CHAPTER 23\*

## **Mapping the Chaos:**

## Building a Research Practice with Threshold Concepts in Studio Art Disciplines

## Ashley Peterson

Art-making is an expression of the intellect. A viewer, observing a work of art, can guess at the physical labor required: sketches, models, editing, iterations, false starts. What about the intellectual labor? While not always apparent, this is no less vital a component than the manual skills required to make art.

I am a Research & Instruction Librarian at a small private art college. In this chapter, I explore the role of the academic art library, whose patrons express thinking, learning, and knowledge as visual art objects. A case study illustrates how the threshold concept Searching as Strategic Exploration from the ACRL Framework for Information Literacy for Higher Education, along with other theoretical concepts and institutional goals, shape the integration of information literacy concepts into courses in studio art disciplines. I argue that librarians must assume a leading role in helping studio art students build research practices that inform and enrich their artistic practices, and in answering the question: What constitutes an information-literate artist?

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#### Artists and research

What is the role of research in the art-making process? Certainly, art can be a deeply personal expression or a display of in-born technical virtuosity, in which cases the need for gathering and synthesizing external information may not be apparent. However, in most academic studio art programs, students are encouraged to make art that is thoughtful, engaging, and in conversation with other art and ideas.

In his book Art Practice as Research, Graeme Sullivan argues that the "imaginative and intellectual work" that results in a work of art is a form of research.<sup>2</sup> In Sullivan's view, art is a document that expresses meaning and, potentially, new knowledge.<sup>3</sup> This suggests that an artwork, if it is the result of rigorous, careful research, is an important part of a scholarly conversation. In his article about the importance of forming good research questions to enrich the art-making process, George Petelin supports this notion when he claims that a work of art does not point toward an answer to the research question, but is itself the answer.4

If, following Petelin, research is an indelible part of artistic work,<sup>5</sup> it needs to be made visible and emphasized for students in studio art programs. It is within this process of inquiry, reflection, learning, and experimentation that librarians can situate themselves as an indispensable resource for student-artists.

### The librarian's role

There is a long tradition of library support for visual arts-based research. Journals such as Art Documentation, Art Libraries Journal, and the Visual Resources Association Bulletin abound with case studies detailing thoughtful, creative approaches to working with academic studio art communities. These approaches come from all corners of librarianship, from technical services to digital humanities to research education. While all departments in a given academic library are essential to supporting community learning, this chapter will specifically address the role of librarians who work directly with patrons, one-on-one or in a classroom setting, to develop and hone their research abilities.

A crucial first step toward teaching research skills to visual artists is to understand how they find and use information in the creative process. William Hemmig provides a model for this in a pair of articles from 2008. In one, he conducts a study of academic literature addressing the information needs and information-seeking behavior of practicing visual artists. He concludes that the majority of these studies focus on how artists use libraries, rather than on how they more generally seek out information and conduct research.<sup>6</sup> Following this literature review, Hemmig conducted his own study of working artists and their information needs and drew several conclusions about how libraries can better serve this population.<sup>7</sup> Hemmig's work both illuminates some commonalities in artists' information needs<sup>8</sup> and demonstrates the importance of understanding the information needs of a user base within and, most crucially, beyond libraries.

In an academic art library context, it is of course useful to understand how students seek information and incorporate it into their creative processes. However, the end game is not to discover what students want and provide it; academic librarians need to assume a leading role in educating studio art students about effective research practices. Key to this is a strong alignment with faculty, both at the individual and administrative levels. Building trust and mutual respect between a librarian and an instructor is vital, as is the library's role in shaping the curriculum of an entire academic department or school. Increasingly, the art librarianship literature is arguing for this kind of collaborative, programmatic relationship.<sup>9</sup>

# Information literacy at the School of the Museum of Fine Arts, Boston

The School of the Museum of Fine Arts (SMFA), Boston is a small private art college offering bachelor's and masters' degrees in studio art. To describe the SMFA Library's approach to information literacy education, it is crucial to begin with an overview of the curriculum. The case study outlined shortly is specific to the Bachelor of Fine Arts (BFA) degree program. BFA students are required to complete 76 studio art credits, as well as 14 academic courses at the SMFA or at Tufts University.10 First-year BFA students are required to complete two courses in Writing and Composition, WRI 1 (or WRI 3, for English-language learners) and WRI 2. Instructors in each WRI 1, WRI 3, and WRI 2 class are required to work with a librarian to teach students research skills and information literacy concepts. Information literacy learning goals are determined in conjunction with the Writing and Composition program coordinator, and learning outcomes for class research sessions are set with the course instructors. Theoretically, these sessions are the first structured points of contact that BFA students have with SMFA library staff and resources. As yet, there is no structured point of contact between librarians and BFA students beyond the WRI classes, though many studio art and academic course instructors do schedule class visits to the SMFA Library. The goals and content of these sessions vary, but librarians always strive to align session content

to course curriculum and to build on the foundational information literacy skills taught in the WRI classes.

Beyond considerations of curricular alignment, there are philosophical underpinnings to information literacy education at the SMFA. Of primary value is the acknowledgement of browsing and serendipitous discovery as legitimate and essential components of the research process. The research habits of SMFA community members, as observed by librarians and faculty, bear this out, as do trends observed broadly: William Hemmig notes at the conclusion of his literature review of artists' information-seeking habits that browsing is a crucial method of discovery for artists.<sup>11</sup> While art librarians have long understood the importance of chance encounters, librarianship in general is trending toward a more serious consideration of this phenomenon. In 2011, Birger Hjørland published a study of the library literature on browsing. He concludes that there have been very few attempts to understand and explicate browsing behavior and calls for a renewed effort to study it.<sup>12</sup> A similar plea is made in a recent conference paper about browsing and serendipitous discovery in the electronic environment. The authors maintain that as online searching has become an important method of information discovery, systems and tools have been designed that focus on search precision at the expense of the browsing experience.<sup>13</sup> They call for a new approach to online discovery, one that allows for multiple modes of information finding—"structured and unstructured, linear and serendipitous."14 One desired outcome of browsing is, of course, serendipitous discovery: finding something illuminating, confounding, or just plain interesting that was not being consciously sought. Naresh Kumar Agarwal attempts to construct a definition of serendipity as it impacts information-finding. An important take-away from Agarwal's study is the notion that an unexpected discovery may not be of much importance to the research process in and of itself; what comes before and after a serendipitous encounter is just as important as that "aha!" moment.15 Information-seekers should consciously open themselves to the serendipitous encounter, and following a discovery should thoughtfully consider why what they found has resonated and how it will be of value.

Another animating component of the SMFA Library's approach to information literacy is the notion of the library as cabinet of curiosities. Historically, cabinets of curiosities emerged in Europe in the early modern period (fifteenth through seventeenth centuries) and are the forerunners of the contemporary museum. Found mostly in the homes of the wealthy, these cabinets—which sometimes were literal cabinets and sometimes encompassed entire rooms—comprised collections of human-made and naturally occurring objects. Typically, the purpose of a cabinet was on the one hand to "define, discover, and possess" and to, via arrangement and juxtaposition,

inscribe objects with layers of meaning that together suggest an overarching narrative of wonder. <sup>16</sup> Essentially, cabinets were a way for wealthy Europeans to order and make sense of their world, just as that world was expanding via discovery and exploration, both in terms of scientific thought and colonization. <sup>17</sup> Many contemporary thinkers see the curiosities cabinet as an apt metaphor for the process of research and knowledge creation, and it describes the function of many academic libraries: they are places where the juxtaposition of seemingly disparate things, when activated by a curious mind, can constitute new knowledge. This notion heavily informs how SMFA librarians encourage users to engage with libraries and approach the research process.

## Why Searching as Strategic Exploration?

Librarians at the SMFA encourage students to be deliberate and metacognitive in their approach to research, and to carefully consider how it enriches their work. We want students to achieve this through the development of a research practice that informs, supports, and in some instances might be their artistic practice. The goal is not so much to show students the steps to do this (though that is part of it) as it is to help them develop the knowledge practices and dispositions required to develop a research practice. The ACRL's Framework for Information Literacy for Higher Education resonates with this approach, and has helped SMFA librarians situate our work within a larger conversation about information literacy in higher education.

Threshold concepts, one of the conceptual underpinnings of the Framework, provide a compelling avenue toward student mastery of information literacy. Given the foundations of research education at the SMFA, a concept that holds great relevance for our students is Searching as Strategic Exploration.18 "Strategic exploration" is an apt way to describe how we encourage students to approach the artistic research process: strategic emphasizes the importance of being purposeful, productive, and self-reflexive, while exploration implies values that animate the entire endeavor—curiosity, creativity, and a sense of wonder. Where we see this as a potentially troublesome, 19 yet crucial concept is in the emphasis on the nonlinear, iterative, and serendipitous aspects of finding information. Speaking personally, I was well past my formal education and several years into my career before I realized that false starts, dead-ends, and "aimless wandering" through information during a research process are not wasteful or unproductive; they are essential to the final outcome. While so-called "experts" (art librarians, artists with a developed research practice) might acknowledge the importance of what can seem like creative wheel-spinning and embrace the complex connection between

research and making, student-artists need to be deliberately led to this way of thinking. Many first-year BFA students come from an art-making background at the high school level that focuses on technique over concept, and the knowledge practices and dispositions that come with crossing the Searching as Strategic Exploration threshold are a means to a considered, critically engaged artistic practice.

## Case study overview

During the spring 2016 semester, SMFA Librarians worked closely with a jewelry and small metals instructor to develop the research content of her Advanced Jewelry Studio/Seminar course. The seven students in this course were mostly in their third and fourth years of the BFA program, and one was a second-year MFA candidate. All had taken classes before in jewelry and small metals, and thus the focus of the seminar was less on technique and more on developing the conceptual ideas that shape their work and on independent studio time.

The librarians and the instructor collaboratively developed assignments and in-class activities to structure the development of student research practices. The overall learning goals for the research component of the course were for students to:

- build on the foundational information and visual literacy skills acquired in first-year writing courses;
- reframe engagement with research and library collections via browsing and serendipitous discovery;
- bring serious inquiry to artistic motivations; and
- cultivate a research practice that directly informs and enriches an artistic practice.

Since the fall 2014 semester and during each subsequent semester, SMFA Librarians have worked with this instructor to teach students research skills and information literacy concepts. Each time, previous efforts are evaluated and new ideas are implemented. The work done in the spring 2016 semester resulted from this iterative, reflexive process: what began in 2014 as a single meeting, in the library, with one of the instructor's classes evolved into a semester-long partnership where librarians help shape course content and meet with students several times, both in the library and in the classroom.

Another element new to the spring 2016 iteration is a focus on Searching as Strategic Exploration in shaping the assignments, activities, and overall learning goals for the course. One of the ways the librarians and the instructor agreed to approach teaching research is to illuminate and discuss the hidden labor that results in a "final" work of art. Research is an essential component

of this labor, and we wanted to prompt students into considering and experiencing how, exactly, it shapes what they create. In order to help students cross the Searching as Strategic Exploration threshold—to take a considered, metacognitive approach to a process that is often messy, repetitive, and unpredictable—we identified some key knowledge practices and dispositions associated with this concept, which helped us develop course content. These include the "contextualized complex experience" of research, the "cognitive, affective, and social dimensions" of the researcher, the ability to toggle between divergent and convergent thinking during the search process, "mental flexibility and creativity," and recognizing the importance of browsing and serendipity.<sup>20</sup>

# Building a research practice in Advanced Jewelry Studio/Seminar

On the first day of class, the instructor gave students a questionnaire that asked them to share how they typically conduct research, whether they have ever been asked to conduct research alongside their studio practices, and what they hope to accomplish in the course. The completed questionnaires were shared and discussed with the librarians. At the end of that first class period, students were given their first research assignment: visit the Museum of Fine Arts and select an object on display in the jewelry galleries; write a one-page response to it that includes at least some research; and make an object inspired by the piece, their research, and their reflections. The research requirements for the assignment were intentionally left vague, as one of the goals of the exercise was to observe how each student approached this component. Another goal was to make explicit the connection between learning and making, as this theme would be revisited and expanded upon throughout the course.

For the next research assignment, students were asked to take a self-guided field trip to a place relevant to the interests that inform their work. Students were free to choose where they visited; the only stipulation was that it must not be a place they'd been before. While at their chosen sites, students were required to visually document their visits, focusing on anything they found interesting, inspirational, or surprising. By requiring students to visit an unfamiliar place and pay attention to visual elements, the intent was that they would both position themselves for a potential serendipitous encounter and appreciate the visual elements of the research process. Following the field trips, students were asked to create a ten-minute slide presentation featuring images of their work prior to the course, images that relate to their research

interests, images of other artists' work that they find inspiring or that they admire, and images from the field trip. This gave them an opportunity to visually express a coherent narrative of their interests, influences, and inspiration. The librarians were invited to class to observe and offer feedback on these presentations.

For the next research activity, librarians spent an entire class period (9 a.m. to 5 p.m., with a two-hour break for lunch) working with the students. In preparation for this class, students were asked to read "The Performance and Practice of Research in *A Cabinet of Curiosity: The Library's Dead Time,*" an article about an art installation that investigates how the "materiality of information shapes the making of meaning." The authors, who are also the artists, aimed to make visible the "dead time" or hidden labor that underlies the production of knowledge. Students were also required to complete a series of questions asking them to reflect on their research interests and practices (sample questions: "How did you approach the Museum of Fine Arts research exercise? What subjects or themes did you concentrate on in your presentations? What questions do you have of your own work?"), and to generate a list of twenty keywords associated with the subjects, themes, and questions defined.

The class session began in the classroom with a conversation about the assigned reading. Librarians came prepared with guiding questions and were delighted to find that the students generated discussion topics on their own. These included the aesthetic dimensions of research, the concept of "dead time" and hidden labor, the notion of libraries as curated spaces that reflect the goals and values of an institution, and how this might impact research and knowledge creation. Next, the librarians and instructor guided students in a mind-mapping exercise. Based on the keywords students generated, each used large sheets of paper and colorful writing implements to map out the links and connections among their interests. After about forty-five minutes, students switched mind maps with a partner and re-drew these associative webs for one other. The goal was to show students the social, collaborative dimensions of the research process. Following this, the entire class had the opportunity to examine each map and its re-drawn version and to ask questions or offer further ideas.

After the lunch break, the students, instructor, and librarians re-grouped in the library for what was termed an "Exploration Session." Starting with the keywords from their mind maps and the questions generated during the mapping/sharing exercise, students were turned loose in the library to find information to help them learn more about their research interests. At the outset, students were encouraged to try browsing as well as searching: perhaps note the call number of an interesting book title and spend several minutes scanning adjacent titles, or approach a new section of the library shelves, or

browse the titles in the library catalog or databases that fall under a particular subject heading. To continue to foster a collaborative research environment and emphasize the social nature of knowledge creation, the mind-mapping partnerships were maintained; students were required to find at least one resource of interest for their partner. As the students found resources (often with the assistance of the librarians) they were asked to note book and article titles, names of artists or authors, any new information they discovered, and any questions they were left asking.

There were two follow-up assignments to the day-long mind mapping and library exploration sessions: an annotated bibliography and a cabinet of curiosities project. The annotated bibliography was intended to capture what students found during the library exploration and how each title supports their research. For the cabinet of curiosities assignment, students were asked to consider information that they found unexpectedly and that resonated with their interests, and to think again about why it is compelling. They were then asked to make visible the new ideas and knowledge generated so far in their research by making ten objects that together present a narrative about what each student is exploring. Students had two weeks to complete the cabinet assignment and present them in class for a mid-semester critique. The librarians participated in these critiques, which allowed us an opportunity to observe how connections were being forged between the research and making processes. Students' approaches to the project were varied: some used the opportunity to explore working in new materials or using familiar materials in new ways, others used object creation to explore and manifest new ideas, and some did both. One thing common to each project was the notion of "fearless experimentation" engendered by the assignment parameters: because two weeks is not a lot of time in which to create ten new art objects, students agreed that they worried less about the final outcome and instead focused on the experience of making. Students, librarians, and the instructor came to the conclusion that this constitutes a form of tactile, experiential research.

Following the cabinet of curiosities assignment, students had two more structured opportunities for outside research: a visit to the library at the Museum of Fine Arts (separate geographically and operationally from the SMFA Library), and a visit to the Department of Textile and Fashion Arts at the Museum of Fine Arts. Here they met with curators and were able to study objects from the collection. The SMFA librarians' last point of contact with the class came during the final critiques, where we had a chance to assess the progress students made in their research, observe and discuss how it informed their work, and identify who might still benefit from one-on-one research consultations with a librarian.

### Assessment, debrief, and reflection

SMFA Librarians approach assessment as a means of evaluating student learning and improving our teaching practice. There were several points of assessment during this course that allowed the librarians to evaluate students' progress in their research practices:

- Student feedback forms: in addition to the first-day questionnaire asking students about the current state of their research habits and what they hoped to accomplish in the Advanced Jewelry Studio/ Seminar course, a last-day questionnaire was distributed. This asked students to reflect on what they accomplished and how the various research activities contributed.
- Assignments: the work the students created was a visual manifestation of their progress, and librarians had the opportunity to observe this at two distinct points during the semester. The annotated bibliographies were also helpful for evaluating the quality of the information students were finding to support their research interests.
- *Critiques*: the mid-semester and final critiques were essential assessment opportunities. In addition to viewing work, librarians were able to hear about students' creative processes and conceptual justifications, and to ask further questions about the role research played in a final piece.
- Debrief conversation: during the last class session, librarians and the instructor engaged students in a conversation about the research content of the course—how it was and was not helpful to their work, and how things might be improved moving forward.

Feedback from the last-day questionnaire and the debrief conversation seem to suggest that for many students the goals of the course were met. Overall, there was consensus that the research component pushed them to consider resources and information they would not usually engage with, and that the collaborative nature of some of the research activities was very beneficial for discovering new ideas. Students agreed that the class engendered a comfort with the art-making process which, perhaps paradoxically, allowed them to start reaching better results once they were not as hung up on these results. Another interesting point raised was that students felt their time in the library, working with librarians, was made more productive by librarians' having seen examples of their work and having a visual understanding of their interests and what they are trying to accomplish. Regarding the impact of research on their work, students commented that it allowed them to formalize their own ideas about what they create and communicate these ideas with confidence, and to experiment with new materials and techniques.

Students also had great suggestions for improving the research experience. Many were overwhelmed by the volume of information found during the library exploration. While the annotated bibliography and cabinet of curiosities assignments were helpful in distilling the information somewhat, more time to read, reflect, and synthesize would have been appreciated. One student suggested, and many agreed, that the mind mapping exercise should have come earlier in the semester (it was conducted during the fourth week of class), so that everyone could immediately begin identifying their research interests and making connections. It was also suggested that making a second mind map, toward the end of the semester, and comparing it to the first iteration would be helpful. Students were pleased with how accessible and ready-to-help the librarians were, and it was agreed that moving forward, students in an intensive research seminar like this class should be required to meet one-on-one with a librarian to discuss their research agendas.

When the instructor and the librarians met to reflect on the course, we came to the conclusion that more thought should be given to how we assess the quality of research evident in students' artistic output. While to some extent this is necessarily a tricky endeavor—we are not interested in dictating what art "should" look like or represent—it is still, we believe, possible to develop a rubric for evaluating to what degree a piece or a body of work is the outcome of a thoughtful, rigorous research process. This is under consideration for subsequent semesters.

Overall, Searching as Strategic Exploration as a threshold concept proved an apt guiding principle for the research content of this course. We wanted students to recognize the complexities and the "dead time" of the research process and to value its importance in their own work. Key course components that drew from this concept were the variety of resources students explored (museum collections, library collections, print resources, visual resources), different ways of finding information (targeted browsing, open-ended browsing, directed searching, collaboration), multiple modes of connecting information and ideas to artistic output (concept mapping, slide presentations, the cabinet of curiosities project), and requiring students to pay attention to their own thought processes via reflection questions, group critiques, and the debrief conversation.<sup>22</sup> The concept of "strategic exploration" helped students observe and enact research as a nonlinear, iterative, and multimodal process essential to their artistic output.

#### **Future directions**

The librarians and the instructor feel very positive about the collaborative work done in the spring 2016 Advanced Jewelry Studio/Seminar course. We

will continue to refine our approach, with the broader goal of reaching as many students as possible with these opportunities to develop their research skills and information literacy aptitude. To this end, discussions are underway regarding how the SMFA librarians will shape the research content of the Senior Thesis Program for the fall 2016 semester; the work done in the Seminar course will serve as a model. Senior Thesis is a year-long, research-and-writing intensive course that culminates in an artistic thesis project. As this program usually enrolls anywhere from one-third to one-half of the senior class, librarians see it as a productive focus of information literacy education.

In closing, it is worth noting that the SMFA is in some operational flux. Previously affiliated with the Museum of Fine Arts, Boston, as of July 2016 the School is under the management of Tufts University. At the time of writing this chapter, it remains to be seen how this new alignment will impact the degree programs, curriculum, or even the name of the SMFA. While the future is uncertain, SMFA librarians see this as an excellent opportunity to advocate for information literacy and research education as essential components of the revised studio art curriculum. Our accomplishments in the Advanced Jewelry course demonstrate that librarians can and should form robust, meaningful partnerships with faculty toward shaping studio art course content and overall student learning outcomes. The end result is art work that is thoughtful and research-driven, and artists who are critically engaged with their sources of inspiration and the scholarly conversation in visual art.

#### Notes

- Association of College and Research Libraries (ACRL), Framework for Information Literacy for Higher Education, February 2, 2015, http://www.ala.org/acrl/standards/ ilframework.
- 2. Graeme Sullivan, Art Practice as Research: Inquiry in Visual Arts. 2nd ed. (Thousand Oaks, CA: Sage Publications, 2010), xix.
- Ibid., 72. 3.
- George Petelin, "Begging the Question: Performativity and Studio-Based Research," Arts and Humanities in Higher Education 13, no. 3 (July 1, 2014): 199.
- 5. Ibid., 193.
- William S. Hemmig, "The Information-Seeking Behavior of Visual Artists: A Literature Review," Journal of Documentation 64, no. 3 (May 2008): 343-62.
- William Hemmig, "An Empirical Study of the Information-Seeking Behavior of Practicing Visual Artists," Journal of Documentation 65, no. 4 (July 2009): 682-703.
- Hemmig, "An Empirical Study of the Information-Seeking Behavior of Practicing Visual Artists," 683.
- 9. See for example: Larissa Garcia and Jessica Labatte. "Threshold Concepts as Metaphors for the Creative Process: Adapting the Framework for Information Literacy to Studio Art Classes." Art Documentation: Journal of the Art Libraries Society of North America 34, no. 2 (2015): 235-48.; and Kristina M. Keog and Stephen A. Pat-

- ton. "Embedded Art Librarianship: Project Partnerships from Concept to Production." *Art Documentation: Journal of the Art Libraries Society of North America* 35, no. 1 (March 1, 2016): 144–63.
- 10. Currently, SMFA students receive their degrees through Tufts University and complete many of their academic credits through the Tufts School of Arts and Sciences. However, with the exception of dual enrollment students (who have been admitted to both schools), BFA and MFA students at the SMFA do not go through the Tufts application process and are not "officially" Tufts students. As of July 2016, the SMFA is operationally part of Tufts University; it remains to be seen how application and enrollment will change.
- 11. Hemmig, "The Information-Seeking Behavior of Visual Artists," 357.
- 12. Birger Hjørland, "The Importance of Theories of Knowledge: Browsing as an Example," *Journal of the American Society for Information Science and Technology* 62, no. 3 (March 1, 2011): 596.
- 13. Kate Joranson, Steven VanTuyl, and Nina Clements, "E-Browsing: Serendipity and Questions of Access and Discovery" in *Charleston Library Conference* (Charleston, SC: Purdue e-Pubs, 2013), 2.
- 14. Ibid., 7.
- 15. Naresh Kumar Agarwal, "Towards a Definition of Serendipity in Information Behaviour," *Information Research* 20, no. 3 (September 2015): 18.
- Patrick Mauries, Cabinets of Curiosities (New York: Thames & Hudson Inc., 2002),
  25.
- 17. It is important to pause and more fully acknowledge this link between cabinets of curiosities and the colonialist legacy of the Early Modern period; their histories are inextricable. Many of the objects collected in cabinets were symbolic of the "exotic" places and people newly "discovered" by European nations. The sense of wonder that cabinets were meant to engender often elided the brutal and deliberate erasure of the personhood of colonial subjects, reducing them and their cultures to "curiosities" to be collected. For an engaging and thoughtful examination of this phenomenon, see Stephen Greenblatt, *Marvelous Possessions: The Wonder of the New World* (Chicago: University of Chicago Press, 1991).
- 18. ACRL, Framework for Information Literacy for Higher Education.
- For a definition of "troublesome" as it relates to threshold concepts, see Jan H. F. Meyer, and Ray Land, "Threshold Concepts and Troublesome Knowledge: An Introduction," in Overcoming Barriers to Student Understanding: Threshold Concepts and Troublesome Knowledge, eds. Jan H. F. Meyer and Ray Land (London: Routledge, 2006), 3–18.
- 20. ACRL, Framework for Information Literacy for Higher Education.
- 21. Bonnie Mak and Julia Pollack, "The Performance and Practice of Research in A Cabinet of Curiosity: The Library's Dead Time," *Art Documentation: Journal of the Art Libraries Society of North America* 32, no. 2 (2013): 202.
- 22. ACRL, Framework for Information Literacy for Higher Education.