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A UX Research Space at Yale University: Proposal

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A Library/IT Proposal for a UX Research Space at Yale University

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1 Executive Summary

The idea for a central, shared space for conducting user testing and other kinds of qualitative data gathering came from a developing partnership between the Library and central IT.

As Library staff investigated the possibility of a formalised user testing program, the colleagues who run IT's established user testing program provided Library staff with much-needed advice and resources to assist their investigation.

While central IT's user testing program is both established and operationalized, finding appropriate spaces for testing that did not inconvenience the test participants remains a challenge. IT offices are located at the 25 Science Park building- a significant distance from what is considered central campus, and not a location where most Yale community members ever need to visit (unless they are staff). The Library, while lacking a formalised testing program, has the advantage of a key location in almost the center of campus: the Sterling Memorial Library.

During the development of this proposal, the user testing programs in central IT and in the Library have both evolved further: central IT hired a dedicated UX Researcher, and the Library created a new department for Assessment & UX Research, with a UX Research Librarian on staff. The fundamental needs of both programs, however, have not changed.

The Library can provide and manage an accessible, convenient testing location available to both programs, and central IT can continue to advise and assist Library staff in building out their user testing program. We will go over two different models for a proposed UX Research Space and the background research we did to develop our two operational models in greater detail later in this document. The table on the next page captures the two models for the proposed space and equipment more succinctly:

	Operation Model #1	**Operational Model #2**
Year 1 Costs	$5,800 - $8,200	$8,800 - $11,200
Square Footage	500 sq. ft.	700 sq. ft.
Technology	1 Mac, 1 PC, 2 monitors, Document camera	2 Macs, 2 PCs, Document camera, 2 monitors, assistive technology, 2 docking stations
Furniture	One large table, one small table, 8-10 chairs, storage cabinet	One large table, two small tables, 8-10 chairs, storage cabinet, wall dividers

2 Background

Yale University Library

In the past several years, the Library has explored different methods of conducting usability tests and gathering other valuable user feedback. Usability evaluation and user feedback collection activities occurred on a project-by-project basis, and conducted by a single staff person or with the assistance of other library staff who have received basic instructions specific to the activity/project being worked on. In other words, the Library lacked an operationalized program of routine usability assessment and user feedback collection.

The Library's 2016-2019 vision statement states a clear focus on user-centered design of the Library's digital and physical experiences:

> "The library is a gateway to exceptional collections and continuously strives to enhance discovery, access, and use of the collections...
>
> Library spaces are inspiring, functional, and adaptable to the changing practices of scholarship, teaching, and research.
>
> Library services are intuitive, seamless, and driven by an evidence-based understanding of the disparate needs and research practices of our users."

> "Mission, Vision, Goals and Guiding Principles | 2016-2019 - About the Library."library.yale.edu/about.

Additional, the Library's top stated goal for 2016-2019 is focused on user experience:

> "*User Experience*: Proactively engage with users and staff to improve services **continuously** [emphasis added]."

> "Mission, Vision, Goals and Guiding Principles | 2016-2019 - About the Library."library.yale.edu/about.

With its patrons' experience of our digital and physical services in its focus, the Library has committed to developing and operationalizing its assessment and UX research programs by incorporating a new Assessment & UX Research department. This department's work is solely dedicated to the continuous and routinized collection, measurement and dissemination of quantitative and qualitative data that will help the Library stay in alignment with its mission and stated goals.

The Library has taken a step towards centralizing and streamlining its usability assessment and user feedback collection activities with the incorporation of the A&UXR department. Recent large-scale initiatives like the Bass Library Space Project required a centralized, easily accessible place to meet with patrons and conduct feedback gathering activities. With space in the Library at a premium, and even with months of advance scheduling, the same accessible, centralized space was not always available. While it will remain true that the A&UXR staff will need to leave the Library space to meet patrons where they are (when the recruitment process requires it), it is also true that a centralized, easily accessible place to meet and conduct feedback gathering activities will be essential to the success of the A&UXR department and the achievement of the Library's stated mission and goals.

Yale University IT

Since 2013, Yale IT's User Experience & Design Services team has made significant improvements to Yale's digital environment by making it more usable and accessible. The team launched a user research program that supports the work to understand how users interact with websites, applications, and services for the Yale community. User research is an essential part of the team's process and ensures that they are designing and building with the user in mind.

Having easy access to members of the Yale community is important to the user research program in order to conduct direct user research. It has been a continuous challenge for the User Experience & Design Services team to recruit users for testing, in particular students, who are all located on the main campus and not in proximity to IT at Science Park. A centrally located and accessible space to conduct user research is in need for the user research program to continue to be a success.

The user research lab proposal that follows in this document aligns with IT's FY18 goals and new IT governance structure, which are focused on strengthening collaborations with the Yale community. The user research program would benefit greatly from a dedicated space for conducting testing and research. This would also ensure that IT is prioritizing user needs across the university as it understands and improves the user experience for the community.

Yale IT 2018 Goals | IT Town Hall Presentation, September 20, 2017

3 Current Challenges

Set Up

In its current state, user research takes a considerable amount of time to set up and without a dedicated space, additional work is needed when it comes to setting up testing, particularly the monthly third Thursday testing sessions provided by central IT.

Using the Yale Study Spaces Scheduling tool, IT reserves space for testing. This usually consists of finding rooms that are available for full day testing sessions. This becomes especially challenging when there are summer groups on campus or during busy periods like midterms and finals. With any available room, there is a two hour reservation limit, which causes the UX Researcher to make multiple reservations.

Other challenges include having exclusive use of spaces. Rooms reserved in public areas usually have a few other people in the same room, which can cause difficulty as user research activities are normally communicated as being confidential.

There have been other times where rooms are double booked and IT is left to find last minute rooms for user research activities.

Recruitment

Without a dedicated space, pop-up user research becomes more difficult. Trying to reserve last minute rooms usually ends up with securing a room that is susceptible to very low foot traffic, or in a more hidden location. Recruitment in these reserved spaces do not yield appropriate test participants. When participants are asked to find these less visible spaces it can result in wasted time and frustration.

Quality of Spaces

Spaces we are able to test in usually find themselves to be uninviting and impersonal. When testing is in the library, the rooms that are usually available are in the basement. These are less than ideal areas as WiFi occasionally loses signal in the middle of usability tests, causing an obstacle for users and ruining the natural flow of the test.

Without having a dedicated space, we lose out on the opportunity to be able to modify the space as we see fit for the user research activity taking place. For examples, tables that can be configured for one on one interviews or focus groups, furniture on wheels for easy re-configuration, privacy areas for usability tests, etc.

Quality of Research

Without having a lab to conduct research, we are missing out on the opportunity to test mobile applications, which is critical in a mobile first world. With having to travel to different spaces every time, it is more convenient to test just on a laptop. Some users have difficulty adjusting to a laptop that is not their own; they encounter difficulty with scrolling, screen sizes, keyboard, or trackpad/touchpad. There have been cases where participants fail a particular usability testing task with the comment that they think on their personal machine it would've been easier.

Devices

Having to travel from space to space for user research diminishes the amount of equipment the research team can use. Having a dedicated space would allow for storing and using a few types of devices essential to user testing. In particular, document cameras for mobile testing, and accessibility hardware, or accessibility software that is only available on specific operating systems.

4 Strategic Goals

Yale University Library

The Library needs to achieve the following goals as a part of reaching the larger stated goal of "[p]roactively engag[ing] with users and staff to improve services continuously:"

- Conducting routine usability evaluations as a part of a user-centered agile design and development process for its locally developed systems (e.g. Quicksearch, Findit, etc.)
- Conducting usability evaluations for the Library's vended systems to help prioritize and provide evidence for design and functionality changes to bring to vendors
- Establishing a program of routine, lightweight user testing for all Library projects and systems
- Establishing a protocol for conducting *as-needed* accessibility testing

Yale University IT

There are several strategic goals from Yale IT's perspective in support of the UX Research Lab.

- Promote the usability and accessibility services offered by IT to the Yale Community.
- Create a space that is both dedicated and available to Yale user researchers and participants.
- Invest in equipment and reliable infrastructure to conduct user testing to support IT and library services.
- Increase student participation in user research activities by having a dedicated space for testing, which will as a result enhance the quality of user research.
- Continue to strengthen the collaboration with the Resource Office on Disabilities in an effort to support assistive technology testing.

Yale University UX Community

The Library and IT have built a collaborative relationship in the past two years, sharing tools, resources and strategies. A dedicated user research lab would:

- Strengthen the collaboration between UX Practitioners around the Yale Community.
- Provide a space where members can informally update and advise each other on issues or questions that arise while doing UX work at Yale.
- Advocate for user research and user-centered design practices among University staff.
- Raise awareness of accessibility issues in the Yale UX CoP with the assistive tech in the lab space as the University embarks on a campus wide initiative to create and maintain [ADA standards etc] compliant web spaces.
- Provide an area where UX practitioners can conduct research, using each other as support and as a source of knowledge

5   Peer Reviews

Summary

Staff from Yale IT and the Library identified UX departments at three peer institutions who have had experience in launching and operating user research labs:

- Harvard University Library's [User Research Center](#)
- MIT Office of Undergraduate and Academic Programming [Accessibility and Usability group](#)
- Duke University Library's [Assessment and User Experience department](#)

During the summer of 2017, Yale IT and Library staff members Jenn Nolte, Sylvia Perez, and Taber Lightfoot spoke with and/or visited colleagues at these institutions. Notes from these conversations are summarized below.

Recommendation

Based on the feedback we received from our peers at MIT, Harvard and Duke, it is clear that **having a physical space for conducting user research is a part of the *first phase* of developing a fully integrated user research program**.

The user research programs at Duke and MIT are mature (Duke's space is almost 5 years old and MIT's space is 10) and fully integrated into the culture of their respective institutions. Both programs have evolved past the need for a physical space; research is gathered either in person (Duke) or remotely (MIT); both programs have also used remote unmoderated user testing platforms like Usertesting.com and UserZoom to collect data. The physical space that these programs needed at their inception are no longer necessary due to the level of integration the programs achieved over time and the type of data being collected.

It is also important to note that Duke's program does not mention web or space accessibility at all; their focus is on gathering data related solely to library services, systems and spaces. MIT's program does include web accessibility consultation as well as testing and training with assistive technology- and with that does additionally maintain [a physical space](#) where MIT community members can go to use those technologies.

By contrast, Harvard's program is only two and a half years old. Harvard's program currently serves library staff (i.e. other library units are clients of the user research program) and will

expand to serving faculty and other campus departments and organizations later next year. There are no plans to disband the program's physical space; rather the focus at Harvard seems to be on broader integration into the Harvard community.

Harvard's user research program is also now expanding into testing with assistive technologies. This addition to the program's services follows the recent launch of an initiative to address web accessibility issues, which includes a formalised policy on web accessibility at Harvard University.

Given the relatively young ages of both Yale University Library's and Yale IT's user research program, it is clear that a centrally located and dedicated space is crucial to successfully growing and integrating these programs into the Yale community.

In the Library, as the Assessment & UX Research department launches its services, user testing and other user data collection methods will become the occupation of at least one full FTE. A dedicated space for meeting test participants and conducting user research will be crucial to the initial success of the department's service model.

Additionally, the need for space and equipment for testing with assistive technology is real: universities receiving any kind of federal funding must provide web interfaces that are in compliance with the World Wide Web Consortium's WCAG 2.0 standard. However, mere compliance is often not enough to ensure that an interface is truly usable for people who require assistive technology- this often requires actual use of the technology in conjunction with the interface in question. Yale University IT is taking this issue very seriously, creating a unit in the User Experience and Design Services department devoted solely to accessibility evaluation, remediation and planning. In the Library, the Executive Committee has categorised web accessibility evaluation as the highest priority of its IT department for the 2017-2018 fiscal year. A dedicated space with assistive technology will help IT and the Library achieve these goals together for the betterment of the University. Additionally, given what we've learned about physical labs and the maturity of user research programs, it would be helpful to revisit and assess the need for physical space in 2-3 years' time.

Harvard University

User Research Center at Harvard University Library

Basic Information

The team visited the Harvard User Research Center in June 2017 to tour the facility and speak with Amy Deschenes, Senior UX Consultant, and her colleague Danielle Lavoie, Lab Manager.

History

The Harvard User Research Center (URC) launched in August of 2015 with funding from the Arcadia Foundation. Prior to the launch of URC, the University discovered that members of the Harvard library community were undertaking user design projects that were dispersed across libraries and schools. They realized a user research space would be the solution to coordinate usability efforts across all of Harvard's libraries.

Service Model

The Harvard URC's primary customers are staff members who are looking to conduct user studies on their websites and applications. The center offers training to the community so they can learn more about best practices in user experience testing. Throughout the year, the center hosts workshops that allow people to dive deeper into UX testing techniques, explore participatory design, and discuss approaches to ethnographic testing, and also partners with other campus groups to host guest speakers and special events.

There are dedicated assistive technology tools in the center to help in evaluating websites and applications for accessibility. The center also launched a pilot program, the Accessibility Testing Participant Pool, that recruits users to periodically test new Harvard digital products for accessibility.

Currently, the center recruits participants through two different pools, the Harvard Student study pool and the Accessibility Testing Pool. With each pool, the staff at the center is careful not to overuse any participant as to avoid a user getting to accommodated with user research activities and skewing results.

Mission/Vision

The vision for the Harvard User Research Center is to provide equipment, space, and training resources for performing systematic, forward-thinking, and user-centered assessments of services, spaces, and digital resources. The center was launched with support from the Arcadia Foundation.

Staffing, Space, and Equipment

The Harvard URC was started with grant funding from the Arcadia Foundation, which was essential to getting the center off the ground and operationalized.

There are four staff members who support the space, including Amy Deschenes, the Senior User Experience Consultant, who oversees the day-to-day operations of the center. There is also a Lab Manager, who is there to answer questions about booking the lab, check out equipment, and provide guidance on recruiting participants for testing at center.
https://urc.library.harvard.edu/people

The Harvard URC is nested in the Lamont Library on Harvard's campus and made up of three main areas. The lab supports one-on-one usability testing or larger scale testing with multiple observers. There are Windows and Mac workstations available where Harvard staff can practice using the software on their own.
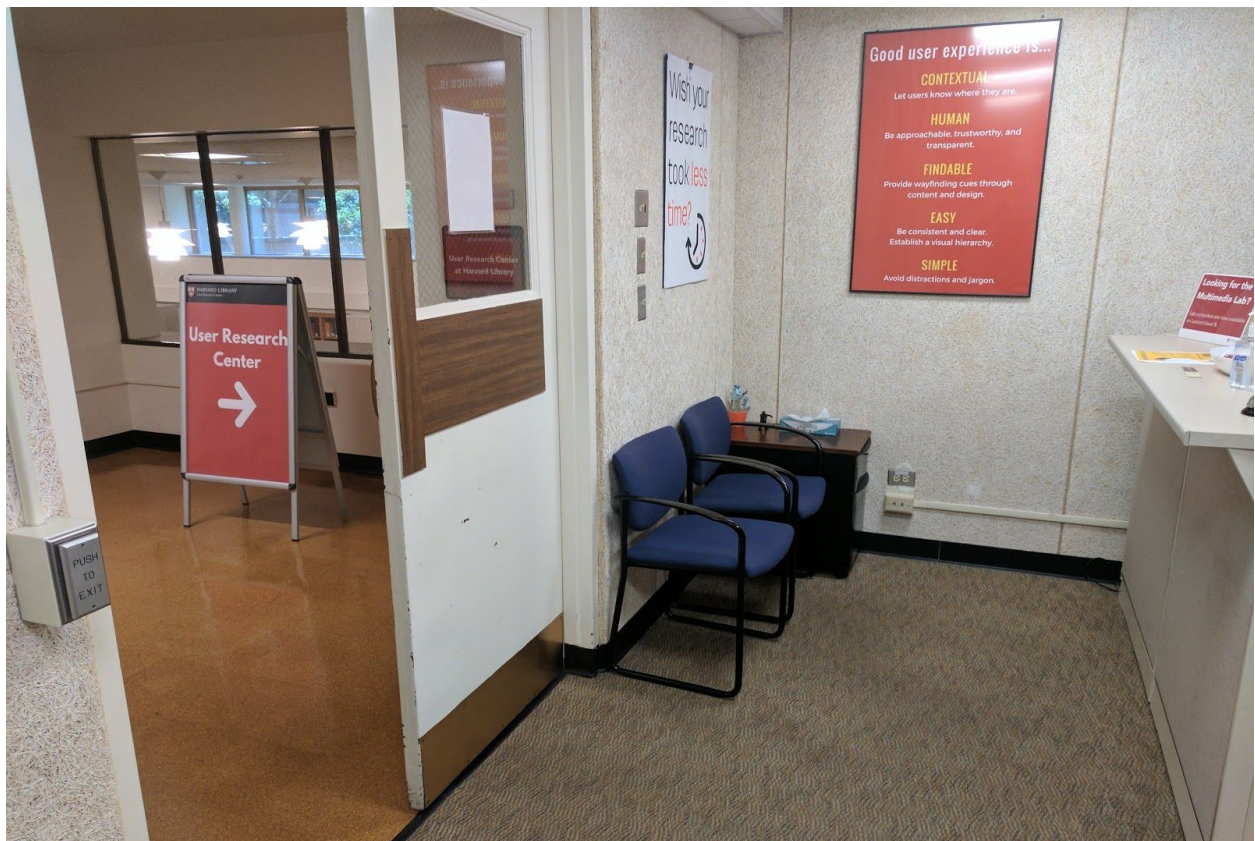
Entrance to Harvard URC.

Staff office for receiving visitors, working at desks.

The center also has a participant room that can be used for usability, accessibility, mobile, and eye-tracking tests, a conference room that seats up to ten people and is available for test observation, staff training, user interviews, or other collaborative UX activities, and there is also a reception/waiting area for study participants that can also be used for small-scale studies using methods like micro-feedback or tablet/paper-based surveys.
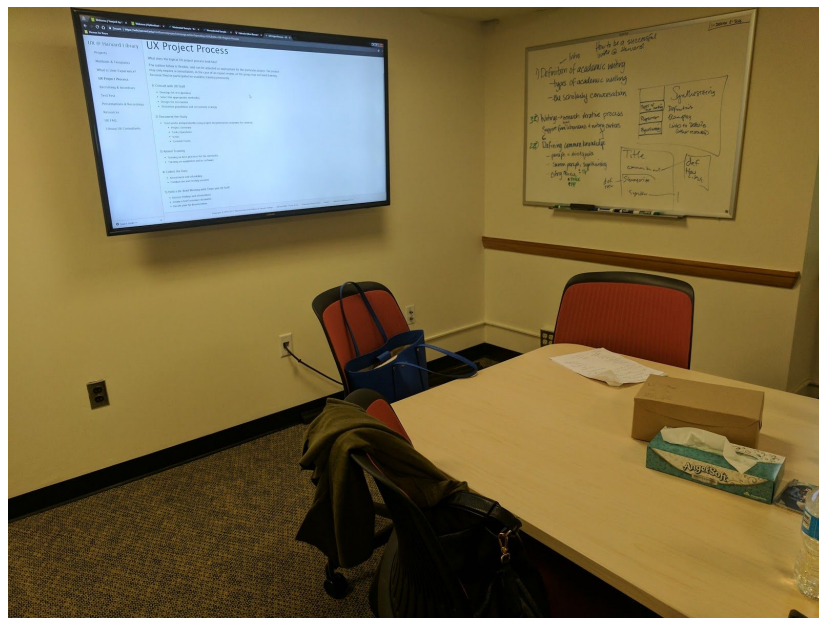
Conference room at Harvard URC.

Accessibility testing station at Harvard URC.
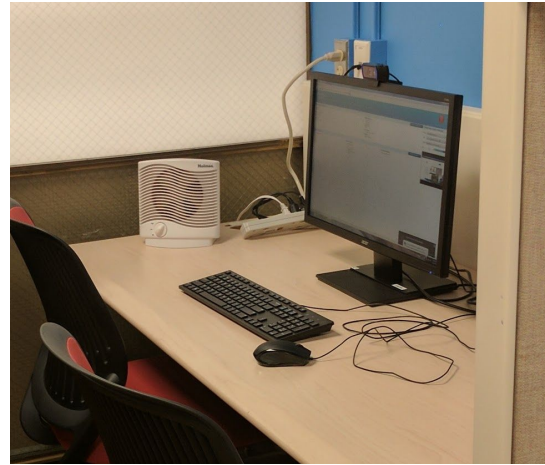
Usability testing station at Harvard URC.

Eye-tracking testing station at Harvard URC.
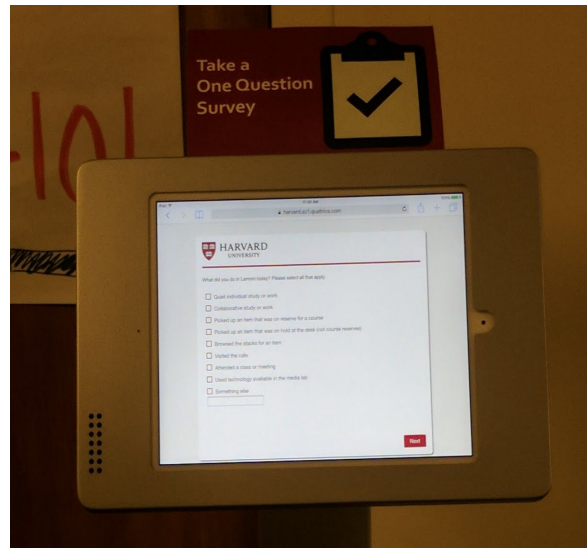
Portable iPad survey station at Harvard URC.

There is a wide selection of testing software available on laptop and desktop computers at the center including Morae, Silverback, JAWS, NVDA, Tobii Studio, Balsamiq, Adobe Captivate, and Optimal Workshop. Portable equipment is also available for checkout, such as laptops, eye-trackers, camcorders, and voice recorders.

Supply closet at Harvard URC.

The space is available on a limited basis to anyone from the Harvard community needing to perform usability, accessibility, or eye-tracking testing.

Successes and Challenges

We learned from Amy that as we launch Yale's User Research Lab that we shouldn't be afraid to fail. Amy also made it clear that recruitment for testers is very challenging, and that we should keep experimenting with new and creative ways to encourage faculty, students, and staff to participate in user testing.

Massachusetts Institute of Technology

Accessibility and Usability, MIT Office of Undergraduate Advising/Academic Programming

Basic Information

The team met with Chris Laroche, Usability Consultant at the Massachusetts Institute of Technology (MIT), April 2017. His group is an internal consultancy based out of the Undergraduate Advising and Academic Programming office.

History

The department has existed for more than ten years. The lab started out as an assistive technology lab, but over time they discovered that students wanted to use assistive technology on laptops rather than in a lab. The space transformed into accessibility and consultancy, with a lot of user research and user testing. Currently, the team offers user interviews, surveys, user testing, evaluation, accessibility/usability reviews, assistive technology reviews, screen reader code reviews, and evaluation tools for the community.

Service Model

Primary customers and stakeholders include anyone in the MIT community and scheduling is done on a first-come, first-serve basis. User research activities conducted by the MIT team include card sorting, reverse card sorting, expert/design reviews, surveys, usability testing, user interviews, and focus groups, with efforts normally place first on student facing projects. Recruiting is still something the team is trying to perfect. Sometimes recruiting is left up to the client, but the team recognizes that this at times biases the participant pool. A remote unmoderated tool, Loop11, is used by the team at times, with screening of possible participants through surveys. Development teams around campus know they can reach out to the usability consultants at any point in time, but are also aware they need to plan ahead to get on schedule. The UX team also works closely with the library at MIT, offering their accessibility testing services and meeting once every two months to share knowledge.

Mission/Vision

The accessibility and usability team was centrally funded by the university, first by allocation 5% - 10% of several staff member's time. Once other members in the university started noting the importance of the lab's presence, two full-time usability positions were funded. Being in IT made it challenging for the usability and accessibility team to get noticed. The team first focused on gaining respect for the work they do. They did "roadshows" to talk about the work they do and added user research options in addition to user testing.

Staffing, Space, and Equipment

The user lab is a centrally funded space that requires six people to manage. Roles include a manager, assistive technology specialists, and accessibility and usability consultants. The team started with a dedicated lab space, but overtime discovered that their needs were better met by the use of a mobile lab. This version of the lab was equipped with mobile devices and laptops. The team learned that for them it was more important to have a multi-function room that could easily convert into a space for focus groups, a research lab, interviews, etc. This was due to the fact their original dedicated space was located too far from the main part of campus.

Successes and Challenges

Looking back, the team at MIT wishes they knew that they didn't have to have a dedicated space to use a lab. Based on their needs, a multipurpose space and a mobile cart was useful for them to complete the work they needed to. The team recognizes the importance of an observation room where clients or other team members can watch research take place without being a distraction to the participant.

Duke University

Assessment and User Experience at Duke University Libraries

Basic Information

The team spoke with Emily Daly, Head of the Assessment & User Experience Department at Duke University Library, in April of 2017. The department serves other departments in the Library, focusing on the Library's systems, spaces and services and its patrons' experience of those services.

History

The Assessment and User Experience department at Duke University Library formally incorporated in January of 2013. Prior to this, Emily Daly was an Instruction Librarian who had begun a project of collecting data through usability testing to make a case to Library IT for making changes to Library interfaces. In 2011, the department of Instruction and Outreach in the Library was re-configured into a smaller, UX-focused department. No new staff were hired.

The newly formed department initially focused on improving staff experiences of interfaces and systems, but eventually shifted to collecting data and testing for the patron's experience of Library systems. An opportunity again arose when staffing changes in the Assessment department allowed for that activity to be folded into the new UX department. This evolved further into the department's current focus: capturing and assessing a holistic view of user engagement in the Library's physical and virtual spaces.

Service Model

The department works extensively with other groups in the Library. It also publishes reports, data sets, Tableau visualization dashboards, and other deliverables to its web site for the rest of the Library (and the open web) to consume. This speaks to the department's efforts at communication and transparency. Much of their work comes from other Library groups, but there are also some more routine projects the department initiates:

- A bi-annual (Library) user satisfaction survey
- Annual statistics for external organizations (e.g. ARL, ACRL, IPEDS, ASERL)
- Maintaining the Tableau dashboards

Mission/Vision

The mission statement for the Assessment and User Experience program at Duke Libraries is posted on their website [emphasis added]:

"The Assessment & User Experience (AUX) Department works with all library departments to **improve users' experience of library services and spaces, both physical and virtual**. AUX staff engage in the following:

- Provide leadership for addressing user needs across Duke University Libraries
- Evaluate and improve the content, design, and organization of the Libraries' online presence
- Study library users' needs and priorities
- Proactively identify and relieve "pain" points users may encounter in their work in the libraries
- Collect and analyze data to evaluate Duke University Libraries operations and understand user needs"

<div align="right">"Assessment & User Experience | Duke University Libraries."
library.duke.edu/about/depts/assessment-user-experience.</div>

Staffing, Space, and Equipment

The Assessment and User Experience program at Duke began with a small budget of less than $7,500, the majority of which was used for equipment/software and for providing food at student advisory board meetings and focus groups. After studies are completed, the student government budget is often used to buy items recommended by those studies' findings (example: cushions for a proposed 'meditation room' in the library which came out of an observational space study).

A specific budget breakdown of the program looks like this:
- Equipment and software $2000
    - Ex. webcams, mobile devices, audio recorders, licenses for Morae, Jing, WebEx
- Food for focus groups, student advisory meetings ~$2500
- Testing incentives ~$1000

The budget did NOT include funding for staff development.

Emily recommended a solid testing or trial period of new software or equipment before purchasing; she often found she was spending money on items she did not end up using too much. She also noted that some of the software and hardware has been accumulated overtime and shared with campus or library IT- to reduce costs and eliminate waste in her budget.
At one point, the Library did have a Usability Lab located in the Lab and used by departments across campus. As the program matured, the lab was was eventually repurposed to office space. Emily noted that now she "goes where the users are" and often uses student's own devices in her testing.

There are three full-time staff in the Assessment and User Experience program at Duke. They also hire 1-3 graduate students from library science in UNC and North Carolina programs per semester. The full-time staff consists of a web developer and self -taught designer and an assessment consultant/analyst.

The Assessment and User Experience program and Duke work collaboratively with other units on campus. Duke's central IT organization has a [web services unit](), with an information architect, UX designers and developers. They often use the library as testing place. There also exists a campus-wide group, DUX (Duke UX), where usability and UX practitioners share ideas and experiences. Finally, the Assessment and User Experience program also works closely with the student government.

Successes and Challenges

Emily noted that the Assessment and User Experience team is a small department with a to-do list that never grows shorter - but acknowledges that this is part of the job. She stressed that the department cannot do their work independently - communication is key. Making sure people feel invested while being conscious of that fact that they are potentially creating work for other staff.

Having the department grow out of two existing departments, both centered in the Library, helped accumulate buy-in from colleagues faster. With that said, Emily acknowledged that some staff in the Library were needed more convincing of the value that the Assessment and UX department could provide. Assessment and UX activities were also slowly added to job descriptions of staff in the department, but also staff in other units- creating a slow but sure adoption of a user-centered approach to delivering Library services and ensuring the need for the Assessment and UX department's work.

One big success that Emily noted was a [month long observational space study]() conducted in the Library every day at 4 different times a day. The results of this study created specific talking points for Library administrators, who were able to make convincing arguments related to money spent on furniture and ultimately saving the Library from making some costlier choices.

6 Implementation

Below is a description of two proposed operational models for the UX Research Space.

Operational Model #1 describes our identified minimum requirements to start and maintain the lab. This includes multipurpose furniture and basic technical equipment to perform the most basic user research activities.

Operational Model #2 is more developed version of Model #1. It will allow for multiple user research activities to take place at once.

	Operation Model #1	**Operational Model #2**
Year 1 Costs	$5,800 - $8,200	$8,800 - $11,200
Square Footage	500 sq. ft.	700 sq. ft.
Technology	1 Mac, 1 PC, 2 monitors, Document camera	2 Macs, 2 PCs, Document camera, 2 monitors, assistive technology, 2 docking stations
Furniture	One large table, one small table, 8-10 chairs, storage cabinet	One large table, two small tables, 8-10 chairs, storage cabinet, wall dividers

Operational Model #1 (Minimum Requirements)

Staffing

Locating the proposed user research lab in the Library obviates the need for Library staff, specifically A&UXR staff, to have access to and monitor that space. A set up similar to Harvard's User Research Center, where staff have desks directly adjacent to the Lab space itself, would be be ideal.

While the user research lab would indeed be space owned and maintained by the Library, the central idea of this proposal is to provide access to and share this space with IT colleagues, and the Resource Office on Disabilities. This shared access would require a calendar and booking process of some kind; similar to processes already in place for Library spaces reservable through Yale Study Spaces Scheduling (LibCal). Library A&UXR staff would manage this calendar and

keep it up to date, and Yale IT staff would be able to book the lab at any time that is available. Library A&UXR staff would also book the Lab on behalf of other Library staff, e.g. Library IT staff who may need use of the space for staff testing or accessibility testing as may be required by a project.

Space

The space for the proposed user research lab should be in a central area that is convenient to students, faculty, and staff. A space in a well-known area of campus would be ideal to ensure that research participants are able to easily find the space. Locating that space in a moderately high foot-traffic area would also allow for conducting "pop-up" user research when needed.

In terms of accessibility, the space must be able to accommodate participants in wheelchairs or of low mobility. The building should have a ramp, and if the space is not on the ground floor, the area for testing should be near an elevator. The space should also have a handicapped restroom nearby. For equipment, the space should also be able to accommodate users who want to bring in their own assistive technology equipment.

Equipment

The list below details what we have identified as basic equipment needed to launch the user research lab, based on lessons learned from MIT. MIT learned that for their needs a multipurpose space was more important than a fully equipped lab. This plan for equipment includes a dedicated conference-sized room with tables and chairs that will seat up to 10 people, or in different group combinations. The ability to reconfigure the furniture will be useful for interviews and focus groups.

- Table (large)
- Table (small)
- 8-10 chairs
- 1 Mac laptop
- 1 PC laptop
- 2 monitors
- Document camera
- Storage cabinet

The lab will run on a bring your own device (BYOD) model for mobile devices and assistive/adaptive technologies. With support from the Resource Office on Disabilities, the lab will pilot and test new assistive/adaptive technologies for adoption by the ROD and the Yale community at large.

See Appendix B for room/equipment diagram

Maintenance & Service Agreements

Yale IT will provide funding for the laptops and monitors, and Yale University Library will purchase and provide support and maintenance on these machines for the duration of their service contract (approximately 3 years). Additional one-time purchases include the document camera and storage cabinet. These will be jointly funded by the Library and IT.

Incentives for Eligible Participants

Recruiting Yale community members for user testing is a challenge, and a shared challenge across peer institutions as mentioned in the Peer Reviews section. At a minimum, we should consider creating a set of incentives to attract and retain participants for the user research activities. These incentives can include Yale apparel such as t-shirts, water bottles, umbrellas, mobile device cases, charging cables and sunglasses.

Total Estimated Costs*

	Year 1 Costs	Year 2 Costs
Equipment	$5,000 - $7,000	$1,000***
Incentives for Eligible Participants**	$800 - $1,200	$800 - $1,200
Total	**$5,800 - $8,200**	**$1,800 - $2,200**

* Funding sources: Yale University Library, Yale IT, Resource Office on Disabilities (as needed)
** Estimated yearly cost to support incentive program.
*** For additional equipment as needed.

Operational Model #2 (Enhanced Requirements)

Staffing & Space

The staffing and space needs are the same for [Operational Model #1](#).

Equipment

The following model for the space is based on Harvard's User Research Center. Similar to model one, it consists of a full sized space that will accommodate up to 10 people, tables, chairs, 4 laptops (Mac and PC), in addition to a document camera, BYOD mobile devices, wall dividers, and a cabinet for storage.

- 1 Large table
- 2 Small tables
- 8-10 chairs
- Document camera
- 2 Mac Laptops
- 2 PC Laptops
- 4 Monitors
- 2 Docking stations
- Assistive technology (hardware/software)*
- Wall dividers

To be determined and funded by the Resource Office on Disabilities

See *[Appendix B](#) for room/equipment diagram*

Maintenance & Service Agreements

Maintenance and service agreements plans are the same for [Operational Model #1](#).

Incentives for Eligible Participants

The incentives for recruiting participants would follow the [Incentives for Eligible Participants](#) plan as proposed in [Operational Model #1](#).

Total Estimated Costs*

	Year 1 Costs	Year 2 Costs
Equipment	$8,000 - $10,000	$1,000***
Incentives for Eligible Participants**	$800 - $1,200	$800 - $1,200
Assistive technology (hardware/software)	TBD	TBD
Total	**$8,800 - $11,200**	**$1,800 - $2,200**

* Funding sources: Yale University Library, Yale IT, Resource Office on Disabilities (as needed)
** Estimated yearly cost to support incentive program.
*** For additional equipment as needed.

7 Appendix

A. Photos of Harvard's User Research Center (URC)
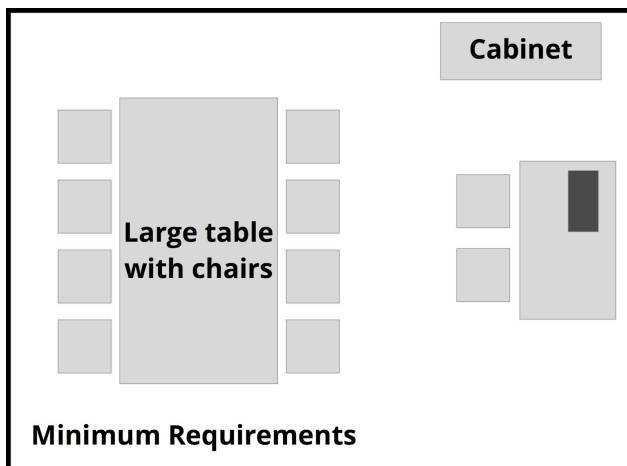
Photos from Yale's Visit, June 2017

photos.app.goo.gl/8JIMlpuRANECsmGK2

Photos by URC Staff

urc.library.harvard.edu/galleries/user-research-center-harvard-library

B. Proposed UX Research Space Layout

Operational Model #1

Operational Model #2