10 Indigenous Data Sovereignty

Quechan education data sovereignty

Jameson D. Lopez

Introduction

In the mainstream education literature in the United States, Indigenous youth and adult data tend to be ignored because of small sample sizes that make “statistically significant” inferences difficult to demonstrate (Shotton et al., 2013; Sumida Huaman et al., 2016; Walter & Anderson, 2013). One can witness the lack of Indigenous presence in mainstream data when looking at top-tier journals in higher education (*The Review of Higher Education*, *Journal of Higher Education*, *Research in Higher Education* and *Journal of College Student Development*) that include White, Black, Hispanic and Asian, but erase Indigenous students by categorizing them as “Other” (see Christensen & Harris, 2019; Creuseere et al., 2019; DesJardins et al., 2019; Radimer & Rowan-Kenyon, 2019). Additionally, the dominant societal understanding of Native Americans is constrained by the limitations found in data that reproduce bias narratives controlled by dominant cultures. For example, inconsistent data in the integrated postsecondary dataset in the United States reports institutional number of Indigenous students. The data are self-reported and often misrepresent the actual number of Indigenous students in the United States in postsecondary education.

Walter and Anderson (2013) state that statistical analyzes, “speak a ‘truth’ about the communities on which they shine their statistical light” (Walter & Anderson, 2013, p. 9). The dominant narratives often speak of high rates of suicide, diabetes, alcoholism and drug abuse to define Native American populations. In an education context, this results in stereotypes of Indigenous children that lead to at-risk resources as opposed to gifted education. To resist a deficit research approach that plagues Native populations (mostly from mostly non-Native researchers), Indigenous researchers advocate for Tribal Nations and researchers to gather our own data for data sovereignty.

Nonetheless, many Indigenous Peoples and Indigenous Nations still have confidence that quantitative research and methods can support Indigenous Peoples, as long as researchers on Indigenous environments understand how quantitative methods have historically harmed and overlooked our communities (Rodriguez-Lonebear, 2016; Shotton et al., 2013). In this chapter, I examine a case of Indigenous Data Sovereignty in practice, using the example of my tribal higher

education department (Quechan). I first describe our efforts to establish data sovereignty, the solutions we found to create enough data to establish statistical power and to speak truth about our community. Additionally, Indigenous Data Sovereignty action is imperative to creating data that can help in the creation of policies that are reflective of the Indigenous communities they are intended to support. Next, I demonstrate how a quantitative methods frame through an Indigenous Data Sovereignty practice lens empowers our community education policies. Lastly, I describe the challenges that our community experienced going through the process of establishing more comprehensive data sovereignty.

Identifying available resources

In the following I start with a story as an analogy to the efforts I, along with other tribal members, put forward to help establish Indigenous Data Sovereignty practices in our tribe the Quechan Nation. Among the many first lessons I learned throughout my childhood, my mother taught me how to utilize what is available to accomplish a job. Although, I quickly learned it wasn't always possible. One of the first times I learned that what was available to me wasn't enough to accomplish a job was during a lunar eclipse. I remember attending school and the teacher giving us instructions about how to make eclipse glasses out of cereal boxes. It was interesting, as she cut holes so you could safely stare off at the sun while simultaneously protecting your eyes. It was brilliant in theory, but in reality, I knew it probably wasn't possible for me. About halfway through her presentation, I realized I couldn't build cereal box eclipse sunglasses at home, because our cereal came in bags. Even though we did have the occasional bran flakes that came with our commodity food, my family's access to boxed cereal was different than my White peers.

Have you ever had commodity food? For those of you who haven't, it's a part of a federal food distribution program for Natives in the United States. And if you really think about the history of commodity food, you realize that one of Native America's staples, Fry Bread, is an offspring of those government rations. I'm sure most of my Native sisters and brothers are also quite familiar with the golden brick: the glorified and highly anticipated commodity cheese. However, if you have ever survived on commodity food, you would know about another one of my favorites, commodity peanut butter. As my mother would grow tired of making school lunches in my later years of grade school, I became responsible for making my own lunches. I remember the first time I tried to make myself a peanut butter and jelly sandwich with commodity peanut butter. I attempted to smoothly spread the peanut butter when instantly the peanut butter crumbled the bread. Commodity peanut butter is like trying to put on your high school jeans after years of binging on frybread, honey and powdered sugar; everything just kind of crumbles and falls apart... including your self-esteem. I used to ask my Mom, "why can't we just get JIF (JIF is a brand of peanut butter)". My Mom hated when I complained, and rightfully so. She grew up often times without food, but my Mom was also patient with me. She showed me a little trick. She said,

“JD, go get the pancake syrup”. I did, and she continued, “Put about a teaspoon of syrup and mix it together. Now try to spread the peanut butter on the bread”. And boom! Wouldn’t you know, I had made knockoff JIF. As I reflect now, Natives are the syrup to the stiff consistency of our society, because we can make the best of anything. I take the same approach to data.

Analogously, in the beginning stage of working with our tribe, I realized our Nation did not have the infrastructure that we often advocate for when trying to establish data sovereignty. We did not have servers, we did not have a dedicated space, we did not have a computer to house the data or even a dedicated external hard drive we could dedicate to housing our data. Similar to the eclipse sunglasses, we, as a higher education board, did not have access to the basic resources needed to accomplish a job. What was “normal” for researchers, even access to everyday resources is a challenge for Indigenous Peoples working to advocate for, and enact, Indigenous Data Sovereignty. I also realized that it was not necessarily a concern given the amount of challenges the community faced between our water rights, land rights, gaming compacts etc.

Even with these competing priorities, it is important to pursue Indigenous Data Sovereignty because it moves us into a more proactive space to support these urgent priorities. However, what was available to us was a few higher education board members who were dedicated volunteers that wanted to gather the data that they needed to make good decisions that would support an increase in the academic achievements of our tribal students. I sat in our meetings and we began to talk about data. We built policies around our data and with the support of the higher education board, we decided to use my PhD dissertation research project as one of our first attempts to establish our own educational data. The central research question I asked in my dissertation study was how do researchers operationalize the American Indian/Alaska Native (AI/AN) Millennium Falcon Persistence Model (see Lopez, 2018) in social scientific studies of AI/AN students? However, we wanted to build data that represented our community values and privileged our voices while being accepted by the outside world. We started to brainstorm questions or item development to measure constructs that reflected the values of our community. As Indigenous quantitative statistics prioritizes speaking truth about our community, we also follow the suggestions of Paris and Alim (2017) that posit educational outcomes must be measured according to the student cultural values. For example, in postsecondary literature students often claim the reason for going to college is to give back to their community. If giving back is an important motivation for going to college, maybe that should be the outcome variable because it is based on the students’ cultural values.

Community values

Identifying and utilizing community values to decide which data to collect as a means of enacting and practicing data sovereignty can be quite difficult. Especially, given Tribal Nations do not always agree on what they value. Tribal citizens can identify differently, despite all identifying as Quechan. For example,

in our tribal community some folks identify as being liberal while others identify as being conservative, some are two-spirit (how some Indigenous folks describe their sexual, gender and spiritual identity), some tribal members are mixed with other ethnicities and have citizenship with countries other than the United States like with Mexico. Some tribal members are Christian, some are traditional, some of the tribal members hunt and fish while others are vegans. The range of community values range so broadly that it can be difficult to measure educational outcomes or gather data that corresponds to our array of tribal values. Nonetheless, we tried to measure our community values, beginning this process by first attending our elder meetings.

With the support of a tribal council member, I was invited to sit at the table during elder meetings. As we passed around hot apple pies from McDonalds, I admired the smiles and laughter as the elders were speaking Quechan. Slowly they would ask me in English, which family I belonged to. I mentioned the names of my mother, father, uncles, aunts and grandparents until my elders felt satisfied. From that point, I sat in silence as I listened to their stories about what it meant to be Quechan, challenges in our community and hope for our people to work together in harmony caring for one another. The elders would gather to decide on issues around our ceremonies. In this particular meeting, some of the elders were questioning if it should be allowed to have cellphones in our Big House, where we held a portion of our overnight cremation ceremony. Some of our tribal kids were seen sitting in the wood pews watching YouTube and Netflix while their parents and grandparents paid their respect to the deceased through the night. It was eventually decided cellphones didn't have a place in the Big House, and if kids got tired, they could take a break outside. Talk of technology advanced conversations around how we would carry our ancient traditions in the modern world as Quechan People. One elder talked about our cremation ceremony origins, but more critical was the importance of remembering certain procedures through the ceremony based on the first cremation and remembering that what we do with our life will be mourned and celebrated. I learned, the cremation was central to our identity as Quechan, understanding the ceremony was important to our education but, more importantly, the ceremony allowed us to reflect on our life contributions to our community. The elders wanted our traditional knowledge to be passed on as they shared stories about how to mourn through our creation story. They talked about Rabbit pulling his ears off after the creator died and other rabbits throwing their ears into a fire during the creator's cremation. It was a sign that when someone passes away, we are losing a piece of us. Through these initial meetings and meeting with tribal officials, experts in Nation building and education, and various community members we realized that some of the first data to be collected in our community needed to reflect our Quechan identity. For example, adding variables from the Scale of Native Americans Giving Back (Lopez, 2020) such as I can speak my tribe's language; I have a close relationship with my tribal relatives; I participated in tribal ceremonies prior to attending college (e.g., cremation ceremony); I know my tribe's creation story. These questions would help researchers measure difficult constructs such as Indigenous identity. As part of

our Indigenous Data Sovereignty enactment we would be creating important constructs to Quechan education. To begin that process, we went through the Institutional Review Board.

Institutional review board

The use of an Institutional Review Board (IRB) is an important process when working with Indigenous communities, and approval is dependent on healthy interpersonal relationships. Healthy interpersonal relationships mean relationships where you are not just going to someone when you need a favor, but rather building relationships through community events such as dinners, chicken scratch dances and other social events. The following is a description of the IRB process with the Quechan and Cocopah Nations. In November 2016, I requested to be on the Quechan Tribe's work session in December. I presented my research before the Quechan council and received verbal support from the council. However, due to unforeseen circumstances with the tribal election the following week, my request was tabled. After a few months of contact, and waiting, I was informed that I could request a letter of support from the higher education department. In February 2017, I requested and received a letter of support from the council; an essential element of community endorsement required before I could proceed.

Arizona State University's IRB examined my research proposal and approved this study to examine the postsecondary persistence model for Indigenous students. Participants were informed that there were no obligations to fill out the survey and that they could opt out of the study at any time. The information on the study was given on the online link before the survey, that also describes the purpose of this study and provides an option to see the results. Participants were given contact information to ask any questions about the study and given an opportunity to provide an email address if they wanted to see the outcomes of the study. The IRB was approved in March 2017. There was not a budget for this project, so most of what we were able to do came from a scholarship I received to help with participant recruitment and data collection. Again, this is a not uncommon challenge for those seeking to enact data collection using Indigenous Data Sovereignty practices.

Data collection

I collected data from Quechan students using the web-based instrument surveymonkey.com. Our Quechan higher education department was able to find addresses to do a small mail out to about 100 participants for a census sample, to whom I sent an introduction letter, a postcard with a link to the survey, a third follow-up using email and a final email requesting participation. We also utilized social media outlets ran by our tribal members and gave participants an option to provide their email address to enter a raffle for a chance to win one of four 50-dollar Amazon gift cards as incentives are important to participant recruitment (Dillman et al., 2014).

The research incorporates Indigenous quantitative methodologies through creating statistical data that privileges Quechan voices. For example, the variables developed for the study came from the community and uplifted Quechan voices in the research. Furthermore, our higher education department wanted to collect data that was relevant to our community as many federal data sources, such as the Beginning Postsecondary Students Longitudinal Study, use small samples and lack relevant variables that provide data that are inconsistent, irrelevant, poor quality, and produced/used within an environment of mistrust (Lopez & Marley, 2018; Rainie et al., 2017). Some of the variables we included were an attempt to measure constructs such as “giving back”, and “cultural identity”, that allow researchers to challenge dominant mainstream value systems, such as persistence and college GPA. Some of the giving back variables (Lopez, 2020) include I help organize community events (i.e., Indian Days, Pow Wows, Community dinners etc.); I notice positive change in the tribal members that I encourage; I pray for my tribal community; if possible, I always try to buy from tribal businesses. My suggestion to the higher education department was that eventually we could use giving back as an educational outcome of postsecondary education that is from a Quechan perspective as opposed to GPA, persistence or graduation rates.

The surveys were sent out and we collected responses from about 75 Quechan students, and it was the first data we collected from our tribe that would be housed by our tribe. I was able to run the analysis for the data and have data that was completely from our community collected and developed by Quechan tribal citizens. However, it was only the beginning to our plans for the higher education board. One other higher education board member and I continued to meet over the course of a year and further develop our tribal educational policies to include data collection and request funding for equipment to house the data. We met with our tribal higher education director, sat in our tribal council meetings and planned to petition our tribal council for financial support for equipment. However, the other board member fell ill and passed away. Our tradition doesn't allow us to mention their name, but she was a phenomenal woman with brilliant ideas. I feel what may be the biggest loss is she had ideas that no one else ever had. Additionally, she had a brave and dedicated spirit to make them happen. We mourned her and sent her into the afterlife with tribal rights through our cremation ceremony. However, the momentum after collecting our first round of data to establish comprehensive postsecondary education data for our tribe began to falter. Indigenous programs with limited access to resources that include human, social and monetary capital are often more vulnerable than other types of programs.

Lessons learned

There were several things I realized by attempting to establish data sovereignty with no financial support and just our will to do something to start. However, I personally took a lesson I learned in my early 20s while entering this work. Since I was a kid, I spent time all over The Rez during the summers. Some summers, I spent with my Nana, some summers, I spent with my uncles and aunts. And then

some summers, I spent with my parents traveling to reservations across Turtle Island (North America). We always ate traditional foods, and as a child, I would sometimes refuse. I would occasionally push the food around with my fork to make it look like I ate, but I remember my Mom telling me, “Don’t play with your food”. It was a lesson that followed me in my adult years.

I spent one of my college summers in Nebraska for an internship. Quite honestly, I wasn’t doing much with the internship, but it gave me a chance to chill with one of my bros. He was like a big brother and I think just about anybody who spent any amount of time with him has a story about his shenanigans. He always liked to be on the move, drive his war pony (personal car) around and keep busy. One day we were out and about, and we met an older woman. She was super kind and inevitably invited us to her grandson’s 18th birthday. Keep in mind, we had just met her that day. My bro said, “Sure, we’ll go”. And before I knew it, evening struck, and we were talking with strangers outside a trailer house along the Missouri River. We ate, talked, played guitar and fished. It was a beautiful evening with some awesome Native People. We were swapping stories and toward the latter part of the night around the fire, a little German Shepherd puppy arrived. It was the cutest little dog. My bro saw the little puppy and started to pet him and wrestled the little dog with his hand. He was smiling and while keeping his eyes down fixated on the dog below, he asked, “is this puppy for the birthday boy?” The rummage of party noise waned and the empty sound of night and moonlight replaced the talking. No one answered my buddy. He was still smiling, but simultaneously looking around confused. Then his smile turned into sole confusion.

I was also confused; did we do something? Both of our eyes wandered through the party, and eventually, the lady who extended the invitation walked in our direction. She motioned to us and we leaned in. She covered her mouth and in a slightly loud whisper said, “it’s for the sacrifice”. My bro who was still petting the puppy until the moment of her whisper immediately stopped and said, “oh”. We were a little taken back, or at least I was. I never heard of that, just because we don’t practice that in our tribe. When we left, I was still confused, but my buddy explained to me they were Sioux and it was part of their traditions. I told my bro, “You shouldn’t play with your food”.

I also realized that when in other people’s communities, you shouldn’t assume to know them just because they are Indigenous. Tribes are not monolithic and the policies that we do create need to be reflective on the Nations you are from. My first piece of advice is that we have to create policies that are relevant to our own community and owned by that community. It makes little-to-no sense to have the same policies as other Tribal Nations around data sovereignty practices, as tribes have different educational capacities, financial situations, geographic differences and traditions. So, what worked for us as Quechan may not work for larger tribes.

Accessibility and the ability to create relationships to move data initiatives was a key advantage to getting this work off the ground. However, the core underpinnings of Indigenous Data Sovereignty—Indigenous leadership and the data reflecting the needs, priorities, lifeworlds and aspirations of Indigenous Peoples remain. My second piece of advice is to not overthink creating Indigenous data

sovereignty practices and the data that flow from these. Often, we wait for large amounts of funding or political support to establish our own data collection. At the end of the day a small group of people in our higher education board created a survey, sent it to people we had contact with and we were able to collect the best data that anyone in the world has seen about postsecondary education in the Quechan Nation. The data was from us and reflective of our community values.

Conclusion

In this chapter, I examined an Indigenous Data Sovereignty initiative among my tribal higher education department (Quechan). Our efforts to establish data sovereignty by using what was available allowed us to create enough data to establish statistical power, speak the truth about our community and demonstrate how quantitative methods through Indigenous Data Sovereignty empowers our community. There are three key takeaways from this experience and research. First, I believe what we can gather from this research is that we have to create policies that are relevant to communities and owned by that community. Too often, we rely on data that is not reflective of the communities in which policies are created from. Indigenous Data Sovereignty provides a framework and encourages tribes to gather their own data, no matter how humble the beginnings may be. Second, I described some of the challenges when collecting data representative of our community voices, maintaining momentum and creating data through our own processes that were best for an individual community. Although momentum is somewhat difficult to maintain in our communities because of limited amounts of capital, it is important to find the people who want to make change with you. A takeaway from this experience is that you can accomplish more when you are working with other members of the community as family as opposed to individuals. Third, one of the most rewarding parts of collecting our own tribal data was realizing we established the most comprehensive dataset on Quechan postsecondary education that the world has ever seen. No matter how humble or small our efforts may seem, realize that Indigenous Data Sovereignty in our communities allows us to own our history for our future generations of Indigenous Peoples.

References

- Christensen, M. C., & Harris, R. J. (2019). Correlates of bystander readiness to help among a diverse college student population: An intersectional perspective. *Research in Higher Education*, 60(8), 1195–1226.
- Creusere, M., Zhao, H., Bond Huie, S., & Troutman, D. R. (2019). Postsecondary education impact on intergenerational income mobility: Differences by completion status, gender, race/ethnicity, and type of major. *Journal of Higher Education*, 90(6), 915–939. <https://doi-org.ezproxy1.library.arizona.edu/10.1080/00221546.2019.1565882>.
- DesJardins, S.L., Toutkoushian, R.K., Hossler, D., & Chen, J. (2019). Time may change me: Examining how aspirations for college evolve during high school. *The Review of Higher Education*, 43(1), 263–294. doi:10.1353/rhe.2019.0096.

- Dillman, D.A., Smyth, J.D., & Christian, L.M. (2014). *Internet, Phone, Mail and Mixed-Mode Surveys: The Tailored Design Method*. Hoboken, NJ: John Wiley & Sons.
- Lopez, J.D. (2018). Factors influencing American Indian and Alaska native postsecondary persistence: AI/AN millennium falcon persistence model. *Research in Higher Education*, 59(6), 792–811. doi:10.1007/s11162-017-9487-6.
- Lopez, J. D. (2020). Examining construct validity on the scale of Native Americans giving back (SNAG). *Journal of Diversity in Higher Education*. 1–30. <https://doi.org/10.1037/dhe0000181>
- Lopez, J.D., & Marley, S.C. (2018). Postsecondary research with American Indians and Alaskan natives: quantitative challenges and future directions. *Journal of American Indian Education*, 57(2), 5–34.
- Paris, D., & Alim, H.S. (Eds.). (2017). *Culturally Sustaining Pedagogies: Teaching and Learning for Justice in a Changing World*. New York, NY: Teachers College Press.
- Radimer, S., & Rowan-Kenyon, H. (2019). Undergraduate men’s alcohol consumption: Masculine norms, ethnic identity, and social dominance orientation. *Journal of College Student Development*, 60(1), 1–16. doi:10.1353/csd.2019.0000.
- Rainie, S.C., Schultz, J.L., Briggs, E., Riggs, P., & Palmanteer-Holder, N.L. (2017). Data as a strategic resource: self-determination, governance, and the data challenge for Indigenous nations in the United States. *The International Indigenous Policy Journal*, 8(2), 1–29.
- Rodriguez-Lonebear, D. (2016). Building a data revolution in Indian country. In T. Kukutai, & J. Taylor (Eds.), *Indigenous Data Sovereignty* (pp. 253–272). Canberra, Australia: Australian National University Press.
- Shotton, H.J., Lowe, S.C., & Waterman, S.J. (2013). *Beyond the Asterisk: Understanding Native Students in Higher Education*. Sterling, VA: Stylus Publishing.
- Sumida Huaman, E., Martin, N., & Chosa, C. (2016). “Stay with your words”: indigenous youth, local policy, and the work of language fortification. *Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas*, 24(52), 1–29.
- Walter, M., & Andersen, C. (2013). *Indigenous Statistics: A Quantitative Research Methodology*. Walnut Creek, CA: Left Coast Press.