

Understanding the Transfer Student Experience Using Design Thinking

Abstract

Purpose

Discussion of a 2015-16 University of Washington Libraries project focused on understanding the needs and challenges of transfer students on the Seattle campus and developing innovative ways to support transfer student success.

Design/methodology/approach

The study employs design thinking methods, including interviews and rapid iterative prototyping and feedback, to understand and emphasize the user experience.

Findings

Transfer students at the Seattle campus identify themselves as a unique group separate from other undergraduates because of their prior experience, shortened timeline at the university, and their need to balance academic, work, and family commitments. Because transfer students often have little time to learn about and effectively use campus resources, the authors found that working with campus partners to enrich transfer-specific student orientations and events with educational and practical content was the most effective means of supporting new students.

Research limitations

This pilot study was conducted over an 11-month period with a small number of participants, but the iterative nature of design thinking allowed the authors to gather new feedback from a variety of students and staff at each phase.

Originality/value

This study showcases how design thinking methods can increase understanding of transfer student and other user needs. The design thinking approach can also enable the rapid development of library and campus services, as well as outreach efforts, to meet user needs.

Introduction

This article presents a discussion of a 2015-16 University of Washington (UW) Libraries project focused on transfer students at the UW Seattle campus. A team of librarians, graduate students, and staff members employed design thinking methodology to explore challenges faced by transfer students and to identify ways in which UW Libraries might better support this group of students. The authors will

highlight the benefits of design thinking as a method for understanding student needs and discuss the results of this approach and subsequent actions taken to improve the transfer student experience at the UW Seattle campus. Over the course of an 11-month project, the team learned that some transfer students wished to have separate events and programming during orientation, as they wanted to be seen as a distinct group and felt that they had little in common with first-year students entering directly from high school. Transfer students also felt intense pressure on their time, both because they are already two years into their degree progress and because of work and family pressures they perceived to be greater than for other first-year students. The combination of these two findings provided the basis for several programmatic changes to the way UW Libraries planned for Fall 2016 orientation events, specifically targeting events to transfer students and having content that was more explicitly designed with their needs in mind. The authors believe other institutions will benefit not only from learning about the results of this project, but also from understanding how a design thinking approach can yield a deeper awareness of transfer students' experiences [1].

Background

The wider context for the 2015-16 Libraries project on transfer students is a growing focus at UW on the needs of first year and transfer students in order to improve retention and success. UW is a public, Research 1 institution with campuses in Seattle, Bothell, and Tacoma. Seattle is the largest of the campuses, with a total undergraduate enrollment in Fall 2015 of 31,525 undergraduates and 14,345 graduate students (University of Washington Office of Planning and Budgeting, 2016). Transfer students made up over 17% of first-year students at the Seattle campus in 2015 (1,443 transfers out of 8,235 first-year students), with 86% of those students transferring from a Washington State two-year college (University of Washington Office of Admissions, 2016).

While the overall six-year graduation rate for transfer students at UW is 83% – compared to 81% for first-time, first-year entrants – and transfer students had a slightly higher mean GPA upon graduation in 2015 than high school entrants, transfer students may still face challenges upon arrival at a large research institution such as UW [2]. Fifty-two percent of transfers are first-generation college students, 19% are from underrepresented minority groups, and 41% are Pell eligible (Rucker, 2016a, p. 8). A 2014 UW report on student retention and graduation notes a number of negative predictors of degree attainment for transfer students, including out-of-state status, PELL eligibility, and first-generation status (University of Washington Office of Educational Assessment, 2014, p. 18). The highest proportion of transfer students who drop out do so after one quarter, versus three quarters for high school entrants (Rucker, 2016a, p. 9), which points to the need for more immediate interventions for transfer students who may be struggling with their transition. Factors relating to transfer student challenges that are noted in various UW reports include adjustments to large class sizes and the need for greater student support (Rucker, 2016a, p. 11; University of Washington Office of Educational Assessment, 2014).

As part of a suite of efforts designed to increase higher education access and affordability, and in response to some of the challenges highlighted above, UW is currently engaged in a Community College

Engagement Initiative, “a year-long self-study designed to review and assess the Community College transfer student experience at the University of Washington Seattle” (Rucker, 2016a, p. 2; University of Washington *Race & Equity Initiative*, 2016). In order to align the activities of UW Libraries with such wider institutional initiatives, the Libraries created the positions of First Year Experience Librarian in 2014 and Undergraduate Experience Librarian in 2016. These librarians, working closely with the Libraries Teaching & Learning Group and staff in the Odegaard Undergraduate Library, have focused their efforts on assessing student needs, implementing new programs and services, and building strong relationships with key institutional partners such as the Office of First Year Programs and the Office of Minority Affairs and Diversity. Integrating the Libraries into UW’s First Year Experience Initiatives is a key element of the Libraries 2014-17 Strategic Plan (University of Washington Libraries, 2016).

Despite a demonstrated commitment at both the institutional and Libraries level to supporting transfer students, the First Year Experience Librarian recognized that there were gaps in Libraries staff’s understanding of this population and what the Libraries might do to support it. In order to begin to address these gaps, the team articulated a number of questions to explore: who are UW’s transfer students and what challenges do they face at UW and in the Libraries? Given the possible associations highlighted in a number of studies between library use and student success – including higher GPAs and greater retention rates (Soria *et al.*, 2013; Haddow, 2013) – how could the Libraries support institutional efforts to help students succeed? How could the Libraries strengthen campus partnerships with others focused on transfer student success? With these guiding questions as a starting point, the team embarked on a project to explore how the Libraries might understand and better address the needs of transfer students.

Literature Review

There is a significant body of higher education research devoted to identifying challenges faced by transfer students and the ways in which community colleges and universities can address those challenges. The authors’ work at UW focused on how those at “receiving institutions” (Townsend and Wilson, 2006) can help to support transfer student transitions. Therefore, the team’s review of the literature concentrated on studies of transfer students after they had arrived at their new institutions. Key challenges identified in a number of studies include: “transfer shock,” the decline in grades many transfer students experience at their receiving institutions (Hills, 1965; Cejda *et al.*, 1998; Laanan, 2001); real or perceived gaps in transitional support for students at the receiving institution (Tobolowsky and Cox, 2012; Townsend, 2008); finding community, feelings of marginalization, and making social connections (Townley *et al.*, 2013; Kodama, 2002); and differences in academic environments between “sending” and “receiving” institutions, including challenges relating to large class sizes and connecting with faculty, especially at larger institutions (Townsend and Wilson, 2006).

Townsend and Wilson (2006) and Townsend (2008) make the important observation that understanding one’s own institutional context (size, nature of student body, and mission) is critical for fostering transfer student success, and explored student perceptions of the transfer experience at a large,

research-focused institution similar to UW's. Both Townley *et al.* (2013) and Townsend (2008) highlight the importance of understanding the potentially unique needs of transfer students and creating "a supportive university environment that facilitates opportunities for their participation in activities that are customized to their needs" (p. 280). This may come in the form of specific student orientation programs designed exclusively for transfer students (Eggleston and Laanan, 2001), as well as other "transfer-specific practices" such as transfer centers, transfer-specific advising, social events, and scholarships (Miller, 2013, p. 47). Beyond specific individual practices, Jain *et al.* (2011) also identify the need for institutions to develop a "transfer receptive culture," which is defined as the "institutional commitment by a four-year college or university to provide the support needed for students to transfer successfully – that is, to navigate the community college, take the appropriate coursework, apply, enroll, and successfully earn a baccalaureate degree in a timely manner" (p. 257).

The library literature addressing transfer students is sparse, relative to that of the greater higher education realm. Nonetheless, several key articles have looked at the role of the library in supporting transfer students. Phillips and Atwood (2010) provide an excellent summary of a handful of libraries-based articles that consider transfer students (pp. 335-37); few libraries-based articles have been added to the corpus since, although at least one recent conference presentation (McCallister, Gregor, and Joyner, 2015) addressed transfer-aiding collaborations between two- and four-year institutions. Notably, while Phillips and Atwood's work itself focused on information literacy concerns, they recommend that "like its First Year Experience counterpart, transfer students would benefit by receiving systematic support for their academic success" (p. 344), and they encourage ongoing dialogues about the library's role in students' success.

Earlier library literature explored the challenges of differing levels and availability of library instruction (Staines, 1996; Tag, 2004), and case studies include examples of instruction programs targeting transfer students (Cox and Johnson, 1992) and a library partnership with a writing center to assist under-prepared transfer students in acclimating academically to a four-year institution (Tipton and Bender, 2006). Tipton and Bender assert that libraries shouldn't shy away from small-scale collaborations as necessary supplements to larger instruction efforts at research institutions in particular, stating that the "one-size-fits-all school of education has already failed some of these students more than once, and alternatives are desirable for retention and graduation of diverse student populations" (p. 401). The authors of this paper echo this assertion, the sentiments of which were backed up in interviews with transfer students. One of the goals of the UW Libraries project was to identify opportunities for those creative, small-scale collaborations that would speak directly to the specific needs of transfer students, as called for by Bender and Tipton.

In order to gain insights into the needs of transfer students and devise new ways to foster their success at UW, the Libraries project team employed design thinking methodology, which Steven Bell describes as a process that

... guides the development and implementation of all types of products and services. Design thinking can be used to create a new building or a new library service. Design thinking is the

mental approach that designers use to identify problems, understand those affected, prototype possible solutions, and then develop appropriate products and services (Bell, 2007).

Design thinking involves a series of steps taken to gain insight into people and their needs or challenges, innovating new solutions to meet those needs, and then developing one of those solutions through an iterative process that circles back to users for feedback to ensure it works for them. Design thinking has been used extensively in the fields of design, engineering, information technology, education, and business for many years (Dorst, 2011).

Design thinking entered the field of librarianship in a significant way via the recent partnership between design firm IDEO, the Chicago Public Library, and Aarhus Public Libraries in Denmark. The collaboration enabled these two public library systems to explore ways in which the design thinking approach could be used to develop and implement new services in response to highly diverse sets of user needs. The partnership resulted in the 2015 *Design Thinking for Libraries Toolkit*, which guided the UW Libraries' project (the toolkit consists of an in-depth guide, activities workbook, and a "Design Thinking in a Day" at-a-glance guide). Beyond the *Design Thinking for Libraries Toolkit*, however, explorations of design thinking's use in libraries, and academic libraries in particular, is less extensive. Mathews (2012) highlighted design thinking as one possible method libraries could use to innovate more rapidly, and articles by Bell (2008 & 2015) and Meier and Miller (2016) point to the potential of this approach for academic libraries. There is also a growing body of literature on service design in libraries (Marquez & Downey, 2015; Johnson *et al.*, 2015), which shares many traits with design thinking in the emphasis on a holistic focus on user experience. However, there are currently few detailed case studies of how design thinking in particular is being applied in college and university libraries. The authors hope that the project outlined in this article will provide a useful example of how design thinking can be used effectively in academic libraries to facilitate better understanding of user groups such as transfer students.

Methodology

The project team decided that using design thinking, as user-focused methodology, would be ideal for quickly learning more about transfer students at UW Seattle and piloting new services to support them. Using a design thinking approach for the development of services and spaces in libraries is valuable for two key reasons: first, the emphasis on direct, ongoing engagement with users through a variety of qualitative methods (interviews, observation, etc.) places the focus on *user experience*; second, the use of 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. Furthermore, the emphasis on developing empathy with users – seeing the world (and not just the library) through their eyes – is critical for libraries to understand the challenges students face in their academic and personal lives.

The project was conducted from October 2015 through September 2016. After holding a design thinking training workshop for Libraries staff in Summer 2015, seven staff members who currently work with or were interested in understanding the needs of transfer students volunteered to form a small

project team: the First Year Experience Librarian, staff and MLIS students from the Odegaard Undergraduate Library, and the Assessment and User Experience Librarians. Having this small core group was key to the success of the design thinking process, in that all individuals involved brought unique skill sets and fresh perspectives to the process and members were able to act nimbly without having to coordinate too many busy schedules.

Throughout the various stages of the project, the team held interviews and focus group-style 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 [3]. 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 work of the UW Libraries project team was structured around the phases outlined in the *Design Thinking for Libraries Toolkit*: **inspiration**, **ideation**, and **iteration/implementation**. According to Tim Brown, CEO of IDEO,

the design thinking process is best thought of as a system of overlapping spaces – inspiration, ideation, and implementation – rather than a sequence of orderly steps. Inspiration is the problem or opportunity that motivates the search for solutions. Ideation is the process of generating, developing and testing ideas. Implementation is the path that leads from the project stage into people’s lives (Luebke, 2015).

The project team began the **inspiration** phase by exploring existing institutional data and conducting a literature review. The institutional data examined by the team focused on admissions and enrollment data, including the average age of transfer students admitted to UW and the types and locations of the institutions from which they transferred. This data provided an important big picture context for the team’s qualitative work, and the literature review helped identify key issues faced by transfer students more generally. Based on the data and literature, the team brainstormed questions about transfer students and the challenges they might face at UW and in using the Libraries. During Fall 2015, the team explored these questions by conducting seven semi-structured interviews with four transfer students and three staff from First Year Programs, the Office of Minority Affairs and Diversity, and Undergraduate Admissions. Each interview was conducted by two project team members, with one asking questions and the other taking notes. Interviews were also recorded for later analysis by the entire team. Following the design thinking approach, the project team did not focus the interview questions specifically on the Libraries (see Appendix A). Instead, it took a more holistic approach and explored broader issues faced by transfer students (culture shock, work-life balance, connecting to resources on campus) and on their entire college experience (admissions and orientation processes, student life). In doing so, the team hoped to identify innovative ways the Libraries might support these students.

After this inspiration phase, the team moved to the **ideation** stage, which was designed to generate and test ideas to meet the challenges articulated in the initial interviews. As part of this stage, each team pair reviewed the recordings and notes for the interviews they conducted in order to identify

preliminary themes to share with the group. Team members did not formally code the interviews, but instead identified common threads using the design thinking method of “storytelling.” This involves each team member taking turns to describe what they thought were the most important ideas and quotes from the interviews they conducted, while the others listened and took notes (IDEO, 2015, pp. 51-52). The selection of “memorable stories” (IDEO 2015, p. 54) and quotes on the part of each team pair was subjective; however, the full team had all interview notes in front of them during the storytelling session so they could ask questions about how and why certain ideas were chosen. This narrative approach is in keeping with the design thinking emphasis on developing empathy with users, and the method served two purposes: it allowed the team to “immerse [themselves] in different user perspectives” (IDEO 2015, p. 53) and also highlighted where team members agreed or differed on what was important to transfer students.

After each member’s turn, the group collectively identified common themes relating to the challenges experienced by transfer students at UW Seattle that they heard emerge across multiple interviews. The team brainstormed possible ways to address these challenges, discussed them, and then voted on the ideas that emerged from brainstorming. This resulted in the selection of a single idea to prototype: a transfer student panel event hosted by the Libraries. In design thinking, the prototype is a “physical representation of [a] concept” that enables teams to “share ideas with other people, get feedback, and learn how to further refine it” (IDEO, 2015, p. 69).

In design thinking, once a prototype has been created, the project enters the **iteration/implementation** stage: this involves testing the prototype, gathering user feedback on the prototype, and modifying the original idea based on that feedback. This is followed by additional prototypes or pilots and further feedback and modification until the team determines that the idea is ready to be rolled out officially to users. This iterative process ensures that staff do not invest significant time and resources into creating new, fully formed services that may not be entirely suited to user needs (IDEO, 2015, p. 83). During the preliminary development of the Libraries prototype transfer student event in Winter 2016, the team discovered that a similar event was already being hosted by the First Year Programs Office on campus. Instead of putting resources into testing its own event, the team observed this panel as a prototype. Four team members attended the event in order to observe attendance and how it was received by students. Feedback on this event was then gathered using a single focus group style discussion conducted by two members of the project team. The discussion was held at a meeting of the campus transfer student organization, 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).

Based on the feedback received during this discussion, the team decided not to proceed with the idea of a transfer student event as they had originally conceived it (a detailed discussion of the feedback is in the Results section below). Team members revisited the brainstorming process in later Winter/early Spring 2016 in order to identify different solutions to transfer student needs, drawing upon the themes identified in the original seven interviews and subsequent user feedback on the prototype. As a result, a suite of new programming and events aimed at transfer students was developed. Project team members

then returned to two staff members in First Year Programs to gain input on the new ideas. The programming was piloted in Fall 2016 and student feedback was gathered via follow up surveys, with the plan to integrate the programming into ongoing Libraries offerings starting in 2017.

Limitations

There are some 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 at a single institution. The students interviewed by team members in the initial stages of the project were recruited through a student organization, Transfer Students United, so they may have held opinions shaped by their experiences as members of a group focused on raising the profile of transfer students on campus. Given the small sample of participants, 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 4 students and 3 staff at the start of the project, the continuous engagement with users at later stages of the project (returning to 6 of the original interviewees and gaining insight from 6 new participants at later stages) provided a variety of user perspectives and opportunities to assess if our ideas were viable.

Results and Discussion

Identifying Student Needs & Challenges (Inspiration)

Initial interviews in Fall 2015 with four transfer students and three selected staff members who support them pointed to a number of recurring themes, many of which confirmed issues identified in the literature review and in the survey of institutional data. Key themes that emerged during these initial interviews are discussed in detail below, including: transfer students' desire to have prior experiences recognized and to be acknowledged as a distinct group from first-year students entering UW directly from high school; the need to identify resources and sources of support rapidly; the "culture shock" many students experience in transferring to a large research institution from a community college; and the importance of forming community on such a large campus.

Value of prior experience & identification as a unique group

All four transfer students the team interviewed in the initial phase of the project expressed their perception that their prior academic and personal experience was not always fully acknowledged or appreciated by their peers, faculty, and staff at the receiving institution. The average age for transfer students at UW in Fall 2015 was 23, and all student interviewees noted that this perceived age and experience gap between transfer students and high school entrants presented challenges to their sense

of belonging at UW. One student highlighted the example of some of her professors and peers who assumed that all students had started at the university directly out of high school, not realizing that transfer students have had different experiences:

I think most of the resources here are centered around [a] freshman culture. I remember sitting in class and professors every now and then will talk about, "Remember you did this during your freshman year?"... and then you just feel like obviously he or she is not speaking to me because I didn't start here freshman year. I have different experiences and it would be great if those experiences were acknowledged...

However, while students noted that they had significant prior educational and life experiences they wanted to have acknowledged, this did not mean that they knew how to navigate the very different academic and social environment at UW. As one first-generation transfer student observed, although she had significant prior academic experience from community college, she was uncertain about how to translate this experience to her new institution:

I know about taking classes, but I don't know what you DO in a university. Is it the same [as community college]? Do you just go to class and then you go home? Well, the answer was no. Later, I felt like I was missing out on something... everybody here is building a community, everybody is doing something besides just going to class.... For a while, I was feeling out of place.

In comments such as these, interviewees highlighted the need for a kind of institutional support that could respect their past experiences and still provide them with the resources they needed to make the successful transition from one academic environment to another. All the transfer students interviewed by the project team wished to be seen institutionally as a distinct group, different from other new students. They wanted programs focused solely on transfer students, such as transfer-specific orientation events, and resisted the idea of being grouped with other (generally younger) first-year students. Interviewees in this initial stage of the project were all commuter students, and all believed that transfer students had work and family responsibilities and existing outside social networks that other undergraduate students did not.

Identifying resources and sources of support rapidly

In addition to identifying as a distinct group with important past experiences and specific needs, a major challenge identified by all the initial UW transfer student interviewees was the pressure to "hit the ground running." While new first-year students have four or more years to learn about campus resources and services, transfer students felt they did not have the luxury of time to find and effectively use sources of support: "You spend most of your time here trying to figure out how to do things, where to go, who to talk to, [but] by the time you've built your resources list, before you can really start using

those resources, your time is up.” This is a particularly acute issue at an institution such as UW, which operates on academic quarters rather than a semester system.

Staff who work closely with transfer students, such as advising and admissions officers, noted that because transfer students are often older and have prior academic and life experiences, they have a tendency to want to be more self-sufficient when they arrive at UW. The three staff members in these initial interviews said that transfer students are less likely to ask for help than high school entrants because they are often used to taking care of themselves. The same student who noted that she did not know what to “do” in a university also indicated that she felt she *should* have known how to navigate her new environment because of her prior experience. In the midst of such a potentially disorienting and disempowering experience, she was not inclined to ask for help. Should students even wish to seek out sources of support, locating them at large institutions such as UW can be a challenge in and of itself.

The lack of awareness of support and resources available to transfer students also extended to the Libraries. Although interviewers often did not ask directly about the Libraries, the team heard from both students and staff during this project that UW’s large library system was daunting for new transfer students: they did not know where the buildings were, which libraries they could use, which libraries offered the best study spaces for their needs, and how the libraries were different from each other. As one student remarked in the initial interview stage, “We have libraries which offer different types of resources. They definitely need to be highlighted, specifically for transfer students.” Transfer students often did not receive a formal, separate introduction to the Libraries during their orientations. The transfer students interviewed by the authors also frequently entered their majors without taking a 100-level class that would have provided them with an introduction to UW Libraries services and resources. While one of the student interviewees had taken a Transfer First Year Interest Group (TFIG) course at UW, which includes an introduction to the Libraries, others had either not taken a TFIG or had not received Libraries instruction as part of any UW course they had taken. More generally, only about 6% of transfer students at UW enrolled in a TFIG in 2015 (J Larsen 2016, personal communication, 17 October).

“Culture shock” & community

All four students in the initial interviews expressed feeling “culture shock” when they arrived at the university: this was connected to large class sizes, the radical change in scale from community college to UW, uncertainty about different academic expectations, and questions about how to form community. One student likened her experience as a transfer student to an “immigrant experience,” in that she had left behind her existing community and had to establish a new identity and relationships and learn a different culture. Students noted that it had been easier for them to get to know instructors at their community colleges than to connect with professors in large lecture classes at UW and that they were surprised certain academic skills, such as writing, that were taught as part of community college classes were now the responsibility of the student to learn outside of class.

All the students interviewed as part of the inspiration phase noted challenges in finding community on campus. Many students who enter university directly from high school establish social networks in their first two years through student organizations, dorms, or Greek life. As noted earlier, the students who were interviewed initially were commuter students, and all indicated they had jobs and existing family commitments, which meant they were often not on campus beyond when they were in classes. This, in turn, made it more challenging to connect to other students or existing communities and to balance off-campus and on-campus life. However, as one staff member who works closely with transfer students noted, there is also a tension in this desire for community: while there is a wish to build connections, these students are often highly focused on getting their degree work completed and on their external commitments. As the staff member noted, some transfer students resent even having to go to orientation: they wanted to attend classes and do their coursework, then leave campus for jobs and home.

Addressing Student Needs (Ideation)

Using the themes emerging from student and staff interviews conducted during the initial inspiration phase of the project, the team moved to the ideation phase to identify potential solutions to student challenges. The team decided to prototype an event designed to help students learn about campus resources and form community by meeting and hearing about the experiences of other transfer students. The proposed event, hosted by the Libraries in Winter quarter, would consist of a panel of transfer students who would share experiences and tips with new transfers, followed by a social event in which transfer students could meet each other. Libraries and other campus support material would be available to students during the event. The team felt that this event would address a number of the issues raised by students and staff: having an event just for transfer students would speak to the desire to be acknowledged as a distinct group; a panel in which transfer students could share with their peers what they had learned about navigating UW would potentially help to demonstrate the ways in which transfer student experiences were institutionally acknowledged and respected; the social event would help support community building; and the hosting of the event by Libraries staff, in a Libraries space, and including Libraries and other campus resources, would assist new transfers in becoming more familiar with the Libraries and getting up to speed quickly on campus resources.

As mentioned previously in the Methodology section, the team discovered that a similar event, a transfer student panel on “Avoiding Transfer Shock,” was already being hosted by the First Year Programs Office. As this panel was quite similar to the project team’s idea, team members decided to treat this panel as their prototype. However, only one new transfer student attended the panel, which prompted the project team to question whether other such events would be successful.

Reconnecting with Students & Staff (Implementation/Iteration)

In order to identify potential reasons for the lack of attendance and to explore whether the idea for a Libraries event needed to be modified or discarded altogether, the project team returned to transfer students and First Year Programs staff to gather input via a discussion at a meeting of the campus

transfer student organization. During the follow-up discussion with six students and two staff from First Year Programs, team members described what they observed at the student panel and solicited feedback from the students about what might make such an event successful. All students and staff felt strongly that the timing of events was critical, as was the perception of how directly relevant it was to immediate needs. Events that have a discernible connection to success (especially if directly related to their department/major) were seen by students as the most likely to succeed. Given the time pressures faced by transfer students, they wanted to have a clear understanding of what they would get out of it. As one student noted during the discussion, "I have to decide if I am going to go to work or attend the event." All the students at the follow up discussion indicated that they wanted information included in transfer student orientations at the start of the quarter, as this was the best time for them to gain introductions to important support services on campus. After this point, students noted that they were immersed in coursework and felt the window of opportunity provided by orientations was often lost.

This discussion helped team members realize that developing and hosting their own event was not a viable solution to meeting the needs of transfer students. While the team was attempting to address some of the challenges identified in the inspiration phase of the project (needing community, learning about campus resources), team members had not given sufficient weight to other important elements. These included time pressures felt by transfer students because of existing commitments and their commute, and that the critical moment for reaching transfer students is early in their first quarter. Coupling the insights from interviews and prototyping with the institutional data pointing to the fact that UW transfer students are more likely to drop out during their first quarter underscored for the project team the importance of connecting with transfer students as soon as possible once they arrive on campus and integrating Libraries offerings more seamlessly with existing orientation activities.

At this point, the project team reassembled and revisited previously brainstormed ideas for how the Libraries might support transfer students. The team decided to shift the focus more firmly onto working closely with campus partners to integrate the Libraries more effectively into existing orientation events, rather than trying to offer add-ons or stand-alone events. The team reviewed previous ideas from the ideation phase and decided to design new events in partnership with First Year Programs and the Undergraduate Research Program. Thus, after the initial inspiration phase in which the project team identified challenges faced by transfer students at UW, an ideation phase that enabled the team to brainstorm and create a prototype of a possible solution to some of these challenges, and an iteration/implementation stage in which feedback on the prototype was gathered, the team repeated steps in the ideation process to generate new ideas for events and programming to integrate into existing orientation programs. These new ideas, which Libraries staff began piloting in Fall 2016, are described in the sections below.

Meeting students where they are: Integration into Fall 2016 orientation activities

The First Year Experience Librarian worked closely with staff of Odegaard Undergraduate Library, First Year Programs, and the Undergraduate Research Program to implement a series of new events to

support incoming transfer students in Fall 2016. The offerings attempted to address the specific needs of transfer students that the design thinking team had identified, including helping students discover critical resources early in their UW academic career and in ways that respected their limited time. The Libraries co-hosted transfer student focused programming as part of Fall orientation that combined academic and social opportunities tied to departmental/subject information.

The Libraries' transfer student programming was offered in September 2016 during Dawg Daze, a campus-wide, week-long series of events designed to welcome new and returning students before the start of classes. The First Year Programs Office had received similar feedback from transfer students about the desire for separate programming, and, as a result, held a separate Transfer Student Kick-Off for the first time in 2016. This provided an opportunity for the Libraries to join wider campus efforts focused on transfer students. Events offered by the Libraries were designed in collaboration with First Year Programs and were marketed cross-divisionally as a suite of opportunities intended exclusively for transfer students.

The first of these was a series of library tours to showcase several different libraries on campus. They were led by returning transfer students in order to facilitate connections between new and more experienced transfer students. The tours were developed in response to the lack of awareness transfer students expressed about the Libraries 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, introduced transfer students to a variety of library spaces and services available to them and positioned the Libraries as an active presence in a growing transfer student support system. The tours introduced students not only to the Odegaard Undergraduate Library (which transfer student interviewees had associated with "younger" and "less serious" students), but also included a range of other Libraries spaces that are well-suited to quiet, individual study.

The second event, a transfer student social with departmental librarians and advisors, was developed in partnership with the Undergraduate Research Program. The social, which was held in the Undergraduate Library, was designed to be an informal event where students could 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. This event spoke directly to new transfer students' need to learn quickly about the campus services and resources available to them (in this case, librarians, advising resources, and Undergraduate Research); helped to build community among students and those who support them; provided departmental- and major-specific connections with immediate relevance to students; and highlighted ways that students could build on their existing academic experiences in undertaking undergraduate research projects at UW. As a result of this tighter integration between the Libraries and its partners, attendance at the social was robust, with over 45 students meeting librarians, advisors, and fellow students.

From the Libraries' perspective, both the transfer tours and the social addressed the fact that many transfer students miss out on introductory library sessions offered as part of 100- and 200-level courses. Since transfer students often immediately enrol in upper-division courses in their majors and need subject-specific resources, meeting liaison librarians who could help them succeed in their courses was an important element that acknowledged both transfer students' academic needs and differences from other first-year students. Libraries' staff also gathered feedback about these new pilot events in order to identify areas for improvement and better understand whether they met student needs. While the analysis of this feedback is ongoing, initial assessments from the events indicate that students found them useful. As one student noted in the transfer student social survey, "I appreciate all the on-campus transfer events. It truly feels welcoming and has helped prepare me for my classes."

Raising awareness among Libraries staff

In addition to developing events in collaboration with other campus offices, the project team shared findings with Libraries staff in order to raise awareness of transfer student needs and to create buy-in for Fall orientation activities. Project team members presented their results to subject liaison librarians in Spring 2016, and also hosted a Transfer Student Panel as part of the Libraries' staff development program in Summer 2016. At that panel, Libraries staff had a chance to hear directly from transfer students about their challenges and how the libraries might help make the transition to UW easier for other transfer students. The event was designed to enable Libraries staff to learn about the rich experiences and challenges faced by transfer students and to brainstorm ways to consider transfer students' needs in their own work.

Next Steps: Ongoing Partnerships & Support for Transfer Students

While the 2015-16 cycle of work started by the project team is complete, Libraries efforts to improve the transfer student experience will carry forward into 2016-17 and beyond, and much of the work begun by the project team is being integrated into existing operational efforts. In keeping with the iterative design thinking approach, the Libraries will continue to engage in ongoing institutional efforts to identify transfer student needs, to develop creative and collaborative solutions to meet those needs, and to pilot and revise those potential solutions through ongoing dialogue with students and campus partners. In her article "Institutional practices that facilitate Bachelor's Degree completion for transfer students," Miller (2013) recommends moving toward a campus "collaborative culture" focused on transfer student support (p. 48). One of the questions the team began by asking focused on how Libraries staff could strengthen campus partnerships, which can be challenging to cultivate at a large and decentralized institution. The project itself, which involved frequent contact with staff in other units, enabled UW Libraries staff to build these stronger connections with staff in First Year Programs, Admissions, the Office of Minority Affairs and Diversity, and the Undergraduate Research Program. As a result of the project, the Libraries is positioned to continue to work with partners to foster a "collaborative culture" for transfer student success. Moving forward in 2016-17, UW Libraries staff hope to extend these partnerships, including with the new Transfer Initiative Manager, a position proposed in 2016 as part of UW's Community College Engagement Initiative (Rucker, 2016b, p. 5).

In addition, librarians will explore connecting with students outside the Libraries in a newly revamped space in the student union building called the “Commuter & Transfer Commons.” This space, which is designed to give commuter and transfer students a central, dedicated place for connecting with each other, offers the opportunity for outreach and promotion of library services and resources. As the team learned during the course of the project, some transfer students had a strong interest in being recognized as a distinct group from other first-year students and felt especially pressed for time. Librarians hope that meeting transfer students where they are in this new campus space will help connect librarians and students in a way that potentially saves students time and will emphasize the message that the Libraries recognizes transfer students’ specific needs.

Also, as part of the effort to provide students with faster and easier ways to identify campus resources, including those offered by the Libraries, the First Year Experience Librarian will partner with First Year Programs and other units to ensure that online information for transfer students is collected in one place and that students are aware of this resource. Finally, Libraries staff also plan to create a transfer student “persona.” This persona will assist Libraries staff in keeping the specific needs of transfer students in mind when designing and marketing library services and resources (Ward, 2010).

Conclusion

As a result of a 2015-16 design thinking project, UW Libraries staff at the Seattle campus now have a better understanding of transfer student needs and stronger relationships with transfer students and the 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 rich understanding of transfer student experiences. The transfer students interviewed by team members reported that they struggled to find a sense of connection and community in coming to such a large institution. The approach of a personal, empathic, continual dialogue led transfer students to express repeatedly their gratitude that librarians were taking an interest in them as a distinct group of students.

The project resulted both in a new suite of events that directly benefitted transfer students in Fall 2016, as well as a set of initiatives that will be implemented in 2016-17. Just as importantly, the design thinking approach has assisted the project team in internalizing and formalizing methods focused on continuous engagement with *all* users. This pilot project has provided UW Libraries with a new operational model in which a design thinking team generates new ideas for student support that can then be incorporated into ongoing Libraries activities. The authors highly recommend design thinking as a way for libraries to learn about the needs and challenges of a specific population (such as transfer students) and to create innovative solutions for meeting those needs. This is an approach that can be scaled to varying timeframes and resources available in different libraries. The IDEO toolkit, in particular the “Design Thinking in a Day” at-a-glance resource, provides an ideal starting point for exploring how this approach can support libraries in continually improving services to meet user needs.

Notes

[1] Highlights about this project, with a focus on best practices for using design thinking as part of an overall assessment program, were presented in a short paper entitled “Assessment by Design: A Design Thinking Project at the University of Washington Libraries” at the 2016 Library Assessment Conference, Arlington, Virginia, October 31-November 2, 2016.

[2] Graduation rates are drawn from the University of Washington Office of Educational Assessment, 2014, p. 61. The six-year graduation rate for UW transfer students is higher than the national figure of 65% for students who transferred to public four-year institutions (Shapiro *et al.*, 2013, p. 24). At 2014-15 graduation, the mean GPA for UW transfer students was 3.34, compared to 3.32 for high school entrants.

[3] Under UW Human Subjects guidelines, the authors were not required to submit an Institutional Review Board application for this project.

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Appendix A: Interview Questions

For Students:

1. Tell me about your experiences before you were at the UW: where did you transfer from, and why did you decide to come to the UW?
 - a. How prepared did you feel by your prior experiences (at Community College, for example) for life at UW?
2. What are some of the most exciting things about being a transfer student at the UW? What are some of the most challenging things about being a transfer student here?
3. If you could give new transfer students one piece of advice about how to succeed at UW, what would it be?
4. Walk me through a typical day for you – what do you do, where do you go?
5. Think back to a time when you first arrived at the UW when you felt confused or lost.
 - a. How did you get assistance or resolve your confusion?
 - b. Were there particular people on campus who were resources for you?
 - c. When you first arrived here, how did you find out about services/resources available to you?

For Staff:

1. How do you define a “transfer student”?
 - a. Tell us a little bit about your work with transfer students at the UW – what does it involve?
 - b. What does the process look like from the point a student is admitted as a transfer student, to getting the students on campus and oriented to the UW?
2. Think back to a time when you worked with a transfer student who was facing some challenges. What were those challenges, and what were you and/or others able to do to support them?
 - a. Based on this and other experiences, what do you see as some of the most important issues faced by transfer student when they come to the UW?
 - b. To what extent are these issues unique to transfer students at the UW?
3. What kind of support is available to transfer students at the UW?
 - a. How do transfer students learn about the support available to them?
 - b. Do they take advantage of this support, and/or do they take advantage of support channels for undergrads generally?
4. What qualities and skills does a transfer student need to have to success at the UW?