

Outside of the Digital Darkroom: Scaffolded Research, Response, and Creation in the Library for New Media and Design Students

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Abstract:

Creative inquiry is integral to artmaking. However, this very idea may be a disciplinary threshold concept¹ for developing artists that see research and craft as discrete processes undertaken for different purposes rather than reciprocal, iterative, and inextricable. As a visual art librarian and a professor of new media and design, one of our shared pedagogical goals is to create opportunities for students to not only develop specific strategies and habits of mind that will help them build robust artistic research practices but also grow in their metacognitive awareness of the connections among asking, thinking, reflecting, responding, making, and doing.

One foundational aspect of practice-based research that we often ask students to engage with involves finding, contemplating, reading about, making connections with, remixing, iterating upon, and/or taking inspiration from existing visuals. However, in our experience, many art students primarily turn to social media and other participatory online platforms when we prompt them to locate images for inspiration or to identify examples of “historic or contemporary artists and designers working in media or conceptual themes similar to [their] own work.”² While these platforms have many benefits, such as helping students connect to other creators and share their work outside of traditional gallery and publishing structures, they can also greatly limit students’ serendipitous encounters with unfamiliar ideas, creators, and visuals.

Keywords: creativity | developing artists | visual art librarianship | pedagogy | student artists | higher education

Article:

*****Note: Full text of chapter below.**

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Maggie Murphy and Kelley O'Brien

INTRODUCTION

Creative inquiry is integral to artmaking. However, this very idea may be a disciplinary threshold concept¹ for developing artists that see *research* and *craft* as discrete processes undertaken for different purposes rather than reciprocal, iterative, and inextricable. As a visual art librarian and a professor of new media and design, one of our shared pedagogical goals is to create opportunities for students to not only develop specific strategies and habits of mind that will help them build robust artistic research practices but also grow in their metacognitive awareness of the connections among asking, thinking, reflecting, responding, making, and doing.

One foundational aspect of practice-based research that we often ask students to engage with involves finding, contemplating, reading about, making connections with, remixing, iterating upon, and/or taking inspiration from existing visuals. However, in our experience, many art students primarily turn to social media and other participatory online platforms when we prompt them to locate images for inspiration or to identify examples of “historic or contemporary artists and designers working in media or conceptual themes

similar to [their] own work.”² While these platforms have many benefits, such as helping students connect to other creators and share their work outside of traditional gallery and publishing structures, they can also greatly limit students’ serendipitous encounters with unfamiliar ideas, creators, and visuals.

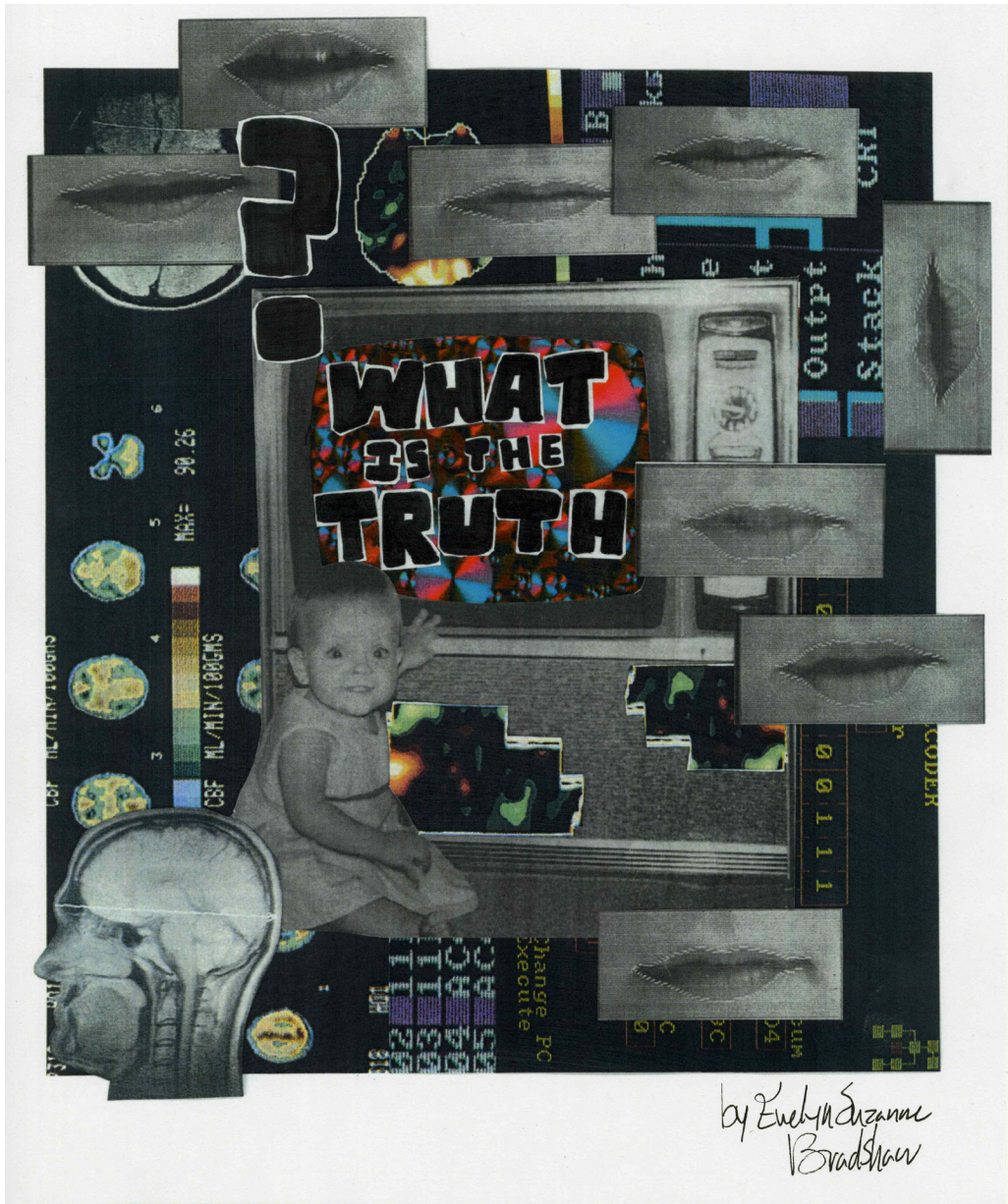


FIGURE 6.1

The color collage from the poster side of Digital Darkroom student Suzanne Bradshaw’s finished zine. (Used with permission.)

In fact, popular apps like Instagram, YouTube, and TikTok deliver users curated visual content through the “filter bubble” of their algorithmically driven feeds, which are constantly refining themselves based on user behaviors.³ In essence, when seeking inspiration online, art students and other creators often are shown an ever-narrower stream of content from channels designed to serve up more and more of what a user already wanted to see.⁴ Once a student finds what they like in terms of medium, style, aesthetic, thematic content, and so on, it becomes difficult to break out of the algorithmic feedback loop and stumble on something else without actively searching for it.⁵

In an effort to encourage students to create outside their comfort zones, we designed a scaffolded, hands-on assignment for new media and design students taking ART 344: Digital Darkroom, taught by Kelley O’Brien. While this course focuses on techniques for digital imaging and manipulation of photographic media, our assignment conversely centers on (comparatively) analog processes and technologies for image discovery and creation. The assignment requires students to move between their studio classroom and the library to browse the stacks, check out books, make photocopies, compose paper collages, create reproducible zines based on their own critical writing and imagery, and critique each other’s work—all in response to a directed research question and a provided set of pre-selected readings. By asking students to engage in these low-tech strategies and reflect on their choices for artistic inquiry and creation, we hope to frame research and craft as complementary and core to the production of visual art, as well as directly address the conflict between algorithm and serendipity.

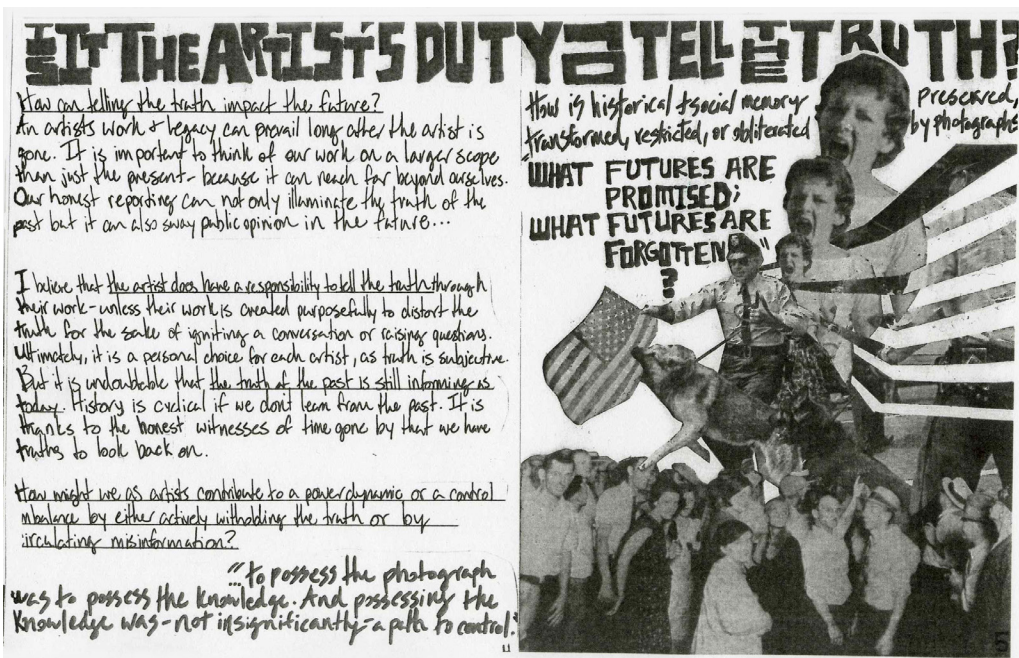


FIGURE 6.2

A detail of a two-page spread from Suzanne Bradshaw’s zine, showing her written response and collage for the question, “Is it the artist’s duty to tell the truth?”

FRAMING UNDERGRADUATE ARTISTS AS RESEARCHERS

Information literacy instruction and art education are two different fields. However, both fields have shared theoretical debates and pedagogical shifts around skills-based and concept-based teaching. As most librarians involved in information literacy instruction know, the transition from the 2000 ACRL *Information Literacy Competency Standards for Higher Education* to the 2015 ACRL *Framework for Information Literacy for Higher Education* was often positioned as paradigmatic, moving “away from a skills-based approach and toward the exploration and understanding of concepts, knowledge practices, and dispositions meant to support intellectual growth over the course of a student’s education and beyond.”⁶ Teaching librarians who work with art and design disciplines almost immediately sought to adapt the core ideas from the Framework for Information Literacy to the studio art environment, such as by connecting Research as Inquiry to the artistic process, Scholarship as Conversation to critiques, Searching as Strategic Exploration to browsing for print materials within library spaces, and Information Has Value to discussions about remix and attribution practices.⁷ Amanda Meeks, Larissa Garcia, Ashley Peterson, and Alyssa Vincent even proposed a mnemonic tool—CREATE—that can be used to discuss information literacy concepts from the Framework with art and design students in language relevant to their contexts as creators.⁸

Similarly, some art education scholars argue that embracing concept-based pedagogy allows practicing art educators to frame “the intrinsic nature of artmaking as an inquiry process”⁹ and emphasize creativity and critical consciousness instead of solely focusing on the development of universal technical skills.¹⁰ However, comparatively few academic art educators have shared practical approaches for teaching artistic research concepts to undergraduate students, in particular.¹¹ While many working artists have described art-making as a process of research and inquiry, pedagogical writing from artists and educators within the academy typically focuses on teaching artistic research practice at the graduate rather than undergraduate level.¹² For example, Marshall argues that the role of the graduate art instructor includes “prepar[ing] students for studio-based research that includes both creative production and a written component,” which she later refers to as praxis (reflexive art practice) and exegesis (writing about making), respectively.¹³ Similarly, Loveless’s “manifesto,” *How to Make Art at the End of the World*, specifically examines “what research-creation does *in, to, and as* part of ongoing university discourse in the arts, humanities, and social sciences, with specific attention to what research-creation does to our understanding of scholarly form at the graduate and doctoral levels,” especially for PhD programs in visual arts practice.¹⁴

Studio art faculty who teach at the undergraduate level may therefore find that partnerships with teaching art librarians who endeavor to build on the Framework for Information Literacy in their instruction can help with providing students with a conceptual framework for artistic inquiry. However, even at the intersection of information literacy and artistic research practice, there has been little, if anything, written specifically about asking art students to critically reflect on the role of the algorithmic environment of social

media platforms and portfolio sites in their practice-based research or aesthetic development as creators—despite there being vibrant discussions about algorithms, authority, bias, representation, and misinformation in information and visual literacy circles.¹⁵ On the one hand, this phenomenon allows students to scroll through their feeds and passively discover other creators working within their preferred techniques and aesthetics who may not have prominence in the traditional art world.¹⁶ On the other hand, art students are less likely to discover unexpected sources of inspiration or serendipitously encounter images from the broader global history of visual culture within their personalized digital spaces, as they might if they actively engaged in browsing through print materials in a physical library—an artistic inquiry strategy taught to many visual creators over the course of their formal educations.¹⁷

The need for educators to directly tackle the conflict between algorithm and inspiration for visual creation with students is addressed in several places within the four themes of the more recent *Framework for Visual Literacy in Higher Education*, an interdisciplinary companion to the Framework for Information Literacy that focuses on visual aspects of information. For example, one knowledge practice suggests students engaged in visual literacy learning may “anticipate the ways in which algorithms, social media, and participatory technologies obscure or promote visuals and visual media creators, which may reflect commercial interests and reinforce existing social dynamics.¹⁸ Additionally, two dispositions posit that visual literacy learners “acknowledge that no platform is neutral, and that concealed factors like suggestion algorithms and power structures within the publishing industry shape experiences with visuals”¹⁹ and “appreciate that creativity and inquiry can be inspired through browsing and experiencing serendipitous encounters with both digital and analog visuals.”²⁰ While the Framework for Visual Literacy is not centered on teaching and learning in art and design disciplines specifically, it can be used to build upon ideas from the Framework for Information Literacy for concept-based teaching and learning on artistic research practice for undergraduate studio artists.

CASE STUDY: “WHAT IS TRUTH?”

Our teaching partnership for ART 344: Digital Darkroom began as a conversation in spring 2021 about information and visual literacy curriculum mapping for students in the New Media & Design concentration of our institution’s Bachelor of Fine Arts program. Kelley had recently taught the spring term undergraduate senior capstone seminar and felt that students taking that course may be arriving with gaps in their conceptual foundations for artistic inquiry that were too big to sufficiently address during that capstone experience. As we talked about these gaps, we realized we needed to work backward and think about strategic ways to scaffold in targeted opportunities for students to develop specific strategies and dispositions for approaching artistic inquiry earlier in their coursework. In other words, if we know that we want students to be able to engage in deep (and deeply interwoven) research, writing, and creating at the fourth-year capstone level, what specifically do we want them to know, and be able to do, as creative researcher-practitioners at the intermediate level—and how can we get them there?

From there, we informally brainstormed a basic shared list as we talked. More or less, we both want students to be able to

- describe the role of research in their personal artistic practice;
- articulate the limitations of relying on algorithm-based social media feeds for serendipitous encounters and holistic aesthetic development;
- apply searching and browsing techniques for finding and using print media in the library and archives;
- find, synthesize, respond to, and attribute ideas from images and texts in their own writing and art/design work;
- see themselves as in conversation with other practicing artists, designers, theorists, and scholars; and
- demonstrate a willingness to iterate and make changes to their processes *and* products in response to feedback and critique.

In developing this list, we knew that no single assignment, or even course, can result in mastery of each of these learning goals. However, Kelley suggested that her upcoming section of ART 344: Digital Darkroom, a required studio course for New Media & Design BFA students that is recommended to be taken in their second or third year, would be a good place to strategically situate targeted learning opportunities.

ART 344: Digital Darkroom explores the dynamic relationship between digital technology and photography. Through a series of structured studio problems, students taking the course learn a variety of methods for working with photographic images, images created from the capture of light, and within a digital “dry” darkroom. One of the core learning objectives for the course is to be able to engage in “convincing manipulation of photographic images” using the Adobe Creative Suite. As a response to her experience with teaching the capstone seminar, Kelley wanted to redesign the Digital Darkroom syllabus for fall 2021—and she had ideas for a scaffolded series of three major assignments that would allow students to progressively build, and build upon, their research practices.

In thinking about how to design and sequence these assignments, Maggie suggested the initial project of the course that she has previously advocated for in the context of first-year writing courses: have students work *from* textual sources, without having to find the sources themselves, as a first step for engaging in researched writing.²¹ In other words, although synthesizing, responding to, and attributing ideas from images and texts in their own writing and art work is one of our goals, if Kelley provided pre-selected readings for their initial research-based assignment, then students could “practice reading, comprehension, and synthesis when writing from complex sources”²² without the pressure of having to first locate and select relevant sources on their own. This allows them to focus on other aspects of artistic inquiry for their beginning project, including finding and using images, while working their way up to discovering texts to engage with through writing and artmaking on their own in subsequent assignments.

With this idea in mind, the initial assignment of the sequence for Digital Darkroom started to take shape. We would ask students to engage with a range of physical library spaces, material objects, and analog technologies in order to break out from the comfortable familiarity of the algorithm-mediated virtual environment. In research workshops

with Maggie, hands-on visits to the Martha Blakeney Hodges Special Collections and University Archives, and class sessions with Kelley, ART 344 students would be guided through new techniques for actively searching, browsing, interacting with print materials, using scanners and photocopiers, and folding paper booklets, along with metacognitive reflection on the creation process as a form of research. These scaffolded project steps culminate in each student making a zine comprising their own critical writing and collaged illustrations, synthesizing and responding to ideas from selected readings and found images from the libraries' collections, to create a final design product at the intersection of exegesis and praxis.

ASSIGNMENT DETAILS

Students were introduced to this project in their first class session of the fall term. The details they received about the assignment and its stages were as follows:

WHAT IS TRUTH?

Students will work in the library to create a collaged research zine that discusses the idea of truth in art. Each student will produce an 8-page black-and-white zine folded from 11x17 paper. Your zine will unfold to reveal a full-page color poster of the collage featured on your zine's cover.

Supplies needed: scissors, precision utility knife/blade, glue stick, clear tape, pens/markers, 11x17 paper

Steps:

1. Building on your library research workshops, tour, and archives visit, go to the library and borrow the following three books from Reserves, then photocopy the assigned pages:
 - a. *The Reconfigured Eye: Visual Truth in the Post-Photographic Era* by William J. Mitchell, pp. 210–223
 - b. *Each Wild Idea: Writing, Photography, History* by Geoffrey Batche, pp. 129–144
 - c. *Uncertain Histories: Accumulation, Inaccessibility, and Doubt in Contemporary Photography* by Kate Palmer Albers, pp. 3–17 and 130–135
2. Read the excerpts you have photocopied and highlight any words you are unfamiliar with. Underline any statements that you feel passionately about (both agree with or disagree with).
3. Answer the questions below in your own words. (Each answer should be 200 words.) Then, for each question below, find two quotations from the readings above to support your opinion. Cite quotes appropriately.
 - a. How do images sway public opinion?
 - b. Does the artist have a duty to tell the truth?
 - c. Can a manipulated image tell more truths than unedited photos?

WHAT IS TRUTH? (continued)

4. Find 13+ images in print materials at the library (whether the stacks or the archives/special collections) to support your opinion of the above questions. Using the photocopier, make color copies (if possible) of images for your poster, and B&W for your zine side. Collage at least 3+ images together as a visual representation of each question.
5. Produce a collaged zine from an 11x17 piece of paper, using the photocopier to shrink/enlarge images and text then glue/tape in appropriate locations. (Refer to Professor O'Brien's *How to Use the Photocopiers* zine distributed in class for instructions, and look for Maggie's posted announcements about open hours for color photocopier use.)
 - a. Use this format to organize information:
 - Front cover: must include the title "WHAT IS TRUTH?," a collage you have created from 4–5 images sourced from the library, as well as your name
 - Pages 1 and 2: your response to question 1, the two quotes, and 3 images collaged into something new
 - Pages 3 and 4: your response to question 2, the two quotes, and 3 images collaged into something new
 - Pages 5 and 6: your response to question 3, the two quotes, and 3 images collaged into something new
 - Back cover: must include a reference list of your sources for all quotes and images
 - Reverse side: should feature a poster-sized version of your front cover in color.
 - b. All text produced by you should be handwritten clearly.
 - c. Front cover, pages 1–6, and the back cover will be in black and white.
 - d. Poster side will be in color.
6. Produce five copies of your zine as detailed above, then use the library scanners to create a two-page PDF of both sides of your zine. Upload the PDF to our class's shared Google Drive. One copy will go on display in Jackson Library and one copy will be deposited for preservation in Special Collections and University Archives for future researchers to access and use.

This project will be evaluated with consideration for:

1. well-articulated (proof-read) research and opinions based on readings;
2. ability to construct new images to reinforce ideas from reference photos;
3. consistent design, consideration for hierarchy of information (both visual and text), and relationship between handwritten and photocopied text; and
4. integration of text and imagery in creative manner.

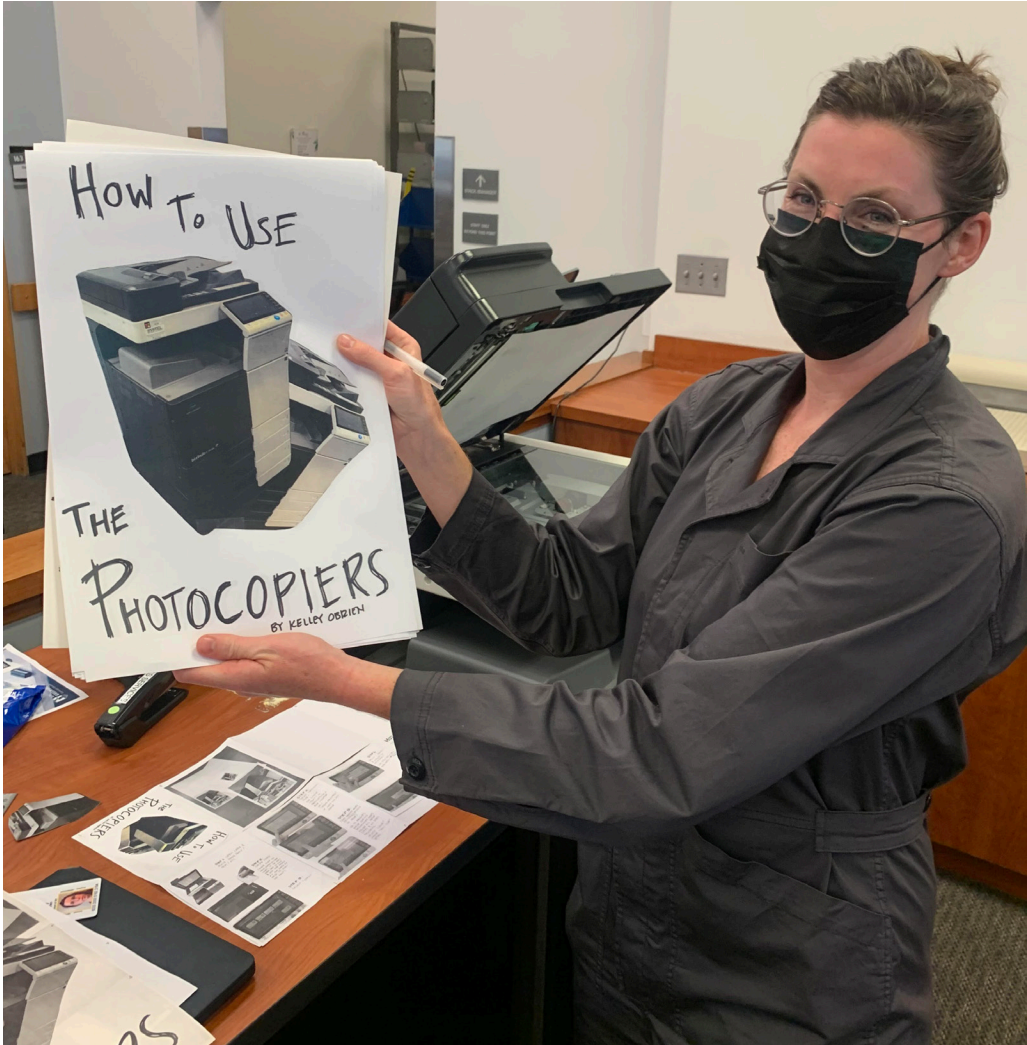


FIGURE 6.3

Kelley O'Brien in UNC Greensboro's Jackson Library, showing the cover of her zine, *How to Use the Photocopiers*. Kelley distributed copies of the zine to her students both to provide them with instructions on photocopier use and give them a physical exemplar of the type of two-sided zine on 11×17 paper they would be making for the "What is Truth?" assignment.

Library Visits

For their second class session of the semester, ART 344 students met with Maggie in the library instruction lab for the first of two research workshops, while Kelley worked on a zine that would walk students through using the library's photocopiers. This three-hour workshop introduced the concept of an artistic research practice by drawing parallels to

the familiar idea of a “studio practice” and led students through a discussion about the role of research in artmaking. Students brainstormed about what kinds of research artists need to do (“research on new techniques/how to work within different mediums,” “research of the topics they plan to create art from,” “self-reflective research and brainstorming,”) as well as what research skills and habits of mind artists need (“observational skills, analytical skills, seeing close up and bigger picture,” “curiosity to pursue more obscure topics,” “flexibility, be willing to try new things even if they don’t always work”) in a shared Google Doc.

Following a brainstorming debrief, Maggie asked students to share their current strategies for finding visual inspiration, and then discussed the practice of browsing through print materials in libraries, bookstores, and archives as a way to encounter unexpected ideas. From there, we talked about the way books in the library are organized as well as different approaches to finding images in books, especially from books outside of the art and design sections. We ended the workshop with students visiting the stacks to browse for two books, one from anywhere within the Library of Congress N call number classification and one from *anywhere else* within the library. This quick activity was intended to help students become familiar with the library space as well as immediately put a new research strategy into action so that they would be more comfortable with browsing on their own during the independent work part of the project.

A practice takes practice...

 <p style="font-weight: bold; text-align: center;">Make time for research</p> <p style="text-align: center;">Artists <i>are</i> researchers! Don't forget to incorporate reading, writing, looking, listening, talking, thinking, reflecting, and making mistakes into your art-making.</p>	 <p style="font-weight: bold; text-align: center;">Beware the algorithm</p> <p style="text-align: center;">Social media is great, but browsing your feed should not be your only strategy. Browsing through print materials is a great way to encounter the unexpected.</p>	 <p style="font-weight: bold; text-align: center;">Be curious & open-minded</p> <p style="text-align: center;">We like what we like, but sometimes forcing ourselves to work outside of our comfort zone produces new ideas or breakthroughs in our processes and products.</p>
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FIGURE 6.4

A slide from Maggie Murphy’s first research workshop on developing an artistic research practice and seeking inspiration in the library for ART 344 students.

The ART 344 students returned for their second library visit a week later. During this three-hour class period, the class broke into two groups. While one group was visiting the Martha Blakeney Hodges Special Collections and University Archives (SCUA), the other group took a tour of the library's Digital Media Commons and photocopy/scanning stations before returning to the instruction lab for a second research workshop. This second, shorter workshop focused on copyright, fair use, remix, and attribution ethics for artists as context for citing the images they would find and use in their collages in the subsequent weeks. Halfway through the class period, the groups switched places. During their visits to SCUA, students handled Victorian trade bindings and photo albums, Edo-period *ukiyo-e* prints, illustrated church cookbooks, university yearbooks, illuminated manuscripts, and other examples of unexpected materials collected by academic libraries that they might take visual inspiration from. In addition, students explored rare and unique artist's books, local exhibition ephemera, and archived copies of the *Coraddi*, UNC Greensboro's student-run biannual literary and visual art magazine. These latter materials were selected not just for their aesthetic value but also because they further demonstrate how artists' work may be collected and used by other researchers in a range of fields as part of the scholarly record—a point we would emphasize again later when a copy of each student's finished zine for this assignment was deposited into the University Archives at the conclusion of the project.

Class Sessions and Independent Work

In parallel to library workshops and tours, students were asked to apply newly learned strategies and techniques in the classroom. This included browsing for and checking out books, reading and discussing works on truth and manipulation in art, working in groups to create and scan practice collages from photocopied images, and engaging in constructive critique of each other's work as a class. As Kelley projected students' practice collages at the front of the classroom, students examined a range of concerns, including contrast within images, cutting techniques, visual aesthetics, and elements of design—all in order to establish a foundational understanding of the craft and conceptual rigor expected from the final zine.

After engaging together in guided reading, writing, discussion, and crafting, students had two weeks to complete their zines on their own. Kelley held two additional class sessions in the library, allowing students to work independently with access to books, black-and-white and color copiers, and workspace, while also being able to check in with Kelley and Maggie. While the first class period was completely unstructured, during the second, Kelley held brief two-on-one reviews with students in rotations as the rest of the class continued to work on their zines. Students met in pairs with Kelley to lay out their works-in-progress, receiving constructive criticism about their image concepts, craft quality, and text legibility while also examining the various creative and technical methods their peers were experimenting with. This provided students with an opportunity to reflect on the feedback they received, incorporate new ideas from their classmates, and make adjustments to their in-progress zines before the project deadline.

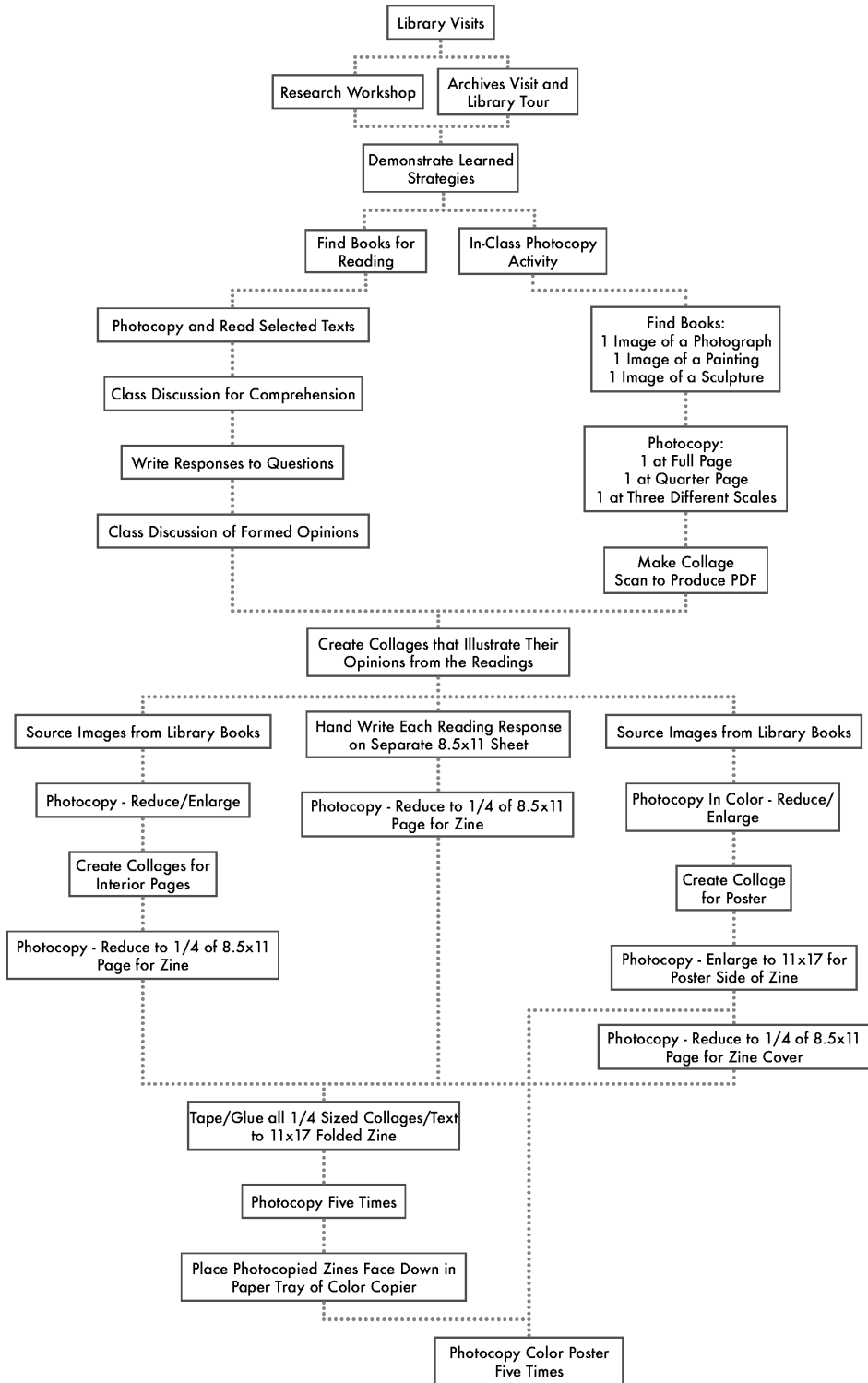


FIGURE 6.5

A flowchart illustrating stages of the “What is Truth?” assignment.

Critique, Revision, and Exhibition

On the day the assignment was due, students turned in the scans of their zines and brought the printed booklets to class for a round-robin critique session. This critique focused on the conceptual connections between images, text, and theme in students' collages and zine layouts in addition to their overall craft approach. As students shared their observations, questions, and feedback, Kelley offered the students the chance to optionally rework their zines in response to the critique process before turning in a final, revised copy. For some students, this was merely an opportunity to revisit the photocopier's settings in order to improve the legibility of their duplicated images and text. For others, it was a shot at reflecting and iterating on their initial browsing strategies, image sources, design choices, or construction processes.

Finally, once all original and revised zines were turned in to Kelley, Maggie worked with colleagues from SCUA to create a simple “phygital” display²³ of the zines in UNC Greensboro's Jackson Library before a copy of each work was deposited in the University Archives. The QR code seen at the bottom right of the photo in figure 6.6 directed visitors to a Google Site (<http://go.uncg.edu/what-is-truth>) featuring downloadable PDFs of each zine as well as directions for printing and folding the works as booklets, increasing access for those avoiding in-person library use during the continued pandemic. Because a static display cannot demonstrate how each zine unfolds into a full-page poster on its reserve side, the site also includes an animated gif illustrating the transition from black-and-white booklet to color poster. The exhibition was promoted on both the University Libraries' and School of Art's social media channels in order to create greater awareness of this cross-campus collaboration in each unit's communities.



FIGURE 6.6

A display of the Digital Darkroom students' zines in the interior entrance lobby to the main building of UNC Greensboro's Jackson Library.

DISCUSSION

As with any assignment pilot, this project was a learning experience for everyone involved. We always expect our students to iterate and make changes in response to reflection, discussion, and feedback, and we intend to do the same in terms of how we structure and teach the assignment each time ART 344: Digital Darkroom is taught. For example, next semester, we plan to build even more modeling into our instruction, with hands-on demonstration of collage, layout, and reproduction processes in addition to walkthroughs of browsing for books or breaking down and responding to complex readings. Another change will be to the readings themselves: while this semester's assigned books consisted of two theoretical texts and one practical case study, next semester we will swap out one of the theory-heavy readings with conceptual writing by artist Martha Rosler—allowing students to further contextualize their own ideas and work about visual truth and manipulation in relation to those of another creator.

Overall, one of our greatest successes with the project was also one of the most basic. Students developed greater familiarity with the library as they were pushed to engage with a wide range of its spaces, technologies, materials, and services over the course of several weeks. More than a few ART 344 students told us they had never been to the university's library before this semester, never mind checked out a book, handled archival materials, or made scans or photocopies. It occurred to us that asking students to leave the comfortable environment of the studio art building and incorporate the library-as-place into their design practice mirrors what we wanted them to do with their visual influences and sources of inspiration as artist-researchers: break out of their bubbles, whether virtual or physical, to increase their opportunities for serendipity and unexpected revelation. Another success came by virtue of having students create zines as their research product. Because the zine format is multimodal, students were able to articulate conceptual connections about shifting meaning, context, and juxtaposition between text and visuals *in* both their writing and collages that they might have missed if they were assigned separate research papers and design projects.

CONCLUSION

As educators, we want new media and design students to develop critical and reflective approaches to creating as well as see themselves as artist-researchers whose work contributes to disciplinary discourse, scholarship, and visual culture. This then means that we need to provide our students with intentional opportunities to build and practice the foundational approaches and strategies they will need to develop a holistic artistic research practice. One such approach, as technologies and machine-learning algorithms become more and more a part of everyday life, is remembering to regularly consider how limiting oneself to these environments as artistic researchers can hinder creative development—and integrate other strategies, like analog browsing, into our repertoires.

At the same time, if we ask these emerging practitioners to find, evaluate, read, synthesize, incorporate, and cite relevant texts while simultaneously tasking them with

using unfamiliar strategies and tools for locating, selecting, remixing, and creating new visuals, we are probably setting them up to fail. That is why we developed the “What is Truth?” research assignment as the first in a series of projects intended to get our ART 344 students to synthesize, respond to, conceptualize, and illustrate ideas both in text and visuals. Subsequent course projects require them to find and attribute ideas from additional sources outside of their social media feeds, including texts in scholarly anthologies, popular periodicals, and archival documents, in and beyond the library.

Finally, by targeting a required course that most students take in their second or third year for these interventions, we hope that we are meaningfully impacting the researched writing and conceptual art and design work students will be doing at the capstone level. While our focus thus far has been on students within the New Media & Design concentration, our experience could also form the groundwork for more sophisticated curriculum mapping efforts around the integration of information and visual literacy instruction into required courses across the School of Art’s Bachelor of Fine Arts program. Ultimately, the more we collaborate, the more (we hope) art students will see the library as a generative place for their creative practices.

NOTES

1. Jan Meyer and Ray Land, "Threshold Concepts and Troublesome Knowledge: Linkages to Ways of Thinking and Practising within the Disciplines," Occasional Report, Enhancing Teaching-Learning Environments in Undergraduate Courses, May 2003.
2. This phrasing is taken from one of the "essential questions" posed in the June 2009 update to the ARLIS/NA Art, Architecture, and Design Information Competencies; see Stephanie Beene et al., "Graphic Design, Interior Design, Photography, Urban and Regional Planning," *ARLIS/NA Art, Architecture, and Design Information Competencies* (Art Libraries Society of North America, June 2019), https://archives.library.illinois.edu/erec/ARLIS_Archives/8554075a/RISScompGD-ID-P-URP19.pdf (page discontinued).
3. Ivan Medvedev, Haotian Wu, and Taylor Gordon, "Powered by AI: Instagram's Explore Recommender System," *Facebook AI* (blog), November 25, 2019, <https://ai.facebook.com/blog/powered-by-ai-in-stagramms-explore-recommender-system/>; Adam Mosseri, "Shedding More Light on How Instagram Works," *Instagram Announcements* (blog), June 8, 2021, <https://about.instagram.com/blog/announcements/shedding-more-light-on-how-instagram-works>; Cristos Goodrow, "On YouTube's Recommendation System," *YouTube Official Blog* (blog), September 15, 2021, <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.
4. Richie Barker, "Trapped in the Filter Bubble? Exploring the Influence of Google Search on the Creative Process," *Journal of Interactive Advertising* 18, no. 2 (July 3, 2018): 85–95, <https://doi.org/10.1080/15252019.2018.1487810>; Allison J. B. Chaney, Brandon M. Stewart, and Barbara E. Engelhardt, "How Algorithmic Confounding in Recommendation Systems Increases Homogeneity and Decreases Utility," *Proceedings of the 12th ACM Conference on Recommender Systems*, September 27, 2018, 224–32, <https://doi.org/10.1145/3240323.3240370>; Tama Leaver, Tim Highfield, and Crystal Abidin, *Instagram: Visual Social Media Cultures* (New York: John Wiley & Sons, 2020); Slate Staff, "How Well Do Our Instagram Explore Pages Know Us?," *Slate* (February 6, 2020), <https://slate.com/human-interest/2020/02/instagram-explore-personalized-algorithms.html>.
5. Maria Popova, "The Filter Bubble: Algorithm vs. Curator & the Value of Serendipity," *Brain Pickings* (blog), May 12, 2011, <https://www.brainpickings.org/2011/05/12/the-filter-bubble/>; Marijke Goeting, "From Me to All of Us, and Back Again: Algorithmic Feedback Loops in Contemporary Art," *The Journal of Art Theory and Practice* 18 (December 31, 2014): 169–88, <https://doi.org/10.15597/17381789201418169>; Amy Youngs, "Filter Bubbles and Inequality," *Art and Technology (The Ohio State University Department of Art)* (blog), December 6, 2016, <https://u.osu.edu/artandtech/2016/12/02/filter-bubbles-and-inequality/>.
6. Melissa Gross, Don Latham, and Heidi Julien, "What the Framework Means to Me: Attitudes of Academic Librarians toward the ACRL Framework for Information Literacy for Higher Education," *Library & Information Science Research* 40, no. 3 (July 1, 2018): 262, <https://doi.org/10.1016/j.lisr.2018.09.008>; see also, for example, Nancy M. Foasberg, "From Standards to Frameworks for IL: How the ACRL Framework Addresses Critiques of the Standards," *portal: Libraries and the Academy* 15, no. 4 (2015): 699–717, <https://doi.org/10.1353/pla.2015.0045>; Barbara J. D'Angelo et al., eds., *Information Literacy: Research and Collaboration across Disciplines*, Perspectives on Writing (Fort Collins: The WAC Clearinghouse, 2017).
7. 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 (September 2015): 235–48, <https://doi.org/10.1086/683383>; Stephanie Beene and Shannon Marie Robinson, "When Research Does Not Start with a Question: Teaching with the Framework and Visual Literacy Standards within Art and Architecture Librarianship," *Art Documentation: Journal of the Art Libraries Society of North America* 36, no. 2 (September 1, 2017): 254–80, <https://doi.org/10.1086/694243>; Stephanie Grimm and Amanda Meeks, "Break the Stereotype! Critical Visual Literacy in Art and Design Librarianship," *Art Documentation: Journal of the Art Libraries Society of North America* 36, no. 2 (September 1, 2017): 173–90, <https://doi.org/10.1086/694238>; Ashley Peterson, "Mapping the Chaos: Building a Research Practice with Threshold Concepts in Studio Art Disciplines," in *Disciplinary Applications of Threshold Concepts*, eds. Samantha Godbey, Susan Beth Wainscott, and Xan Goodman (Chicago, IL: Association of College and Research Libraries, 2017), 317–29; Mackenzie Salisbury and Nick Ferreira, "Drifting

- through Research: How the Bibliodérive Inspired New Approaches to Information Literacy at Flaxman Library,” *Art Documentation: Journal of the Art Libraries Society of North America* 36, no. 1 (March 1, 2017): 108–21, <https://doi.org/10.1086/691375>; Alexander Watkins, “Teaching with Threshold Concepts and the ACRL Framework in the Art and Design Context,” in *The Handbook of Art and Design Librarianship*, 2nd ed., eds. Paul Glassman and Judy Dyki (London: Facet Publishing, 2017), 147–56.
8. Amanda Meeks et al., “CREATE: Adapting the Framework to Studio Art Disciplines,” *College & Research Libraries News* 78, no. 10 (November 3, 2017): 554, <https://doi.org/10.5860/crln.78.10.554>.
 9. Margaret A. Walker, “From Theory to Practice: Concept-Based Inquiry in a High School Art Classroom,” *Studies in Art Education* 55, no. 4 (Summer 2014): 289.
 10. Stacey McKenna Salazar, “Studio Interior: Investigating Undergraduate Studio Art Teaching and Learning,” *Studies in Art Education* 55, no. 1 (2013): 69.
 11. Salazar, “Studio Interior.”
 12. Graeme Sullivan, “Research Acts in Art Practice,” *Studies in Art Education* 48, no. 1 (October 1, 2006): 19–35, <https://doi.org/10.1080/00393541.2006.11650497>; Cora Marshall, “A Research Design for Studio-Based Research in Art,” *Teaching Artist Journal* 8, no. 2 (March 19, 2010): 77–87, <https://doi.org/10.1080/15411791003618597>; Kasia Leousis, “Outreach to Artists: Supporting the Development of a Research Culture for Master of Fine Arts Students,” *Art Documentation: Journal of the Art Libraries Society of North America* 32, no. 1 (March 2013): 127–37, <https://doi.org/10.1086/669994>; Natalie Loveless, *How to Make Art at the End of the World: A Manifesto for Research-Creation* (Durham; London: Duke University Press, 2019); Courtney Hunt and Michele Jennings, “My Work Is Work: Artistic Research Practice and Knowledge Creation in the Work of Carmen Winant and Tomashi Jackson,” *Art Documentation: Journal of the Art Libraries Society of North America* 40, no. 1 (March 1, 2021): 33–51, <https://doi.org/10.1086/713822>.
 13. Marshall, “A Research Design for Studio-Based Research in Art,” 79.
 14. Loveless, *How to Make Art at the End of the World*, 7.
 15. Eamon Tewell, “Toward the Resistant Reading of Information: Google, Resistant Spectatorship, and Critical Information Literacy,” *portal: Libraries and the Academy* 16, no. 2 (2016): 289–310, <https://muse.jhu.edu/pub/1/article/613843>; Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: New York University Press, 2018); Carolyn Caffrey, “Teaching Algorithmic Bias in a Credit-Bearing Course,” *International Information & Library Review* 51, no. 4 (October 2, 2019): 321–27, <https://doi.org/10.1080/10572317.2019.1669937>; Alison J. Head, Barbara Fister, and Margy MacMillan, “Information Literacy in the Age of Algorithms: Student Experiences with News and Information, and the Need for Change” (Project Information Literacy, January 15, 2020), <https://files.eric.ed.gov/fulltext/ED605109.pdf>.
 16. Xin Kang, Wenyin Chen, and Jian Kang, “Art in the Age of Social Media: Interaction Behavior Analysis of Instagram Art Accounts,” *Informatics* 6, no. 4 (December 2019): 52, <https://doi.org/10.3390/informatics6040052>; Maria Goicoechea, “The Art Object in a Post-Digital World: Some Artistic Tendencies in the Use of Instagram,” in *Platform (Post) Pandemic* (ELO 2021, Aarhus, Denmark: Aarhus University, 2021), https://conferences.au.dk/fileadmin/conferences/2021/ELO2021/Full_papers/Maria_Goicoechea_de_Jorge_The_Art_Object_in_a_Post-Digital_World__207.pdf.
 17. Polly Frank, “Student Artists in the Library: An Investigation of How They Use General Academic Libraries for Their Creative Needs,” *The Journal of Academic Librarianship* 25, no. 6 (November 1, 1999): 445–55, [https://doi.org/10.1016/S0099-1333\(99\)00077-4](https://doi.org/10.1016/S0099-1333(99)00077-4); Hannah Bennett, “Bringing the Studio into the Library: Addressing the Research Needs of Studio Art and Architecture Students,” *Art Documentation: Journal of the Art Libraries Society of North America* 25, no. 1 (April 2006): 38–42, <https://doi.org/10.1086/adx.25.1.27949400>; Amanda Gluibizzi and Paul Glassman, eds., *The Handbook of Art and Design Librarianship* (London: Facet Publishing, 2010); Effie Patelos, “Research Intersections within Practice: Artists and Librarians,” *Art Documentation: Journal of the Art Libraries Society of North America* 32, no. 1 (March 1, 2013): 43–53, <https://doi.org/10.1086/669988>; Patrick Lo and Wilson Chu, “Information for Inspiration: Understanding Information-Seeking Behaviour and Library Usage of Students at the Hong Kong Design Institute,” *Australian Academic & Research Libraries* 46, no. 2 (April 3, 2015): 101–20, <https://doi.org/10.1080/00048623.2015.1019604>; Kenneth Steinbach, *Creative Practices for Visual Artists: Time, Space, Process* (New York: Routledge, 2018).

18. Association of College and Research Libraries, *The Framework for Visual Literacy in Higher Education (Companion Document to the ACRL Framework for Information Literacy in Higher Education)*, April 2022, sec. “Learners participate in a changing visual information landscape” and “Learners pursue social justice through visual practice,” https://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/Framework_Companion_Visual_Literacy.pdf.
19. Association of College and Research Libraries, sec. “Learners practice visual discernment and criticality” and “Learners pursue social justice through visual practice.”
20. Association of College and Research Libraries, sec. “Learners participate in a changing visual information landscape.”
21. Maggie Murphy, “On the Same Page: Collaborative Research Assignment Design with Graduate Teaching Assistants,” *Reference Services Review* 47, no. 3 (August 1, 2019): 343–58, <https://doi.org/10.1108/RSR-04-2019-0027>.
22. Murphy, “On the Same Page,” 355.
23. Torey Akers, “Physical or Digital? At TheVOV’s Phygital Exhibitions, It’s Both,” *Jing Culture and Commerce*, April 30, 2021, <https://jingculturecommerce.com/thevov-phygital-exhibitions/>; Goicoechea, “The Art Object in a Post-Digital World.”

BIBLIOGRAPHY

- Akers, Torey. “Physical or Digital? At TheVOV’s Phygital Exhibitions, It’s Both.” *Jing Culture and Commerce*. April 30, 2021. <https://jingculturecommerce.com/thevov-phygital-exhibitions/>.
- Association of College and Research Libraries. *The Framework for Visual Literacy in Higher Education (Companion Document to the ACRL Framework for Information Literacy in Higher Education)*. Stephanie Beene, Millicent Fullmer, Katie Greer, Maggie Murphy, Tiffany Saulter, Sara Schumacher, Dana Statton Thompson, and Mary Wegmann. Chicago, IL: ACRL, April 2022. https://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/Framework_Companion_Visual_Literacy.pdf.
- Barker, Richie. “Trapped in the Filter Bubble? Exploring the Influence of Google Search on the Creative Process.” *Journal of Interactive Advertising* 18, no. 2 (July 3, 2018): 85–95. <https://doi.org/10.1080/15252019.2018.1487810>.
- Beene, Stephanie, Larissa Garcia, Stephanie Hilles, and Amanda Meeks. “Graphic Design, Interior Design, Photography, Urban and Regional Planning.” *ARLIS/NA Art, Architecture, and Design Information Competencies*. Art Libraries Society of North America. June 2019. https://archives.library.illinois.edu/erec/ARLIS_Archives/8554075a/RISScompGD-ID-P-URP19.pdf (page discontinued).
- Beene, Stephanie, and Shannon Marie Robinson. “When Research Does Not Start with a Question: Teaching with the Framework and Visual Literacy Standards within Art and Architecture Librarianship.” *Art Documentation: Journal of the Art Libraries Society of North America* 36, no. 2 (September 1, 2017): 254–80. <https://doi.org/10.1086/694243>.
- Bennett, Hannah. “Bringing the Studio into the Library: Addressing the Research Needs of Studio Art and Architecture Students.” *Art Documentation: Journal of the Art Libraries Society of North America* 25, no. 1 (April 2006): 38–42. <https://doi.org/10.1086/adx.25.1.27949400>.
- Caffrey, Carolyn. “Teaching Algorithmic Bias in a Credit-Bearing Course.” *International Information & Library Review* 51, no. 4 (October 2, 2019): 321–27. <https://doi.org/10.1080/10572317.2019.1669937>.
- Chaney, Allison J. B., Brandon M. Stewart, and Barbara E. Engelhardt. “How Algorithmic Confounding in Recommendation Systems Increases Homogeneity and Decreases Utility.” *Proceedings of the 12th ACM Conference on Recommender Systems* (September 27, 2018), 224–32. <https://doi.org/10.1145/3240323.3240370>.
- D’Angelo, Barbara J., Sandra Jamieson, Barry M. Maid, and Janice R. Walker, eds. *Information Literacy: Research and Collaboration across Disciplines*. Perspectives on Writing. Fort Collins: The WAC Clearinghouse, 2017.
- Foasberg, Nancy M. “From Standards to Frameworks for IL: How the ACRL Framework Addresses Critiques of the Standards.” *portal: Libraries and the Academy* 15, no. 4 (2015): 699–717. <https://doi.org/10.1353/pla.2015.0045>.

- Frank, Polly. "Student Artists in the Library: An Investigation of How They Use General Academic Libraries for Their Creative Needs." *The Journal of Academic Librarianship* 25, no. 6 (November 1, 1999): 445–55. [https://doi.org/10.1016/S0099-1333\(99\)00077-4](https://doi.org/10.1016/S0099-1333(99)00077-4).
- Garcia, Larissa, 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 (September 2015): 235–48. <https://doi.org/10.1086/683383>.
- Gluibizzi, Amanda, and Paul Glassman, eds. *The Handbook of Art and Design Librarianship*. London: Facet Publishing, 2010.
- Goeting, Marijke. "From Me to All of Us, and Back Again: Algorithmic Feedback Loops in Contemporary Art." *The Journal of Art Theory and Practice* 18 (December 31, 2014): 169–88. <https://doi.org/10.15597/17381789201418169>.
- Goicoechea, María. "The Art Object in a Post-Digital World: Some Artistic Tendencies in the Use of Instagram." In *Platform (Post) Pandemic*. Aarhus, Denmark: Aarhus University, 2021. https://conferences.au.dk/fileadmin/conferences/2021/ELO2021/Full_papers/Maria_Goicoechea_de_Jorge_The_Art_Object_in_a_Post-Digital_World_207.pdf.
- Goodrow, Cristos. "On YouTube's Recommendation System." *YouTube Official Blog* (blog), September 15, 2021. <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.
- Grimm, Stephanie, and Amanda Meeks. "Break the Stereotype! Critical Visual Literacy in Art and Design Librarianship." *Art Documentation: Journal of the Art Libraries Society of North America* 36, no. 2 (September 1, 2017): 173–90. <https://doi.org/10.1086/694238>.
- Gross, Melissa, Don Latham, and Heidi Julien. "What the Framework Means to Me: Attitudes of Academic Librarians toward the ACRL Framework for Information Literacy for Higher Education." *Library & Information Science Research* 40, no. 3 (July 1, 2018): 262–68. <https://doi.org/10.1016/j.lisr.2018.09.008>.
- Head, Alison J., Barbara Fister, and Margy MacMillan. "Information Literacy in the Age of Algorithms: Student Experiences with News and Information, and the Need for Change." Project Information Literacy. January 15, 2020. <https://files.eric.ed.gov/fulltext/ED605109.pdf>.
- Hunt, Courtney, and Michele Jennings. "My Work Is Work': Artistic Research Practice and Knowledge Creation in the Work of Carmen Winant and Tomashi Jackson." *Art Documentation: Journal of the Art Libraries Society of North America* 40, no. 1 (March 1, 2021): 33–51. <https://doi.org/10.1086/713822>.
- Kang, Xin, Wenyin Chen, and Jian Kang. "Art in the Age of Social Media: Interaction Behavior Analysis of Instagram Art Accounts." *Informatics* 6, no. 4 (December 2019): 52. <https://doi.org/10.3390/informatics6040052>.
- Leaver, Tama, Tim Highfield, and Crystal Abidin. *Instagram: Visual Social Media Cultures*. New York: John Wiley & Sons, 2020.
- Leousis, Kasia. "Outreach to Artists: Supporting the Development of a Research Culture for Master of Fine Arts Students." *Art Documentation: Journal of the Art Libraries Society of North America* 32, no. 1 (March 2013): 127–37. <https://doi.org/10.1086/669994>.
- Lo, Patrick, and Wilson Chu. "Information for Inspiration: Understanding Information-Seeking Behaviour and Library Usage of Students at the Hong Kong Design Institute." *Australian Academic & Research Libraries* 46, no. 2 (April 3, 2015): 101–20. <https://doi.org/10.1080/00048623.2015.1019604>.
- Loveless, Natalie. *How to Make Art at the End of the World: A Manifesto for Research-Creation*. Durham; London: Duke University Press, 2019.
- Marshall, Cora. "A Research Design for Studio-Based Research in Art." *Teaching Artist Journal* 8, no. 2 (March 19, 2010): 77–87. <https://doi.org/10.1080/15411791003618597>.
- Medvedev, Ivan, Haotian Wu, and Taylor Gordon. "Powered by AI: Instagram's Explore Recommender System." *Facebook AI* (blog), November 25, 2019. <https://ai.facebook.com/blog/powered-by-ai-instagram-explains-recommender-system/>.
- Meeks, Amanda, Larissa Garcia, Ashley Peterson, and Alyssa Vincent. "CREATE: Adapting the Framework to Studio Art Disciplines." *College & Research Libraries News* 78, no. 10 (November 3, 2017): 554. <https://doi.org/10.5860/crln.78.10.554>.
- Meyer, Jan, and Ray Land. "Threshold Concepts and Troublesome Knowledge: Linkages to Ways of Thinking and Practising within the Disciplines." Occasional Report. Enhancing Teaching-Learning Environments in Undergraduate Courses. May 2003.

- Mosseri, Adam. "Shedding More Light on How Instagram Works." *Instagram Announcements* (blog), June 8, 2021. <https://about.instagram.com/blog/announcements/shedding-more-light-on-how-instagram-works>.
- Murphy, Maggie. "On the Same Page: Collaborative Research Assignment Design with Graduate Teaching Assistants." *Reference Services Review* 47, no. 3 (August 1, 2019): 343–58. <https://doi.org/10.1108/RSR-04-2019-0027>.
- Noble, Safiya Umoja. *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York: New York University Press, 2018.
- Patelos, Effie. "Research Intersections within Practice: Artists and Librarians." *Art Documentation: Journal of the Art Libraries Society of North America* 32, no. 1 (March 1, 2013): 43–53. <https://doi.org/10.1086/669988>.
- Peterson, Ashley. "Mapping the Chaos: Building a Research Practice with Threshold Concepts in Studio Art Disciplines." In *Disciplinary Applications of Threshold Concepts*, edited by Samantha Godbey, Susan Beth Wainscott, and Xan Goodman, 317–29. Chicago, IL: Association of College and Research Libraries, 2017.
- Popova, Maria. "The Filter Bubble: Algorithm vs. Curator & the Value of Serendipity." *Brain Pickings* (blog), May 12, 2011. <https://www.brainpickings.org/2011/05/12/the-filter-bubble/>.
- Salazar, Stacey McKenna. "Studio Interior: Investigating Undergraduate Studio Art Teaching and Learning." *Studies in Art Education* 55, no. 1 (2013): 64–78.
- Salisbury, Mackenzie, and Nick Ferreira. "Drifting through Research: How the Bibliodérive Inspired New Approaches to Information Literacy at Flaxman Library." *Art Documentation: Journal of the Art Libraries Society of North America* 36, no. 1 (March 1, 2017): 108–21. <https://doi.org/10.1086/691375>.
- Slate. Slate Staff. "How Well Do Our Instagram Explore Pages Know Us?" (February 6, 2020). <https://slate.com/human-interest/2020/02/instagram-explore-personalized-algorithms.html>.
- Steinbach, Kenneth. *Creative Practices for Visual Artists: Time, Space, Process*. New York: Routledge, 2018.
- Sullivan, Graeme. "Research Acts in Art Practice." *Studies in Art Education* 48, no. 1 (October 1, 2006): 19–35. <https://doi.org/10.1080/00393541.2006.11650497>.
- Tewell, Eamon. "Toward the Resistant Reading of Information: Google, Resistant Spectatorship, and Critical Information Literacy." *portal: Libraries and the Academy* 16, no. 2 (2016): 289–310. <https://muse.jhu.edu/pub/1/article/613843>.
- Walker, Margaret A. "From Theory to Practice: Concept-Based Inquiry in a High School Art Classroom." *Studies in Art Education* 55, no. 4 (Summer 2014): 287–99.
- Watkins, Alexander. "Teaching with Threshold Concepts and the ACRL Framework in the Art and Design Context." In *The Handbook of Art and Design Librarianship*, 2nd ed., edited by Paul Glassman and Judy Dyki, 147–56. London: Facet Publishing, 2017.
- Youngs, Amy. "Filter Bubbles and Inequality." *Art and Technology (The Ohio State University Department of Art)* (blog), December 6, 2016. <https://u.osu.edu/artandtech/2016/12/02/filter-bubbles-and-inequality/>.

