When students drive design: Creating a family study room for students who are parents

Jennifer F. Paustenbaugh  
Brigham Young University (USA)

C. Jeffrey Belliston  
Brigham Young University (USA)

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WHEN STUDENTS DRIVE DESIGN:
CREATING A FAMILY STUDY ROOM FOR STUDENTS
WHO ARE PARENTS

Jennifer F. Paustenbaugh
Brigham Young University, jennifer_paustenbaugh@byu.edu

C. Jeffrey Belliston
Brigham Young University, jeff_belliston@byu.edu

Abstract

The paper focuses on a user-centered design project in the Harold B. Lee Library at Brigham Young University (BYU). BYU students who are parents comprise about 25% of the student population. University leaders have a goal for students to graduate in fewer semesters. Some students—especially females—drop out of school upon becoming a parent. Other students delay graduation by taking fewer classes in order to attend to their parental duties. Student parents who use the library frequently did not feel welcome when accompanied by their children. Oftentimes the parents elected not to use the library as the study resource it was intended to be. In 2015 the library decided to re-envision some prime space on its entry level as a family study room where students with children would feel welcome and encouraged to study and to meet with class project teams. Donors embraced the idea and made a significant gift for the space transformation and subsequent upkeep. Students in an undergraduate sociology capstone course interviewed student parents to determine what elements should be included in the space for parents to have a successful study experience. The sociology students also visited other academic and public libraries that had already created spaces for families to ascertain what elements were working well and what these libraries would do differently if they were to recreate their spaces. Using the input provided by the class, a group of stakeholders worked with a campus architect to turn the identified area into a welcoming and useful space. The Keith and Dolores Stirling Family Study Room opened for the first day of classes in the 2017-18 academic year. Utilization of the space has exceeded expectations for all involved and student parents report that the space has helped them better achieve their academic goals.

Keywords: parenting students, student-parents, family-friendly, academic achievement, library user research, study spaces, participatory design, user-centered design
Recent estimates at Brigham Young University (BYU) in Provo, Utah, USA are that as many as 25% of its primarily undergraduate student population of 33,500 are also parents. Parenting students at BYU tend to be married and closer in age to the traditional college student population of 18-22 years old. However, they mirror national estimates in the USA that indicate as many as 25% of students enrolled in higher education institutions are also parents even though they are more likely to be single, or older, or both [Lovell, 2014, pp. 187-188]. Programs in the USA and elsewhere [Teichler and Bürger, 2008] have targeted populations, including parenting students, in efforts to broaden access to higher education. Parenting students may face unique challenges in balancing studies, employment [Nelson, Froehner, and Gault, 2013], and family time [Owton, 2014] as well as in feeling included in the university community [Keyes, 2017; Schumacher, 2015; Brown and Nichols, 2013; Marendet and Wainwright, 2010] and welcome in academic spaces—especially the library [Marendet and Wainwright, 2010]. Traditional age parenting students “show… the greatest impediments to persistence” in obtaining four-year degrees [Lovell, 2014, p.187].

Although the Harold B. Lee Library (HBLL) at BYU is not the first academic library in the USA, or even in Utah, to create a space for parenting students, the user-centered, participatory design process by which it included parenting students throughout the planning, design, and assessment progression offers a model for other academic libraries to consider. Foster states that “… library spaces, technologies, and services that are built with broad participation work better and are more responsive to the work practices and needs of real people” [Foster, 2014, p.14]. In their work on pregnant and parenting students, Brown and Nichols [2013] advised that, in implementing programs for this group, these students “need to be involved in every step of the process. Only they can speak to the needs and issues of parenting students” [p. 527]. Schumacher [2015] asserted,

Student parents can provide valuable information about their needs to help colleges identify the most effective services and types of information to offer. Many programs regularly ask for feedback on their services and adapt these services to meet the needs of student parents. Such input from students can help program leaders assess whether the services their programs address, and adequately respond to, the most pressing issues student parents face [p. V].

Standard 2.5 in the ACRL Standards for Libraries in Higher Education [2018] reads, “The library commits to a user-centered approach and demonstrates the centrality of users in all aspects of service design and delivery in the physical and virtual environments.” Further, standard 6.8 states, “The library’s physical and virtual spaces are informed by users” [pp. 10, 13]. This paper focuses on the student-driven planning and design process as well as the initial assessment of the resulting space.

Informal observations of parenting students on campus and in the HBLL revealed that academic spaces were less than welcoming. Many parenting students entered the library only for the purpose of one parent swapping the child with the other parent, thereby allowing both parents to attend their staggered classes or meet a study group without an accompanying infant or toddler. Anecdotal evidence revealed that parenting students who attempted to use library resources with children in tow were frequently greeted by icy stares or complaints from non-parenting students. One BYU student mother explained, "[I]f more students were aware of the difficulties associated with parenting, there would be a higher level of acceptance and understanding for bringing their children to the library or having to work around tight schedules for group work" [Stoddard, 2013]. There were no spaces in the building that were specifically inviting to parenting students. For BYU’s parenting students, the library was ineffective because it was not addressing “the entire spectrum of student needs” [Applegate, 2009, p. 345].

Additionally, the university was (and still is) attempting to reduce the time to graduation for all students. BYU has an enrollment cap and a very competitive admissions process. Students who make slower progress toward graduation further limit the number of students who can be admitted. The HBLL wanted to find ways that it could help address this campus challenge. The Institute for Women’s Policy Research reported that, “Students with children are especially unlikely to complete
a certificate or degree within six years of enrollment with only 33% attaining a degree or certificate in that time” [Gault, Reichlin, Reynolds, and Froehner, 2014, p. 2]. Keyes [2017] asserted that, “creating a family friendly study room is a concrete and important step toward welcoming and supporting parenting students, helping them achieve their academic goals and reducing attrition rates” [p. 324].

In early 2015, the HBLL sought University approval to create a family study room as a place where parenting students would feel welcome and supported in their educational pursuits. In May 2015, the HBLL received a generous, anonymous gift for the creation of a family-friendly study room. The donors’ own experience confirmed that the challenges of parenting, studying, and meeting with project groups were difficult at best. Informally following the journeys of identifiable parenting students through the HBLL indicated that creating a family-friendly study room on the entry level would allow for the easiest access for parents who might be pushing strollers and carrying books and baby gear into the library.

A 3,156 square foot space with natural light was identified for the new family-friendly study room. It had been determined that a family-friendly study space would be most successful if the barriers for access to the room were minimized (e.g., not having to use an elevator to move between floors with strollers and children), if it had abundant natural light [Cunningham and Tabur, 2012], and if the space was highly visible to library users [Kent and Myrick, 2003].

The assessment librarian suggested that determining the programmatic needs of the space could make an interesting learning opportunity and capstone project for sociology students at BYU. Supported by the university librarian, he approached a sociology professor with whom he had previously worked and proposed a study to identify needs of parenting students who would use the space. The sociology professor enthusiastically embraced the idea and agreed that the study could be undertaken during fall semester 2015. During the first week of the semester, the university librarian made a presentation to the Sociology 404 capstone class outlining the goals of this family-friendly space, and introduced the assessment librarian as the professional faculty liaison on the project. The students were also informed that as part of the project they would make an end-of-semester presentation to library administrators, the campus Academic Space Planning Committee chair, and the donors.

The university librarian apprised the class that the purpose of the family study room was to provide students with young families a place to study while tending to the needs of their children. She also noted that a space successful in meeting the needs of parenting students would probably include its own restroom facilities, a lactation room, work space for parents, and features designed to educate and occupy young minds [Paustenbaugh, 2015]. In setting the parameters of the project, the university administrators gave clear direction that this space was not to be a daycare facility and that parenting students needed to be in the room with their children at all times. Other than that direction and the previously made decision that the space should be on the HBLL’s entry level, the students were not provided with other planning constraints.

In preparation for surveying students and holding focus groups with parenting students, capstone students visited two local academic libraries that had created family study spaces. The Utah Valley University Fulton Library opened their space in 2007 as part of their new library building [Utah Valley University website, 2018] and the University of Utah Marriott Library debuted their family study room in fall 2014 [Godfrey, et al., 2017]. Additionally, the assessment librarian identified local public libraries that had recently renovated their children’s areas, and student teams also made visits to these spaces. At all these libraries class members assessed how similar institutions balance the need to accommodate parents with children and the studying needs of those parents. These visits included a semi-structured interview with the library director at each location and interviews with parents at the public library sites. Findings from these visits confirmed that the space selected in the library to house the family study room was ideal in terms of its size and location and helped inform the survey design [Sociology Capstone 404, 2015].
The students developed and administered their survey questionnaire in September 2015 from a sample of 3,367 possible respondents. The first question asked if respondents had children and, if so, additional questions were asked. The survey received 887 responses with a 28.7% completion rate. Parenting students had the option of self-identifying if they were interested in participating in a focus group to further explore issues and features that needed to be addressed in the creation of an ideal family study room. Survey questions focused both on asking respondents what they needed in the family room to aid their studies or research and what they needed to meet the needs of their children while studying there. Conclusions from the first area of focus were that the room would be used as a place for more effective study, to care for children’s needs, and would provide an environment equipped to meet the needs of parenting students, allowing “the balancing act between work, family, and school to be a little bit easier” [Sociology Capstone 404, 2015, p. 8]. Conclusions from the second area of focus recommended the implementation of certain broad concepts: safety and cleanliness, open design, age separated sections for children, an inviting environment for families, self-contained features, and publicity [Sociology Capstone 404, 2015].

The capstone students conducted three focus groups and five interviews with individual parents during the first few weeks of November 2015. Parenting students who participated in the focus groups were asked to visualize a space the size of one half of a basketball court and to note the features that needed to be included in the space. Priorities identified by the focus groups included amenities such as a media area, a variety of engaging activities for their children, comfortable and functional furniture, a kitchen area, and a bathroom with a changing table. As far as layout was concerned, parenting students expressed a preference for age-separated areas for children, a separated or sectioned-off media space, a lactation room, an open play area, group study spaces, and furniture that facilitated the supervision of their children. Additionally, when the capstone students explored policy decisions that would be needed, parenting students recommended that parents should be responsible for their own children at all times and that security should be called if children are left alone in the space. They also recommended encouraging parents to clean up after themselves and their children and keeping media at a reasonable noise level. Comments from the focus group showed great enthusiasm and anticipation of the creation of a family study room. One participant commented that, “…I think that this is really good and really important not just for the parents but so people can see that we do think families are important even when we’re focusing on careers and college education” [Sociology 404 Capstone, 2015, p. 4].

In December 2015 the capstone students made a well-received formal presentation. The donors were appreciative that students had been included in defining the needs for the space and that he had a chance to interact with the students who had conducted the study, several of whom were also parenting students.

Following the student presentation, members of a participatory design team were identified. Meunier and Eigenbrodt [2014] assert that the guiding principle of participatory design in the context of library buildings “is that all stakeholders… should be involved in the design process, in order to ensure that the end result … meets the actual needs of the stakeholders” [p. 219]. The design team was tasked to combine recommendations in the students’ report along with the expertise of team members to create a plan for the space. Team members brought varying levels of knowledge and experience with them to the process. They included the director of the campus child and family studies laboratory, the retired director of a private early childhood education facility, a campus architect, one of the library’s fulltime custodial employees, the head of library security, several library employees who were also currently or previously parenting students, the library facilities group, the senior associate university librarian, and the university librarian. Occasionally, the head of campus academic space planning also attended the meetings.

With the foundation laid by the Sociology 404 capstone class, the design team worked relatively quickly. The campus architect developed several different iterations of a design based on input from the group. The assistant facilities manager, herself a parenting student, led a small group who identified furnishings, a play structure, wall-mounted play amenities, and a number of appropriate toys and books. The campus architect presented various versions of the plan also...
representing graduated cost options [Busby, 2016]. The team selected a plan that included two family restrooms, an ample lactation room, separate spaces for various ages of children, two group study rooms, a media viewing area, student workspaces that included PCs and printers, an enclosed area for a dishwasher to sanitize toys, and open sight lines throughout. The decision was made to use glass walls, so the space would be highly visible and welcoming to parenting students. Choices made in the design process allowed for a substantial endowment to maintain and update the room to be created from the funds remaining from the construction and furnishing of the room.

Throughout the design process, the university librarian and senior associate university librarian worked with a representative of the university’s Office of General Counsel, the Office of Risk Management, and the head of library security to address risks and possible contingencies. They developed a short list of rules for the use of the room [HBLL, 2017]. The rules heavily emphasize having a parent in the room with their child or infant at all times. It was determined that student and non-student staff who would work in the room sanitizing toys or cleaning would be required to annually complete the university’s Child Protection Training. Video cameras were placed throughout the family study room (excluding the restrooms and lactation area) and are monitored by library security. For safety, the room was deliberately located on the main corridor through the library so that it is close to the library security office. In line with the HBLL’s service philosophy of having all its spaces open to everyone, the room is not restricted just to parenting students and their children. Because one of the project goals was to provide a space where parenting students could attend to their children and meet with group project teams, limiting access to the space seemed counterproductive.

The campus Physical Facilities shops carried out the renovation. Construction commenced in March 2017. Because the space was in a highly trafficked area on the library’s main level, the project was very visible to students. The library also created signage informing library patrons of the new space to generate additional interest along with its ensuing word-of-mouth advertising to parenting students.

The family study room opened the first day of classes in fall 2017. The director of library public relations and his student staff used their standard social media channels to announce the opening of the space. Response on social media was instant and overwhelming reaching over 130,000 people [Harold B. Lee Library, 2017], and the room continued to receive coverage in campus media outlets [Clarke, 2018; Argento, 2017]. Parenting students who had seen the construction taking place as well as those who heard about it began using the space immediately. A few weeks later an official opening and naming ceremony with the donors’ family took place. The donors had requested that the room be named the Keith and Dolores Stirling Family Study Room, in honor of a former BYU faculty member and his wife.

Although room use was high and comments about the room, its features, and what it was allowing parenting students to accomplish were largely very positive, the university librarian and others involved in the project wanted to know if the room actually meets the needs of parenting students and, if not, how it could be improved to better do so. With the assistance of a faculty member in the Psychology Department, the assessment librarian identified a graduate student willing to undertake an assessment of the space as part of his degree requirements.

During the winter 2018 semester, the graduate student, working with several undergraduate research assistants, asked visitors to the room to participate in a survey to improve the room. Using convenience and snowball sampling methods, 98 people agreed to receive a link to a survey, which included both quantitative (closed) and qualitative (open ended) elements. They responded to questions that ranged from how frequently they used the space to what would make the space more user friendly. Additionally, respondents were asked what impact the family study room was having in helping them achieve their educational goals. There was a 95% response rate. The student research team coded the open-ended questions and analyzed all the results [Graff, 2018].
In April 2018, the graduate student researcher presented his findings, which were positive and informative. Key themes were identified in the study. The team learned that the largest demographic using the room is Junior or Senior students who have children along with their student or non-student spouses. The majority indicated that they are extremely satisfied with the room. Areas of lowest satisfaction are sanitation and maintenance. Some complained that non-parenting students are also using the room, which at peak times limits parenting students’ access. There were also requests for additions or adjustments. For instance, several respondents noted that the automatic doors to the room, which had been adjusted to provide more time for parents with strollers to enter or exit, needed to close more quickly so that children in the room could not run out. Requests also included adding an instant warm water heater to the sink by the lactation room, more private study rooms, and a microwave and refrigerator.

When asked about the impact the family study room had on the respondent’s education, several themes emerged:

1. Enables the respondent to do schoolwork and watch child, less disturbing to others, makes life easier (44 mentions).
2. It is one of the best things to happen for my education (12 mentions).
3. Positive but general/vague (11 mentions).
4. Allows respondent and spouse to switch off between classes or is a convenient place to get a babysitter (3 mentions).

One parenting student’s response was particularly encouraging. She said, “It has been life changing for me. It has allowed me to have a baby and continue my education. I don’t know what I would do without it! Without [it], my education would have been prolonged by years” [Graff, 2018, p. 10].

Another question asked whether the family study room has allowed the respondent to return to school to complete a degree or allowed the respondent to stay to complete a degree. Thirty-seven percent said yes. Sixteen mentioned that the room had made their lives easier. One respondent explained, “It has helped because now there is an environment where I can study and not feel like I’m interrupting other students when my baby has needs” [Graff, 2018, p. 10]. Twelve respondents indicated in some way that the room was absolutely essential to their degree completion. One female parent wrote,

I came back to school while my son was 3 months old. The first 3 days of school, I felt extremely awkward, finding places to sit with my baby and try to keep him quiet while I waited to go to class. I don’t think I would have lasted, it would have been too inconvenient! So this family center has helped TREMENDOUSLY. My baby can cry, I don’t feel like a disturbance! I can nurse my baby, and I don’t feel awkward about it! [Graff, 2018, p. 10].

Another parent noted, “We have a 2 year old and my spouse and I are both students. At home working … is impossible …. [W]e both get an additional 10+ hours a week of working time while our child interacts with other children and adults. This was definitely a game changer and at least one of us would have had to drop out otherwise” [Graff 2018, p. 36]. Another student noticed a change of attitudes in non-parenting students. The student said,

I’ve noticed a change in the attitudes of non-parent students who are more understanding of young children because BYU has welcomed them so publicly with the family-friendly study room. Studying in the family-friendly is so nice. I can get so much homework and studying in while my daughter plays with other kids and is entertained by the new toys we don’t have at home. It is also a great way for me to connect to other parents who are doing the same thing (going to school with a child) to create a sort of support group and camaraderie [Graff, 2018, p. 37].
Anecdotally, from the response above and others like it, the family study room is also helping to create a community among parenting students. Lin, Chen, and Chang [2010] stated, “Library design must give users something they do not have in the office or at home, namely community” [p. 343].

The library facilities team is working to follow-up on some of the suggestions from the survey. The door adjustment and instant hot water heater are easy items to address. A decision had been made by the design team that keeping a microwave and refrigerator clean would be a constant struggle. At present, these requests will not be fulfilled. The addition of more private study rooms will take away from available open space, so this issue will require further study. Although the library service policy attempts to facilitate the inclusion of all who want to use a library space, consideration has been given to creating a sign for the entry door indicating that students with children have first priority using the space between 11 a.m. and 2 p.m., the hours of peak usage. The faculty sponsor of this project has volunteered to have one of his fall 2018 undergraduate classes engage in further assessment of the room which, among other things, would help determine whether subsequent changes have been positively received.

A user-centered, participatory design process was essential to the creation of this successful space. All stakeholders were involved throughout the planning and design. Having student researchers gather input and feedback from their fellow students allowed for honest, genuine responses from the parenting students to be served, afforded a significant mentored learning opportunity for student researchers, and created a meaningful experience for the donor. It is likely that for the many student researchers who are not parenting students, involvement in this project increased their empathy for and understanding of the challenges faced by parents who are trying to graduate. Kruvelis [2017], writing in the American Council on Education blog Higher Education Today, states that,

By advocating for student parent supports, developing a greater understanding of student parents’ needs and implementing targeted interventions, colleges can build a more welcoming, productive environment that helps parents complete school and launch careers that provide economic security for their families.

Although the library's family study room is just one targeted intervention, it is already creating a more welcoming, productive environment for parenting students.
References Cited


Harold B. Lee Library. (2017, September 5). Got Kids? I know today is a big day for the freshmen, but I’ve got a surprise for the young set. If you have small children and have been avoiding the library because they might get bored, worry no more. My Family-friendly Study Room opens in a few minutes. Find it on level 3 (the main floor). [Facebook status update]. Retrieved from [https://www.facebook.com/bynbl/posts/1015572066588566](https://www.facebook.com/bynbl/posts/1015572066588566)


