valued in the past? It can be difficult to do, but you want to make sure that your conclusions about the motivations of your students are as evidence-based as possible. In addition, knowing where the students are in the research process can help with motivation. Providing instructional opportunities at the point of need may really assist in motivating students, so negotiate with the course instructor to find the best time for you to come into the classroom.

You're off to a great start if you are thinking intentionally about how to motivate your students not just at the beginning of class, but throughout your time with them. I recommend Trudi Jacobson and Lijuan Xu's book *Motivating Students in Information Literacy Classes* to learn more about motivating students in your library workshops.[7]

PUTTING IT ALL TOGETHER: "AUTHORITY IS CONSTRUCTED AND CONTEXTUAL"

To return to one of the initial questions of this book, how do we motivate students to make sense of information literacy concepts using classroom discussion and active learning while both listening to them and dealing with time constraints, especially if they become disengaged as the story of the lesson unfolds?

In this concluding section, we will consider a common component of instruction that maps to the ACRL frames Authority Is Constructed and Contextual and Information Has Value. Let's examine how we might approach teaching students about evaluating sources using some of the suggestions found in this chapter and elsewhere in the book.

Evaluating sources is a common topic of library instruction. One way to place students at the center of your instruction and motivate them to learn is to make sure that they engage with you close to a point of need. In addition, students will want to have some ideas of what they want to research before you work with them. Ask the course instructor for this information and request that this information is shared with you. At the start of class, read out as many of these topics as you can so that students know that you are grounding the day's class in their specific needs. Integrating your lesson into the current "journey" of what students are doing in class provides an important signpost to students about why you are working with them on this skill. It may even motivate them to connect with what is happening because they can see that it will help them immediately. They might not feel as lost as to why they are in class.

I try to connect students with course content by choosing an important and meaningful topic that centers any direct instruction or modeled searching that I do in class. In the following example, I use the Flint, Michigan, water crisis, a controversy many college students in Michigan are already familiar with from news coverage. I am hoping to engage with students' emotions as Eyler recommends, and I know that these students really care about what's happening in the world. To save time in this lesson, I hand out the instruction materials I have as the students arrive. Students use news articles, blog posts, scholarly information, social media posts, and other types of sources in the activity I am about to describe. Sometimes I distribute these sources as students arrive. I may even give them the sources as I wander around the room during our initial discussion about what's happening in Flint because this gives me the chance to get among the students.

When I am asked to teach a library session with the writing requirement class, I present the students with this argument and focus on the frame Authority Is Constructed and Contextual: "The state government in Michigan should compensate the residents of Flint because Flint residents have experienced injustice from the state leadership in Lansing." I ask the students to first think on their own or write about the reasons both for and against this argument. In some cases, I start one step before this and have someone in class describe what's going on with the water in Flint—to tell the story of the Flint water crisis—because not all students may be aware of this issue.

The students discuss with a partner the pro and con arguments for compensating Flint residents, and then the whole class talks this through. As the students are engaging with the multiple perspectives of this argument, I ask them to engage with each other respectfully about the pros and cons of each position. The students often talk about what would happen financially to the state if we had to pay out a lot of money. Others consider personal rights in their discussion and state that everyone in the United States should have access to clean water, and the state government ignored the citizens' concerns in Flint. Sometimes cultural concerns are addressed because Flint is a city with a primarily African American population. I am not always successful in getting the students to engage with one another while we have this conversation. Sometimes they seem to be talking to me instead of to everyone, but as much as I can, I try to turn their direct questions to me back to the rest of the class.

As students are discussing the issue, I will casually ask them what evidence would support their viewpoint. What would they need to prove the conclusions that they are drawing? While the students suggest statistical and financial data in this regard, sometimes they suggest that public health and economic research on the effects of the water crisis in Flint would help them. Some of their arguments are based on assumptions they have about the geographic area or about the health effects of lead poisoning. I often gently ask them, "How do you know [such-and-such]?" Of course, some formal research has been completed on the effects of the Flint water crisis, but there is a lot

more information on this topic to be found in news sources and on the open Web. So the students can readily search for information about the water crisis (and its attendant effects) in a library database or online. I might write some common misconceptions, questions, or important aspects of the issues on a whiteboard or type them into a presentation slide to confirm that I'm listening to what the students are saying and acknowledging that what they're considering is important. I summarize their arguments and the potential supporting evidence that we're looking for before we move on to the next step.

The students then pair up. I give each student in the pair a different source about the water crisis to read. They will switch sources at some point so that both students have a general idea of the information in both articles. I ask students to think about these six questions as they read:

1. Is this source relevant to the topic? How might I use this source?
2. Who wrote this source? Where is it published? Google both the author and the publisher of the source. How might your search results—what you have found out about these sources—inform your reading of it?
3. Could the source be biased? Why do you think so? Can you still use the source? If so, how?
4. Who is the audience for this source?
5. What are the characteristics of each source? How would you describe this source to someone else?
6. What questions do you still have about this source, topic, or issue?

I'm hoping that the students can feel emotionally invested in the topic because it relates to the geographic area in which they live. In the group discussion that follows, students engage with a wide range of sources created by various stakeholders in the Flint water crisis. The authority displayed within these sources illustrate the value of information in various contexts. We have a great conversation because students see value in evaluating Tweets and other social media posts, sources that are much more connected to their everyday lives. In the last two or three minutes of the session, I ask students to reflect on our conversations and write about how what we discussed applies to the work they will be completing for class; this gives them an opportunity to reinforce what they have learned in class.

You'll notice that I didn't choose a point-and-click topic for this example. Please advocate with your course instructors the option of flipping the classroom on this topic. Students can learn the basics of using the library website and databases in an online tutorial. I do appreciate that advanced students might want to learn more sophisticated ways of searching. Those students can still learn some of those concepts via an online learning object and you can quickly review searching in the classroom. The few students such as PhD candidates who have highly specialized search needs would have those needs

better addressed through a consultation model of service either by appointment or through regular office hours even at a large institution.

The next chapter illustrates more options for how students can reflect on and assess their own learning to enhance their understanding of information literacy concepts.

NOTES

1. Tracey Tokuhama-Espinosa, *The New Science of Teaching and Learning: Using the Best of Mind, Brain, and Education Science in the Classroom* (New York: Teachers College Press, 2010), 116.
2. Ron Ritchhart, Mark Church, and Karin Morrison, *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for All Learners* (San Francisco: Jossey-Bass, 2011), 10.
3. Tokuhama-Espinosa, *The New Science of Teaching and Learning*, 123.
4. John M. Keller, *Motivational Design for Learning and Performance: The ARCS Model Approach* (Springer Science+Business Media, 2010).
5. Krista M. Reynolds, Lindsay Michelle Roberts, and Janet Hauck, "Exploring Motivation: Integrating the ARCS Model with Instruction," *Reference Services Review* 45, no. 2 (January 1, 2017): 149–65.
6. Joshua R. Eyler, *How Humans Learn: The Science and Stories Behind Effective College Teaching* (Morgantown: West Virginia University Press, 2018), 112.
7. Trudi E. Jacobson and Lijuan Xu, *Motivating Students in Information Literacy Classes*, New Library Series no. 8 (New York: Neal-Schuman, 2004).

PART IV

Looking Back and Forward on Your Library Instruction

10
The End of Class

All good things must come to an end.
—Geoffrey Chaucer

The end of a library instruction session can come as a relief to a librarian. Even if you like teaching, instruction takes a lot of effort, and you might be glad when it's over. You've put considerable effort into designing a good lesson plan. You've moved around the classroom and are physically exhausted from standing for an hour and a half. Emotionally, you've had to be on alert and responsive to learner needs and emotions, so as to keep the instruction moving forward and motivate the students to forge ahead. Students have asked you unexpected questions and you've had to think on your feet. Of course, the challenge of library instruction can also be invigorating for some librarians because they like connecting with students, and it might be one of the few times that they can do so. Many librarians like to share knowledge with new people in interesting ways.

Most of the time, I am energized by instruction but relieved when I am finished with a class. Sometimes those emotions cause me to rush through the end of a class. I also see librarians rushing through instruction at the end of class to get it all in and make sure that they've at least mentioned many different library concepts that they think will be helpful for students. But if your instruction is like a story, it should have beginning, middle, and ending signposts. For many stories, the endings make the entire story more memorable.

Maybe there's a twist to the story at the end that surprises you so that you leave the story with a positive feeling. You could be happy for the characters at the end of the story or sad that you're finished with the book. In any case, the end of a story is usually one of the most impactful parts of the entire journey. While you might not be able to make the end of your library instruction as exciting as the end of a good novel, you don't want to miss out on one of the most impactful parts of the experience. At the end of the class, you might consider that there will be actions that will benefit the students and actions that will benefit the library instructor.

THE STUDENTS AND THE END OF CLASS

Students watch the clock at the end of most of their classes to know when class is over and they can move on to the next thing. Don't take it too personally if students start to get restless as the end of your time together nears.

At the end of a library instruction session, you may want to have the students complete some sort of summative, or conclusionary, assessment to evaluate whether they understand the concepts taught in the session. This assessment can be skills-based by asking the students to perform some sort of task in a survey. You could also ask them to reflect on the entire session and write a focused minute paper summarizing everything they learned in class. Other summative reflections include answers to questions such as:

- What will be the next step for your research project?
- What was the most important thing you learned today?
- How would you explain what you learned today to an absent classmate?

I have used the absent classmate prompt with some success. My department also used that question and compared the answers from students in many of our classes to determine what students thought was important in our instruction. Thematically, it was good to see what was and wasn't taught in our sessions. Students recall and reinforce their learning when they have to distill that learning by reviewing what they learned. Of course, you could just tell them what the main points of the session were at the end, but I like to follow my guiding principle of "teaching is not telling" until the very end and give the students an opportunity for quiet reflection to conclude our time together. Another way to reinforce learning is to have a concluding discussion about why they were in class. While there could be one or two definitive answers to the question "Why do you think you needed library instruction?" I do find that students give interesting answers to this question, including, "To learn that the library is more than a place to study." Another way to provide for summarized content is to list the main points on your final presentation slide.

The end of the class can also be an opportunity to set up a way for students to transfer what they learned in the session to a need they will have after class. I use user-friendly graphic design tools to make physical handouts for students. These handouts may include images of the library website and recommended library databases for their project. They might also include questions that students should ask themselves when it comes to evaluating sources. I have one class that I see every semester which has more of an online mode of instruction, so I teach from a website that I've created, and I make sure that there is a simple URL for it. Students can easily return to that site, even though it is embedded in their course management site as well. If I have used presentation slides in class, I will share those slides with students and the course instructor so that they can easily access them later. Regardless of the format that I use for these kinds of supplemental materials, I always include my contact information so that students can follow up with me if they have questions. In addition, I include information about how to use the reference services at our library so that students have a backup source for this in case they need one.

THE LIBRARY INSTRUCTOR AND THE END OF CLASS

There are other unique tasks and processes that the library instructor can complete at the end of class as well. Leading up to the end of class, you may want to give students some sense of the passage of time. If students need to complete some sort of activity by the end of class, they may lose track of time and need a reminder that they have a specified amount of time left. In the end, you will want to give some sort of official signal that class is over if you can't stay after class for follow-up questions.

Toward the end of class, I like to check in with the course instructor to see if there is anything else that they want to explore before class is over. In fact, I check in with the course instructor at least one other time during class to make sure that the instruction is meeting their expectations. If you decide that students need to hear a summary from you about the main points of the class, you can also do this at the end of class as a signal that the class is over. I complete this kind of summative activity as a way to reinforce what was important in the class.

Finally, you will want to reflect on the session both toward the end of class and after it is over. You will want to think through whether you missed discussing something with the students. If so, you might need to send an e-mail to the course instructor or students, or send a message through their course management site, that includes this missing information. In addition to reflecting on the session before the students leave, you will also want to contemplate the course as a whole. The next chapter contains a more complete

description of the reflective practice in which you can engage in order to improve your teaching methods.

PROGRAMMATIC ASSESSMENT

The assessment component of library instruction, especially for one-shot library instruction, can seem overwhelming. We may not know the students well, and our time with them is short. How much can we expect them to learn, given such limitations? Is it even worth measuring whether the students have learned the content? Will they honestly remember it? It is easy to feel that assessment is meaningless for library instruction when lessons are often identified as short-term learning moments about skills that students may not practice often. But some librarians have invested considerable time in instruction, so they want to figure out whether students have actually learned the content. If you are putting a lot of effort into your instruction, don't you want to know if it is worthwhile? While I do find this aspect motivating for my own professional development, I also see assessment more broadly as an integral part of the entire learning process. A good assessment reinforces the learning that happens in the classroom.

A larger question to consider is whether your classroom assessment is an authentic representation of student learning. Is your approach to the reinforcement of student learning designed well enough to be a true indication of student learning? Can you make the students' thinking about information literacy visible in a perceptible manner? In any case, as the ADDIE and Hunter templates indicate, assessment is not separate from the learning process for students. In their regular course content, faculty members require students to complete high-stakes tests or paper-writing assignments that enhance classroom learning. In library instruction, formative or summative assessment techniques require students to review and practice the course content, thus reinforcing learning and furthering their knowledge of key concepts.

If you have to complete a summative assessment, breaking that assessment into chunks will help. Do you really need to know if students have learned everything that you taught all of the time you saw them? It might be more helpful to conduct your assessment in stages, measuring only one aspect of your instruction at a time. For example, after your session, can the students find a library database? Do they know how and when to use the instant-messaging reference service that you provided? How will they evaluate sources for research papers after your session? Do they know how to add a source to one of their Zotero libraries?

You should conduct a short pre- and post-survey on a targeted learning component and see what happens. Compare the results of the two surveys and determine how your analysis might inform your future practice. You will probably have to teach that course content again, so you might want to

make sure you're doing the best you can for the students. Moreover, it can be more empowering to plan your own assessment approach rather than have an assessment protocol thrust upon you. In any case, assessment can be intimidating because its results might challenge certain assumptions or components of your own teaching. You can prepare yourself for this ahead of time by remembering the guiding principle "sometimes you will not succeed." An assessment might give you some harsh evidence that you are not succeeding. If your assessment is designed well, it will become obvious how and where you can adjust your instruction for both your students' and your own success. Revising your instructional approach will make it more likely that you are authentically imparting and reinforcing learning in the classroom.

I encourage librarians to consider how critical perspectives can inform these types of assessment practices. Current research and engagement with critical pedagogies can shift the lens with which these types of summative assessments are conducted. Ebony Magnus, Jackie Belanger, and Maggie Faber address the pitfalls of many library assessment projects in their excellent article "Towards a Critical Assessment Practice."[1]

NOTE

1. Ebony Magnus, Jackie Belanger, and Maggie Faber, "Towards a Critical Assessment Practice," *In the Library with the Lead Pipe*, 2018, www.inthelibrarywiththeleadpipe.org/2018/towards-critical-assessment-practice/.

11
Looking Back on Your Teaching

Reflective Practice

The most fundamental aggression to ourselves, the most fundamental harm we can do to ourselves, is to remain ignorant by not having the courage and the respect to look at ourselves honestly and gently.

—Pema Chödrön

I thank God for my failures. Maybe not at the time but after some reflection. I never feel like a failure just because something I tried has failed.

—Dolly Parton

The phrase *reflective practice* is not just a teaching buzzword. A quick 2020 WorldCat search for the descriptor *reflective teaching* identified at least 2,167 books about this subject. People are really interested in reflective practice! Almost all of the instruction librarians that I know are reflective practitioners. They are mindful of the ways in which they approach their work, deliberate with the implementation of their instruction, and thoughtful when reflecting after any library session. Sometimes librarians don't know that they are being reflective—they just know that they want to do better, which is a reflection itself. What is reflection really? Why is reflection beneficial? How can we be more intentional with our reflective tendencies, and what might be the result of all of this ruminating on learning?

WHAT IS REFLECTIVE PRACTICE?

There are many standard definitions of reflective teaching. I rely heavily on Daniel Liston and Kenneth Zeichner's series entitled *Reflective Teaching and the Social Conditions of Schooling: A Series for Prospective and Practicing Teachers* to understand the many aspects of reflective practice. Liston and Zeichner define reflective practice in the first book of the series, *Reflective Teaching: An Introduction*, as having five features. A reflective teacher does the following:

1. Examines, frames, and attempts to solve the dilemmas of classroom practice.
2. Is aware of and questions the assumptions and values he or she brings to teaching.
3. Is attentive to the institutional and cultural contexts in which he or she teaches.
4. Takes part in curriculum development and is involved in school change efforts.
5. Takes responsibility for his or her own professional development.[1]

The authors refer to John Dewey's seminal 1933 work *How We Think* to emphasize that reflective thinking should be approached with three dispositions: open-mindedness, responsibility, and wholeheartedness.[2] In addition, they maintain that a reflective approach doesn't mean that you need to be paralyzed by constant contemplation, but that you should try to balance routine, action, and reflection.

I find these five features + three dispositions helpful in making reflective thinking concrete. If these features and dispositions define reflective practice, then many librarians are already reflective practitioners. They are thoughtful about how to approach classroom difficulties. They are self-aware and challenge their own assumptions about students, teaching content, and so much more. Many librarians have a true desire to be reflective about the cultural conditions of their academic settings, their own backgrounds, and the cultural contexts of their students' identities. Librarians try and sometimes succeed in participating in curriculum development in their academic departments and campus settings. Some campus committees enthusiastically recruit librarians to become part of campus-wide change efforts because they know that librarians get things done. Finally, the many professional development opportunities that are offered by librarian-centric organizations such as ACRL's Instruction Section prove that librarians have been taking responsibility for their own professional development for a long time.

In order to be successful at reflective practice, library instructors have to approach reflection with at least an open-minded desire to explore pedagogical themes beyond their own. They have to not only own the work they do, but also take responsibility for asking why something is or isn't working, and

think deeply about the impact of their teaching on themselves, the campus, and their students. Finally, they have to be wholehearted about their work, which means taking risks and sometimes failing but still moving forward.

Even if the desire is there to examine your classroom practice, or you want to be more open-minded about the cultural contexts in your classroom, how do you do these things? Understanding why reflective practice can be beneficial will help you determine how you can more easily become a reflective thinker.

WHY REFLECTIVE PRACTICE?

An objective can be loosely defined as the reason why we do something. Librarians are encouraged to create goals and objectives when planning their instruction. These objectives involve student learning. In creating a pedagogical objective, library instructors can then check themselves as to why they are taking a certain approach to their instruction or even teaching certain content. Do you create objectives, deliberately or unintentionally, when you teach? Then you are being reflective—you are examining your instructional practice; examining your assumptions by making your objectives achievable; and trying to understand the pedagogical context in order to connect what you are accomplishing with the students to what is being studied in the classroom. Presumably you have learned about the course content or assignment requirements in order to make your objectives relevant, and you may even be looking for additional training on how to teach well. Good librarians create objectives with an open mind, a responsible approach, and a wholehearted mindset. If you are creating objectives in your instruction, you are being intentional about your instruction and at least somewhat reflective in your practice. You are already a reflective practitioner! But why do you want to be reflective in your practice? What are the objectives for reflective practitioners?

Simply said, reflective practice allows you to assess your own instruction in order to be a better teacher. Do you identify similarities in your instruction for different classes and then try to build on those similarities? You are being reflective and trying to improve some aspect of your instruction. Are you teaching the same thing all of the time and think it's time to change things? You are being reflective by considering how to make your teaching more relevant. Any time that you examine your instruction or think about the context in which your teaching happens, you are putting reflection into practice, and the instruction is likely to be improved as a result.

Reflective practice is something that we can learn directly from the field of education and teacher training. Pre-service teachers read about instruction and watch others teach in order to learn how to teach themselves. They then apply what they learned from reading and observing by completing practicums and student teaching internships, where they have a mentor teacher

to help them reflect on what they're doing when they teach. Soon they are encouraged to be reflective on their own and become more independent in their work. Reflective practice can work the same way for library instructors.

While reflection might be considered an essential part of learning how to teach, reflective practice is also important for a veteran librarian who has taught for many years. Why do even more experienced library instructors need reflection? The information landscape is ever-changing, and new technologies and information streams may require revised approaches to library instruction. In addition, critical pedagogical trends have highlighted that our attitudes toward and our understanding of students should always evolve. Reflective practices allow us to be thoughtful about the nature of our instruction no matter how much experience we have as librarians.

Finally, if you feel that you're too busy to be reflective about your instructional work, that busyness is probably a sign that you need to set aside time to be thoughtful about your instruction, or you will become even more overwhelmed. Reflection can make your instruction easier to do, as well as improve its execution. You should try to find the time to put some of the following reflective methods into practice. Remember that I have repeatedly mentioned that students need time in class to really reflect on their learning and process what is happening. Library instructors need time to reflect on those things too in order to thoughtfully improve their teaching.

REFLECTION IN PRACTICE

There are many ways that reflective practice can be implemented. This chapter suggests a few that have worked in my experience, divided into three categories: reflecting on perspective, reflecting on teaching, and cultivating a reflective frame of mind.

Reflective Practice: Examining Your Perspective or Mindset

While it can be tempting to only look at your instruction in a granular way—to look at a particular exercise, database, or tech tool—I would recommend that a better first phase would be to take a step back and think more broadly. What do you care about? What are you trying to accomplish overall? What do students really need? Why are you doing what you're doing, not just in this class, but as a library instructor overall? Identifying your big-picture perspective helps you look at those other chunks of your instruction in a more meaningful fashion. You can then map such segmented questions of your instruction as "Am I teaching the right database?" or "Do students really learn to evaluate sources from this exercise?" to what you really want to do on a broader scale. This might also make your instruction more meaningful to you personally. You

can more easily connect all of the pieces of your instruction to something that is larger and might make more of an impact on your students' lives.

One thing that you can do to get started is to write a personal mission statement. During the 2019/2020 academic year, I worked with Laurie Alexander and Emily Sartorius to create a mentorship guide as part of the Institute of Museum and Library Services (IMLS) grant "Library as Research Lab," a project that brought academic librarians, information science students, and faculty together through mentored, library-focused research projects. All the participants created a personal mission statement in the winter of 2019 through a guided activity outlined in the mentorship guide.[3]

In the guide, we write that "articulating what you care about, determining what does not matter to you, and thinking about your future can be a powerful exercise in finding direction in your work." A mission statement is an exercise that helps you identify your core values, describe why those values are important to you, and examine how those values do (or do not) appear in your work. It also provides a moment for you to compare your values to those of your current environment. Do your values match the values of your academic institution, not just as stated, but as those values are practiced by your university community? This exercise helps you be reflective not only about your own instruction, but about that of your campus environment as a whole.

Another way to be reflective about your teaching philosophy is to examine various educational traditions. Again, Zeichner and Liston's text *Reflective Teaching: An Introduction* provides a great summary of many educational modes of thought. Do you think of education as primarily a student-focused endeavor (progressive tradition)? Or is the content that you teach the most essential component (conservative tradition)? Perhaps your motivation as an instructor is to consider education as a vehicle for social justice (social justice tradition). Or do you think of education as a journey, and that journey is more important than the destination (spiritual-contemplative tradition)?[4] You can learn more about these kinds of educational perspectives and then apply them to yourself. Is one of these traditions a more aspirational mode for you? Do you wish that you could be more progressive but feel like you have to focus on teaching databases and citation styles to the detriment of what you perceive as student needs? Do you identify with multiple traditions? If so, be explicit. In what circumstances do each of those traditions resonate with you? And once you have made that identification, how do those circumstances match the core values of your personal mission statement?

Once you have spent some time thinking through the essence of your teaching philosophy—your personal mission statement and how it is articulated in various educational paradigms—you are better able to see how that philosophy plays a role in your day-to-day teaching. You are ready to conduct a few more precise reflective exercises concerning your instructional practice. You have examined your instructional mindset and might be ready to alter that lens by teaching in a different way.

Reflecting on Teaching: Examining Your Teaching Practice

There are many different exercises, writing prompts, and thought experiments that can help you become more reflective about how you teach. One of the most valuable exercises that I've found is something I learned while training to be a crisis hotline volunteer; it's called Plus/Wish-Because feedback, a technique I described earlier as it pertains to student reflection (and which I called the Plus/Wish mindset). This exercise can also be applied to your own professional development. I have adapted it to include a component—the because component—that emphasizes the rationale behind the conclusions you draw in each part of the feedback cycle. This component was not included in my original crisis hotline training.

Plus/Wish-Because feedback is a summative assessment methodology that requires you to be specific and thoughtful about reflection in a particular teaching context. It requires you to ask yourself these two questions after you teach a class, while being sure that you know the reason why each of the answers is important:

1. *What did I do well?* Be explicit by finding context-specific examples such as, "I am glad about how I responded when a student asked a question for which I didn't know the answer. I didn't get flustered, and instead I asked for the student's e-mail address. I'm glad that I didn't feel pressure to answer the question in the moment because I will be able to better serve that student's needs with a more thoughtful answer later on."
2. *What do I wish I had done?* Specificity is required here as well. This part of the exercise is not just about identifying a circumstance when something didn't go well. The question is not, "What do I wish I had done differently?" This part is much more concrete because it prompts you to find an alternative approach to your actions or thoughts. In addition, you need to be explicit regarding the rationale behind your suggested alternative approach, so that you can articulate an understanding of when you could apply this technique again. An example would be, "I wish that when the student asked an assignment-specific question in class, I had referred that question to the course instructor instead of trying to answer it myself because the instructor would have been able to give a more complete response to that question."

As you may have noticed, a key word throughout this exercise is the word *because*. I have often heard that the most important word in the English language is not *please* but the word *because*. You want to examine why the conclusions you draw in this reflection are important. When you know why something does or doesn't work well, you can more easily apply that reflection to other circumstances.

Char Booth's book *Reflective Teaching, Effective Learning* and Michelle Reale's multiple works on reflection offer many more examples of reflective exercises.[5] They have suggestions for journaling as well, which might be a method that resonates with some librarians. I have a system of physical manila folders for each class, and I write reflective comments on the inside of every folder to remind me of my reflections when (or if) I ever teach for the same course instructor. I encourage you to organize your reflective practices in some way to cultivate a reflective frame of mind.

Cultivating a Reflective Frame of Mind: Personal and Professional Development

At this stage, it might seem overwhelming to consider all of these aspects of reflective practice. You can try just one or two things to help you start the reflective habit. The answers to some of the following key questions will help you cultivate a reflective frame of mind:

- Do you have any experience actively critiquing curricular or instructional strategies? Consider reading something like Esther Grassian's *Information Literacy Instruction: Theory and Practice*, one of the foundational texts in the library instruction field. Spend some time with a leading library publication like *In the Library with a Lead Pipe* to get a sense of what is currently important in the library world, and then apply it to what you are teaching.
- When you think of a problem, do you authentically try to see it from different angles? If you have trouble seeing alternatives to what you're doing, is there a way that you can foster a mentorship relationship with someone in your organization? If not, consider participating in something like the ACRL Instruction Section's Mentoring Program.[6]
- How much agency do you think you have to affect change? Do you think that librarians should play a leadership role in curriculum development or stick to the classroom? You may be disappointed if you spend a lot of time reflecting on your work but then don't have the tools or disposition to make changes happen if needed. A talk with your supervisor or a mentor can help you see where you can make change happen.
- How much of an honest, critical lens can you apply to your own actions? For example, the Plus/Wish-Because feedback approach doesn't work well if you can't see any room for improvement, but let's be honest: there is almost always something that you can do differently. And building on that . . .
- Do you need a community for reflective practice to help show you alternative perspectives? You might need support when you are

inevitably confronted with your own shortcomings. One of my guiding principles asks you to anticipate how you are going to manage disappointments or frustrating circumstances. Perhaps having a supportive community of practice will help you work through these concerns. Be kind and generous to yourself and others, so as to manage both your expectations of reflective practice as well as the difficulties you might face while being reflective. Pursuing professional development together can be reflective. Michelle Reale describes this kind of professional development through a librarian journal club in her book *Becoming a Reflective Librarian and Teacher.*[7]

- Reale also posits in her book that reflection is a cyclical and not a linear process. It can take a lot of work sometimes, so you should make time for reflection, perpetual problem-solving, and questioning the status quo. Reflection is not a process that has a beginning, middle, and end.[8]
- Most importantly, listen to yourself, and trust your students, faculty, and others because reflection is hard work that hopefully you won't have to do by yourself.

PUTTING IT ALL TOGETHER: REFLECTION IN PRACTICE

While reflection does not have to be a solitary activity, it is your own responsibility. In fact, I encourage you to take ownership of the reflection and review of your instruction so that you can have thoughtful conversations with your supervisors, faculty, and students that are grounded in concrete ideas. Reflection can be empowering because it allows you to make the changes that you think are important, grounded in the philosophy and values that resonate with your standards. It may be intimidating, but reflection already does happen—many faculty and students will thoughtfully consider not just what you are teaching but how you are teaching as well. Whenever you are confronted with an instructional situation that you have had before, you probably reflect on that past situation and apply what you learned the first time. If you are reflective about those past lessons, you can implement what you have reflected upon—or let's just say it—learned from those past experiences in a more measured and meaningful manner. As the educator and philosopher John Dewey declares, "We do not learn from experience. We learn from reflecting on experience."

NOTES

1. Daniel P. Liston and Kenneth M. Zeichner, *Reflective Teaching: An Introduction*, 2nd edition (New York: Routledge, Taylor & Francis Group, 2014), 6–7.
2. John Dewey, *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process* (Boston: D. C. Heath, 1933).
3. "Mentoring Guide: Activity: Personal Mission Statements," Library as Research Lab, June 12, 2020, https://liblab.labs.si.umich.edu/mentoring-guide-activity-personal-mission-statements/.
4. Zeichner and Liston, *Reflective Teaching*, 50–76.
5. Char Booth, *Reflective Teaching, Effective Learning: Instructional Literacy for Library Educators* (Chicago: American Library Association, 2011).
6. "IS Mentoring Program | Instruction Section," Association of College & Research Libraries, American Library Association, https://acrl.ala.org/IS/is-committees-2/committees-task-forces/mentoring-program/is-mentoring-program/.
7. Michelle Reale, *Becoming a Reflective Librarian and Teacher: Strategies for Mindful Academic Practice* (Chicago: American Library Association, 2017), 87.
8. Reale, *Becoming a Reflective Librarian and Teacher*, 7.

Conclusion

I touch the future. I teach.

—Christa McAuliffe

Librarians such as Scott Walter and Amanda Nichols Hess, among many others, have been conducting research and providing insight into the intersection of academic librarians' professional roles and their identity as instructors. Academic library professional organizations such as LOEX and ACRL's Instruction Section are devoting forums and round table sessions to discussions of librarians as teachers, and there are many articles and books which highlight the ambiguity that librarians sometimes feel as educators. It can be difficult for librarians to see themselves as teachers when they are not in the classroom every day all day like high school teachers are. Traditional faculty and graduate student instructors can develop ongoing academic relationships with students over time in which the conventional roles of student and teacher are clearly defined. By contrast, librarians are often featured in syllabi as guest speakers or their instruction is labeled as a "library day" without mentioning that any teaching will be happening at all.

Even if library instruction continues to be considered an add-on by some faculty members, this type of instruction continues to grow, whether conducted in the classroom, in the library, online, or by meeting such information literacy needs as thinking critically about the news. Practice can make perfect,

and librarians should teach as often as they can to become more comfortable with a teaching role. Academic librarians' instructional skills can actually grow in the classroom. Pre-service teaching programs utilize this method as an essential component of teacher education. And while part of this practice includes preparing for class and starting the class off right, many current teachers will say that there is no replacement for actually trying things out in the classroom with real students.

Managing student motivation, facilitating good classroom discussions, fostering critical thinking in the classroom, listening to students, balancing multiple course needs with time constraints, and constructing engaging instructional experiences may take practice. Conducting the class will actually help librarians feel more like teachers. Helping students make meaningful connections between library resources, information literacy skills, and course objectives is the heart of library instruction, and we will feel more like teachers when we feel more comfortable in the middle of the library session. How do we motivate students to make sense of information literacy concepts using classroom discussion and active learning while both listening to them and dealing with time constraints, especially if they become disengaged as the story of the lesson unfolds? This may seem like a lot to do, but it can be done in an hour or an hour and a half. I've seen it happen in my own practice and in the instruction that my colleagues facilitate every day.

Library schools need to evolve curricula to meet the ever-changing needs of future librarians, but library instructors currently in the field must also be able to see themselves as teachers in order to grow in this area. Access to professional development resources can be difficult for library instructors to obtain, as recently highlighted in the *In the Library with the Lead Pipe* article "Service Ceiling: The High Cost of Professional Development for Academic Librarians."[1] Scott Walter, in his seminal article "Librarians as Teachers: A Qualitative Inquiry into Professional Identity," notes: "Simple mastery of basic instructional competencies, however, will not help librarians to develop the sort of teacher identity that research in teacher education suggests is important to their ongoing professional development."[2] As instructional professional development needs expand beyond the simple mastery of basic competencies, library administrators, professional organizations, and the larger academic library community need to come together to make it easier for librarians to improve their instructional practice. The cost of library conferences is one concrete area for improvement, and the library community can collaboratively develop an approach that more modestly supports our professional organizations while still offering real value as defined by members throughout that community. Moreover, professional development barriers not only stymie the opportunity for all librarians to improve their teaching in a meaningful

way but also favor an elite group of librarians who are the only ones that can afford these privileges. These privileged few are often a homogeneous group that does not diversify our profession or reflect the diversity of our student populations.

Reflective practice has improved my teaching, but it took some time for me to be able to think critically about what I was doing in the classroom. Observing other library instructors made a huge impact on me, and I hope that you have the opportunity to do the same. Reflecting on someone else's teaching, even if I didn't share those reflections with that person, was a way that I could practice thinking critically about instruction. In addition, I read a lot about library instruction and education in general. I have set up e-mail alerts for the journals that are focused on my subject specialty, children's literature, and also for *College and Undergraduate Libraries, Inside Higher Ed,* and *The Chronicle of Higher Education*. I want to know what is happening in the larger context of higher education, and then I draw my own conclusions on how it might impact the library community. I read *In the Library with the Lead Pipe* because it is shaped by a team of grassroots librarians from across the library community. I also read the articles selected for the ALA Library Instruction Round Table's "Top Twenty" list every year because I can count on those articles to represent the highest-quality library research and practices in our field.

Finally, mentorship has been an invaluable activity for me. I have had some amazing mentors throughout my multiple careers. In becoming a mentor myself, I am always reminded of what it's like to be new to the instruction experience, and I follow my guiding principle of reminding myself of what it is like to be a student. I learn just as much from mentoring librarians and library students as I did from being mentored myself. I recently participated in the work of an IMLS research grant entitled "Library as Research Lab" where mentorship was highlighted. I worked with Laurie Alexander and Emily Sartorius to publish some of the mentorship activities in which we participated for the grant's work.[3]

This book is my way of providing some of the same advice that I offer when I mentor future and current librarians. I learned just as much when I revisited some of my most cherished educational researchers, bloggers, and educators like Paulo Freire, John Keller, Annie Downey, Ron Ritchhart, Tracey Tokuhama-Espinosa, and Joshua Eyler. In revisiting their work, I became curious about research that was new to me, and so I thoughtfully considered Michelle Reale's work and the many articles that focus on teaching in *The Chronicle of Higher Education*. I hope that reading this book will motivate you to look beyond the advice offered here and explore new ideas that will advance your own teaching practice. I wish you the best of luck!

NOTES

1. Bridgette Comanda et al., "Service Ceiling: The High Cost of Professional Development for Academic Librarians," *In the Library with the Lead Pipe*, 2021, www.inthelibrarywiththeleadpipe.org/2021/service-ceiling/.
2. Scott Walter, "Librarians as Teachers: A Qualitative Inquiry into Professional Identity," *College & Research Libraries* 69, no. 1 (2008): 60.
3. "Mentoring Guide," May 29, 2020, Library as Research Lab, https://liblab.labs.si.umich.edu/mentoring-guide-home-page/.

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