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# Assessment by Design: A Design Thinking Project at University of Washington Libraries

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## Abstract

Design thinking is a user-centered approach to the development of services and spaces that is increasingly being used in public and academic libraries. It is a valuable approach for libraries for two key reasons: firstly, the emphasis on ongoing engagement with users through a variety of qualitative methods (interviewing, observation, etc.) places the focus continually on user experience within and beyond the library; secondly, the use of that feedback in an iterative process of rapid design, prototyping, and reassessment means that this approach can help libraries be more nimble and responsive to user needs. Design thinking's emphasis on iteration—in which feedback is gathered from users at each stage of the process of creating new services and resources—can be a valuable complement to larger scale assessment projects. This paper discusses how design thinking was applied in a 2015–2016 project at the Odegaard Undergraduate Library at the University of Washington. This pilot project focused on identifying challenges faced by transfer students at the University of Washington and was also designed to help the team better understand how this approach might be rolled out more widely as part of an overall assessment program. This paper will discuss what the project team learned (successes and failures) from implementing this project and provide tips for the effective use of this method in academic libraries.

## Introduction

This paper presents a brief discussion of recent assessment work focused on transfer students at the University of Washington (UW) Seattle campus. A small team of librarians, graduate students, and staff members in the Odegaard Undergraduate Library employed a design thinking approach in order to

explore some of the challenges faced by transfer students at this large state institution and to identify ways in which UW Libraries might better support this population of students. The paper discusses the benefits of design thinking for understanding student needs, highlights lessons learned by the project team about design thinking, and provides tips on using this approach in academic libraries.<sup>1</sup>

## What is design thinking, and why did we use this approach?

Design thinking is a user-centered approach to the development of services and spaces that is valuable for libraries for two key reasons: firstly, the emphasis on direct, ongoing engagement with users through a variety of qualitative methods such as interviews and observation places the focus continuously on user experience; secondly, the use of feedback in an iterative process of design, prototyping, and reassessment means that this approach can help libraries be more responsive to user needs. Design thinking is a mindset that emphasizes developing empathy with users and attempting to see the world through their eyes. This mindset is critical for libraries to understand the challenges students face in their academic lives and to develop ways for libraries to meet user needs in potentially new and creative ways.

The UW Libraries team based its work on the processes outlined in the *Design Thinking for Libraries Toolkit*. The toolkit, which emerged out of a collaboration between design thinking firm IDEO and the Chicago and Aarhus (Denmark) Public Libraries, provides libraries with a guide to the key stages of design thinking: ideation, iteration, and implementation.<sup>2</sup> Ideation involves

learning about a target user population (in our case, transfer students) and brainstorming ideas about how services, resources, and/or spaces can be developed or changed to meet their needs. The iteration stage involves creating a prototype of a service, gathering user feedback on the prototype, and making changes to the original idea as needed. During the implementation phase, the new service is piloted with a larger group, feedback is gathered, and additional changes made. The process is intended to be relatively rapid in order to enable organizations to be nimble in developing, testing, and revising services to meet emergent needs.

UW Libraries staff were interested in design thinking as a way to gain a more holistic perspective on transfer student experiences and to learn how we might fit the libraries more seamlessly into their lives. We were also interested in design thinking as an approach that could expand the UW Libraries assessment toolkit and enable us to respond more quickly to user needs. The UW Libraries has a strong track record of effectively using methods such as large-scale user surveys, as well as smaller-scale qualitative approaches, to gather user feedback for improvement. However, many of these activities often take a significant amount of lead time to implement, to analyze and communicate the data, and then to act on the results. An approach in which agility is key—in which we could potentially implement new services or tweak existing ones within the space of months—was a driving factor in the decision to pilot design thinking. Going forward, design thinking will be a key part of the UW Libraries assessment program, as it will enable staff to follow up more quickly on data gathered through other methods such as surveys.

### **Piloting design thinking at UW Libraries: what we did and what we learned**

The project team decided that design thinking would be ideal for gaining a better understanding of some of the challenges transfer students face in moving to a research university from smaller community college settings. Throughout the various stages of the 11-month project, the team held interviews and group discussions with a total of eight transfer students and four university staff members. In keeping with the iterative nature of design thinking, six of these student and staff participants were consulted at multiple points in the process. In addition, follow-up surveys were sent to students who attended a series of events that were

implemented in the final stage of the project. The project focused on transfer students at the Seattle campus, the largest of the three campuses in the UW system.

For the pilot project at UW Libraries, the ideation stage involved two steps: the first involved a literature review and an exploration of existing UW institutional and libraries data on transfer students. This data, and the general literature on transfer student experiences at large research institutions, provided an important big-picture context for our understanding of transfer students. Based on the questions that emerged from this initial literature and data review, the project team then conducted seven interviews, four with transfer students and three with staff from the First Year Programs Office, the Office of Minority Affairs and Diversity, and the Admissions Office. We chose not to focus our questions specifically on the libraries, but instead on broader issues faced by these students (culture shock, work-life balance, connecting to resources on campus). In doing so, the project team hoped to see if there were ways that the libraries could address needs in users' workflows or lives that might not be immediately obvious if we had just asked about existing libraries services or resources. The second step of the ideation stage involved identifying key themes relating to the challenges experienced by some UW transfer students based on institutional data, literature, and our interviews. Key themes that emerged included:

- Transfer students wished to be acknowledged institutionally as a distinct group from other first-year students. Transfer students at UW Seattle are often older and may have job and family responsibilities that they perceive other first-year undergraduate students as not having. Students expressed resistance to the idea of being included with other (younger) first-year students in orientation activities, for example.
- Students identified two key challenges they faced in transferring to UW Seattle: (1) difficulty in finding community; and (2) the need to “hit the ground running”: while other first-years have four or more years to learn about campus resources and services, transfer students felt that they did not have the luxury of time to identify sources of support. Students expressed a need for opportunities to learn about the campus early in their time at UW (ideally, at transfer-student-specific orientations) and in flexible ways (via online information, for example). However, because the institutional focus on

transfer students was relatively new at UW Seattle, information for transfer students existed in multiple places, often making it difficult for students to find the information they needed in a timely manner.

- Our project was centered on the Odegaard Undergraduate Library, but initial interviews revealed that students preferred quieter spaces within the libraries, and often associated the undergraduate library with first-year students who were perhaps less studious and who had more time to socialize.
- Transfer students often entered their majors without taking a 100-level class that would have provided them with an introduction to UW Libraries services and resources.

As a last step in the ideation process, the team then brainstormed possible ways to address these challenges. The team decided to create a library-hosted panel and social event for transfer students that would involve more experienced transfer students sharing their experiences with new transfers.

Once the team decided on this event, we moved to the iteration stage of the process, which involved developing and testing a prototype of our idea. As the team was developing a prototype, we learned that a similar event was being hosted by a different group on campus. Team members decided to treat this event as their prototype and so attended it in order to observe who participated and to gauge the level of interest among transfer students. Only one student attended the event, leading the team to conclude that this might not be the most effective solution to meeting student needs. Team members then returned to students and staff for a group discussion, which was held at a meeting of the campus transfer student organization and which was attended by six students and two First Year Program staff members (two of the students in attendance and both staff members had been previously interviewed in the initial stages of the project) in order to get their perspective on why the event was not successful. Students indicated that the timing of the event was critical, as was the direct relevance of the material to their major: students noted that they wanted all information included in transfer student orientations, as this was the best time for them to gain introductions to important support services on campus, rather than at a later point in the academic term.

The team then entered the iteration/implementation phase, which involved returning to our original idea and deciding how to make changes based on user feedback from the prototype event. We revisited our initial data and interviews and our observations and student/staff feedback on the prototype, and decided to revise the original idea: while we would still have an event, it would be integrated into existing orientation events for transfer students (rather than an independent, separate library-hosted event) and would feature a more departmental-specific focus. The libraries also decided to partner more closely with the First Year Programs Office and the Undergraduate Research Program on these events, gaining feedback from these partners once we had generated new proposals.

In fall of 2016, the libraries, in partnership with these units, piloted a series of new events designed to support transfer students. These included:

- Library orientations and tours designed specifically for transfer students (rather than orientations that included both transfers and other first-year students). Tours were developed in response to the lack of awareness transfer students expressed about the library support available to them, and the fact that many students might not receive formal library instruction if they did not take either a 100-level or a Transfer First Year Interest Group course. The library tours, which were attended by 41 students in fall 2016, introduced transfer students not only to the Odegaard Undergraduate Library but also to a range of other library services and to spaces that are well-suited to quiet, individual study.
- A transfer student social with departmental librarians and advisors, developed in partnership with the Undergraduate Research Program. The social, held in the Undergraduate Library and attended by over 45 students, provided transfers with an opportunity to meet other transfer students, subject librarians, and departmental advisors. While this event was in many ways similar to the team's original idea, the critical difference was that it was held in conjunction with the Undergraduate Research Program's panel presentation on research opportunities for transfer students.
- Children's Story Time for transfer students and their children, developed in partnership with First Year Programs and the Student Parent Resource Center. This was designed with transfer students with families in mind. The

event was not well attended, and library staff are considering whether it should be modified or offered again.

Feedback on these events was gathered in the form of surveys, which are currently being analyzed to assess what worked and what might be changed. In addition, the project team presented its results to liaison librarians and has hosted a transfer student panel for library staff. This panel enabled librarians to hear directly from transfer students about their experiences and the support they need in their majors.

Over the next year, staff in Odegaard Undergraduate Library will continue to assess the new events for transfer students and will also be working closely with campus partners to explore other areas of support for transfer students:

- The first year experience librarian will partner with staff in First Year Programs and other units to ensure that online information for students is collected in one place and that students are aware of this resource.
- The first year experience librarian will explore connecting with students outside the libraries in a newly revamped space in the student union building called the “Commuter and Transfer Commons.” This space, which is designed to give commuter and transfer students a central, dedicated place for connecting with others, also offers librarians the opportunity for outreach and promotion of library services and resources.
- Project team members will also create a new user persona representing transfer students, to assist library staff in keeping the needs of these students in mind when designing and marketing library services.

As a result of this work, UW Libraries staff now have a better understanding of transfer student needs and stronger relationships with transfer students and other campus staff who support them. The design thinking method itself has yielded important dividends in terms of increased connection with students and staff. The “high touch” approach inherent in design thinking was critical for establishing these connections and developing a deeper understanding of the transfer student experience. The transfer students we spoke to reported that they struggled to find a sense of connection and community in coming to such a large institution. The personal, empathetic, continuous

dialogue approach to learning about their needs produced unexpected dividends, and students repeatedly expressed their gratitude that librarians were taking an interest in them as a distinct group of students.

There are obvious limitations to the team’s approach to understanding transfer student needs. This was a small pilot project designed to gain insights into transfer student needs at the UW Seattle campus and to explore the potential of design thinking methodology. The project was based on feedback from a small sample of a total of twelve participants, and the results are not intended to be generalizable to other institutions. However, one of the key benefits of design thinking is that it is structured to address the question of sample size and representativeness: while the team interviewed only four students and three staff at the start of the project, the continuous engagement with users at later stages of the project (returning to six of the original interviewees and gaining insight from six new participants at later stages) provided a variety of user perspectives and opportunities to assess if our ideas were viable.

### Tips on using design thinking in your library

The *Design Thinking for Libraries Toolkit* provides a detailed guide to best practices for undertaking design thinking projects. Based on our experience, the UW Libraries team can offer additional details (and some modifications) on those tips and best practices:

- **Utilize a small, core project team and draw on others as needed:** The Libraries’ project drew upon a core six-person group who were able to bring diverse skill sets and perspectives to the process: we had a mix of librarians from different units, staff, and graduate students as part of the team. Because we were looking to understand transfer student support and user needs assessment from a fresh perspective, having this diverse group of people was key. Six people was an ideal size for the team; this was enough to divide up the work over the course of the project, but small enough so that we did not face significant scheduling challenges for the weekly team meeting. Beyond this core group, we also had smaller pop-up teams who assisted us with different aspects of the project. For example, three other librarians and graduate students assisted us with notetaking during interviews. This helped to distribute

the workload and give others experience in the process, while helping the core team keep up momentum.

- **Gain administrative buy-in early in the process:** The support of the director of Odegaard Undergraduate Library was critical to the success of this project. This was essential not only because of the need for staff resources and time dedicated to the project, but also because it signaled a willingness to experiment with new approaches and ideas, not all of which would succeed. Administrative support for experimentation, creativity, and even failure was crucial in enabling the project team to realize the full potential of design thinking.
- **Pay attention to meeting and space logistics:** Frequent, regularly scheduled meetings are essential to keep up project momentum. The process is not necessarily intended to be long in duration, but there is a significant investment of time of a few hours per week for each team member during that period. Scheduling all team meetings ahead of time for the duration of the project was essential to move the process forward, even though our project did take longer than expected (more on this below). On a related note, a dedicated space for team meetings and materials, as recommended in the *Design Thinking for Libraries Toolkit*, enabled the team to keep brainstorming materials in view during our meetings. This made it significantly easier to return to those materials continually over the course of the project. This was especially important when the initial event prototype did not succeed: because the team had tracked ideas at all stages of the process and those steps were clearly visible, we were able to return quickly to the challenges we identified and the range of solutions we had previously brainstormed.
- **The mindset with which your team approaches this work is key:** Our project was dependent on team members' willingness to be flexible and open to failure. As this was a pilot, for example, it took us longer than expected to get through all stages of the project (11 months from start to the implementation of new events in fall 2016). In part, this was because team members undertook this project in addition to their regular responsibilities, and also because collaboration with partners outside the libraries can take a significant investment of time at such a large, decentralized institution like UW. The *Design Thinking for Libraries Toolkit* recommends that libraries have dedicated

staff time granted to a team for this process. Realistically, however, this was not possible for us, nor is it a possibility for all libraries. It took some time for the project team to become comfortable with the idea that we needed to adapt the design thinking process to our own institutional context, and we would encourage others to be open to this possibility from the start and to be flexible about modifying the approach as needed. Flexibility was also crucial when it came time for us to prototype our idea for an event. In design thinking, the prototype can be informal—a mock-up of an idea that can help to make it more concrete in order to get user feedback. Rather than create our own prototype, we were able to use another, very similar event as an opportunity to gain user feedback on the viability of our idea. While this will not always be an option, actively seeking out these opportunities has the potential to save project teams (and their users) significant time and effort.

- **Be up front with colleagues about what design thinking is (and isn't):** As the project team shared results and ideas for services and resources for transfer students with colleagues, we realized that we needed to spend more time explaining what design thinking is and how it fits into an overall assessment picture. While design thinking draws on traditional assessment methods such as interviews and observations, the relatively rapid and iterative nature of the approach looked different than the assessment and user experience work that was familiar to some staff. The sample size for the pilot project was small, as it can generally be for design thinking projects, but user feedback was gathered from different groups of users at multiple points in the process. In future, the team will foreground the question of sample size and process in particular so staff will understand both the strengths and limitations of the process. In addition, we will stress the usefulness of design thinking as one part of an overall assessment toolkit, one that can be effectively used in conjunction with other methods such as surveys.
- **Keep your strategic plan in view:** The project team learned a great deal about transfer student challenges and needs more broadly by not focusing specifically on the libraries. However, this also meant that it was easy to lose sight of what was actually within the UW Libraries' scope in terms of meeting some of the broader

needs we identified. We found that it was important to use the UW Libraries' strategic plan as a roadmap for making choices about where to focus in developing new services and resources for those students. Continually asking questions about what is within the library's scope, and what might be best for other partners to address (either on their own or in collaboration with the library) can help ensure that project teams do not lose focus on what their libraries can and should be doing for users. The information gained about user needs in this work can also be used to inform potentially new areas of focus in the next iteration of a strategic plan.

- **Treat the process as an opportunity to build partnerships:** The process itself provided the project team with an opportunity to solidify strategic institutional partnerships and resulted in increased collaboration with the Office of First Year Programs and Undergraduate Research on targeted resources and services for transfer students. Gathering input from staff in these other UW units during the course of the project highlighted areas where we could collaborate more effectively in both the short and long term.

### Conclusion and next steps

As a result of piloting design thinking at UW Libraries, we now have a set of services in place for transfer students that we will continue to assess as they are rolled out in the 2016–17 academic

year. Library staff is also currently planning on running design thinking projects in winter/spring 2017 to follow up on results from our triennial survey for faculty and students. This will involve training additional library staff members in the design thinking approach, which will help to build capacity for this work across the library system. In the longer term, the UW team is considering how we might embed design thinking meaningfully into a sustainable, ongoing practice. While it is certainly a useful part of an assessment toolkit, the true strength of design thinking is as a mindset in which organizations embrace continuous learning, nimbleness, and innovation in order to deliver the best possible support to our users.

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### References

1. A detailed discussion of what we learned about transfer students, and the subsequent actions we took in terms of service improvements, are available in an article entitled "Understanding the Transfer Student Experience Using Design Thinking," Reference Services Review, forthcoming, 2017.
2. IDEO, Design Thinking for Libraries: A Toolkit for Patron-centered Design, 2015, accessed September 28, 2016, <http://designthinkingforlibraries.com/>.