Design Thinking Challenge: Library Classroom Redesign

INFO 287 Design Thinking Final Project

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ACADEMY of ART UNIVERSITY LIBRARY
“Design is the art of gradually applying constraints until only one solution remains.”
Unknown

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Supplementary Materials are available on a shared Google Drive folder. Whenever you see this block, click here to access the folder.
Introduction

“The mission of the Academy of Art University Library is to provide resources and services that facilitate the educational development of creative professionals in the fields of design, communication and the arts.”

(From AAU Library Mission Statement)

Academy of Art University (AAU) is a private for-profit arts institution based in the heart of San Francisco. With its open admissions policy, a wide range of traditional students (18-24), adult learners (25+), and international students come to learn from active industry professionals in over 20 programs in design, entertainment, fine art, and the liberal arts. In 2018, AAU served roughly 8200 FTE students, with a mix of onsite, online, and hybrid education students (both onsite and online; personal communication, October 30, 2019). The campus itself is fragmented across the city with over 20 academic and administrative buildings, mainly in San Francisco’s downtown Financial District. The AAU Library is located on the 6th floor of the 180 New Montgomery building, close to some academic departments, but far away from many of the undergraduate dorms and many of the smaller departments that require more industrial spaces and equipment. The library also has a satellite location in the School of Architecture building that primarily holds architectural-related materials.

In a sense, San Francisco is the living campus of AAU, but at the same time, the geographical fragmentation leads to a serious disconnect with the library and its services. The library’s mission statement above is straightforward on paper, but in practice, I believe there is always opportunity to innovate for the benefit of our patrons. Librarians always need to be intentional about the design of “library touchpoints” to facilitate positive user experiences (Bell, 2018). As AAU Library’s current Reference and Information Literacy Librarian, I am trying to breathe new life into the workflows and materials that I have inherited when I took on this position. I see this as my “Year One”: my first year in my first librarian job, putting all of my coursework on information literacy instruction into practice. This is a prime opportunity to engage in a design thinking (DT) challenge that explores and hopefully improves AAU library instruction.

As a process, DT “presents an opportunity for team-driven projects that allow for ample latitude in creative problem solving” (Bell, 2018, p. 4). So what are the touchpoints of library instruction?
- The content: library resources and basic research skills;
- The person providing that content: in the majority of cases, me;
- The tools: handouts, worksheets, iPads, etc.;
- The library classroom: the place where students interact with the content, tools, and me.
The library instruction I provide consists of “tours” and “research strategy workshops” (RSW). In my library tours, I interact with major-specific classes such as introductory courses in fashion and advertising, advanced writing courses (LA 202: English Composition: Creative Persuasion and Argument), and English for Arts Purposes classes (EAP; AAU’s name for ESL courses). The RSW is geared specifically towards the undergraduate introductory writing course LA 108: Composition for the Artist (and its EAP counterpart LA 107). LA 108 is a foundational writing course that all undergraduate students must take, and the AAU Library has provided RSWs as structured information literacy instruction since 2015. I guide students through the RSW worksheet so they can begin finding sources for their “artistic process paper,” where they are required to use library resources to support their descriptions of how a specific artistic process works in their field (e.g., how to storyboard, how to write a screenplay, how to create a figure in Maya, how to draft building plans). LA 107 students are instructed to write an artistic critique on a recent work of art, supported by analyses found in library resources. RSW worksheets are photocopied onto carbon paper, so I can collect student responses and analyze them for library program review purposes.

In my preparation, I have questioned the extreme inconsistencies in student responses on the RSW worksheet and overall student interactions during instruction: Is it the content? The presentation of that content, i.e., my teaching style? Student motivation being in the library? Instructor buy-in? The library classroom space itself? Something else? Redesigning the actual instructional content and working on my pedagogy are separate and valid issues to tackle (something I will address at the end of this report). As Bell (2018) succinctly recommends, “Commit to tackling the simplest of challenges and experiment with design thinking as the process for fixing what’s broken” (p. 6). It is in this context that I engage with my DT challenge of improving the AAU library classroom, as the simpler and logical first step in overall improvements to AAU library instruction.

“The Library teaches information literacy skills in adherence with ALA IL standards, at point of need, in relevant, engaging ways.”

“The Library facility, staff and technology support student and faculty academic needs by providing computers, printers, copiers and scanners; adequate open hours, furniture, space planning; adequate staff, access to staff, expertise and customer service of staff.”

(From AAU Library Mission Statement)

Both old and revised RSW worksheets available on Google Drive for reference.
Empathic Design

My main issue throughout this DT challenge is that my role in library instruction is so deeply embedded in approaching this question. I can see how the space and the instruction itself relate to each other. It provides me a unique, yet biased perspective, because I have a significant stake in the outcome of this DT challenge. I did my best to remain impartial throughout my data collection and subsequent analyses, approaching this DT challenge systematically as an outsider, while also juggling doing my job in preparing and teaching these classes from which I am gathering data. The question I asked myself throughout this whole process: How is the space impacting instruction? I found Reimagining Library Spaces: Transform Your Space on Any Budget by Diana Rendina (2017) an invaluable frame of reference to structure how I thought about library spaces, as well as IDEO’s Design Thinking for Libraries (2014) toolkit to provide the DT framework and empathic research methods.

1) Inventory Check

Early on in my empathic design process, I followed Rendina’s (2017) first step of taking an inventory of the physical space (p. 66). Taking inventory may seem like a small and simple step, but it prompted me to begin focusing on what students may react to when asked to think about their library classroom experiences. I also began questioning whether I am using this equipment effectively in relation to the physical space.

- 21 folding chairs
- 1 projector
- 1 rolling projector stand
- 1 projector screen
- 1 iMac
- 1 speaker
- 1 huge desk
- 1 side desk

- 1 file cabinet
- 1 rolling chair
- 1 small stool
- 1 chair
- 1 rolling iPad cart
- 20 iPads (5th gen)
- 1 rolling white board

More pictures available in Photo Journal > 1_Original Layout
2) Quickfire Focus Groups and Interviews

I call my primary data collection here “quickfire” focus groups and interviews because I asked feedback from students and instructors right at the end of some of my library sessions. I know this is not the most ideal method for collecting data, but I saw this as a necessary compromise, given the time constraints of this DT challenge and everyone involved. I solicited feedback by asking “What are your thoughts about learning and being in here in the library classroom? Is there something that you’d like to see changed?” Data was collected from one LA 108 section (mix of majors), one LA 202 section (mix of majors), one graduate Advertising major class, one phone call conversation with a LA 108 instructor, and one LA 108 instructor I co-taught with in providing library research instruction for her class (no librarian-led RSW). After collecting responses, I compiled and standardized them in MS Excel to produce graphs of frequency counts, weighting both instructor and student responses as the same.
My takeaways:
The most notable complaint was the noise from next door’s EAP classroom; even I am bothered by the noise during my instruction, and there are times when I feel like I have to talk over them. The thin wall separating the classrooms does nothing to dampen the sound; and EAP classes tend to be noisier because they are practicing group conversations or watching video clips at a high volume. The library classroom space doesn’t seem as welcoming because it is small and lacks proper air circulation (the windows do not open in this room), so much so that some students call the space “sterile” and “suffocating.” The folding chairs with table arms have so little desk space, reminding many of high school. They do not like the fluorescent lighting either, with one student reminded negatively of an old office space. Instructors definitely want to make the space more conducive to conversations by rearranging the seating so that it would be in a U shape instead of rows. They appreciate having the white board and projector, and one even wanted more writing board space, seeking flexible presentation options to complement her teaching style. All this actually prompted me to measure the library classroom: it seems to be roughly a 20 x 20 sq. foot space, based on estimates from the free AR measuring app TapMeasure. I also spent some time in the EAP classroom, looking around and sitting around when it was empty, and it definitely feels bigger (possibly 1.5x bigger).

TapMeasure:
[https://apps.apple.com/us/app/tapmeasure-ar-utility/id1281766938]

Response Data Excel file available.
More pictures and short 360 phone video clips available in Photo Journal > 2_EAP Classroom

3) Expert Interviews

As described in the Libraries Toolkit, expert interviews can lead to valuable perspective on factors integral to a project’s focus (IDEO, 2014). Per instructor recommendation, I sought out expert perspectives from librarians of nearby academic institutions to learn about how they conduct instruction in their respective library spaces, especially since they may have been engaging in instruction longer than I have. I interviewed the AAU Library Director, asking her about past librarians and their instruction experiences. I reached out to three nearby institutions via email for a request to interview and possibly tour their library spaces: Fashion Institute of Design & Merchandising’s San Francisco campus (FIDM SF), the San Francisco Art Institute (SF AI), and Golden Gate University (GGU). I received no response from FIDM, GGU Library emailed me their responses, and I was able to tour the library and small campus space at SF AI.
Library Director
Debra Sampson, AAU Library Director, mentioned how the room is small and hard to maneuver through when helping students one-on-one during library instruction, especially when using iPads. When asked about her experiences talking to past AAU librarians conducting instruction, she recalled one wanted a podium while another wanted a standing desk for the computer and projector – neither received budget approval from the finance department. Conversations mainly revolved around wifi connectivity and the frustrations of managing the iPads, and not so much about the kind of instruction conducted. When she was teaching in the past, Debra used the white board a lot more than the projector. She also noted inconsistent iPad use in instruction until after 2016, even though iPads were purchased many years back (refresh from 3rd generation iPads to our current 5th generation iPads in 2017-2018). The small space and thin wall that carriers over noise negatively impacted the lecturing experience then as it does now. She also provided much-needed context regarding the current layout: the library classroom and EAP classroom were once one big EAP computer classroom; it was in a “capital improvement” renovation that split this wide room into two smaller classrooms. If it were up to her, she would break down the wall again – dividing the room was a mistake, and it’s making both classes suffer from the noise. Yet this is something that the administration probably will not do, in order to have additional classroom spaces and not undergo costly architectural planning and construction in the library space yet again.

My takeaways:
High staff turnover in my position contributed to a lack of communication about instruction, especially when it sounds like past librarians really didn’t confer about issues with library instruction, with each other or with course instructors. Everyone has their personal preferences in how they conduct instruction; I’m just starting to develop mine through trial and error and seeking feedback. (I wouldn’t be in this situation engaging in a DT challenge if there wasn’t turnover in the first place.) The wall has been an issue for everyone for the longest time, and this is something that I will need to acknowledge and hopefully address in this DT challenge.

GGU Library email correspondence
Jennifer Weiser, Web Services & Student Engagement Librarian at the GGU Business Library, wrote to me saying that they do not have a library classroom for traditional library instruction. Librarians typically go to the classroom via Zoom or in-person. They do conduct periodic workshops and small group research assistance sessions in one of their three “collaborative-team-work stations.” These spaces are equipped with various technology options, can seat seven people comfortably, and can convert to a lecture space that can hold 16 students – this larger configuration has only been used once in recent years for a 1-hour workshop discussing a specific database. No noted issues with noise, but some noise from group use of the work stations may interfere with nearby tutoring sessions.
My takeaways:
Librarian instruction is highly customized to the class and its assignments. The culture there is highly flexible and mobile, moving the librarian out of the library space to where students are. Workshops held at the library are for small groups. This gets me thinking about how technology is used at the AAU library classroom and how flexible the space is in instruction.

**SF AI Field Trip**
Jeff Gunderson, Librarian and Archivist at SF AI’s Anne Bremer Memorial Library, gave me a tour of the library space and the small historic campus. They do not have an actual room for library instruction; the sitting area surrounded by the bound periodicals and reference shelves doubles as a presentation space. They present from a laptop connected to a TV/monitor when they talk about their online resources. Incoming classes typically have 8-10 students, the size of many of their studio classes; when they have 15-20 students, they would move instruction to the lecture hall. “Space is a premium in the library,” Jeff notes, but even though the space is very tight, it is very much in the middle of the library resources being discussed. Jeff also commented that if he could make some sort of change to the space, he would like a projector screen to hang from the ceiling for presentations.

My takeaways:
Instruction mirrors the needs and culture of the institution. The way how they discuss their resources blends with the actual collections themselves. SF AI is technically a competing arts institution to AAU, but in practice, it is very niche, with a slower pace of life where everyone knows nearly everyone, something hard to do in AAU’s fragmented campus. Its library collections are historic and targeted for their audiences. This experience made me question how I could mimic the kind of instructional space that AAU students have in their regular classrooms – how can I create more space in the library classroom and use that space better?
4) Personal Observations from Teaching

Throughout the data collection described above, I also took notes on Google Keep on my iPhone. Observing, documenting, and reflecting on actual behavior is crucial to understand target users, beyond asking for their motivations (IDEO, 2014). Following Rendina’s (2017) suggestion of observing a library space “like an anthropologist” using Conifer Research’s AEIOU acronym (Activities, Environments, Interactions, Objects, and Users; 70-72), I put briefly here some of my additional observations providing library instruction:

Activities [how students move about in this space]:
- Sitting the chairs, laying around all of their bags and materials around them, with the occasional coffee or smoothie
- Some students occasionally moving in and out of the classroom, even during lecture and discussion bits of the library session

Environments [how they move in similar spaces]:
- Based on instructor feedback, the equipment other than the folding chairs is consistent with what they have in their regular classrooms for this semester

Interactions [how they interact with the space and each other]:
- Talking to each other in side conversations
- Those sitting in back rows lean back on the wall
- After I clean up the room after a class, it’s interesting to see how some chairs on the side are turned facing towards the projector screen (when they were initially straight in rows)
- Sitting down on the floor because the chair is too small and uncomfortable
- Attempting to tune out noise during breakout sessions (covering their ears)
- Students nearby projector squirming because it gets hot in the classroom after some time, with the heat from the projector radiating outward
- Keeping the door open per instructor request makes me question whether students hear me, especially with EAP classes happening next door

Objects [what are students using in the space]:
- Students using their own laptops, iPads, notebooks, and phones to do the RSW
- Other students using library iPads
- Writing on RSW worksheets
- Looking through handouts that I give out

Users [observations of the students themselves]:
- Sleeping
- Texting or playing on their phones
- Listening to music with one earbud in (oddly enough, sometimes these students are the most vocal and contribute interesting, relevant thoughts to discussion)
- Balancing the RSW worksheet and iPad or personal device on their laps and small desk space
- Frustration (from not finding relevant library materials yet)
- Confusion (from not initially understanding what I demonstrated)
- Nonchalance (maturity perhaps?)
- Engaging with me when I pose questions individually or to the whole class
5) Personas

I created three personas of students based on my personal observations described above, supported by relevant external research on pursuing higher education and adult learner demographics and motivations:

Mintel’s 2015 *Attitudes towards Higher Education* report projected increased enrollment among women, minority groups, and 25+ individuals through 2024. Many Millennials are adult learners (25+), making up 27% of undergraduates, most of which are employed full-time; more than half are married or have families (St. Amour, 2019). Students seek affordability and less time to earn a degree, though they are increasingly questioning whether a degree is still necessary to achieve their career goals (Bonetto, 2015). As an open admissions institution, AAU brings many students from out of state, drawn in by both the prospects of an art career and San Francisco culture. We have a sizeable international student population that is supported by the EAP department, which is focused on accelerating ESL learning so international students can pursue their major-specific coursework. Yet in many EAP courses as well as LA 108, there is a lot of struggle and relatively high disinterest in general coursework. One of the instructors I interviewed bluntly stated that “Almost a third of class in LA 108 doesn’t show up”; they are not only absent during library instruction. The LA 108 failure rate is high because students do not attend class; they’re not interested in writing, research, and quite possibly, the library. They may come to a degree path based on their passion, but at the same time also feel like choosing a different major, feeling uncertain how they may apply their education to the “real world” (Bonetto, 2015).

As the Mintel report noted, there are still opportunities: though younger students definitely need guidance, education is still viewed as a way to improve career prospects and increase earning potential, but with a shifting focus from education to attain a degree to education as skills-based training. 46% current/prospective students view education as a way to acquire new skills; 70% place more importance on skills over a degree (Bonetto, 2015). Yet students still want both an education and the “college experience,” such as meeting like-minded people and others from different backgrounds and participating in internships.

Utility of chosen degree, by age, September 2015

Please tell us how much you agree or disagree with the following statements. [Any agree]
Base: 1,357 internet users aged 18+ who are in school and/or have a degree
Source: Lightspeed GMI/Mintel (2)
I also recognize that other students are not always coming to AAU straight out of high school. There may have been some gap in time since a student last attended college. As Reed (2019) notes in his opinion piece “College Ready,” fit goes both ways in the student-college relationship: Some students may do poorly through their first attempt at college, and return years later and succeed. The National Student Clearinghouse Research Center identified 36 million Americans with some postsecondary education but no degree completion and not currently enrolled in an academic institution as “Some College, No Degree” students (SCNDs), up from 29 million five years ago. 10% of this population have two years’ worth of academic progress up until last enrollment and are seen as “potential completers” that may complete their degree (Shapiro et al., 2019).

![Figure 1a. Some College, No Degree Population’s Age Profile](image)

They may also be veterans - AAU has a steadily growing presence of veteran students that are taking advantage of the GI Bill. There are definitely students returning to school seeking a second degree to change careers or augment their first one. A recent Inside Higher Ed article outlined marketing firm Lipman Hearne’s recently published four personas of adult learners: reinventors, scholars, change makers, and seekers. Commonalities across these personas include a desire for a better paying career, flexibility in how they pursue their education (online, onsite, or a mix of both), and emotional benefits that come with a degree (confidence, well-roundedness, professionalism; St. Amour, 2019).

Reed (2019) recognizes open-admissions colleges for their “epistemological humility,” not “pretending” to identify successful students, but letting everyone in to find out and see for themselves if they can succeed. This sentiment makes sense in light of SCNDs’ years since last enrollment: the median is ten years for all SCNDs, but four for potential completers (Shapiro et al., 2019). Adult learners have different motivations between their first and second attempts at degree completion, ideally more focused on what they want to get out of their education towards a specific career path. 67% of Millennials agree that a degree is necessary for a successful career, and 64% also recognize that a bachelor’s degree is less valuable than it used to be (Bonetto, 2015, p. 42). Though this sounds conflicting, the state of the economy at the time many Millennials first entered the workforce gave rise to the motivation of “doubling down” on education by earning a second degree in order to compete for jobs. Higher education has to move past “traditional” versus “non-traditional” students, especially in an institution such as AAU that claims to be open to any and all aspiring arts professionals. Library instruction plays a role in that; there is definitely opportunity here for targeted instruction and services that recognize these key features of traditional students and adult learners.
How do AAU students engage with library instruction?  
*Based on my experiences introducing students to library resources in one-shot sessions

"The Advancer": Sophia Driver

**DEMOGRAPHICS**
- Mid 20s, early 30s; most likely female
- Commuter student (1-2 hour travel time each way)
- Works a full-time or part-time job on top of studies
- Some English proficiency; English is not their first language

"I want to use my prior experiences to influence how I create memorable ad campaigns - I was told the library can help me."

**LIBRARY BEHAVIORS**
- Knows what she needs, but not always how to access it
- Unafraid to ask and respond to questions during instruction
- Engages with instruction by taking notes
- Uncovers and applies connections between resources

**EDUCATIONAL EXPECTATIONS**
- Needs straightforward instruction (resources connect with learning objectives)
- Wants to know how to access databases off-campus
- Needs to know that reference assistance is available

**MOTIVATIONS**
- Make a career switch
- Education as investment (*doubling down* to get better paying job)
- Resume and portfolio building
- Learn from instructors currently active in industry
- Seek professional recognition

*Images used come from Canva’s free image collections.*
"The Satisficer": Alison Walker

DEMOGRAPHICS
- 17-23 years old
- Comes for out of state or international
- Lives in one of the freshman dorms
- Passing high school with average/below-average grades

"I want to create sustainable fashion that boosts the self-esteem of young women - but why do I have to use the library?"

MOTIVATIONS
- Learn alongside other open- and like-minded people
- Education as "moving out" (from home, from past experiences)
- Focus on artistic passions and "the college experience"
- Take advantage of AAU open enrollment (no GPA requirement)

LIBRARY BEHAVIORS
- Does not always see value of library instruction
- Finds loosely relevant resources to meet citation requirements
- Reluctant to respond or ask for help during instruction
- Distracted: on phone, sleeping, side conversations

EDUCATIONAL EXPECTATIONS
- Needs library research for required composition course
- Wants to know about available major-specific resources
- Needs guidance to recognize possibilities and extent of library resources for their creative work

"The Shaker": Edward Surge

DEMOGRAPHICS
- 25-40+ years old
- Coming back after many years to finish a degree
- Most likely to be married or have families
- Possible veteran status; here at AAU with GI Bill

"I know what I want to research based on my experiences aboard, but I am totally lost in how to begin using library databases."

MOTIVATIONS
- Seeks flexibility in educational path and learning options
- Education as "emotional validation" and accomplishment
- Take advantage of AAU open enrollment (no GPA requirement)
- Make a career switch and seek higher paying work

LIBRARY BEHAVIORS
- Participates in library instruction; engaged and thoughtful
- Curious to explore library resources and explanations why things are (e.g., usage rights)
- Unafraid to ask questions and take notes

EDUCATIONAL EXPECTATIONS
- Needs to observe the actual steps of how to navigate through specific databases
- Wants confidence in ability to explore resources on their own
- Needs to know that reference assistance is available

*Images used come from Canva’s free image collections.
Identifying Problems

In this DT challenge, I see that I can summarize what I uncovered in my Empathic Design step as issues pertaining to Space and Sound.

In my process of identifying problems with the library classroom space, I took a step back to consider the “narrative design” of the library space, of “library as experience” (Malczewski, 2014). How is space used and how do patrons behave in it? How do people sit? And where, in relation to others in the same space? What is the vocal volume in a particular space? How do people in that space order “nonfixed space” (move chairs or tables to suit their needs)?

Citing David Thornburg’s Learning Space Metaphors, Rendina (2017) describes the library classroom as a campfire where people gather to hear stories, a time for both lecture and opportunity for interactive discovery of library resources (pp. 35-36). At this campfire in the AAU library, instructors bring their students to the library and I pass on stories of research instruction. I have a decent equipment inventory suited for small class instruction. But the space itself is perceived as unwelcoming, because the room is small, air circulation is poor, the folding chairs bring back unfavorable high school memories, and the row arrangement does not promote conversation. Most importantly, the thin walls bring sound from the class conversations next door, making it harder for everyone to concentrate. Interviews with my expert sources helped me realize that instruction mirrors the needs and culture of the institution. Taken with my own observations of student behaviors and relevant secondary research, I created three personas. To apply the personas I created, I believe that the library classroom should convert Satisficers to consider using more library resources in their work and support Advancers and Shakers in promoting conversation in library instruction and reference assistance beyond the one-shot library session. Malczewski (2014) proposes it best: “How can we develop a library space that people can feel comfortable enough to learn in?” (p. 36). In this DT challenge, I see that I can summarize what I uncovered in my Empathic Design step as issues pertaining to Space and Sound. My question then is:

How might we modify the library classroom to make the library instruction experience effective, engaging, and comfortable?
**Brainstorming**

Sitting in the space, reflecting upon recent library instruction and my identified issues of **Space** and **Sound**, I started moving things around. Moving the computer desk further back, moving the projector cart forward, moving the whiteboard more to the center – the physical action of moving things around helped me to come up with so many ideas. Inspired by Rendina’s (2017) narrative of redesigning her library space and appendix of potential renovations by budget (pp. 159-160), I decided to organize my overflowing thoughts into various tiers of budget proposals.

**Unlimited Budget Proposal**

The goal: Create open flexible options in a small space; hiding wires and going wire free as much as possible

- Wall-mounted computer cabinet instead of desk
- Touchscreen wall
- Rolling chairs with panels for writing space (usable for on-the-fly seating rearrangements)
- Change window panels to actual windows (improve air circulation)
- Curtains instead of roll-up blinds
- Dimmable, adjustable lighting
- Sound absorption panels hanging from the ceiling
  - Involves strategically placed speakers playing ambient noise to reduce the distraction of hearing conversations throughout the rest of a given space.
- Stronger wifi routers (3x)
- Power strips on the sides of the walls for laptop charging (3x, one for each side where students are)
- Get newer set of iPads
- Get Bluetooth keyboards with those iPads
- Paint the walls a warm, relaxing color
- Pamphlet and brochure wall rack
**$1000-$1500 Budget Proposal**

The goal: Replace presentation equipment and furniture with better, flexible options
- New projector with more lumens
- Mount projector to the ceiling
- Presentation cart instead of large desk
- Paint the wall with whiteboard paint (writeable dry erase surface that we can potentially project upon; Rendina, 2017, pp. 108-112)
- Sound proofing panels that double as art displays on the back wall (having student artwork on it may encourage a department to help split the cost)
- Pamphlet and brochure wall rack
- Remove redundant furniture (no side desk, no projector screen, no rolling white board)
- Curtains instead of roll-up blinds
- Rearrangement: open-faced U that spans the majority of the room

**<$500 budget proposal**

The goal: Create more presence and perception of space; repurpose existing equipment; find optimal furniture arrangement
- Mount shower board in the middle of the wall (12 x 10 ft.) to create whiteboard wall
- Use side table currently used for pamphlets as the computer table
- Move this table to the side of the room where the iPad cart is, making it a pseudo-podium style desk (see picture below)
  - Generates more space to walk around and create a bigger circle; requires IT assistance in unlocking the computer from the desk
- Don’t use the projector screen anymore; use the white board
- DIY sound proofing panels
- Rearrangement: amphitheater-style concave rows, with a gap in the middle

**$500-$1000 budget proposal**

The goal: Replace essential presentation equipment; find optimal furniture arrangement
- Mount shower board the length of the full wall (20 x 10 ft.) to create an instant whiteboard wall (Rendina, 2017, pp. 108-112)
- Mount projector to the ceiling
- Presentation cart instead of large desk
  - Or remove large desk and replace with smaller one (or with the side desk; requires IT assistance in unlocking the computer from the desk)
- Sound proofing panels
- Remove redundant furniture (no large desk, no projector screen, no rolling white board)
- Rearrangement: amphitheater-style concave rows going across the whole room

More pictures available in Photo Journal
> 4_Prototype Layouts
Prototyping Proposal

Going back to my identified issues of **Space** and **Sound**, prototypes would be various furniture rearrangement patterns and low fidelity sound proofing builds. Removing what is deemed as excess furniture is straightforward. Using the rolling whiteboard as the presentation screen is the simplest way to prototype how a projection would look like on a whiteboard wall, especially in conjunction with using natural light by rolling up the blinds instead of using the fluorescent lights whenever possible. Adhering carpet remnants and loose foam bits to the backs and bottom gaps of the EAP and library classroom doors would be a low-cost test for sound dampening. Additionally, buying sample packs when they are available from manufacturers is also a viable, low-cost solution. Hanging bound stacks of towels in wooden frames on the library classroom walls presents a cost-effective, proof of concept for acoustic ceiling panels or sound masking solutions (DIY Perks, 2016). Moving the computer to the side would require coordination with IT in unlocking and relocking the computer. Of all the prototypes, seating rearrangement is the most open to on-the-fly iteration. To get a visual of how seating arrangements would look like in the library space outside of a library session, I tested Rendina’s (2017) diagrammed computer lab layouts for the traditional row layout and the collaborative cluster layout (pp. 46-47), along with other variations of an amphitheater-style concave layout (2-3 rows of chairs). Such layouts can be tested across classes, as discussed below.

**Final Mix**  * Requires budget approval

- Mounting the projector on the ceiling*
- Remove large desk and replace with smaller one (or with the side desk; requires IT assistance in unlocking the computer from the desk)
- Move new computer desk to the corner where the iPad cart is, making it a pseudo-podium style desk (generates more space to walk around and create a bigger circle)
- Buy shower board to cover part of the wall*
- Buy commercially made sound proof paneling*
- Remove excess furniture
- Use the whiteboard as the presentation board, so I can write on the side and draw on what’s being presented
- Rearrangements (TBD; testing everything mentioned in Brainstorm)

More pictures available in Photo Journal
> 4_Prototype Layouts
Implementation Proposal

Implementation of these prototype rearrangements and sound proofing builds would happen in upcoming RSWs and library tours. I would try out various furniture rearrangements and create my own DIY sound proof panels to use in the spring 2020 and summer 2020 semesters. Whenever possible, I would try to test a prototype seating rearrangement across multiple sections of a class. For example, if there were four LA 202 sections scheduled to come in, I would test seating rearrangements for two of those classes, and compare that experience to the original rows of seats. Ideally, the data collected as discussed in the Evaluation Proposal below would serve as supporting evidence for a budget proposal to make permanent changes as described above in the “Final Mix.” All this would take place gradually through fall semester 2020 onward, with the hope that long term data collection and iterations would influence budget approval for these changes. In this process, I have to remember that I can learn something in failure of a prototype, because it gives me the opportunity to “fail forward” and iterate on lessons learned (IDEO, 2014, p. 74). Given the pace of budget approvals and in-house facilities modifications, a successfully modified library classroom taking insight from this DT challenge proposal would be complete in the middle of spring semester 2021.
Evaluation Proposal

The Library Assessment Cookbook (Dobbs, 2017) offers “recipes” for assessment in all aspects and services of a library, many of which can be adapted towards assessment of library instruction. I propose here a seven point approach, which includes strategies that parallel my earlier data collection to make before-and-after comparisons.

1) Measure noise levels with decibel (dB) measurements

I had attempted to measure dB during recent sessions using the free iOS NIOSH Sound Level Meter, but I had difficulty making measurements in the middle of teaching, especially when I’m still new in my position. I tried my best doing it for three instances: before a morning class, during that particular morning class, and during an afternoon when there was no class. From the brief data that I was able to gather, I feel that this would be a worthwhile addition to a formative evaluation protocol to test library classroom space changes. Measuring in 30 second intervals per the app’s suggestion, I found that noise peaked at 82.1 dB and maintained a max level of 69.6 dB when both classes were in session at the same time. The caveats here are that an iPhone’s microphone is not the most sensitive and accurate dB measurement device and that this observation is based on one instance and therefore cannot be generalized. The intention here is to make the measurements a few times before and after the prototypes are implemented, to see whether there is noticeable noise reduction, especially when library instruction and an EAP class are happening at the same time.

NIOSH Sound Level Meter:

2) Photo journaling

I would take pictures where I can to match the kinds of pictures that I have taken throughout my data collection process so far. I would like to be able to take pictures of how students interact with the space (with students’ permission). I could also ask a co-worker to observe me and take pictures of me as I move around (which might be distracting to me, but also potentially worthwhile in documenting the effectiveness of various prototypes).

3) Reflective journaling

Using a predetemined template, I would engage in reflective journaling after each library session, observing in particular what went well and what could have gone better in interactions relating to the library space. The goal here is to be intentional about documenting changes that I observe as the instructor in a library session and slowly build up a bank of observations that can influence adjustments to prototypes as needed. I could also pair this with photo journaling to add more perspective to a specific instance of an interaction between students and various prototypes.
4) PROTEIN
(Peer Review of Teaching: Evaluative Instruction Networks) Supplements for Librarians

Adapted from a more traditional notion of a formative peer review of teaching, I would have a fellow librarian sit in on a session with a new room layout and seek feedback on how I as the instruction librarian am using the space. This librarian would observe how the space is facilitating or hindering my movement around the room and the instruction with a predetermine form and post-observation debrief. Based on the suggested worksheet headings from the recipe, I would have the form include: Effectiveness of Equipment Use, Ease of Movement (around the room), Clarity of Instruction (Volume and Clarity in Speaking, not necessarily the words and ideas themselves), Relationship with Students, Relationship with Classroom Instructor.

5) “Library Rally”- Instructor feedback

Building upon the instructor feedback forms that I implemented prior to the start of this DT challenge, I could modify the wording and the process by which I solicit feedback. Per the recipe instructions, I could make the process more anonymous: instead of having feedback forms sent directly by me after each library session, I could have the forms sent by someone I know in the relevant academic department such as a program administrator, and to have the form sent at the end of the semester. The recipe recommends a short survey; my current survey is four questions long and is focused primarily on instruction and the handouts I provide. I could potentially add one more question in regards to how I changed the library classroom space: “From your perspective, do you think the current library classroom layout promotes student learning?” (On a scale of 1 to 5, with 1 being “Not very effective” and 5 being “Very effective”).

Current survey link: (https://academyart.libwizard.com/f/instructorfeedback)

6) "Seating sweeps"

The original recipe is a quick assessment of user behavior in specific library spaces. Seating sweeps allow library staff to observe and produce a count of various behaviors in a given library space. The process calls for making a checklist with intended observed behaviors, training individuals how to conduct the seating sweep protocol with that checklist, pilot testing, scheduling and conducting the seating sweep for a specific amount of time, and compiling and analyzing the collected data. I could adapt this recipe and template for how students sit in the library classroom, using the AEIOU teaching observations mentioned earlier as a starting point to develop a checklist that I would use during library sessions to observe the effectiveness of various seating arrangements and other prototypes in relation to students working in the library classroom.

7) Student interviews

I would interview students after receiving library instruction using a rubric of predetermined and open-ended questions gauging how implemented prototypes affected their learning experience. I can already foresee how some stakeholders may be resistant to this particular strategy. Yet it is important to consider this as a viable option, as interviewing patrons with incentives involved ideally yields fruitful insights. I see this as the most time-intensive evaluation strategy to set up and conduct throughout a given semester, but also the most information-rich.
This DT challenge has been quite insightful. DT is indeed one more tool for today’s librarian to identify problems, explore solutions, and make decisions (Bell, 2018); it is a definitely a new tool in my growing librarian arsenal that I hope to revisit time and time again moving forward. I was briefly introduced to DT in terms of gamifying library instruction while working toward my MLIS, but I had not explored it intentionally until this course.

Listening to feedback from the community, actively spending time to move things around, imagining what could be instead of being stuck in what is... I feel like I am exercising creativity towards a real objective instead of in the abstract. I have been taking risks in thinking about how I do instruction, methodically trying out new ideas and strategies, going beyond pure database instruction as time permits to bring forth discussions on critical thinking and source evaluation. I have been receiving actionable feedback from instructors, maybe because I’m actively expressing interest in listening to what they have to say. Little by little, I throw myself into building relationships with various faculty that come in contact with the library in some way, from our long-time faculty library users to new instructors and academic support staff that wander in. My outreach strategy as a “department of one” hopefully encourages instructors to send their students to the library for their research questions, which can then inform the content and presentation in my instruction.

As my “Year One” begins to draw to a close, I am looking ahead to “Year Two” and how I will keep experimenting with my teaching style while making changes to the library classroom. Maybe I’ll go through a DT challenge on my own to reassess and modify the RSW in a structured manner. I hope to be able to move past the carbon paper RSW worksheets to put the whole RSW on iPads as an interactive session using our recently acquired LibWizard survey and tutorial builder. This could also address space usage, having one less thing for students to juggle during a RSW. Successful examples exist; I just need to explore and work with my fellow librarians to make something worthwhile. I could also use some of the same evaluation strategies mentioned above: PROTEIN can be used to identify more pedagogical issues in my instruction; instructor feedback forms could be refined further; student interviews could uncover whether library instruction was relevant to their work and whether they applied it in the particular assignment that the session was designed to support.

So, how might we modify the library classroom to make the library instruction experience effective, engaging, and comfortable?

Maximize the space that we have, arrange the seats and other equipment to promote group discussion, and reduce the distraction of external noise. At the end of documenting this DT challenge, I am telling myself:

“Let’s make gradual changes, test ideas, make mistakes, and fail forward. Change the space, then change the instruction itself – this will change the overall library instruction experience as a time and space that inspires, promotes learning and exploration, and strengthens the AAU library community.”

How can we ensure that we maintain the library space as a place “to inspire and facilitate learning, to advance knowledge, and to strengthen the community”? (Malczewski, 2014, p. 37).
References


Images

- (10) Screenshot of Sound Masking Application Graphic. [Video clip screenshot at 1:25]. Retrieved from https://vimeo.com/265814068