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Ethnography in student-owned spaces: Using whiteboards to explore learning communities and student success

INTRODUCTION

Academic librarians are increasingly engaged in conversations regarding student success. Often, these conversations involve participating in dialogue to demonstrate a library's contributions to the educational mission of its campus community. This dialogue can entail communicating the library's impact on both the "traditional" aspects of student success, such as retention and graduation rates, and on "more affective considerations, such as feelings of self-efficacy and connectedness" (Nichols Hess, Greer, Lombardo, & Lim, 2015, p. 623). Frequently missing from these conversations, however, are students' direct, unmediated perspectives. Ethnographic research methods provide a unique opportunity to integrate these student voices and to learn from student patrons. These methods also offer a mechanism to gather qualitative data that can help set library priorities shaped specifically by patron needs (Kim Wu & Lanclos, 2011).

In spring 2015, in an effort to incorporate student voices, librarians at the University of Tennessee, Knoxville (UTK) began a longitudinal, ethnographic study that utilized oversized, dry-erase whiteboards. Even in an era of digital technology, these mobile whiteboards are well-used by students and frequently move around John C. Hodges Library, UTK's main campus library. Individuals and groups use the boards for a variety of academic and social purposes. The researchers harnessed the popularity of the whiteboards to engage students in public and social spaces throughout the library. With sustained input from across the library's staff, the researchers created a list of open-end questions that were placed on the whiteboards daily. The study design enabled participants and onlookers to view and interact with responses in real-time, providing a participatory approach to both research and engagement. In 2016, the researchers continued the project with a second iteration that took place both at UTK and at the University of Richmond (UR). This second iteration provided an opportunity to examine and compare student input at a large, public, research-oriented university and at a smaller, private, teaching-focused institution.

While the popularity of Hodges Library's whiteboards provided inspiration for this study's research instrument, changes at the University of Tennessee Libraries (UT Libraries) provided the impetus for the study's objectives. In 2012, the UT Libraries embarked on a large-scale renovation of its Learning Commons, which included introducing an updated media design studio, creating new collaborative, technology-oriented workspaces, and offering streamlined organization for campus partners with a presence in the library spaces (University of Tennessee, Knoxville, 2012). The renovation reflected a growing consideration of the importance of designing library spaces for learning and of demonstrating these spaces' impact on the mission of their parent institutions (Spencer & Watstein, 2017). Mixed-methods approaches to assessing satisfaction with this renovated space, including focus groups, interviews, and surveys, provided some insights regarding students' perceptions and experiences. However, the librarian researcher involved, then a Diversity Resident for the UT Libraries and now Social Sciences & Assessment Librarian at the University of Richmond, wondered if the lack of flexibility built into the survey method and librarians' visible presence in focus groups and interviews influenced student responses.

In 2014, the UT Libraries hired Student Success Librarians for First-Year Programs and Undergraduate User Experience. These two newly created roles involved helping "students learn the tools of scholarships while adjusting to college life" (University of Tennessee Libraries, 2014). Developed in response to campus priorities of increasing undergraduate student retention, or persistence from one academic term to the next, and four-year graduation rates, the roles focused on supporting students both in and beyond the classroom. The Student Success Librarian for Undergraduate User Experience was interested in hearing how students themselves defined success. As was the case with the Learning Commons assessment, the librarian researcher wanted to hear from students in their own words, providing a venue to go beyond the limitations of a survey methodology and to augment knowledge gathered from library-specific and campus conversations.

In partnering with each other, the two librarian researchers drew on their shared interests to examine and identify connections among three research questions: student usage of library space, the ways in which students create informal learning communities within these spaces, and how students define success for themselves. The aim of the study was to develop an ethnographic research instrument that would allow for flexibility in implementation. The researchers' specific goal with this instrument was to use their findings to identify the ways in which academic libraries can draw upon their roles as teaching and learning environments to contribute to a larger dialogue related to the multiple dimensions of student success. This paper summarizes library literature related to ethnographic research methods, library spaces, assessment, and user

experience, before proceeding to a description of the open-ended, whiteboard instrument that the researchers developed guided by their review of the literature and their library experiences. This paper then highlights key findings from the longitudinal, ethnographic study that employed this instrument, including the importance of transitional space, or space not specifically set aside for academic purposes, and student-led dialogue. The Paper concludes with learnings to inform both library practice and further research.

LITERATURE REVIEW

Ethnographic methods provide an opportunity to examine multiple perspectives and to engage with participants in their everyday environments (Asher & Miller, 2011). These methods also serve as a venue to gather data that could be challenging to collect through other methods, such as surveys (Ramsden, 2016) or that can complement survey data (Holder & Lange, 2014). Ethnography "is a collection of qualitative methods that focus on the close observation of social practices and interactions" that "deeply [examine] the context in which activities occur" (Asher & Miller, 2011, p. 3). This method enables researchers to observe or interact with their subjects in the subjects' home environment. A unique element of ethnographic methods is their focus on discovery and on examining what users actually do, rather than beginning with expectations or assumptions of their behaviors (Goodman, 2011).

Ethnographic research in academic libraries is often undertaken as part of a multiple or mixed-methods approach (Khoo, Rozaklis, & Hall, 2012, Goodman, 2011) to

answer questions that can include use of library resources, student behaviors, and space assessment (Ramsden, 2016). In one of the few comprehensive reviews of ethnographic studies in libraries, Khoo, Rozaklis, and Hall (2012) identified 81 studies published on the topic, with the earliest being a 1980 report and more than half published after 2006. Methods that these studies most frequently employed were observations, followed by interviews and fieldwork. As with the methods used, the questions asked can span multiple categories and are often designed with "the intention to learn more about a wide range of issues that often interact and cross over to create one *story* of students' lives" (Ramsden, 2016, p. 357). One particular challenge of ethnographic research is that few practitioners in academia have time to devote to the vast amount of data that can be created with ethnographic research, leading to a recommendation that library and information science researchers use ethnographic research methods to target a few specific hypotheses (Crystal & Wildemuth, 2009).

The nature of academic libraries leads to distinctive challenges in the way that they approach and use ethnographic methods. Lanclos and Asher define libraries' research as "ethnographic-ish". They believe that the research that libraries engage in is often "short-term and narrowly contextualized, whereas ethnography projects have open-ended timelines and aim to understand the full context of the subjects' lives" (p 2). The authors acknowledge the challenges of conducting longer-term and larger-scale ethnography projects in academic libraries, including time and staffing constraints and a tendency toward risk aversion. At the same time, they highlight the importance of moving from "ethnographic-ish" to ethnography to better understand which patterns and themes occur across environments. The authors also point to comparative, collaborative approaches that takes into account work being done at other institutions and that involve potential partners beyond the libraries as ways of broadening the conversation (Lanclos & Asher, 2016).

One of the ways in which academic libraries appear to be moving toward ethnographic research include working with anthropologists and collaborating across campuses. One of the largest ethnographic research projects in academic libraries, the Ethnographic Research in Illinois Academic Libraries (ERIAL) study, helped to create a model for this type of research. The project consisted of a team of anthropologists and librarians who studied more than 650 students across multiple institutions between 2008 and 2010. The ERIAL researchers employed semi-structured interviews, participant observation, mapping exercises, workshops and photographs in an effort to understand how students went about research in a naturalistic environment (Asher, Duke, & Green, 2010). In another frequently cited, large-scale research project, Studying Students: The Undergraduate Research Project at the University of Rochester, Foster and Gibbons attempted to understand typical student practices related to college information-seeking needs. The authors found that the physical design of their library services and spaces were not compatible with student preferences and needs. The typical student was used to a model of "self-service", where students attempt to answer questions for themselves without outside interaction. At the end of their research process, the authors reiterated that the process more than the outcomes, taught them about student behaviors. "We saw over and over again how much we did not know about our students and their

academic endeavors. But, perhaps more important, we saw how often our personal assumptions about the students, which have guided years of decisions, were incorrect" (Foster & Gibbons, 2007, p.82). More recently, researchers across eight academic institutions undertook the "A Day in the Life (ADITL) Project" to examine the experiences of more than 200 students (Asher et al., 2017). The researchers' multi-site approach enabled them to compare experiences across institutions, leading to a richer and more complex dataset. As the authors note, "When our observations focus on students in a single library, on a single campus, it is difficult to witness the complexity of [students'] daily journeys" (p. 310). That is why, as Lanclos and Asher note, it is necessary to add larger institutional context and multi-site longitudinal research to the "local" "ethnographic-ish research typically done in libraries (Lanclos & Asher, 2016).

Within academic libraries, ethnographic techniques are typically utilized within short-term space assessment. The literature related to this area conveys the value of having spaces to suit a range of both individual patrons' and institutions' needs (Oliveira, 2016, Andrews, Hines, & Wright, 2016). At Sheffield Hallam University, researchers investigated informal learning spaces, which they defined as "non-discipline specific spaces frequented by both staff and students for self-directed learning activities" (Harrop & Turpin, 2013), p. 59) and for which they included both library and non-library environments. Through methods that included direct observation, mapping activities, and photography, the researchers identified nine categories of space preference and posited the value of having a "portfolio of interrelated campus spaces which offer a coherent whole" (p. 74). The idea of library spaces as connected to a

larger whole also ties to calls across the literature for libraries to contribute to their institution's and faculty's learning initiatives (Oliveira, 2016); to account for growing attention on students' learning styles; and to recognize a shift toward collaborative assignments (Yoo-Lee, Heon Lee, & Velez, 2013).

Ethnographic space assessment studies illustrate the value of space types that may be surprising, such as quiet space (Oliveira, 2016, Yoo-Lee, Lee & Velez, 2013) or those alloted for single-tasking or solo work environments (Hursh & Avenarius, 2013, Webb, Schaller, & Hunley, 2008). These studies also shed light on the importance of varied and flexible spaces to meet a range of needs. Kim Wu and Lanclos conducted open forums and library design exercises for a space and website redesign at the University of North Carolina, Charlotte and found that students wanted both more quiet space and more group study space (2011). Likewise, while nearly 5 percent of respondents to a "Best Places Survey" at the University of Dayton ranked the library as their campus' best place to study for its quiet, comfortable, and convenient atmosphere, another 36 percent ranked it as the worst, for reasons that included being too noisy or too quiet (Webb, Schaller & Hunley, 2008, p. 413). At Cornell University's Mann Library, researchers utilized assessment techniques that included observation, environmental scan, and design exercises and found that students sought varied spaces based on their activity (Andrews, Wright, & Raskin, 2016). Several studies also point out the difference between a space's stated purpose and how students perceive it (Kim Wu & Lanclos, 2011) and the impact of external factors, such as weather, on how students envision their ideal library space (Hobbs & Klare, 2010).

The literature of ethnographic space assessment illustrates students' preferences and, in a number of cases, activities performed or desired in a space. However, two areas in which the library literature is lacking are in examinations of transitional spaces, or spaces that do not serve a specific academic purpose and are often used as a thoroughfare or a waiting area between destinations, and of student-created learning communities within library spaces. Although much literature discusses what students do in a library space, fewer studies discuss students' rationale for doing it. The focus appears to be on that students are studying or learning and less so on how they navigate this learning. Thorpe, Lukes, Bever, & He (2016) for instance, investigate a correlation between academic library use and student success, using the criteria of retention rates and grade point averages, and note that a future area for exploration is students' intrinsic motivation.

Understanding the multiple dimensions of students' experiences can contribute to a user-centered library with decisions shaped by patron needs (Asher, et al. 2017). To learn about these needs, several libraries have undertaken assessment techniques that involve asking students questions about their general interests, habits, and preferences, rather than focusing solely on the library. In a photo documentation and discussion exercise, Hobbs and Klare (2010) incorporated both library-specific topics such as a favorite study space and others that initially appeared unrelated, such as footwear preferences. These "seemingly random subjects" often led to conversations that deepened the researchers' understanding of students' experiences. In the footwear example, for instance, one respondent shared a story of buying a favorite pair of

normally expensive shoes on sale and how his family was not well off, which led to a discussion of the student's use of library resources to save money (p. 350). At the University of Dayton, web survey questions such as favorite foods or television programs were incorporated to increase student interest in the project (Webb et al., 2008). In these cases, providing opportunities for students to show rather than tell their experiences led to unexpected insights.

Providing venues for anonymous, open-ended conversation offers opportunities to learn about the complexities of students' experiences through students' own words, and several students highlight the value of doing so for both assessment and outreach purposes. At Oklahoma State University, a "What if the Library" wall display with Post-It notes and the above open-ended prompt provided a way for students to share their thoughts or read others', while surveys and interviews augmented this data (Ippoliti, Nykolaiszyn, & German, 2017). Farnum, Baird and Bell (2011) in examining physical and virtual suggestion box use at Canadian academic libraries, note that the method's anonymity provides more authentic feedback than non-anonymous methods. The researchers observed a correlation between user satisfaction and making the virtual suggestion box and the library's responses to submitted suggestions highly visible. This practice combines the anonymous with the personal, offering a way to acknowledge and act upon student feedback. Ippoliti et. al (2017) echo this approach in using feedback from their "What if the Library..." project to identify tangible priorities for implementation. Pruneda, Wilson and Riedmueller, in an engagement project that specifically utilized

whiteboards, similarly note that this approach provided a way to unobtrusively interact with and learn from students in real time (2017).

In reviewing the literature, it appears that a viable next step for libraries is to consider how these anonymous, open-ended venues not only benefit library assessment but also contribute to students' experiences by created student-owned spaces and student-directed conversations. Elmborg, Jacob, McElroy and Nelson (2015) examine the connection between voice and space as they describe a Secrets Wall project at the University of Iowa's main library. The project involved providing a space with Post-It notes or blank pieces of paper for visitors to anonymously share their experiences. The authors note that the wall stands as a "third space" that offers a forum for authentic, self-expression, providing a "low-stakes, low-barrier opportunity to engage with others" and for students to "see that their voice has a place within the library" (2015, p. 148). Postings on the wall provided a space for peer-to-peer dialogue, as evidenced by responses that were a direct response to another. Asher et. al, highlight the value of collaborative research that acknowledges and builds upon students' multiple identities in order to make decisions informed by student needs. As they write, "If we situate the library in a broader geography of lived experience we are better able to promote learning beyond the library to support the whole student, insights that can be shared among libraries" (2017, p. 310-11).

METHODOLOGY

The researchers began the whiteboard project in the spring of 2015 at the University of Tennessee, Knoxville. The researchers requested and obtained a waiver

of individual signed informed consent forms from their institutional review board. The researchers had to demonstrate that there was no more than minimal risk to participants; that the research could not be practicably carried out without the waiver; that the researchers would provide contact information in an informed consent statement posted in a highly visible location on each whiteboard; and that the rights and welfare of the participants would not be adversely affected. The researchers also submitted their list of questions, which were crowdsourced with the library's Assessment Committee and incorporated input from others across the library. Both researchers had a background in instructional services, and hearing from others in varied roles across the library led to a more robust set of questions, as well as opportunities to adjust wording to avoid library jargon.

Question prompts asked ranged from, *What is your year in school?* to *Every day, I feel inspired to_____*. The researchers asked library-specific and academically-oriented questions, including *Why did you come into the library today?* and *My dream/ideal library has_____*. Other, student success-oriented questions asked *What is the most challenging thing about college?* and *The first thing I do when my professor gives me an assignment is_____*. Questions designed to solicit responses related to personal habits, interests, and preferences included *If there were a song about your life, what would it be called? Or, what song defines you?* and *What is your most memorable college experience?* **For full list of questions, see Appendix A.**

During the first iteration of the project, the researchers posted one question a day for 30 consecutive days on three different whiteboards, with locations informed by the researchers' informal observations of library spaces, conversations with colleagues, and their review of the literature of space assessment. One whiteboard was set up in a collaborative group space in the library's Commons; a second on a quiet study floor; and a third in a transitional space outside of the library's Starbucks coffee shop and near its main entranceway and Public Services Desk. Each whiteboard had the same question posted on it for 24 hours. Once the question had been posted for this time frame, the researchers photographed responses, erased the board and wrote a new question. The researchers uploaded the photographs to a password-protected drive. They also recorded instances where boards were moved or erased, or where inclement winter weather (unexpected for the region) led to university delayed openings or full-day closings that impacted the study period.

The second iteration of the project, which was launched in spring 2016, incorporated multiple changes. A significant change involved the addition of the University of Richmond's (UR) main campus library as a second study site. The researchers placed two whiteboards in the UR library; one in a quiet study area and the other in a transitional, group study area. At UTK, the researchers continued to use three whiteboards and kept the quiet study floor and transitional location the same as in 2015. The third board, however, was placed on a group study floor, rather than in the multimedia space in the Learning Commons, due to that space having the lowest response rates in 2015 and being the most frequently moved or erased. To prevent "whiteboard fatigue" for both students and the researchers, this second iteration also changed the study approach from posting a question one daily for 30 days to posting a question once weekly for a period of eight weeks. As in 2015, questions were kept up on the boards for 24 hours, photographed, and then erased, and researchers invited colleagues' input and connection to the project through all-staff emails. **For a full list of**

questions, see Appendix B.

Once the project was completed, the researchers and their student workers transcribed all of the whiteboards, using written descriptors for any images drawn on the board. Transcribers numbered each line of transcription and did not correct for misspellings or grammatical errors. When the transcriber was unsure of content, due to text placed on top of other text or partially erased, they placed the line of transcription in brackets. Prior to the start of the project, the researchers coded question prompts into the four categories listed below:

- (A) Student Success
- (B) Demographic
- (C) Habits & Preferences
- (D) Dialogue & Community Opportunities

After data collection, researchers utilized the qualitative analysis software, Dedoose, to create seventeen subcategories that were then assigned to to each transcribed response. **For full list of subcategories, see Appendix C.** The subcodes ranged from general descriptors, such as "positive", "negative", "neutral" to specific, actionable codes, including "library services/resources" and "dialogue and community opportunities." Many of the transcribed responses were coded into multiple categories.

Table 1: Top 10 Codes by Category

FINDINGS AND DISCUSSION

Ethnographic methods are unique in their investigation of culture. Tomlin, Tewell, Mullins and Dent note that "ethnographic research is intended to provide insight into the culture studied and is not generalizable" (2017, p. 643). Hobbs and Klare (2010) similarly observe that "ethnography is always local; it is about particular individuals in a specific context" (p. 356). Thus, while the content of this project may not be generalizable, its observations of specific cultures, places, and points in time can provide insights to shape further conversations that inform research and practice. Lanclos and Asher note that the long-term work of ethnography is a praxis, "a transformative practice emerging from particular theoretical perspectives that value emergent insights over simply identification and fixing problems" (2016, np). They further posit that by providing a space for ethnography, libraries are allowing for a holistic understanding of their students' experiences and needs. By using inquiry, rather than assumption, to better understand these experiences and needs, libraries garner cultural knowledge that can be applied to library services and initiatives, interactions with students and administrators, and the expansion or creation of partnerships.

Over the two study periods, researchers collected more than 2,100 total responses, including text, symbols, and doodles. A total of 1,647 responses, with an average of 55 per day, were collected in 2015. In 2016, the researchers obtained 428 responses, with an average of 47 per day at UTK and 6.5 at UR . **See Table 2 and Table 3 for a more detailed breakdown of responses.**

Table 2: 2015 Responses By Location

Table 3: 2016 Responses by Location

The largest number of applied codes fell under the "Habits and Preferences" category. The researchers defined "Habits and Preferences" as responses describing participants' experiences or thoughts related to an experience or event. Within this category, respondents shared a range of perspectives. In response to the question, *Today I feel_____*, for instance, responses included "Angry because people will not quit talking on the first floor where the desktops are that I need to use"; "#Alllivesmatter"; "#Chapelhillshooting"; "Hangry!" and "Beautiful". Responses to the question *What advice would you give yourself at the start of the semester if you could go back in time* included "STOP PROCRASTINATING!!!"; "go to therapy sooner"; and "if at first you don't succeed in college, go to grad school". **See Appendix D. Image 1, 2 & 3.**

The next largest category of applied codes were classified as "literal responses" to the questions being asked. Answers tended to be fairly straightforward, although participants also took the opportunity to add their own mark in response to prompts such as *What is your year in school? (I am a_____)* or *If you could do anything today, what would it be?* with doodles or descriptive phrases, such as "Proud Junior [smiley emoticon, image] "Instructor (so I will be in school forever [angry emoticon, image] or "graduate"; "win the lottery"; "Unicorn [unicorn, image]. When the "Literal Responses" were cross-tabulated with those coded as "Habits and Preferences, the researchers were able to see focused responses to library-specific questions. In these

responses, students made requests for "more study rooms"; "[more] books in pdf [format]"; "computers on each floor so you can search the catalogue" and other space and services- specific answers. Such responses were similar to those that could be gathered through open-ended survey questions. However, a major difference was that participants were able to see and comment on others' responses, creating a real-time, conversational effect not typical of a survey experience. **See Appendix D. Image 4 & 5.**

Both participants' overall interactions with the whiteboard locations and their individual responses to question prompts provided unexpected insights related to student success and student learning. The researchers had posited that the whiteboard located in the transitional space at UTK would be the least used. This space was the most visible, due to its location near a main entranceway and cafe, and it was also in a location where visitors tend to come and go quickly. As the response rates from both 2015 and 2016 show, however, this space was by far the most popular for participation, garnering more than 60% of total responses both years. At several times, one of the researchers observed individuals stopping to read the board. In another memorable encounter, the researcher began erasing the whiteboard, only to have students stop her because they had not finished reading it! Similarly at UR, a transitional space garnered 62% of the library's responses in 2016. In thinking about student learning and engagement, transitional spaces appear to have untapped potential. Libraries are increasingly called upon to meet students where they are, and being aware of highly visible spaces that may not specifically seem set aside for learning, research, or engagement can provide an opportunity to better meet students' needs. It is also

possible that students saw the transitional spaces as less of a library space than other locations and thus responded to in a different volume and manner than to the other whiteboards. This consideration presents an opportunity for further research, particularly in academic libraries that incorporate campus partner spaces or communal spaces, such as a cafe.

A notable finding was the amount of responses that were directed toward another response, rather than the original question prompt. In both study periods, approximately 10% of responses fit this criteria. Participants offered agreement in the form of symbols, "times two", and "retweet" or "RT" messages. They also offered advice, such as how to print from the campus network and where to find certain materials, and, in multiple instances, encouragement to responses related to academic and personal stress. The popularity of these types of responses illustrates the potential for peer-to-peer learning spaces. Creating an environment where students can ask questions or pass along their knowledge in a way that feels non-judgmental yet personal offers an area for academic libraries to examine. As entities that are often centrally located on their campus and that serve the entire study body libraries may be uniquely poised to create or enhance these types of spaces. These arenas for peer-to-peer conversations may also foster student wellness by allowing students to see that they are not alone in feeling a certain way.

As researchers transcribed responses, the concept of wellness emerged as a recurring theme across the whiteboards, leading to the addition of "Physical/Mental Health or Wellbeing" as a subcode. Even questions that seemed unrelated to the topic brought up responses related to this code. For instance, in response to the question

When you think of the library, what words come to mind?, respondents wrote "anxiety" attacks," "sleep deprivation," and "stress headaches". To the question What is the most challenging part about college?, participants frequently mentioned the university's administration and parking, but they also wrote "food," "sleep," "making friends", and "accepting that you're not a protagonist." See Appendix D. Image 6, 7a and 7b. Such responses were a powerful reminder of the importance of taking into account the entirety of students' experiences, echoing Asher et. al (2017) call for "expanding our approaches to consider the whole person" (p. 309). As libraries consider approaches to teaching and learning, keeping the idea of the "whole person" in mind could mean collaborating with others on campus. Libraries may not specifically be able to answer questions related to mental health, finances, or relationships, but they could benefit from being aware of, and building partnerships with, campus colleagues who can assist. Being able to share student needs in students' own words, as with the whiteboard photos and transcriptions, could kindle conversations about opportunities to individually and collectively support students in a way that assessment specifically tied to a particular department or program may not accomplish.

Both within and across the two campuses, the range of responses stood out. Positive, self-aware responses like, "Thankful to have access to a good education + thankful this board stopped me to remind me to be thankful" (Appendix D, Image 2) stood alongside those that reflected feelings of stress, anxiety, and discouragement. Responses in which students shared personally identifiable information, such as a phone number with a request to text when a study space was available or a social media handle and invitation for followers, were juxtaposed with those in which students championed privacy, asked about data collection, and questioned the practice of sharing contact information. A related area to these juxtapositions were differences between the two campuses. As noted earlier, UTK received significantly more responses than UR in 2016. In addition to differences in the number of responses, there were distinctions among the types of responses. UR participants tended to share literal, academically-oriented responses, while UTK respondents incorporated personal experiences and external events, including comments on campus policies and national politics. The researchers wonder whether UR's much smaller campus size, with a full-time enrollment (FTE) of approximately 3,659 full-time in fiscal year 2017 compared to UTK's approximately 22,139 FTE in the same period, and a more homogeneous student population led to a lack of comfort in responding in this public forum, or students' focus was more internal than external at UR.

Overall, questions with the highest response rates were those that put students first and invited their personality, authority, or problem-solving skills. In 2015, the prompts with the five highest amounts of responses were: *If there were a song about your life, what would it be called? Or, what song defines you?* (91 responses); *What is your year in school (I am a_____)?* (81 responses); *What is the most challenging part about college?* (72 responses, tie); *Why did you come to the library today?* (72 responses, tie); *When you think of the library, what words come to mind?* (72 responses, tie); *What is the last book you read that you loved?* (71 responses) ; and *My dream/ideal library has_____*(69 responses). **See Appendix D. Image 8, 9, 10 & 11**

The anonymity of data collection methods means that it was difficult to ascribe statistical significance to the amount of responses or tie the responses to a specific demographic, as the self-identified population ranged from undergraduate to graduate lecturer. However the breadth of the responses does demonstrate that placing culturally significant questions in transitional and public spaces can be a viable method for soliciting student input. The questions listed above offered an opportunity for students to share something unique about themselves (a song, a book, a college experience) and brainstorm ideas (ideal library, words to describe a library). Even question prompts that may initially seem mundane provided an opportunity for creativity. For instance, responses to the *What is your year in school?* prompt included not only grade levels but also "zombie," "jedi master," and "I don't even know anymore (fifth-year)". Some respondents also ascribed characteristics, such as "super senior" or "international freshman." Such responses illustrate students finding a way to take ownership of a given prompt and add their own identity to it.

The wording of questions mattered. For instance, the prompt *"What can the library do to help you succeed*?" elicited 52 responses, whereas a similar question worded as *"What can librarians do to help you succeed*?" drew only 24 responses, the lowest daily response total in 2015. Other questions that had among the lowest totals were: *In three words or less, why did you choose your major? (*30 responses); *The best part about being a Vol (university mascot/identity) is_?* (33 responses, tie); and *What is the most interesting thing you've learned this semester?* (33 responses, tie). **See Appendix D. Image 12, 13, & 14** In each of these three instances, a board was

either erased or moved, leading to a loss of data. Nonetheless, it is interesting to consider why these prompts may not have resonated. It is possible that the prompts, particularly the most interesting thing you've learned query, suggested a lengthier, more detailed response than the space seemed to support. It is also possible that these prompts came across as campus-centric or library-centric, rather than student-centric. For both research projects and day-to-day interaction with students, whether in "one-shot" instruction, in a consultation, or an orientation or engagement event, giving students a chance to introduce themselves and share their expertise before sharing library facts or seeking input on library priorities seems an avenue to create more meaningful dialogue. Future research projects could more specifically categorize prompts as student-centric or library- or campus-centric to investigate how, or to what extent, these two different types of conversation shape interactions.

In thinking about teaching and learning, it is also of interest to consider "jokey/sarcastic/whimsical responses," which stood as the third most-applied subcode. Often, these responses shed light on areas that the researchers might not have otherwise considered. For instance, a suggestion that the library "build a commuter student hotel," while likely facetious, served as a reminder of a specific and growing population that generally is not broken out in the library's survey assessments. Perhaps more than learning for the libraries, these types of responses also provided a unique learning experience for students. Elmborg et. al note that "...having fun is part of what motivates students and helps them cope with pressure. It is also crucial to learning. As students negotiate entry into academia, humor helps them deal with many basic challenges" (2017, p. 153). Of note is that these types of responses often received "x2" or "retweet" reactions from other participants.Perhaps providing a space that seemed less formal or academically oriented than many across campus offered students a way to navigate more formal, and potentially, unfamiliar or intimidating environments.

CONCLUSIONS

In many ways, the whiteboard project stands as a marker of cultural identity and as a time capsule, chronicling student experiences in a specific place and time. While the content shared on the whiteboards may be linked to their locale, the process of gathering and analyzing this content provided insights that the researchers hope can contribute to a larger dialogue across academic libraries. In 2016, Drabinski and Walter argued that libraries must be mindful of the ways and types of value-added and return on investment questions that get asked and prioritized by administration. They further argue that the libraries and higher education as a whole should not limit themselves to statistical methods that commodify learning and create spaces put forth without understanding and prioritizing student voices (Drabinski & Walter, 2016).

The opportunity to conduct this project at two distinct institutions provided valuable insights into student voices that would not have been possible at a single study site. Introducing this particular methodology allowed for a comparative approach that builds upon a base of knowledge without replicating large-scale fieldwork. A major issue within ethnographic research, as demonstrated by Asher and Lanclos (2016), is that ethnography is labor-intensive and most libraries are looking for short-term, high-impact

practices that replicate ethnography without the potential for failure or uncertainty. Although more challenging to undertake, there is value in embracing the uncertainty and looking through a longer-term lens in order to meaningfully contribute to student success and user experience. Collaborating across institutions provides a chance to then re-examine one's own institution with a different perspective, learning what is specific to that institution's culture and what is shared across institutions.

This project's multi-site approach allowed the researchers to specifically learn about their institution by concurrently juxtaposing the methodology in real-time; thus adding to a base of local knowledge that could then be applied globally. It would be illuminating to continue to expand the conversation by introducing this approach at other academic libraries, including public and non-homogenous private settings and branch libraries. Of particular interest is exploring whether and to what extent a library or campus' size and the demographics of its student population impacts both the amount and type of responses. Also of interest is utilizing this methodology in non-library spaces to investigate how response rates and types compare to library spaces. Another, especially exciting area that could extend the reach of this project would be to share whiteboard photos and transcriptions with students. Creating forums for students in 2019, and beyond, to examine what peers in past years wrote could expand the concept of student-owned spaces and student-led conversations.

As libraries consider how they can contribute to student success and create an engaging user experience, it is imperative to consider not only what libraries can offer students, but how libraries can empower their student body to create visible and

authentic spaces. Such student-created spaces enable ownership and community and shape environments that allow meaningful learning to take place.

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Table 1: Top 10 Codes by Category

Code Categories	Number of Coded Applications
Habits and Preferences	1617
Literal Answers	800
Jokey/Sarcastic/Whimsical	610
Response to another quote	224
Academic	188
Library Services/Resources	129
Creative Answers	124
Positive	111
Social	65
Student Success	61
Negative	49

Table 2: 2015 Responses By Location

2015 Locations	Response Numbers & Rates
Collaborative space	226 (14%)
Quiet study space	315 (19%)
Transitional space	1,106 (67%)

2016 Locations	Response Numbers & Rates
Group study space (Library #1)	24 (5% of overall total, 7% of library's total)
Quiet study space (Library #1)	78 (20% of overall total, 21% of library's total)
Transitional space (Library #1)	274 (64% of overall total, 73% of library's total)
Quiet Space (Library #2)	19 (4% of overall total; 36% of library's total)
Transitional Space (Library #2)	31 (7% of overall total; 62% of library's total)

Appendix A

Questions for Whiteboard Study - Spring 2015

- 1. Today, I feel
- 2. My dream/ideal library has
- 3. Facebook/Instagram/Snapchat or _____
- 4. When I study, I need
- 5. In three words or less, why did you choose your major?
- 6. What is the last book you've read that you loved?
- 7. What is your favorite spot to study on campus? Why? Group Study Areas What is your favorite spot in the library? Quiet Floors
- 8. The best part about being a VOL is?
- 9. What can the library do to help you succeed?
- 10.My favorite thing to do on the weekend is _____(Keep it clean!)
- 11.What is the most challenging part about college?
- 12. When are you at your best? (I am a day person, night person, never functional

_____) 13. When I'm researching something I think

- 14. If you could do anything today, what would it be?
- 15.One question I have about the library is
- 16.What is your most memorable UT experience?
- 17.Why did you come to the library today?

18. If there was a song about your life, what would it be called? Or, what song defines you?

19. Which types of library programs or events would you like to attend?

20.What is your year in school? (I am a_____

21. How long are you planning to be in library today?

22. What can librarians do to help you succeed? (P.S. No, we can't write your paper!)

23.Studying with others – love it, loathe it, need it?

24.What is the most interesting thing you've learned this semester?

25.Every day, I feel inspired to ____

26.How do you relax during high-stress times, like finals?

27. When you think of the library, what words come to mind?

28. The first thing I do when my professor gives me an assignment is _____

29. Is there anything you've needed that you expected to find in the library but haven't? 30.What advice would give yourself at the start of the semester if you could go back in time?

Appendix B

Questions for Whiteboard Study – Spring 2016

- 1. Today, I feel____
- 2. What is your favorite space in the library?
- 3. In one word or phrase, describe campus.
- 4. What challenges do you face when you start a research project?
- 5. What is most challenging about college?
- 6. How can our library help you to make our community and/or world better?
- 7. How do you define "success"?
- 8. What is the last thing you read or saw that inspired you?

Appendix C

Positive - Overwhelming positive mention

Negative- Overwhelming negative mention

Neutral- Neither positive nor negative

Response to another quote/Creating Community- Phrase is responding to another participant

Library Spaces- Specifically related to internal library spaces

Non-Library Spaces- Specifically related to non-library spaces

Current or Campus Events- Specifically related to current or campus events

Jokey/Sarcastic/Whimsical -humorous, imaginative or playful answers. This reference can also be coded to "offensive or mocking answers"

Unknown Reference- reference cannot be attached to any other code

Library Services/Resources- related to specific library resources or services

Physical/Mental Health or Wellbeing - related to an emotional or bodily state or condition **Political**- Related to politics or civic engagement

Advertisement/Promotion - related to publicizing an event, program, organization Social- related to non-course and non-career matters, including student organizations, athletic and extracurricular activities

Academic - related to coursework, including particular classes and majors, career considerations

Literal Answers- literal answer to the question being asked

Creative Answers - answers not directly related to the question being asked

A – Student Success – Student Engagement - related to campus activities, initiatives or issues

- **B Demographic –** Get to Know You
- C Habits & Preferences personal responses from participants defining their world
- D Dialogue & Community Opportunities Ways to engage

Appendix D

Image 1

Today, I feel

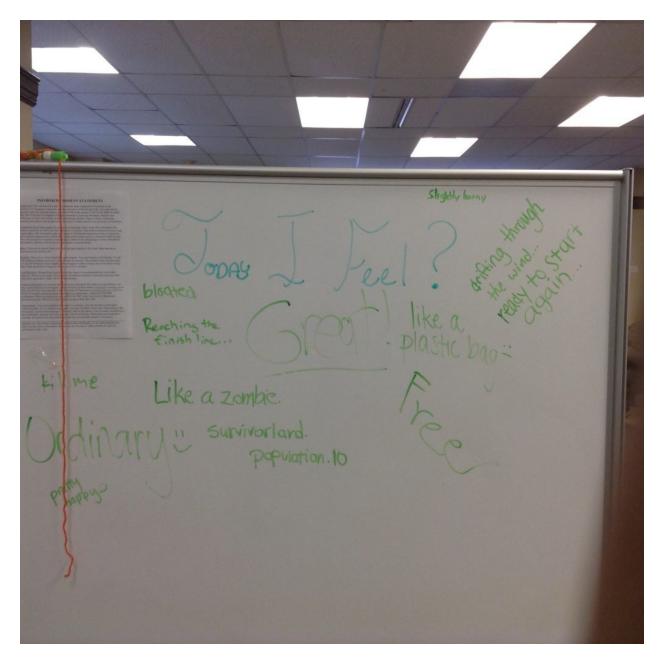


Image 2

Today, I feel

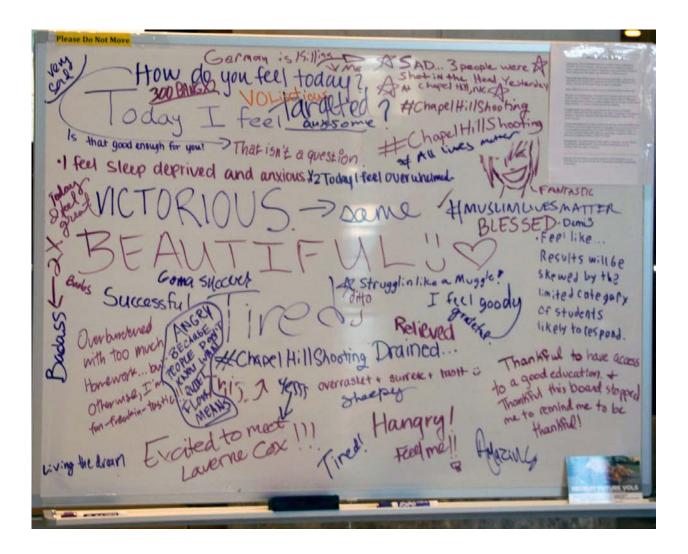


Image 3

If there was a song about your life, what would it be called? Or, what song defines you?



Image 4

My dream/ideal library has

free printing + Every Room. Loano STOM mac 5 Seconded trial dring dream ideal library useful nas Dinosaws books Makes ST pheted in the right et a More on Prase. ar Or rium 0 FOUR torm 200 erywhere \$ alogue Wer SUDO Avoil E. Seconded More 3B Beer Volcano MUA god yes A White seriously, why are we port: adry Beatods ON Campus every day but batal saturday MOYP