Engaging Students in Academic Library Design: Emergent Practices in Co-Design

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This article explores academic libraries that have gone beyond using the traditional survey or focus group methods of soliciting student input, specific to library design projects. The goal for each library was to engage students in space design projects in innovative and hands-on ways that would maximize the potential for gaining their design input toward the creation of improved and enhanced library spaces. The successful co-design practices are further contextualized by analyzing the strategies employed by several academic libraries for engaging students in library design or redesign projects. Key trends, approaches, and emergent practices come into focus as they pertain to student input opportunities. By studying examples of student co-design in academic library design projects, several themes emerge as ingredients for reaching – and keeping – users engaged with library design. Importantly, students must feel that their commentary is valued and that their input is evident in the final design.

Keywords: participatory design, co-design, library spaces, student engagement, academic libraries, novelty

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Introduction

Given increasing "survey fatigue," it can prove difficult to collect an accurate reading of student needs and desires when it comes to brand new or renovated library spaces (Tempelman-Kluit & Pearse, 2014). In order to continue to attract students to college and university campus libraries when the competition for gate count numbers is now places such as the student center, the campus coffee shop, and other local, popular off-campus venues, academic libraries have to redouble their efforts to ensure that newly created or enhanced library spaces reflect student needs. With many academic libraries pursuing interior remodels, or - if they are very fortunate - full renovations to their library buildings, student engagement with library space design planning is key.

This article explores the approaches of academic libraries that have gone beyond the traditional surveys and focus groups in order to engage students in innovative ways. By analyzing the methodologies of several academic libraries, key themes, strategies, and emergent practices come into focus as they pertain to student co-design opportunities. These successful plans for engaging students, taken together, can help to inform librarians of improved ways to engage students as they undertake to redesign or enhance library spaces.

In studying recent examples of successful student co-design practices as they pertain to academic library design projects, the theme of "novelty" emerges as a necessary ingredient for reaching – and keeping – users engaged with library design. This article provides contextualization for how this "novelty" factor works best, and how it can be employed at other academic libraries toward the success of student co-design projects.

Literature Review

Library employees, holding the very best intentions, often believe that they know what their users want without actually asking the students (Lippincott, 2012). It can be an easy collapse to make; library employees who are dedicated to their students and feel like they know and understand them, may mistake these relationships for actually asking students directly - to describe in their own words - what they would like to see in their reimagined library spaces. In addition, there even exist a few instances of library design wherein a patriarchal approach emerges and the design of the library is based on what those at the helm of the project think users need, as opposed to what users actually say they need, even when they have been asked (Leousis & Sproull, 2016). There is also the shift from print resources requiring ample square footage to a reconsidering and repurposing of library spaces toward creating an environment for more collaborative and peer-to-peer learning activities (Andrews, Wright, & Raskin, 2016). It is a change in concept brought on by the exponential growth of e-resources and one that can be strategically informed by student views as to how they would like to enhance the library's image and how the spaces of the post-digital present and future might be used (Dubicki, 2009).

Part of the difficulty in understanding design input may lie in the ways that it is being collected from students. For example, instead of a preconceived set of ideas overly determined by the survey language used, students should get a chance to offer their perspectives more organically and free of the constraints of the tools that are there to collect their feedback (Hobbs, 2010). Or, instead of a survey, perhaps a more open-ended question approach may elicit student responses about their own use of spaces and their desires for future space improvements. Further, there is a difference between user-initiated and library-initiated feedback. User-initiated feedback captures specific

concerns that a user has and offers, unprovoked, at any point in time, whereas library-initiated feedback may pre-determine context due to the nature of targeted questions about specific spaces or space usages Halling & Carrigan, 2012). The way in which library design input is offered or requested may be a factor in how that information is collected and interpreted.

One of the keys to emphasize in library co-design is the need to shift away from the library employee's perspective to that of the student user, thereby gaining fresh perspectives from the students' eyes (Dubicki, 2009). Libraries need to understand the style of today's students in order to provide environments conducive to engagement and learning and this includes how libraries promote their services and configure their spaces (Lippincott, 2012). Libraries are well served to follow museums and other cultural institutions who have led the charge in emphasizing user experience and engagement (Bell, 2014). For better or worse, users' experiences are heavily informed by contemporary retail experiences and students and faculty, alike, also have contact with other academic libraries via their friends and colleagues that can further enhance their academic library expectations institution to institution (Bell, 2014). Ambiance matters, especially as it pertains to the aesthetics, feel, and service received in a space (Andrews, Wright, & Raskin, 2016; Decker & Porter, 2018). For example, Apple built off of loyal users who were willing to pay a premium for a unique experience (Bell, 2014). If the academic library provides the proper space and related experience that resonates with the student, the student is likely to repeat the experience and may even recount it to their friends (Bell, 2014).

As it pertains to library co-design, it is up to library employees to enable the user, within reason, to shape an environment equipped to deliver the best library experience (Bell, 2014). After all, the guiding hope in co-design is that if the library is

set up for students according to their input, they are more likely to come in and use the spaces (Oliveira, 2016). Co-design should also be an iterative experience, allowing future generations of students to give input for successive changes over the years. This involves the creation of an ongoing plan for the refreshing of spaces and continuing to allow them to evolve to meet students' own changing needs as academic library users (Andrews, Wright, & Raskin, 2016).

It seems that even with the best laid plans for library co-design, the library employee often becomes the awkward person in the middle between the architects and the students (Storey, 2014). He or she can often produce both quantitative as well as qualitative data about student activities within academic library spaces, and becomes the natural go-to person for the architects. The architects do not anticipate interfacing with students so, in order to get student information, architects often seek out knowledgeable library employees. If, however, the library employee has not requested - or has largely ignored - direct student input about library design, he or she will be a poor informant to the architects for the renovation project. Furthermore, the ability to actually accept and act upon user feedback is a change-management challenge for the library organization Halling & Carrigan, 2012). What if the user input is in direct contradiction to the anticipated response? What if students want a brightly-colored area where neutrals had been envisioned by the design team? It can be hard to relinquish control of an idealized library design, particularly when library users offer suggestions that seem to fall outside of the expected, or library employee-desired, realm.

While library employees can end up in the middle between architects and students, it is also often the case that students end up last on a list of ten or more campus-wide and community stakeholders to give their input (Storey, 2014). This is confusing, and potentially off-putting to students, due to the fact that the building is

ultimately supposed to be about their needs. However, engaging stakeholders and framing a library redesign project to be in alignment with the parent university can actually be positive (Tevaniemi, 2015). It helps the campus community better understand the goals of the library and cast them in terms of a larger strategic framework (Harland, Stewart & Bruce, 2019). There are often uncertain or unstated relationships between ad hoc campus groups participating, even if nominally, in a library renovation (Storey, 2014). This aspect makes it even more worthwhile to organize opportunities for students to converse directly with deans or university librarians. A people-centered approach that involves contact increases buy-in and good will (O'Sullivan & Partridge, 2016). It is critical that academic libraries are also able to demonstrate - with the resulting physical spaces - that changes have been made based on the user feedback collected (Esson, Stevenson, Gildea, & Roberts, 2012). This makes students feel that their input is valuable and that they are being listened to by library leadership (Miller, 2017).

Furthermore, few techniques provide the wealth of information gained from a simple face-to-face conversation (Esson, Stevenson, Gildea, & Roberts, 2012). This type of conversation, if ongoing, allows for all participants to glean an understanding of design parameters while still allowing users to communicate their needs from their own perspective and to learn and understand the abilities and restrictions informing both the architects' and the designers' work (Powell, 2001). These qualitative methods that emphasize the use of conversations, meetings, interviews, and face-to-face engagement help reduce obstacles stemming from misunderstanding or misinterpretation (Miller, 2017).

If students see themselves as partners in the creation of new library spaces, they are more likely to engage with librarians and architects, and this continuing engagement

can, in turn, be leveraged to help create a more robust culture of assessment within the library by demonstrating to librarians what they do and do not know about their users (Andrews, Wright, & Raskin, 2016). Such a culture also promotes a more fluid incorporation of user experience into all aspects related to space design (Bell, 2014). The academic library gains a fresh, unique student perspective regarding library space usage and, in following these ideas, librarians can even develop better targeted communication, outreach, and service to users (Dubicki, 2009). As is true of library spaces, library services need to be shaped and informed by users in order to be successful (Esson, Stevenson, Gildea, & Roberts, 2012). Students tend to be open to new ideas and "what if" styles of thinking and this mindset helps encourage a culture of "out of the box" thinking critical to the research and development stage of space design (Powell, 2001; Lippincott, 2012). There is goodwill involved in reaching out to students to design their own, ideal library spaces and, by reaching out in this way, librarians will potentially get more buy-in from the student population for future endeavors (Hobbs & Klare, 2010). Therefore, there is much to be gained by communicating with students and inviting them to participate in conversations about the future of their library spaces (Dubicki, 2009).

A slightly humorous approach is also a way to pique students' attention and engage them in co-design projects. The University of Portsmouth discovered how effectively a brand mascot could serve as a bridge between service and users with the unveiling of Pablo the Penguin (Bennett, 2016). While "Pablo," a plush toy penguin, had simulated experiences in the library, users were able to vicariously learn about the services and resources provided to them via images posted to social media of Pablo's adventures. By extension, while Pablo struggled, and ultimately learns his way around

the library, he becomes a trustworthy, albeit, fun source of information and advice for new or reluctant library users (Bennett, 2016; Andrews, Wright, & Raskin, 2016).

Recent Successful Academic Library Co-Design Projects

As it pertains to collecting viable feedback from students about their desires from their renovated or redesigned academic library spaces, surveys are becoming outmoded as a reliable instrument. When students can work with librarians and stakeholders and contribute their time, energy, and creativity to a building or space co-design project, simply taking a canned survey of student opinions begins to feel more like an exercise in "checking the box" as opposed to interacting with student users as fully as they deserve. If students are engaged with an activity that is fun, the results have a higher likelihood of being correspondingly creative (Hobbs & Klare, 2010). Similarly, while relying on focus groups to gauge user needs seems, on the surface, to be a reliable method for collecting feedback, there are more contemporary ethnographic methodologies for studying how students use their library spaces (Danner, Pickering, & Paredes, 2018). In place of the focus groups, which notoriously suffer from low student participation anyway, it may prove more effective to observe students using library spaces, interview them informally about their needs (thereby opening the conversation with them), and create co-design projects that rely on their active contributions. The three case studies that follow elucidate successful methods for engaging students in co-design projects in academic libraries.

In the first example, at Auburn University's Library of Architecture, Design and Construction (LADC), a co-design project between librarians and architecture students allowed for the creation of an interactive exhibition wall as a course project that informed the actual renovation to the library (Leousis & Sproull, 2016). A librarian and the teaching faculty member partnered to create a co-design assignment for students in

Auburn's Planning and Landscape Architecture course. Students, the teaching faculty member, and a librarian worked together with users and other campus stakeholders in mind. The project required that students understand the properties of design from their coursework and that they become effective in researching, vetting, and curating the materials appropriate to the creation of exhibition wall as part of the assignment (Leousis & Sproull, 2016). The librarian and teaching faculty member collaborated to guide students through the process of cost, form, selection, location, etc. as it pertained to the creation of the exhibition wall, and the students presented their proposals. All of the final design choices were made collaboratively, though, through brainstorming sessions.

The resulting co-designed interactive exhibition wall is a significant contribution to the LADC as it allows for the exchange of ideas through course presentations, studio critiques, and exhibitions of student work. Importantly, students who participated in the co-design project gained a sense of ownership and pride in the library (Leousis & Sproull, 2016). While this project set a new precedent for real world design-build projects, it did not address whether participants considered ADA compliance in the resulting project. And, while it undoubtedly paved the way for additional co-design projects that involve not just librarians and students, it also included faculty (a key stakeholder in academic libraries). However, it is unclear as to whether additional projects have been developed or come to fruition as a result of this activity.

Internationally, at the Chancellor Oppenheimer Library at the University of Cape Town, South Africa, Library and Information Studies graduate students completed a practical space planning project in which they redesigned a floor specifically for graduate students (Kahn & Underwood, 2018). The LIS students designing the graduate floor were encouraged use their imaginations and were free to design however they saw

appropriate keeping mindful only of the load bearing walls, which could not be changed. Since the students were graduate-level LIS students designing for others like themselves, they were deemed an ideal group to create this space. Instead of hypothetical, "personas," developed to represent user types, students were designing for themselves (Tempelman-Kluit & Pearse, 2014).

With the goal of developing student creativity and fostering buy-in for the library spaces, this assignment was reproduced year after year after its initial success as a project. It carried with it a hypothetical nature due to the inability to conduct a renovation to a space on an annual basis. Year-to-year, the projects had in common an emphasis on social spaces and a LIS student space away from other students. That said, it was rare that anyone submitted anything revolutionary (Kahn & Underwood, 2018). Interestingly, with all of the movement toward open space and less on shelving, students often still included books in their designs, perhaps because their vision of library still included books or they saw them as a way to incorporate relaxation. Staff were considered necessary and integral to the LIS floor experience and were therefore included in most of the designs either in offices or at service desks. This project was an application of what students had learned in class and space planning studies literature.

Surprisingly, these newly designed LIS spaces often did not reflect ADA compliance or a way to improve space usage for those with disabilities (Kahn & Underwood, 2018). Nor did the spaces demonstrate how they might serve as a 24/7 refuge for persons who need this space at night. These common themes influenced future iterations of the assignment to focus on local conditions. This project showed that it is ineffective to rely on librarian or some students' opinions. There needs to be a more all-encompassing viewpoint of widest range of students as possible.

Meanwhile, students at Andrews University, in Berrien Springs, Michigan were asked to participate in design charrettes as a complement to more traditional techniques such as surveys and focus groups (Oliveira, 2016). 179 students participated in the design charrettes. The participatory nature of this co-design project with an acquisition of qualitative feedback made it a valuable study (Oliveira, 2016). The benefits of using this charrette were that students were able to step through the proposed use of space and provide their instantaneous feedback, which helped with the development of ideas. Students were chosen at random to participate; and all students were approached within the library space and invited to participate in this design activity. The librarians used colored symbols to represent different types of spaces which allowed participants to demonstrated their preferences using the coordinating symbol to space and location within each building. Student charrette participants also went out into other campus spaces, such as the student center, to ask students why they were studying there and not the in the library in order to ascertain preferences. Students are often more comfortable responding to other students than librarians or library staff (Mitchell & Soini, 2014). These students also collected feedback from their peers about why they felt that the library was unable to provide what they needed. Most answers they received related to library aesthetics and comfort. Aesthetic design because well-designed spaces are more enticing to students (Decker & Porter, 2018).

Recommendations

Given these experiences of several academic libraries with varying types of student co-design projects, several strategies emerge for helping to ensure a productive and effective co-design initiative. For example, there needs to be an element of novelty involved in order to capture students' attention. Whether the co-design activity is a for-credit assignment or a voluntary feedback opportunity, the projects most effective at

capturing students' attention are those that are unique, fun, or somewhat outside their daily experience. Interactive, humorous, or out-of-the-ordinary experiences attract students to engage. However, offering course-credit or potentially resume-building experiences in and of themselves, inspire more active engagement than those that do not offer such a reward.

A hands-on project is preferable to a focus group. Students who actually design a library building feature or space; or those who do a virtual "walk through" for how they would use a hypothetical space tend to open up and provide more information than those who sit in a room with their peers and are asked to only provide verbal feedback. While the focus group experience may mirror many of their in-class experiences, when seeking design input, the greater the experiential approach, the more interesting and useful the student feedback.

Students are busy and many will dodge requests to participate in design feedback activities simply by virtue of this fact. If attention is paid to setting an appropriate timeframe, i.e. such as "study breaks" near exams week, these opportunities to collect co-design feedback from the library's point of view may just as readily serve as a study break for students. It should also be noted that food serves as a powerful enticement to participation. Especially in conjunction with exams week or a co-design activity that is set up to be a study break.

Eye-catching visuals and signage will also attract student attention to co-design opportunities. But, today's digitally-oriented students will also expect a social media aspect as well. Perhaps advance advertising of the co-design activity could be posted online in the library's social media while printed signage will help students with wayfinding the day of the event.

When co-design options are narrowed down to a few choices or different sets of choices (such as four separate options of packages that include furniture type, wall color, and lighting options), students are less likely to be overwhelmed than they might be if asked, "What would you like to see in this space?" A pre-selected, sorted group of options keeps these possibilities finite and can even set up a ready-made opportunity for students to vote on the option they prefer. This is particularly worthwhile if the co-design activity is happening at a later stage in the library redesign process.

Students need to feel that they are being heard and that their vote counts. If they do not feel that they are being listened to, then they will be reticent to spend their time and energy participating in the co-design project. A student does not want to feel as though the time they took to offer their opinions about library design were "just for show" or conducted in order to fulfil an outreach requirement on the part of the library. Corollary to this is that students need to be able to see the "fruits of their efforts" in outcomes of design choices. Students do care about their academic library spaces, and they do get excited about renovations and redesigns therein. In order for them to engage in co-design projects, though, they need assurance that their time invested will be recorded in some way, whether that is by receiving course credit, recognition of their input, or being offered a snack, it is critical that their efforts do not go unnoticed.

There are also institution-specific elements, not discussed in depth in this article, that may be employed to inspire students to participate in co-design projects. For example, the specific culture of a library may dictate particular activities. An academic library that belongs to a campus that has a robust sports scene might center co-design activities around the various sports seasons, or might incorporate the school colors or a beloved mascot in design activities wherever possible. Perhaps a mascot-mediated co-design activity might attract users the way that "Pablo the Penguin" promoted student

engagement (Bennett & Thompson, 2016). A campus with a developed Greek life scene might invite members of these social groups to participate in a Greek Day for co-designing a library space. Knowing the campus culture and taking the pulse of the regular users of the library should help shed light on specific strategies for acquiring student participation.

Conclusion

In reviewing emergent practices in academic library space co-design projects, the theme of "novelty" repeatedly emerges as a key ingredient for attracting and sustaining student interest and engagement with the activities that will ultimately lead to their new library spaces. As discovered in the cases at Auburn University, University of Cape Town, and Andrews University, the hands-on element in each of the co-design projects kept students engaged and provoked them to fully invest themselves in the projects. While taking a survey is a passive activity, creating a new facet or feature of a building, designing a library ground-up, and participating in a design charrette (respectively) all require a deeper level of engagement and one that ultimately leads to greater ownership of - and pride in - the resulting design outcomes. Since surveys inherently suffer from limitations as to what type of information is collected by the way in which the questions are asked, co-design projects open up conversations and dialogue that circumvent the problems in collecting basic feedback as they do not require the prescient ability to ask precisely the question to elicit the response most needed and they allow for open-ended discussions.

Today's students also have a desire to be listened to and to have their input reflected (whenever possible) in resulting space design or re-design projects. The trend of seeking user input in the design of library spaces can also extend the longevity of the spaces designed. By focusing on the academic library experience desired by the user,

designing and delivering it at the appropriate touch points and implementing a

framework for understanding continued usability, future adaptability of library spaces

also becomes possible (Bell, 2014). In addition to this enhanced usability of library

spaces, engaging students in co-design projects also aids in developing sustained

relationships with students. These relationships may also buttress the ongoing

development of a framework for continuing improvement to library services, resources,

and outreach as the years go by; bolstered by the trust between librarians and student

users generated by the success of co-design projects.

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