



Article

Using Photo-Elicitation with Native American Students to Explore Perceptions of the Physical Library

Karen Neurohr
Community Outreach and Assessment Librarian
Oklahoma State University Library
Stillwater, Oklahoma, United States of America
Email: karen.neurohr@okstate.edu

Lucy Bailey
Social Foundations and Educational Studies,
Director of Gender and Women's Studies
Oklahoma State University
Stillwater, Oklahoma, United States of America
Email: lucy.bailey@okstate.edu

Received: 16 Feb. 2016

Accepted: 4 April 2016

© 2016 Neurohr and Bailey. This is an Open Access article distributed under the terms of the Creative Commons-Attribution-Noncommercial-Share Alike License 4.0 International (<http://creativecommons.org/licenses/by-nc-sa/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly attributed, not used for commercial purposes, and, if transformed, the resulting work is redistributed under the same or similar license to this one.

Abstract

Objective – This research project explored Native American students' perceptions of the Edmon Low Library at Oklahoma State University (OSU). The study sought to understand how Native American students perceived the role of the academic library in their lives, and which elements of the library students depicted and described as holding meaning for them.

Methods – Photo-elicitation, a form of visual research and a participatory research method, was the primary method chosen to explore students' perceptions of the library. To qualify for this study, students self-identified as Native American and as frequent library users. They also had completed three or more semesters of study at OSU. Five students followed a photo prompt for taking at least fifteen pictures of the library, then participated in two separate interviews with the

primary researcher. Participants also completed a demographic/questionnaire form, answered semi-structured questions, and ranked the photos they took.

Results – This study produced several emergent findings. First, students expressed uncertainty about the library’s books. Second, functional library tools such as express printers and library signage played a valuable role for facilitating student work. Third, the method of photo-elicitation was enjoyable for students and served as library discovery. Fourth, Native American resources and exhibits in the library had varied salience for students.

Conclusion – Limited research focuses on Native American students in academic libraries, particularly on how students use and experience the library. Exploring how individual students who identify as Native American perceive the university library enhanced our understanding of how libraries in Predominantly White Institutions (PWIs) can best serve and support students. This study provided insight into the method of photo-elicitation interviews. This research also provided practical benefits for student participants through increased library knowledge.

Introduction

The Edmon Low Library is located at the heart of Oklahoma State University, (OSU), a land-grant, Research I institution. A modified Georgian brick building graced by a fountain and sweeping library lawn, the Library is a campus icon. This six-floor building, which opened in 1953, has a public seating count of 1800. The main entrance opens to a marble lobby and grand staircase. The first floor includes service and checkout desks, current periodicals, the largest computer cluster on campus, numerous printers, group study rooms, and a coffee shop. The other five floors house varied material and structural resources: books; group tables and individual study carrels; gallery space; soft and hard furniture; a computer training room; and the Math Learning Success Center.

In Fall 2015 the OSU undergraduate headcount was 21,046 students, with 1,138 self-identifying as American Indian/Alaskan Native and 29 students self-identifying as Native Hawaiian/Pacific Islander (Oklahoma State University, 2015). The diversity of the student body is steadily increasing at this Predominantly White Institution (PWI). The university continues to rank high nationally on degrees

conferred on Native American students (Top Native American, 2014). However, as administrators at other institutions have noted, retaining the majority of Native American students both within PWIs and in Tribal Colleges remains an unrealized institutional goal (Belgarde & LoRé, 2007; Brayboy, Fann, Castagno, & Solyom, 2012). At OSU, the first-year retention rate and six-year graduation rate of full-time freshmen Native students, as well as other racial/ethnic groups, still lags behind those of White students (Oklahoma State University, 2013).

Oklahoma has the second highest state population of American Indian/Alaskan Native people alone-or-in-combination in the United States (Norris, Vines & Hoeffel, 2012). Nine percent of the population in Oklahoma identifies as American Indian/Alaskan Native (United States Census Bureau, 2014), and Oklahoma has 38 federally-recognized tribes (National Conference of State Legislatures, 2016). Nationally, Native Americans struggle with high rates of poverty, unemployment, high school attrition (Krogstad, 2014), and are under-represented in postsecondary degree completion. A congressional mandated study of underrepresented racial/ethnic groups in higher education found that, at 14.4%, American

Indian/Alaskan Natives have the lowest six-year graduation rates among the groups noted (Ross et al., 2012). Nationwide, federal and institutional entities have developed programs such as TRIO, GEAR UP, and College Horizons to serve, advance, and retain Native American and other underrepresented students (Brayboy et al., 2012), but little research explores the library's potential to serve underrepresented students in this broader mission.

The Association of College and Research Libraries (ACRL) produced the *Value of Academic Libraries Initiative* to address higher education's emphasis on "assessment, accountability, and value" (Oakleaf, 2010, p. 7). Oakleaf (2010) conducted a comprehensive research review and report of the state of contemporary libraries and provided suggestions for a research agenda. Since that time, research into the library's role in student retention, learning, experiences, and perceptions has increased.

To explore the role that libraries play in the lives of some Native American students, this qualitative study shares student perspectives and images through the method of participant-produced photo-elicitation. This promising methodology can provide insights into students' perceptions of libraries because students are the primary agents in choosing and conceptualizing the visual and verbal data. Their reflections can inform future research and practice. The research questions were:

- How do Native American students perceive the role of the academic library in their lives?
- Which elements of the library do students depict and describe as holding meaning for them?

Literature Review

Decades ago Heyser (1977) recognized the need for more research into how libraries can better serve Native American people. This area of research is slowly increasing. Scholarship offers

recommendations for librarians serving Indigenous people to learn about their histories and cultural rights, and to develop culturally-relevant library services (Burke, 2007; Hills, 1997; ERIC Clearinghouse on Rural Education and Small Schools, 1971; Rockefeller-MacArthur, Rockefeller, & MacArthur, 1998; Roy & Frydman, 2010; Roy, Hogan, & Lilley, 2012; Spencer, 1985; Webster, 2005).

Some studies have focused on college and university libraries specific to Native peoples. Zuber-Chall (2007) provides a historical and current perspective of Haskell Indian Nations University and advocates for increasing research and practice to serve Indigenous libraries. Studies of tribal college libraries have examined college administrators' perceptions (Metoyer-Duran, 1992) and library employee roles (Dilevko & Gottlieb, 2002), and have described developing collections of culturally-relevant books (Koelling, 1995), and supporting and preparing students (Patterson & Taylor, 1996).

Recent library studies recommend avenues of support for underrepresented college students, including library outreach to summer academic programs (Love, 2009), multicultural student service centers (Aguilar & Keating, 2009), American Indian Studies Programs (Alexander, 2013), and Indigenous support programs in Australian academic libraries (Hare & Abbott, 2015).

Studies focused on Native Americans in higher education rarely, if ever, mention the academic library (Brayboy et al., 2012; Carney, 1999; Conroy, 2013; Huffman, 2008, 2010; Oosahwe, 2008; Reyhner & Eder, 2007; Tierney, 1992). One exception is Garrod and Larimore's (1997) study which included students' fond descriptions of their early library experiences. One student in that study described three areas she considered "homes" during college: her dorm room and two different campus libraries (p. 195). Ultimately, Native American students' perceptions of the library and its role in their

lives and their academic success remain relatively unexplored areas of research.

Methodology

This multicase study of five Native American students attending OSU uses participant-produced photo-elicitation as the primary mode of inquiry to explore the phenomenon of interest: students' perceptions of the academic library. Case studies use varied data sources to explore "how" or "why" questions (Yin, 2009). For Stake (1995), a case researcher's goal is to focus on the "particularity and complexity of a single case, coming to understand its activity within important circumstances" (p. xi). In multicase study, examining each individual case in detail contributes to understanding of the whole (Stake, 2005).

Furthermore, multicases are linked in some ways (Stake, 2005). The cases for this study are linked in at least two ways. First, all participants self-identified as Native American who use the physical library at least three times a month. The OSU Library's previous LibQual® survey results helped inform this frequency; furthermore, the frequency indicated that students perceived the library as a resource in some way and had developed familiarity with at least some aspects of the library. The second link across the cases is students' persistence toward graduation through completing at least three semesters of college, an important characteristic of the student retention rates at OSU. New students who leave the university tend to leave during or shortly after their freshman year. Having completed at least three semesters of study indicates that students have passed the first major marker in attrition patterns and are progressing toward degree completion.

Photo-elicitation, a form of visual or image-based research and a participatory research method, is a creative method for exploring students' perceptions of the library. Sometimes called photo-interviewing, photo-elicitation was first tested and described by Collier in the 1950s

(Harper, 2012, p.157). In his comparative study, Collier (1957) found that interviews based on photographs were more definite and effective than interviews conducted without photographs. Whether used as a primary or supplementary tool of data-gathering, a primary aim of photo-elicitation is to use images as prompts to elicit an interviewee's comments, meanings, and perspectives. The inquiry method ideally honors a collaborative, conversational exchange that enables participants to share meanings and contribute to the direction of the interview.

The premise of such an approach is that images hold and evoke varied meanings and values that can offer unique insights and stimulate productive conversations about an individual's world views. The images a researcher might incorporate into their research design may be as diverse as the goals of the study, including advertisements, photographs, paintings, video-clips, and web based images. Similarly, depending on the study purpose, either the researcher or the participant can provide or produce the images that serve as vehicles for discussion or the researcher/participant can produce the images—and the meaning—in collaboration. In this study, we incorporated only participant-generated images as we were invested in fostering students' agency in deciding which photographs they would take, how they would take them, and how they would teach others the meaning they held (Lapenta, 2011).

Very few library research studies have utilized photo-elicitation. Shao-Chen (2006) conducted a case study of how past library experiences influenced current library perceptions of first-year Taiwanese graduate students. Her methods included both participant and researcher-created photographs, along with interview questions based on LibQUAL+ dimensions. She framed her coding analysis on LibQUAL categories. The study included the finding that past library experiences shaped participants' current perceptions.

Briden (2007) utilized participant-produced photographs to study students' lives and research behavior at the University of Rochester. Six years later Briden and George (2013) utilized participant-produced photographs to study academic work places of students. Additional photo-elicitation library studies include Duke and Asher (2011) and Gabridge, Gaskell, and Stout (2008).

Methods

As of 2015, five students have participated in this Institutional Review Board approved study: Amanda, Kellie, Megan, Sage, and Charlie [pseudonyms]. The researchers masked all potentially-identifying information (e.g., hometown, tribal affiliation, etc.) to protect identity. All participants identified as members of tribal nations in Oklahoma. They ranged in age from 19 to 23, and from sophomore to senior status at the time of interviewing. Our study participants were the agents and instruments in the process of data collection through deciding which photos to take, where to take them and the meaning they created and shared about those images.

The Coordinator of Native American Affairs in the Office of Multicultural Affairs assisted in recruiting students through word-of-mouth, posting fliers in her office, and forwarding invitations through email to members of the Native American Student Association (NASA). The primary researcher offered an incentive of ten dollars per hour of participant's time, a sufficiently-modest amount to prevent coercion. Exchanging money or a gift card for participants' time reflects the ethical and methodological principle of reciprocity: providing something of value to participants in exchange for students providing their valuable perspectives for research (Patton, 2002).

The primary investigator (PI) met with students two different times in her office and recorded the interviews with an Olympus digital recorder. Megan and Sage's interviews and the

PI's member checking, a method to check transcription accuracy and clarify and expand data (Creswell, 2009), occurred during their sophomore year. Charlie completed his interview and member check during his junior year. Amanda completed our interview during her junior year and the member check when she was nearing graduation and applying to graduate schools. Finally, Kellie participated during her senior year and the member check occurred after she graduated and was making plans for graduate school. While member checks might occur at any time after an interview, transcription, or analytic stage, the varying dates in which students participated reflected their preferences and busy schedules. The member checks of those nearing graduation or post-graduation suggested a greater deal of retrospection and reflection.

Meetings were scheduled for the students' convenience when the library is typically less busy, to minimize intrusion of library users. After the PI met the students, the first phase consisted of reviewing and signing the consent form, completing a biographical intake sheet and short survey, and responding to three initial semi-structured interview questions:

- How did you first learn about the library?
- Describe any interactions you have had with library employees.
- In what ways does the library make a difference for you?

The short survey and initial questions were designed to prompt students' reflections on their library use and experiences. This information also provided key contextual information for the photographs. When students were uncertain about library resources or services, or asked questions, the PI (a librarian) jotted a note, "parking" the idea until the interview ended. At that point, she answered each question, demonstrated online tools, and/or accompanied students to the library stacks to demonstrate how books are shelved.

In the second phase of the first meeting, the PI showed participants how to use the camera and reviewed the photo prompt:

Take a least fifteen different photos of the Edmon Low Library. Photos should represent some meaning for you. Meaning may be of things you use in the building or online, favorite things, things you dislike or like, things that are confusing or easy, or new things you discover. Photos can be of exterior or interior things. Photos cannot show the faces of people.

The description focused on student-driven meaning and provided prompts as suggestions. The primary researcher loaned students a digital camera for the activity and reminded students that they would discuss each photo when they returned. When participants returned, the PI explored their experience of taking photos, uploaded the images, and discussed them one at a time. Later, the PI made back-up copies and removed the images from the camera to prevent others from seeing the photos. She transcribed the interviews verbatim to prepare for the second meeting focused on member-checking and photo-ranking.

The second meeting with participants took place between one month and twelve months after the initial interview, focusing on three activities. First, the PI asked a series of questions to clarify responses based on initial analysis of the first interview transcript. Second, the PI asked participants to discard one photograph and explain why, and, finally, she asked participants to rank the top photos and explain the reasons. The PI audio-recorded these “member checks” and transcribed them verbatim as part of the analytic process (Poindexter, 2002).

The data reflected several similarities among participants. While the study criteria specified at least three visits to the library per month, all students indicated they came to the library one to three times per week. Similarly, they all used a variety of spaces and seating in the library,

and they all actively participated in the Native American Student Association. Students (cases) differed across age, gender, major field of study, classification, and place of residence. Also, use of the library’s online resources varied in frequency: Sage and Kellie said they used the online resources one to three times per week; Amanda said she used the online resources more than three times per week, and Megan and Charlie described their use as more than three times per month.

Both researchers analyzed the data in multiple ways and over time. As is characteristic of qualitative analysis in which the meaning-making process proceeds throughout and after data collection, the PI noted analytic insights during interviews, during immersion in the transcription process (Poindexter, 2002), and through systematic analysis with the data corpus. In particular, the researchers relied on the concept of “pursuing members’ meanings” (Emerson, Fretz & Shaw, 2011) to analyze data, seeking understanding through interviews and descriptions of photographs of what participants considered meaningful, relevant, and important about the library (p. 129). For example, we used the term “resources” to capture diverse elements of the library such as printers, books, and electrical outlets to reflect students’ perspective of what they found relevant and meaningful to their library use. Similarly, using In Vivo codes, the photographs were categorized by topic and meaning using the participants’ own words (Glaser & Strauss, 1967; Saldaña, 2013; Strauss & Corbin, 1990), evaluated for convergence and divergence (Guba, 1978), and substantive significance (Patton, 2002, p. 467). All photographs were evaluated for comparison across the multi-cases.

Findings

Visual sociologist Harper (2012) suggests that participant photos usually reflect two types: “images of mundane objects that are special because of their role in the lives being documented,” or “visualized metaphors,

sentiments and emotions” (p. 205). The interviewing process revealed the various meanings participants ascribed to the objects and images in their photographs. Participants took the following number of photographs: Amanda, 17; Kellie, 17; Sage, 15; Megan, 17; and Charlie, 15 for a total of 84. Surprisingly, the only exterior photo of OSU’s historical library depicted its tower only, with the meaning ascribed to the chimes, not the iconic building.

Students took pictures of objects they used, liked, or that helped them, and that seemed at first glance to be ‘mundane’ as Harper (2012) notes, objects such as printers, computers, signs, and elevators. All five participants took photographs of individual study carrels, and four photographed the vending machine. The highest number of sentiment photos depicted objects pertaining to Native cultures: two photos of Native books, two photos of Native Americans in traditional tribal attire, and two photos of the Library’s Browsing Room because of the Native programming which has occurred there.

Discussion

Finding One: Uncertainty about Book Use

Several students indicated they appreciated books and reading but also expressed limited experience with this library resource and confusion about how to utilize it. In one case a student described an unpleasant experience with a library employee when they tried to check out a textbook on reserve. Another felt uncertain about how the books were organized. Of the 84 photographs students took, only four represented books. Only Sage (sophomore at the time of interviewing) and Charlie (junior) had ever checked out a book from this library. Amanda (junior), who had never checked out a book at OSU, said, “All the rows and rows of books and I’ve always [wondered], ‘Oh there’s so many books’ but I never really use any of them, so I just kind of wonder if people use them!”

Megan, whose first photograph represented books, expressed her investment in books and their clear symbolic association with the library. Yet her comments and questions related to her photographs of books also highlighted her limited understanding of how to access this library resource. She said,

My instant thought was to take a picture about books because I really do like to read, but I know NOTHING about how to check out a book, where to find the books I would be interested in, what books are reference books, what books, you know, where I could find books for my major or anything.



Figure 1
Photo taken by Megan.

Her second photograph of books highlighted both the limited experience described above and her feelings, when she discovered books of interest, that she had missed a key opportunity to explore an area of interest:

I had no idea. I guess I mean I would have known, if I would have thought about it, but I was just walking by a desk, [where] I was gonna to take pictures... and there were ...tribal books [voice rising with surprise]....Ah, I mean it’s a library so CLEARLY, you know, when you think about it, you would think they would have like Native American books and stuff, but it had just never come to my mind, and I was like “Wow! Maybe I would check some of those out,” if I would have been AWARE.



Figure 2
Photo taken by Megan.

Despite visiting campus between one and three times per week, and her affection for books, her awareness of the ways the library might serve her reading interests increased through this multicase study, echoing Sage's comment, "I like to read a lot of books on Native American issues." This finding underscores the importance of considering how libraries might better highlight and link students' cultural interests with library resources. In addition, this data seems to reflect the trend scholars and librarians have noted of declining book use in academic libraries (Association of Research Libraries, 2012; Davis, 2011; De Rosa, Cantrell, Carlson, Gallagher & Hawk, 2011; Gardner & Eng, 2005). Yet the data also suggests that, for at least several of these students, one reason for this trend might be that students do not have the experience, information, and support to use such resources more fully.

Finding Two: Valuable Role of Functional Library Tools

The varied pictures of objects that outsiders might see as 'mundane' were important to students because they facilitated their academic work. All students referred to the key equipment they use – particularly computers and printers – and the majority of the pictures represented such objects as scanners, printers, and computers. For example, an interesting set

of photographs represented common signs, such as a finding aid sign for electrical outlets. Kellie described her quest for these signs because they enable her to charge her laptop:

I find these signs to be golden...I always am aware of these signs and I turned the corner and I saw this and I knew this was a picture that needed to happen.



Figure 3
Photo taken by Kellie.

Similarly, in pointing to his picture of "the quick print station" Charlie said:

It's on the first floor, and this is REALLY helpful because if I have an assignment due, or a paper or something like that, I'll just head to campus maybe a few minutes early, and I'll go to one of these computers, get on my email or the online classroom, and I'll just print off what I need for class, or assignments that are due and stuff like that.



Figure 4
Photo taken by Charlie.

These pictures represent both the value of library resources to students because they aid in streamlining their academic work as well as, more broadly, the gradual shifting use of the library as information technology has expanded. What was previously a repository of texts, is now a multi-purpose space re-envisioned for the needs of contemporary students.

Finding Three: Photo-Elicitation as Library Discovery

Participants remarked on the novelty of the research methodology and seemed to enjoy the photo activity. Three participants said they envisioned specific photos once they heard the researcher's prompt, while two participants described their photo taking, at first, as "random." Overall, participants seemed to approach the photograph-taking process in terms of representing how they use library resources, what they value in the library, and how participating in photography prompted them to discover new aspects of the library. They were surprised at some of the objects they encountered through the camera lens that they hadn't noticed previously. Megan remarked:

I found a lot of things. I would just walk by things and say [to self], 'Oh, I'd never really noticed that.' When I was really looking for things, I started to realize a lot more that there is to the library.

This comment reflects a broader pattern in the photo methods in which revisiting a familiar environment with heightened awareness and a new purpose can uncover, as Harper (2012) remarked, "previously unknown or unconsidered dimensions of social life" (p. 121). For instance, Amanda was not aware that the library provided iPads or self-checkout stations. Sage discovered the library's exterior live webcam, and Charlie discovered the current periodicals section.

The initial survey/checklist also revealed students' varied levels of awareness concerning library services. Only two participants were aware of the library's textbook reserves, which Sage wished he had known about earlier. A first generation student with financial constraints, he described a critical experience one semester in which a biology instructor deviated from the syllabus requirement to use only the newest edition of the textbook. Sage purchased that edition, then he learned an older edition would suffice. He said, "That was pretty BRUTAL for me... buying a hundred and fifty dollar textbook, that wasn't even worth a hundred fifty."

Finding Four: Varied Salience of Native American Resources and Exhibits

Students took seven pictures that focused explicitly on Native American events or cultural exhibits. Although these pictures comprise a small number of the photos overall, students narrated their meaning at length. All participants referred to aspects of the library which related to their individual nation or Native American identity. Sage took two pictures of Native Americans in a special "Images of Oklahoma" exhibit, and mentioned that one photo related to his culture and the other represented preserving traditional culture ways. Three participants discussed the NASA cultural events they attended in the Library's Browsing Room.

Other photographs underscored the support library resources provided for student events and for facilitating the submission of tribal paperwork, such as particular rooms and scanners. Two of Megan's photographs prompted her discussion of absences – what wasn't in the library – first, a fax machine that would facilitate her ability to efficiently submit her tribal scholarship documentation and a flyer promoting NASA events:

I thought that the little bulletin board was really cool because I

noticed a lot of things that I would be interested in that I would otherwise not have any idea about, although I wish more of our Native American stuff was on there [chuckle]...I noticed we didn't have anything for [Native American] Awareness Week on there.



Figure 5
Photo taken by Megan.

Participant data offers an important caution relevant to research with any cultural groups, which is that motivations and allegiances are multidimensional. A participant may always identify with their individual Nation or Native American culture, but individual interests, personality, and fields of study also shape perceptions of the library and of higher education in PWIs. Megan emphasized the distinction between what she likes to do as an individual, vs. what she thinks other Native American students like to do. For example, she clarified:

I mean I like it here but I know a lot of people that I am friends with that are Native American and they don't come. Like NO ONE comes to the library. A lot of my friends like in NASA (Native American Student

Association) and in stuff, I'm like, "Hey, do you want to go to the Library?" They're like, 'No.' ...but I definitely feel like I don't see very many of my Native American friends here.

Kellie's perspective underscores the vital role student perceptions of the library might play in their willingness to walk through library doors and avail themselves of the resources. She said:

When I think of a library I think of something very institutional and educational...sometimes that can be a bit intimidating especially for someone of a minority. You think, "Oh well, I don't really belong here." I hear a lot of my students [say things like], "I don't deserve this" or "That is just too hard" or "That's only where the smart people go."

Similarly, Megan suggested the library had a role in making visible culturally-relevant books and events: "I think Native Americans would feel...that would warm their heart a little bit just to know that [the library] respects that culture." Kellie suggested that the library should "break that stereotype" and convey "this is an environment for all people, and it's not just only the really smart people [who] go here."

For Kellie personally, however, one photo and her words, shown here as a poetic representation, convey her own intentionality upon entering the library:

When I'm stepping into this magnificent door
I enter a different frame of mind,
an academic frame of mind.
Study,
Focus,
Get this done.



Figure 6
Photo taken by Kellie.

The other three participants offered divergent views of the library as a common space for Native American students. Amanda elaborated that people who say they don't like studying in the library, just really don't like studying at all.

Conclusion

This study is significant for several reasons. First, it expands the limited research available on Native American students' perceptions of the library. Second, it advances knowledge about the meaning of library tools/resources for students persisting toward degree completion, including those elements that may seem "mundane" at first glance, but that students cumulatively use in multidimensional ways to support their institutional and academic work. Third, researchers have not used the method of photo-elicitation interviews widely for either academic libraries or university settings. It provides a way of "seeing" that demonstrates the multidimensional meaning of familiar objects and uncovers questions students have about library resources and how to use them.

Through both method and findings, the research has practical benefits for librarians who seek to serve Native American students and/or who manage the physical facilities of libraries. Providing exhibits, programs, and materials related to Native culture is important, but cultivating awareness of those offerings is equally important. The study also provides

practical benefits for student participants. First, several participants described financial constraints and indicated they were motivated to participate because of the research incentive. Second, students' knowledge of library resources and services increased through participating, and this may have positive academic implications for students.

This study's findings might be distinctive to the participants and the site of this study. Interviews always provide self-report and partial perspectives that observation data about what participants do can enhance. Although this study rests on a small sample that limits its broad applicability, the research focus, multiple data sources, and methodology prompt unique insights upon which future research can build. Currently, the institutional review board protocol for this study at our institution remains open as we intend to continue data analysis, add another data source, and recruit additional participants to explore how perceptions of the library change over time. The methodology also offers promise for studying individuals in other contexts; the PI has used similar methods to collect data with first-generation students, and data analysis in that study is underway.

A unique opportunity to share study findings arose in July 2014 when the Cherokee College Preparatory Institute was held at OSU. The week-long college readiness program connected fifty-four Native American high school juniors and seniors with twenty-one representatives from twelve universities. The PI was invited to coordinate an "Introduction to the Academic Library." Students toured the library, practiced using online resources, and attended an informal presentation of the research data. Findings also informed the session content which focused on library resources with Native cultural connections. These high school students learned what some persisting OSU Native American college students think about the Library. The students were attentive and asked insightful questions afterward.

Research with Native Americans requires awareness of and sensitivity to the history of research on Native American issues and people marked by colonialism, exploitation, misunderstanding and misrepresentation that has often devalued Native peoples and ways of knowing (Huffman, 2010; Klug, 2012; Mihesuah, 1998; Mihesuah & Wilson, 2004; Shotton, Lowe & Watterman, 2013). Given the diversity of sovereign nations and the individuals who identify as Native American, the history of exploitative research (Smith, 2012), and the complexity of students' experiences in PWIs, researchers both within and outside of the culture must take into account the complexity of identity (Brayboy, 2000), and the ways Indigenous people consider their identities and needs to be salient in their library experience.

In 2012 the Association of College and Research Libraries (ACRL) Racial and Ethnic Diversity Committee developed cultural competency standards for academic libraries. The eleven ACRL standards cover cross-cultural leadership, skills and knowledge, library collection development, provision of library programs and services, linguistic and workforce diversity, and research (Association of College and Research Libraries, 2012). These resources may help broaden the cultural competency of librarians who are members of dominant cultural groups. Future research studies could focus on exploring other ways the library might better serve Native American students, as well as other underrepresented groups.

Acknowledgements

The authors sincerely thank the EBLIP reviewers for their comments. This research was originally delivered at the 2014 Library Assessment Conference, and an early version of that paper was produced in the conference proceedings.

References

- Aguilar, P., & Keating, K. (2009). Satellite outreach services program to underrepresented students: Being in their space, not on MySpace. *The Reference Librarian*, 50(1), 14–28. <http://dx.doi.org/10.1080/02763870802546365>
- Alexander, D. L. (2013). American Indian studies, multiculturalism, and the academic library. *College and Research Libraries*, 74(1), 60–68. <http://dx.doi.org/10.5860/crl-311>
- Association of College and Research Libraries. (2012) *Diversity standards: Cultural competency for academic libraries*. (2012). Retrieved from <http://www.ala.org/acrl/standards/diversity>
- Association of Research Libraries (2012). Service Trends in ARL Libraries, 1991–2012. Retrieved from <http://www.arl.org/storage/documents/service-trends.pdf>
- Belgarde, M. J. & LoRé, R. K. (2007). The retention/intervention study of Native American undergraduates at the University of New Mexico. In A. Seidman (Ed.), *Minority student retention: The best of the Journal of College Student Retention: Research, Theory, & Practice* (pp. 167-194). Amityville, NY: Baywood Publishing.
- Brayboy, B. M. (2000). The Indian and the researcher: Tales from the field. *International Journal of Qualitative Studies in Education*, 13(4), 415–426. Retrieved from <http://dx.doi.org/10.1080/095183900413368>

- Brayboy, B. M. J., Fann, A. J., Castagno, A. E., & Solyom, J. A. (2012). Postsecondary education for American Indian and Alaskan Natives: Higher education for nation building and self-determination, *ASHE Higher Education Report*, 37(5), 53–72. <http://dx.doi.org/10.1002/aehe.3705>
- Briden, J. (2007). Photo surveys: Eliciting more than you knew to ask for. In N. F. Foster & S. Gibbons (Eds.). *Studying students: The undergraduate research project at the University of Rochester* (pp. 40–47). Chicago, IL: Association of College and Research Libraries.
- Briden, J., & George, S. (2013). Picture my work. In N. F. Foster, (Ed.). *Studying students: A second look* (pp. 25–44). Chicago, IL: Association of College and Research Libraries.
- Burke, S. K. (2007). The use of public libraries by Native Americans. *The Library Quarterly*, 77(4), 429–461. <http://dx.doi.org/10.1086/520998>
- Carney, C. M. (1999). *Native American higher education in the United States*. Brunswick, NJ: Transaction Publishers.
- Collier, J. (1957). *Photography in anthropology: A report on two experiments*. *American Anthropologist, New Series*, 59(5), 843–859.
- Conroy, J. C. (2013). *Native American student perceptions regarding barriers, supporting factors, and retention strategies at two Midwestern post-secondary institutions* (Doctoral dissertation). Retrieved from ProQuest. (3589835).
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles, CA: Sage.
- Davis, D. M. (2011). *Trends in academic libraries, 1998 to 2008*. Retrieved from <http://www.ala.org/research/sites/ala.org.research/files/content/librariystats/academic/ALS%209808%20comparison.pdf>
- De Rosa, C., Cantrell, J., Carlson, M., Gallagher, P., Hawk, J., & Sturtz, C. (2011). Perceptions of libraries, 2010: Context and community, A report to the OCLC membership. Retrieved from <http://oclc.org/content/dam/oclc/reports/2010perceptions/collegestudents.pdf>
- Dilevko, J., & Gottlieb, L. (2002). Making a difference in their own way: The role of library directors and non-directorial staff at tribal college libraries. *The Journal of Academic Librarianship*, 28(5), 306–318. [http://dx.doi.org/10.1016/S0099-1333\(02\)00322-1](http://dx.doi.org/10.1016/S0099-1333(02)00322-1)
- Duke, L. M., & Asher, A. D. (2011). *College libraries and student culture: What we now know*. Chicago, IL: ALA Editions.
- ERIC Clearinghouse on Rural Education and Small Schools. (1971). *Manual for providing library services to Indians and Mexican Americans* (ED047872). Las Cruces, NM: New Mexico State University.
- Gabridge, T., Gaskell, M., & Stout, A. (2008). Information seeking through students' eyes: The MIT photo diary study. *College & Research Libraries*, 69(6), 510–523. <http://dx.doi.org/10.5860/crl.69.6.510>
- Gardner, S. & Eng, S. (2005). What students want: Generation Y and the changing function of the academic library. *Portal: Libraries and the Academy* 5(3), 405–420.

- Garrod, A., & Larimore, C. (Eds.). (1997). *First person, first peoples: Native American college graduates tell their life stories*. Ithaca, NY: Cornell University Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Hawthorne, NY: Aldine Publishing.
- Guba, E. G. (1978). *Toward a methodology of naturalistic inquiry in educational evaluation*. Los Angeles, CA: Center for the Study of Evaluation, University of California.
- Hare, J., & Abbott, W. (2015). Library support for Indigenous university students: Moving from the periphery to the mainstream. *Evidence Based Library and Information Practice*, 10(4), 80–94. <http://dx.doi.org/10.18438/B86W3Q>
- Harper, D. (2012). *Visual Sociology*. New York: Routledge.
- Heyser, R.G. (1977). Native Americans and libraries: A citation-entry analysis (Doctoral dissertation). Retrieved from ProQuest. (7808954).
- Hills, G.H. (1997). *Native libraries: Cross-cultural conditions in the circumpolar countries*. Lanham, MD: The Scarecrow Press.
- Huffman, T. (2008). *American Indian higher educational experiences: Cultural visions and personal journeys*. New York, NY: Peter Lang.
- Huffman, T. (2010). *Theoretical perspectives on American Indian education: Taking a new look at academic success and the achievement gap*. Lanham, MD: AltaMira.
- Klug, B. J. (Ed.). (2012). *Standing together: American Indian education as culturally responsive pedagogy*. Lanham, MD: Rowman & Littlefield Education.
- Koelling, H. (1995). A model collection process for specialized environment: Recommending reference titles for tribal community colleges. *Community and Junior College Libraries*, 8(1), 63–68. http://dx.doi.org/10.1300/J107v08n01_08
- Krogstad, J.M. (2014). One-in-four Native Americans and Alaskan Natives are living in poverty. In *PewResearchCenter*. Retrieved from <http://www.pewresearch.org/fact-tank/2014/06/13/1-in-4-native-americans-and-alaska-natives-are-living-in-poverty/>
- Lapenta, F. (2011). Some theoretical and methodological views on photo-elicitation. In E. Margolis & L. Pauwels (Eds.), *The Sage handbook of visual research methods* (pp. 201-213). Thousand Oaks, CA: Sage.
- Love, E. (2009). A simple step: Integrating library reference and instruction into previously established academic programs for minority students. *The Reference Librarian*, 50(1), 4–13. <http://dx.doi.org/10.1080/02763870802546357>
- Metoyer-Duran, C. (1992). Tribal community college libraries: Perceptions of the college presidents. *The Journal of Academic Librarianship*, 17(6), 364-369.
- Mihesuah, D. A. (Ed.). (1998). *Natives and academics: Researching and writing about American Indians*. Lincoln, NE: University of Nebraska Press.

- Mihesuah, D. A. & Wilson, A. C. (Eds.). (2004). *Indigenizing the academy: Transforming scholarship and empowering communities*. Lincoln, NE: University of Nebraska Press.
- National Conference of State Legislatures. (2016). Federal and State Recognized Tribes. Retrieved from <http://www.ncsl.org/research/state-tribal-institute/list-of-federal-and-state-recognized-tribes.aspx#ok>
- Norris, T., Vines, P. L., & Hoeffel, E. M. (2012). American Indian and Alaskan Native population: 2010. In *United States Census Bureau*. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-10.pdf>
- Oakleaf, M. (2010). *Value of academic libraries: A comprehensive research review and report*. Chicago, IL: Association of College and Research Libraries. Retrieved from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/value/val_report.pdf
- Oklahoma State University. (2013). *Retention of students: Retention and graduation rates of new freshmen by ethnicity*. Retrieved from <https://irim.okstate.edu/sites/default/files/StudentProfile/2013/pdf/2013retention.pdf>
- Oklahoma State University. (2015). *Five-year academic ledger: Stillwater campus*. Retrieved from <https://irim.okstate.edu/sites/default/files/AcademicLedgers/oklahomastateuniversity.pdf>
- Oosahwe, E. S. (2008). *Strategizing success: Narratives of Native American students in higher education* (Doctoral dissertation). Retrieved from ProQuest. (3304450).
- Patterson, L., & Taylor, R. H. (1996). Tribally controlled community college libraries: A paradigm for survival. *College and Research Libraries*, 57(4), 316–329. http://dx.doi.org/10.5860/crl_57_04_316
- Patton, M. Q. (2002). *Qualitative research & evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Poindexter, C. C. (2002). Meaning from methods: Re-presenting narratives of an HIV-affected caregiver. *Qualitative Social Work*, 1(1), 59–78. <http://dx.doi.org/10.1177/147332500200100105>
- Reyhner, J. & Eder, J. (2007). Higher education of American Indians. In H. S. Wechsler, L. F. Goodchild, & L. Eisenmann (Eds.), *ASHE reader: History of higher education* (pp. 694–702). Boston: Pearson Custom Publishing.
- Rockefeller-MacArthur, E., Rockefeller, R. & MacArthur, P. (1998). *American Indian library services in perspective: From petroglyphs to hypertext*. Jefferson, NC: McFarland & Company.
- Ross, T., Kena, G., Rathbun, A., KewalRamani, A., Zhang, J., Kristapovich, P., & Manning, E. (2012). Higher education: Gaps in access and persistence study, 2012. Retrieved from <http://nces.ed.gov/pubs2012/2012046.pdf>
- Roy, L. & Frydman, A. (2014, March 3). Library services to Indigenous populations: Case studies. In *International Federation of Library Associations*. Retrieved from <http://www.ifla.org/files/assets/indigenous-matters/publications/indigenous-librarianship-2013.pdf>

- Roy, L., Hogan, K., & Lilley, S. (2012). Balancing access to knowledge and respect for cultural knowledge: Librarian advocacy with Indigenous peoples' self-determination in access to knowledge. In J. Lau, A. M. Tamaro, & T. J. D. Bothma (Eds.), *Libraries driving access to knowledge* (pp. 163–189). Berlin/Boston: De Gruyter Saur.
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Shao-Chen, L. (2006). *Perceptions of U. S. academic library services of first-year graduate students from Taiwan: A photo-elicitation study* (Doctoral dissertation). Retrieved from ProQuest UMI Dissertations Publishing. (UMI No. 3234607)
- Shotton, H. J, Lowe, S. C., & Waterman, S. J. (Eds.). (2013). *Beyond the asterisk: Understanding Native students in higher education*. Sterling, VA: Stylus.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and Indigenous peoples*. (2nd ed.). London: Zed Books.
- Spencer, A. F. (1985). *A perception study of the accomplishment of the goals for Indian library and information service in Native American educational institutions* (Doctoral dissertation). Retrieved from ProQuest. (8522753).
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Stake, R. E. (2006). *Multiple case study analysis*. New York: Guilford Press.
- Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Tierney, W. G. (1992). *Official encouragement, institutional discouragement: Minorities in academe – the Native American experience*. Norwood, NJ: Ablex Publishing.
- The top Native American degree producers. (2014, November 20). *Diverse: Issues in Higher Education*, 31(21), 14–17.
- United States Census Bureau. (2014). State and county quickfacts: Oklahoma Retrieved from <http://quickfacts.census.gov/qfd/states/40000.html>
- Webster, K. (Ed.). (2005). *Library services to Indigenous populations: Viewpoints and resources*. Chicago: American Library Association.
- Yin, R.K. (2009). *Case study research: Design and methods*. (4th ed.). Thousand Oaks, CA: Sage Publications.
- Zuber-Chall, S. (2007). *Tommaney Library at Haskell Indian Nations University: An ethnographic case study* (Doctoral dissertation). Retrieved from ProQuest. (3276489).

Appendix Demographic/Questionnaire

1. Participant: _____
2. Gender: Male _____ or Female _____

3. Age: _____
4. Marital Status: Single _____ or Married _____
5. Children: No _____ or Yes _____ If yes, how many? _____
6. List your hometown and state: _____
7. Are you the first in your immediate family to attend college? No _____ Yes _____

Education

8. List your year in School: _____
9. List your major field(s) of study: _____
10. Do you live on campus? No _____ Yes _____
11. Did you transfer to OSU from another college? No _____ Yes _____
12. *Which of the following best describes how frequently you come to the library? (check one)*

- | | | |
|----------------------------|------------------------------------|--------------------|
| 1-3 times a week _____ | More than 3 times a week _____ | Other, List: _____ |
| 1-3 times a month _____ | More than 3 times a month _____ | |
| 1-3 times a semester _____ | More than 3 times a semester _____ | |

13. *Which of the following best describes how frequently you use the library's online resources? (check one)*

- | | | |
|----------------------------|------------------------------------|--------------------|
| 1-3 times a week _____ | More than 3 times a week _____ | Other, List: _____ |
| 1-3 times a month _____ | More than 3 times a month _____ | |
| 1-3 times a semester _____ | More than 3 times a semester _____ | |

14. *Which of the following library spaces/seating have you used? (check all that apply)*

- | | |
|---|--|
| 1st floor computers/printers _____ | Café Libro _____ |
| 2nd floor Browsing Room _____ | Soft seating _____ |
| 2nd floor Reading Room _____ | Group Study Rooms _____ |
| 2nd floor seating by the exhibits _____ | Group Study Tables in the open _____ |
| 2nd floor Computer Instruction Room _____ | Individual study desks (study carrels) _____ |
| 3rd floor _____ | Writing Center Outpost in the Library _____ |
| 4th floor _____ | Math Learning Success Center _____ |
| 5th floor _____ | Other (please list): _____ |
| Basement _____ | |

15. *Which of the following library services/resources have you used? (check all that apply)*

- | | |
|---------------------------------|-----------------------------------|
| Library desktop computers _____ | Large computer monitors _____ |
| Library scanners _____ | Checked out an iPad _____ |
| Checked out a laptop _____ | Textbooks on Reserve _____ |
| Interlibrary loan _____ | Asked librarian for help _____ |
| Library Reserves _____ | Wireless Network connection _____ |

Checked out a book _____
Library printers _____
Library databases _____
Library website _____
Electronic White Board/Projector in Group Study Room _____
Other, please list: _____

Library Search Box on homepage _____
Chat box on library homepage _____
Digital Library Signage _____
Used book in library, didn't check it out _____