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Learning with Students in the Sandbox: Our Stories (chapter 2)

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CHAPTER 2

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Our Stories

Amy S. Jackson, Cindy Pierard, and Suzanne M. Schadl

Amy

My introduction to the library came as a music performance student. Although the library was the natural connection to the repertoire (scores) and interpretations of the repertoire (recordings), this connection ended with the circulation transaction. As I became more serious about performing a piece of music, it was expected that I would purchase the score and recordings as an investment in my art. At this point, I would return the music to the library, and the library was no longer my connection to the music. However, in my role as Performing Arts Librarian, I questioned why it needed to end at this point. Was a student interpretation of a piece of the repertoire any less of an interpretation than the recordings in the library? Professional recordings may be held in higher regard by other musicians, but how can students advance without the opportunity to practice their art? How can the library be more supportive of the initial match between performer and composer when the student checks out a score? The natural extension of the circulation

transaction should be a performance in the library demonstrating how the student engaged with the music we made available to them. Expanding from my role as the Performing Arts Librarian to the Director of Instruction and Outreach, this support of student performances extends to student lectures in the library, and finally to archiving student work in the archive or repository. By making capstone projects, dissertations and theses, artwork, music performances, and other student works available in the library, we demonstrate our continued support and interest in how students are engaging with our resources. By engaging with these students, we show interest in the entire cycle of their research and learning, becoming a place to create and preserve their work, and more than gatekeepers of the "great works."

Cindy

I'm the daughter of a librarian and a historian. I grew up in libraries and archives, and I've always been drawn to the stories found in these spaces. As a librarian myself, I've become interested in how libraries can provide students with venues for practicing and sharing their work, whether that work is an experimental art project or a scientific poster. Many students have grown up with access to technology that encourages them to create and share—whether the subject is a remix of favorite samples or a Halloween costume hack. And yet we don't do much to foster a student-centered culture of creative and scholarly sharing within library spaces. This is a missed opportunity, especially when we consider how *publicly displaying competence* has been shown to reinforce learning.[1] The strategies that libraries can use to facilitate tinkering and sharing by students are many. Libraries with makerspaces can provide tools, materials, and problems that inspire students to produce and even teach solutions. Libraries with gallery space—or even a blank wall and some seating—can move beyond showing the products of a class project to inviting student artists to discuss the role of inspiration and frustration in the creative process. Capturing and supporting the process as well as the product, whether in a repository, in a zine, or as part of an affinity group, can provide a source of inspiration and a sense of community for students who are finding their voices and adding their stories to broader discourse.

Suzanne

I came to the library from the classroom where I taught history, literature, and Portuguese. Training in Latin American studies introduced me to Brazilian playwright Augusto Boal, who applied critical pedagogy to group theatre.[2] He transformed individuals in audiences into "spect-actors" who intervened

with and changed the action on stage. Transferring this concept to library instruction requires me to reject the typical request from classroom instructors to "show" library databases. Instead I invite them and their students to join me on the library platform. Rather than showing them databases, we collectively examine the metadata in their syllabi and link that information with students' inquiries in the moment. This method turns instructors' syllabi into scripts, students' research questions into stage directions, and facilitated library linking into action. Databases barely announce their presence, serving only as backdrops for the content linking students' keywords with the authors, journals, presses, call numbers, and collections identified on professors' syllabi. Adapting this Boalean role (as in Boal and boolean) within a library learning setting enables me to work with students and teaching faculty in the disjunctures between traditional and emerging practice.[3] In this middle—or third space—I learn with others through processes of communal exploration and consciousness raising, or critical pedagogy—where students and instructors are necessarily and simultaneously producers and consumers of information and learning. Together with students, I have argued elsewhere for the option of using library space to practice, rather than just study, disciplines.[4] These opportunities enable students to learn as they contribute further to academic discourse.

A Response: For Action

The title of this book, *Scholarship in the Sandbox*, was inspired by our mutual desire to create a welcoming environment for students practicing the art of scholarly discourse surrounded and inspired by works of others. Although we use the term *scholarship*, we do not limit our definition of scholarship to text-based resources. We embrace all types of scholarly and creative works, including, but not limited to, written works, performed works, spoken works, and created objects. Information professionals use the term *sandbox* to identify restricted physical and virtual spaces for experimenting with new services, workflows, or products. While some situate this enclosure in library learning commons, others use the term to denote private electronic spaces that enable programmers to experiment, testing code and developing software without impacting publicly accessible systems.[5] In this book, the sand is emerging scholarship, which ultimately finds its way out of the box—perhaps best described here as university learning spaces. The collection of stories accumulated in this book demonstrate that the sand and the box intersect with one another in varied spaces that link classroom learning with physical and virtual locations as well as with information systems and communities that extend far beyond our campuses.

The linking mechanisms that Derek Bruff identifies as inadvertent connections between students, their course work, and audiences beyond their reach—"the dude" from his student's footnotes—underscore important connections between people and their scholarship or creativity. Whether students share this production in blogs, performances, repositories, zines, makerspaces, galleries, or "spect-acting" with their professors on library platforms, the experience—as Bruff illustrates—is transformative because production ties classroom learning into a meaningful knot with research or practice done outside of the classroom. This anchor enables students to employ their own academic or creative practices, establish stronger footholds in their disciplines, and publicly display competence. Engaging library spaces and services in creating, preserving, and sharing these kinds of experiences expands the confines of the sandbox to create more diverse, inclusive, and impactful innovations.

This book is divided into four sections: library as laboratory, library as forum, library as archive, and a final section about articulating the value of these roles. Each section includes diverse perspectives, including those of students, classroom professors, academic staff, and librarians, on its topic. Institutions represented include research universities and undergraduate colleges from the United States and Canada. Contributors from the North Carolina State University Libraries are included in each section as "spotlights" because of their long-term commitment to student success in learning spaces that inspire innovation. Part 4 of these spotlights describes the values and principles that unify these contributions. Collectively, all chapters in this book address how libraries are currently expanding their engagement and occupying more central spaces as practical laboratories outside of the classroom. They reveal efforts to curate student work and tips for promoting and preserving access to this production through programming and services that affirm libraries' roles in intellectual processes. Following Bruff's focus on collaborative open-ended problem solving as essential for engaging students as producers of knowledge, these chapters reflect on collective learning in a sandbox where the answers are far less important than the multiplicity of prospective solutions.

On Essential Elements: Open Ends, Audiences, and Student Autonomy

As Bruff notes, preparing students to take what they learn and apply it in differing contexts requires opportunities to practice, fail, troubleshoot, and try again. The student voices in this book confirm the value in this approach. Temnyalova, for instance (chapter 4), concludes that pathways leading to failure underscore the importance of the journey and the map. Morse and

Gordon (chapter 4) value the experimentation required for a final product over the end results, shifting the focus of learning from the final product to the process. Hackenberger (chapter 21) illustrates how tackling problems and questions without a clear way forward illuminates the pitfalls of theoretical understanding without praxis.

Bruff also makes a case for students having an audience outside of class. Students' writing in this book confirms his claim that sharing academic production publicly raises the stakes. Beyond the connections Bruff highlights between student projects, media systems, and potential outside interests, students speaking throughout this book address the ethics of information sharing and the broad impact of making their work available in open-access environments. Kramer (chapter 21), for example, reflects on accountability, acknowledging that making academic work accessible online ties students' conclusions directly to their subjects, ultimately exposing both. Separately, Cain (chapter 10) acknowledges that student research influences the way people frame, understand, contribute to, and challenge norms, also addressing accountability.

On autonomy, Bruff argues that giving students choices in their approaches and methods helps them own the final result and engage more deeply in its effects. One student featured in this book adds an important twist to this equation: Apata (chapter 11) demonstrates the application of classroom theory in library programming, blending her understanding of a disciplinary text addressing doing good as opposed to sounding good with important questions about silence and advocacy among librarians. In her case, and in many others addressed throughout this book, opportunities are taken by students rather than given—underscoring the importance of opening doors for collaboration and opening minds to help identify prospective collaborators on campus and off. Acknowledging the power of these connections enables students, faculty, and librarians to work and learn together in community, ultimately reaching beyond the sandbox to pave a way toward greater diversity and equity in higher education.

Each section of this book brings together varied perspectives on the importance of sharing student scholarship and creative work, as well as case studies illustrating how it can be done. Rather than focusing exclusively on any single part of the community, the book incorporates the viewpoints of teaching faculty, academic staff, community members, and students themselves. The idea is to illustrate the benefits of extending teaching and learning beyond instructor/student or library/student binaries to a multidirectional map. The goal is to create a dialogue around the idea of the academic library as a laboratory for emerging scholars and creatives to practice and test their disciplinary work, as a forum for sharing that work, and as an archive where work can be sustained and curated to continually inspire new audiences.

On Libraries as Labs, Forums, and Archives

In our model we propose new roles for libraries based on current practices, expanding our scope to embrace student-produced content as a significant addition to the existing library. We examine our current roles as laboratories, forums, and archives, documenting ways in which participating in these spaces benefits student learning and engagement. And we consider gaps in learning practices that the library is well positioned to fill.

If we start with the idea of the laboratory, we immediately have a concept that looms large in popular imagination, whether one's individual picture is that within Dr. Frankenstein's gothic castle, Batman's Cave, or the *USS Enterprise*'s Holodeck.[6] Interestingly, and despite laboratories' central role in science education, few scholars defined student learning objectives for the laboratory before the early 1980s. Many schools and colleges had labs in which students practiced specific methods or techniques, but little was known about how or why such practices supported broader goals of scientific learning.[7] And yet labs certainly have capacity to support learning. The scientific method involves observing something that inspires questions, doing background research, developing a hypothesis about possible answers, testing the hypothesis through experiments, and analyzing the data to draw conclusions or pose more questions. Library-based labs recognize the value of process by offering spaces that encourage testing ideas and analyzing data as a pathway to connecting to broader ideas. Indeed, many libraries provide labs to support specific areas of digital scholarship, with the digital humanities standing out as the primary focus of this literature.[8]

Seymour Papert has argued that the process of knowledge creation works particularly well when learners have the opportunity to design, create, and construct (constructionism), especially when the process of creation holds personal meaning for them.[9] Papert's ideas are championed through the emergence of makerspaces, community work spaces outfitted with tools and materials that share a goal of encouraging participants to learn through making. Makerspaces have spread rapidly since the concept emerged in the mid-2000s, and they are now found in a variety of settings, including schools, museums, and libraries.[10] For student makers or producers, this type of library lab offers a chance to experiment, to learn or teach a new skill, to test a process or build a prototype, and to come together with others to share ideas, problems, and solutions.

Knowledge is also developed and refined socially, as Vygotsky notes, through social contexts that involve student-student and expert-student interactions in real-world situations that build on diverse languages, skills, and

experiences.[11] Thus, while laboratories can support the development of understanding through the acts of observing, designing, and creating (and failing), forums facilitate interactions that lead to knowledge creation as a result of community. Libraries are recognized as hearts and brains, bringing learning in and pushing it back out into the community, but the phrase "library as forum" is recent and limited to literature on public libraries, particularly those engaged with K–12 students in science, technology, engineering and math (STEM) learning.[12]

In the language arts, also in reference to K–12 teaching, Lewison, Flint, and Van Sluys illustrate four dimensions for engaging critical literacy. Each of these finds its way into critical librarianship. They are (1) disrupting the commonplace, (2) interrogating multiple viewpoints, (3) focusing on sociopolitical issues, and (4) taking action and promoting social justice.[13] Without naming it, librarians engage the concept of forum in the *Framework for Information Literacy*, noting that scholarship is conversation.[14] Even so, many framework studies fall short of critically assessing who these conversations include and exclude. Critical literacy and pedagogical theory, which surfaced in librarianship in the aughts, has enabled more discussion of inequitable access to information and its modes of production and dissemination.[15] In addition to underscoring the uneven nature of constructed and contextual authorities and the legitimacy of information, critical librarianship advocates for practicing socially just librarianship through more inclusive practices like those Boal embraced in group theatre.[16]

Laboratories and forums support experiential learning and conversation in the present. However, libraries also provide access to learning and conversations from the past, archived for present and future learners. "Throughout recorded history archives, libraries, and other repositories have evolved to provide access to and preserve traces of the past for the future."[17] Although most librarians and archivists understand the subtle distinctions between libraries and archives, recent conversations in the literature provide a deep discussion regarding the role of the archive versus the role of the library, and the place and value of the archive. Traditionally, the role of archives has been the preservation of unique items, while libraries emphasize dissemination of widely published materials. However, according to Manoff, the impact of digitally reproducing historical artifacts, recontextualizing them, and making them widely available disrupts this traditional divide between the library and the archive.[18] Paulus believes that "academic librarians and archivists have the opportunity to build on the recognized value of the library as an archive, to position the library as a site of creation, to confront the reality of digital 'archives in the wild,' and to reconceptualize their roles within the archival life cycle."[19] Grafton's 2007 essay in the *New Yorker* brings this full circle by pointing out that medieval libraries were sites of both creation and preser-

vation.[20] As new platforms and technologies evolve, lessening demands on physical space, libraries have the ability to participate in the cycle of information production, creating a natural flow in conversation with students from the creation to the preservation of their work. This book uses the term *archive* in a metaphorical sense, meaning a repository of works and artifacts, digital or physical. The Library as Archives section of this book focuses on collecting intellectual property and the rights associated with this intellectual property. Most case studies involve use of an online institutional repository managed by librarians. However, we do not limit our discussion to institutional repositories specifically and also consider the collection of physical objects created by students. By situating student work within the sphere of work from other scholars, we can provide an authentic audience and expand the reach of this research.

Answering the Call

Derek Bruff calls for the library to be an inspiration for emerging scholars. He describes libraries as both places of collaboration and collaborators on campus. As Inayatullah notes, our current historical moment "of edutainment and peer-to-peer information sharing" presents libraries with a challenge to expand on their roles as warehouses of knowledge and to embrace the additional roles of being laboratories for creating knowledge.[21] Following that idea, this book presents several models for providing a supportive sandbox environment in which students, teaching faculty, and librarians can practice their academic work through collaboration. If libraries do this successfully, we will enhance our value to our students, our collaborators, and our institutions.

Notes

1. George D. Kuh, and Ken O'Donnell, *Ensuring Quality and Taking High-Impact Practices to Scale* (Washington, DC: Association of American Colleges and Universities, 2013).
2. Paulo Freire, *Conscientização* (São Paulo, Brazil: Cortez & Morales, 1979); Augusto Boal, *Theater of the Oppressed* (London: Pluto Press, 2000).
3. Sohail Inayatullah, "Library Futures: From Knowledge Keepers to Creators," *Futurist* 48, no. 6 (2014): 24.
4. Suzanne Michele Schadl, Molly Nelson, and Kristen S. Valencia, "Uncommons: Transforming Dusty Reading Rooms into Artefactual, 'Third Space,' Library Learning Labs," *Journal of Learning Spaces* 4, no. 1 (2015): 41–52.
5. D. Russell Bailey and Barbara Gunter Tierney, *Transforming Library Service through Information Commons* (Chicago: ALA Editions of the American Library

Association, 2008); Margaret Brown-Sica, Karen Sobel, and Erika Rogers, "Participatory Action Research in Learning Commons Design Planning," *New Library World* 111, no. 7/8 (2010): 302–19.

6. Colin Lecher, "The 10 Best Fictional Laboratories, Ranked," *Popular Science*, August 29, 2013, https://www.popsci.com/science/gallery/2013-08/10-greatest-fictional-laboratories.
7. Avi Hofstein and Vincent N. Lunetta, "The Role of the Laboratory in Science Teaching: Neglected Aspects of Research," *Review of Educational Research* 52, no. 2 (1982): 201–17.
8. Tim Bryson et al., *Digital Humanities: SPEC Kit 326* (Washington, DC: Association of Research Libraries, 2011).
9. Seymour Papert, "A Word for Learning," in *Constructionism in Practice: Designing, Thinking, and Learning in a Digital World,* ed. Yasmin B. Kafai and Mitchel Resnick (Mahwah, NJ: Lawrence Erlbaum, 1996), 1–24.
10. Micah Altman et al., *Rapid Fabrication/Makerspace Services: SPEC Kit 348* (Washington, DC: Association of Research Libraries, 2015).
11. Lev Vygotsky, *Mind in Society* (Cambridge, MA: Harvard University Press, 1978).
12. Marlete Kliman, Nuria Jaumot-Pascual, and Valerie Martin, "How Wide Is a Squid Eye? Integrating Mathematics into Public Library Programs for the Elementary Grades," *Afterschool Matters,* no. 17 (Spring 2013): 9–15.
13. Mitzi Lewison, Amy Seely Flint, and Katie Van Sluys, "Taking on Critical Literacy: The Journey of Newcomers and Novices," *Language Arts* 79, no. 5 (2002): 382–92.
14. Association of College and Research Libraries, *Framework for Information Literacy for Higher Education* (Chicago: Association of College and Research Libraries, 2016), http://www.ala.org/acrl/standards/ilframework.
15. Shana Higgins and Lua Gregory, *Information Literacy and Social Justice* (Sacramento, CA: Library Juice Press, 2013).
16. Boal, *Theater of the Oppressed*.
17. Michael. J. Paulus, Jr., "Reconceptualizing Academic Libraries and Archives in the Digital Age," *portal: Libraries and the Academy* 11, no. 4 (2011): 944.
18. Marlene Manoff, "Archive and Database as Metaphor: Theorizing the Historical Record," *portal: Libraries and the Academy* 10, no. 4 (2010): 385–98.
19. Paulus, "Reconceptualizing Academic Libraries," 940.
20. Anthony Grafton, "Future Reading: Digitization and Its Discontents," *New Yorker*, November 5, 2007, https://www.newyorker.com/magazine/2007/11/05/future-reading.
21. Inayatullah, "Library Futures," 24.

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