A community-driven approach to assessing language and cultural revitalization

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ABSTRACT

This chapter addresses a question many ask about revitalization efforts: *Does revitalization work have an impact*? Our goal is to provide a case study specifically highlighting the assessment process used by the Myaamia community to document the impact of their language and cultural revitalization work.

RESUMEN

Este capítulo responde a una pregunta que muchos tienen sobre los esfuerzos de revitalización: *¿tiene el trabajo de revitalización algún impacto?* Nuestra meta es proporcionar un estudio que haga resaltar el proceso de evaluación que usa la comunidad Myaamia para documentar el impacto de su trabajo de revitalización lingüística y cultural.

1. INTRODUCTION

An often undervalued, understudied, or even ignored aspect of language and cultural revitalization work is the process of determining its impact on the community it serves. While considerable effort is put into researching archival cultural records, identifying resources, and creating cultural curricular activities for engagement, means for assessing impact of revitalization initiatives remains understudied. Revitalization per se is more than solely bringing a level of vitality to a language (i.e., language revitalization). It more broadly consists of multiple, inter-related components including

engagement, reconnecting with community, reconstituting cultural practices, recommitment to values and Indigenous knowledge, and appreciation of cultural history with a vision for the future. A comprehensive look at such components is needed to fully understand, determine, and value the impact of revitalization.

The Miami Tribe of Oklahoma's revitalization effort is known within the community as *eemamwiciki* "the awakening". In the context of scholarly writing, and for the purposes of this chapter, we will refer to it as the Myaamia community's language and cultural revitalization effort. However, it should be noted that this tribal undertaking is part of an extensive, multi-faceted, complex endeavor intended to ensure tribal continuance for future generations and preserve its unique cultural identity through strategic educational initiatives. Central to this is an understanding that any of the facets of revitalization in this community must include strengthening connections and interactions among a diasporic tribal citizenry and increasing opportunities for connecting to their cultural knowledge system. We do not describe the language revitalization or capacity building processes within the Myaamia Community because they are covered in other papers. Our focus here will be on general, overall assessment and evaluation concepts related to impacts of the effort and we note here that a language proficiency skill measure is not currently appropriate. At this stage of development, language is disseminated in many if not most aspects within the revitalization effort and therefore serves as a supportive feature for strengthening connections to one's community and heritage. It is currently believed that higher levels of proficiency will come with time as the effort matures, the community engages broadly, and more educational infrastructure is in place. Therefore, language revitalization functions as one part of the larger community dynamic. For language to flourish, a connected community of knowledge bearers and cultural practitioners with intergenerational ties must be at the center of the kinship network.

Unlike communities involved in revitalization efforts that have living first-language speakers (e.g., Maori or Hawaiian) who can share invaluable insights, the last first-language speakers of the Myaamia community passed in the mid-20th century. Therefore, revitalization work is archive-based and entails knowledge transmission via laborious processes of extracting linguistic, cultural, and community practices and features of Myaamia speech from documentation undertaken from the 17th century into the 1960s (Baldwin & Costa, 2018). Working through the nearly 270 years of linguistic materials requires linguistic analysis, reconstruction, and archival development to create resources that support language growth within a cultural and community context. Further challenging this revitalization work is the circumstance of Myaamia living in diaspora with concentrations in the traditional homelands (Indiana) and removal locations established during the 19th century (Kansas-Oklahoma).

As the Myaamia community embarked upon its revitalization efforts in the 1990's, tribal leadership intentionally questioned how to launch and implement its efforts and recruited the expertise of its Cultural Resource Office (CRO) to create a path of inquiry. The CRO dispatched one of its staff, Daryl Baldwin, to work at Miami University on tribal initiatives. It was through this path that the Myaamia Center (as a research and educational development arm of the Tribe) was eventually established to, in part, conduct in-depth research that assists tribal education. This chapter outlines the process of inquiry used by the Myaamia community to determine the impact of its revitalization journey. We present a community engagement research model that leverages community-level strengths paired with complementary skills academic communities can contribute. The result is a mutually beneficial and synergistic assessment guided by the community voice with the academic voice supporting the process.

Before the Myaamia community assessment process was launched, multiple components were already in place. First, a relationship between the Miami Tribe of Oklahoma and Miami University already existed (see the following section for discussion) and, second, the Tribe's CRO had already begun to wonder and inquire among themselves whether its own revitalization efforts were being impactful to the community and to what extent. Turning to its research arm (the Myaamia Center), tribal leadership assigned the task of exploration. The Myaamia Center assembled an interdisciplinary research team of scholars with established connections to the Center. Their moniker, which incorporates the word for knowledge, *nipwaayoni*, is the Nipwaayoni Acquisition and Assessment Team (NAATeam). The research team defined the scope of revitalization according to the tribe's framework, defined a conceptual and theoretical framework, then crafted an empirical approach, and finally collected and analyzed the data to establish impact (all detailed later in this chapter).

The research team is diverse, representing various disciplines (psychology, linguistics, education, public health), consisting of scholars who are Myaamia and others who are not. Those who are not Myaamia strive to be mindful of their identities as non-Myaamia individuals and situate themselves within the realm of Myaamia ontology-epistemology to ensure Myaamia voices guide the assessment. Using the Myaamia knowledge and values systems as a foundation, the research team began to frame a community engaged assessment process. For more information on the value system, see the first author's dissertation (Shea, 2019). In the next section, we present the context within which this assessment was crafted and implemented, an overview of how this process unfolded, and steps taken to yield valuable data and gain insight into the impact of Myaamia's revitalization work.

We continue this chapter with a section on Theoretical Grounding (Section 2), where we describe our community-engaged approach to research. This section touches on issues of theoretical context, intellectual property, data storage, the assessment process with a focus on the Myaamia approach to it, and an introduction to the tribal programs that were assessed. Section 3 provides a description of

the methods implemented in the research, while Section 4 describes the research design including a description of the participants, the procedures carried out and the measures generated as a result. These two sections on methods and research design will provide technical details in keeping with standard practices of scientific rigor used in most social science research and program assessment. The Discussion section (Section 5) is a summary of the most relevant results from the four research questions we describe. These findings may be of more interest or relevant to a broader audience of revitalization practitioners, psychologists, other social scientists and assessment professionals. It is in this section where we make the key points about the benefits that language and culture revitalization efforts have had on the Myaamia community as we have been able to measure to date. We then close the chapter with a brief conclusion (Section 6).

2. THEORETICAL GROUNDING: COMMUNITY ENGAGED RESEARCH AND THEORY

Community Engaged Research (CER), as used by public health scholars (e.g., Israel et al., 1998; Barkin et al., 2013; and Yuen et al., 2015), seeks to enhance community involvement in research and identifies five dimensions along a continuum that represent varying levels of collaboration between communities and research scholars. At one end, with the least amount of collaboration, is the 'outreach dimension' and at the opposite end, with the most collaboration, is the 'community-driven dimension'. In our case, the 'community-driven' dimension was informed by the Myaamia knowledge and value systems to effectively produce a culturally grounded assessment process (Baldwin et al., 2022; Shea, 2019).

In addition, this approach was paired with a strengths-based scientific inquiry framework (LaFromboise, 2006; LaLonde, 2006; Luthar, 2006) that emphasizes the resilience and assets of a community. This contrasts with the deficit model approach, which tends to focus on problems, weaknesses or other so-called negative attributes. Within a trusting and mutually beneficial relationship with researchers, this multidimensional assessment strategy relied on strong community leadership with a community-level worldview, community-level decision making, and an emphasis on community strengths.

Furthermore, the theoretical underpinnings of this work are grounded in *Social Learning Theory* (Bandura, 1977)*, Maslow's Hierarchy of Needs* (Maslow, 1943) and *Bronfenbrenner's Ecological Systems Model* (Bronfenbrenner, 1979), the common core being that communal connections and social learning, the human need for a sense of self and identity, and the multiple systems (society, family) in which humans exist all contribute to the development and understanding of the human condition. This psycho-social theoretical framing works in concert with Myaamia ways-of-knowing to provide a clearer picture of how the impact of language and cultural revitalization expresses itself within the assessment process.

Tribal leadership expressed a need and desire to understand the impact that its language and cultural revitalization was having on the community. Therefore, prior to launching the assessment projects, the research team worked with tribal leaders to establish research questions and goals to this end. The overarching purpose reflects the core of the Tribe's revitalization effort: "*reconnecting the Myaamia people to their Indigenous knowledge system.*" Through cultural revitalization, the tribe aspires to help its community reconnect to its language, Indigenous practices, and ways of living and knowing for integration into the lives of Myaamia today. The Myaamia research team members believed it was important to express community and cultural leaders' goals in the Myaamia language first. Thus, the team began the process of expressing the goals in Myaamia, then re-interpreting the concept back into English. The Myaamia version of the purpose statement is: *"Myaamia: aalinta eempaapiikinamankwi kineepwaayoneminaani, kati moošaki maamawi ayiileepiyankwi".* Re-examination of the Myaamia terms and conversion to English provides a more refined interpretation of the purpose statement within a cultural perspective: "we pick up some of the threads of our knowledge so that we will always remain together."

To further explore the purpose, non-tribal faculty researchers interpreted the tribe's assessment focus statement into four academically-worded research questions. Myaamia Center staff translated the English language research questions into the Myaamia language with culturally appropriate contexts and meanings. These research questions developed initially in English (a) with interpretations in the Myaamia language in bold **(b)** and finally a refined English version situated in the Myaamia cultural context in italics *(c)* follow:

Research Question 1.

(a) To what degree does language and cultural education improve academic attainment?

(b) taaniši miloniteeheeyankwi kineepwaayoneminaani, kati nipwaahkaayankwi?

(c) How does reflecting on our ways of knowing cause us to be wise?

Research Question 2.

(a) Does language and cultural education impact physical and mental health?

(b) taaniši miloniteeheeyankwi kineepwaayoneminaani, kati nahi- mihtohseeniwiyankwi wiiciilantiiyankwi?

(c) How does reflecting on our ways of knowing cause us to live properly and help each other?

Research Question 3.

(a) Does language and cultural education strengthen ties to community resulting in increased community engagement?

(b) taaniši miloniteeheeyankwi kineepwaayoneminaani, kati neenkotiteeheeyankwi neenkoteelintamankwi?

(c) How does reflecting on our ways of knowing cause us to be of one mind and one heart?

Research Question 4.

(a) How does language and cultural education shape beliefs and feelings towards national/tribal growth and its continuance?

(b) taaniši miloniteeheeyankwi kineepwaayoneminaani, kati miihkweelintamankwi weencinaakosiyankwi, neehi aahkohkeelimakiki iineeki mihši-neewaahsiiwankwiki?

(c) How does reflecting on our ways of knowing cause us to remember where we are from and to care for those we have not yet seen?

In this chapter, we feature assessment completed primarily on research questions 1 (academic attainment), 3 (community engagement), and 4 (tribal continuance). We currently have significant funding to build out a Myaamia-specific definition, model, and measurement protocol to properly assess question 2 and this work will be reported on at a later time.

2.1 INTELLECTUAL PROPERTY RIGHTS AND DATA STORAGE

An important component of community-engaged and community-driven research is ensuring ownership of the data by the community served by the work. Article 4 of the most recent Memorandum of Understanding between Miami University and the Myaamia Center describes the intellectual property rights for all work regarding the Miami Tribe of Oklahoma produced by Miami University or the Myaamia Center. Specifically,

"It is understood by the terms of this agreement that the Miami Tribe, by right of self-determination, has control over its cultural and intellectual property on behalf of the citizens of its nation. Neither the Myaamia Center nor Miami University may copyright materials produced through and/or by the Myaamia Center. No reprinting or distribution of materials produced by the Myaamia Center may occur without the express written consent of the Miami Tribe of Oklahoma," (MOU, 2013).

Therefore, all intellectual property (including data and publications), including the work described in this chapter is owned by the Miami Tribe of Oklahoma. The data are stored on secure University servers that are maintained by the Myaamia Center and Miami University IT Services.

2.2 ASSESSMENT PROCESS

Before unpacking the assessment process, it is important to establish a common understanding of what assessment is. Below, is how the research team defined the terms "research" and "assessment". The research team held research meetings with the executive director of the Myaamia Center, Daryl Baldwin, a cultural knowledge-bearer and co-author of one of the contributions to the present volume, to co-create definitions of research, evaluation, and assessment in order to most effectively serve the needs of the Miami Tribe of Oklahoma. These definitions were influenced and adapted from several sources (Scriven, 1991; Mertens, 2014; Banta & Palomba, 2015).

We have defined research as a systematic investigative process used to examine and understand constructs, relationships, things, or systems within the world/society (for its advancement or betterment). For the purposes of this investigation, there are three specialized types of research. First, *evaluation* is a systematic process that leads to the determination of whether identified outcomes have been achieved. Second, *program evaluation* is a systematic approach of data collection to determine if a program, project, or policy is efficacious and meets its goals. Third and final, *assessment* is an approach that entails a direct measurement of an attribute/intervention, obtained from the individual or community/group, for the purpose of judging its quantity, level, or impact. To define even further, 'formative assessment' occurs throughout a string of events, intervention, or programming while 'summative assessment' occurs at the end of an event, intervention, or programming. Effective assessment includes a feedback loop where the program initiators are able to revamp, revise, or redirect the efforts underway (Scriven, 1991; Mertens, 2014; Banta & Palomba, 2015). The assessment process used in this context is one grounded in a cyclical inquiry. The image below represents the approach adopted by the Myaamia assessment team.
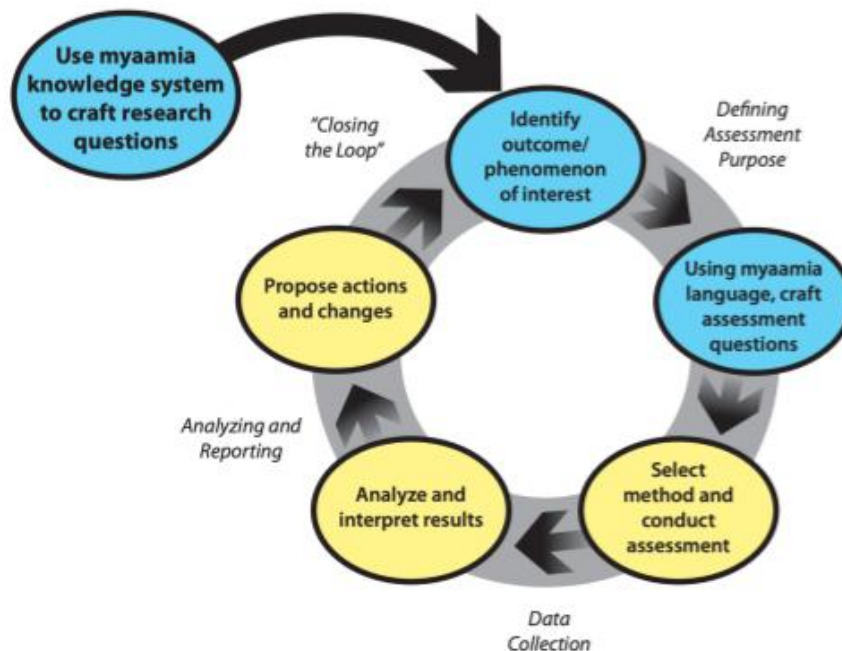

Figure 1: Myaamia Assessment Process Loop (Carole Katz, Myaamia Center)

This assessment loop was co-created by the research team and Baldwin, the Executive Director of the Myaamia Center, and is based upon a standard assessment protocol, branching from the assessment process advanced by Bresciani (2003) and Wallerstein et al. (2018). We worked together

to identify the assessment process first from a Myaamia perspective, and then added in the academic perspective to strengthen the relevancy and appropriateness of the assessment approach.

The assessment loop begins with the establishment of a program need, followed by identifying the questions to be addressed, the identification of methodology with measures, and eventually assessment implementation and reporting of results and analysis. The assessment process is a continuous one and incomplete without reflection and modification that often arises from the feedback loop. Within the Myaamia assessment framework, this feedback loop ensures results are shared with the community at-large, leadership, and specific CRO and Myaamia Center staff responsible for revitalization programming and education. The recipients reflect upon the results and consider implications for future revitalization work.

2.3 TRIBAL PROGRAMS ASSESSED

The assessment of three revitalization programs is presented here: the Heritage Award Program, Eemamwiciki summer programs, and tribal community events.

The Heritage Award Program is a scholarship program at Miami University in which eligible Myaamia tribal members attend Miami University to pursue their undergraduate degrees. They also complete a rotating series of courses on Myaamia culture taught by Myaamia faculty. The curriculum consists of *Ecological Perspectives and History*, *Language and Culture*, and *Contemporary Tribal Issues*. During their senior year, Myaamia students complete a culminating capstone project that, if a student chooses, can connect their interests (frequently from their academic major) to a tribal need.

The Eemamwiciki summer program consists of Saakaciweeta (emerge) for tribal youth ages 5-9, Eewansaapita (sunrise) for tribal youth ages 10-16, Maayaahkweeta (noon) for ages 17-18, and an adult program Neehsapita (afternoon) for adults 18 and older. These one-week experiences are offered in both Oklahoma and Indiana and introduce tribal youth and adults to cultural practices and language. The curriculum consists of six revolving themes: *kiikinaana* (our homes), *weecinaakiiyankwi weecikaayankwi* (song and dance), *meehtohseeniwinki asiihkionki* (living on the land), *eeweentiiyankwi* (family)*, asiihkiwi neehi kiisikwi* (earth and sky), *weekhikaanki meehkintiinki* (games). Only data from the Eewansaapita program are presented here for brevity and because this is the program with the longest-running assessment protocol.

Tribal gatherings that have historically been assessed include (but are not limited to) events such as winter storytelling, organized language classes, ribbon workshops, the Myaamiaki conference, and the annual business meeting of the Miami Tribe of Oklahoma (MTO).

Next, we outline the three studies launched to explore the impact of revitalization and present what was assessed and how we gathered data for each.

3. METHODS

3.1 AUTHOR POSITIONALITY

Dr. Haley Shea is a Myaamia community member, Psychologist, Research Associate at the Myaamia Center, and a Visiting Assistant Professor in Educational Psychology at Miami University. She grew up as an active member of the Myaamia community, herself a product of several of the programs described throughout this chapter (Eemamwiciki summer programs and Heritage Award Program). Dr. Mosley-Howard is a Psychologist and Professor Emerita at Miami University. In her faculty and administrative roles, she worked with the Miami Tribe on various projects for 20 years. Her work and interest in the mental health and educational inequities of under-represented groups has fueled her connection to this assessment work. Dr. Hirata-Edds is a scholar in language acquisition. Both are employed at the Myaamia Center as a result of more than 20 years of nurturing a relationship with folks within the Myaamia Community and specifically at the Myaamia Center.

3.2 ETHICAL CONSIDERATIONS

Dating back to Lomawaima (2000) questions have been raised regarding the power imbalance between tribal sovereignty or control, and researcher control. In addition, Stellefson et al. (2015) advanced the need to address both community consent as well as individual consent referencing the Wallerstein and Duran (2010) study as a case in point.

In the Myaamia community study, the voice governing this research rests with the Myaamia Tribe as it relates to direction, data ownership, access to subjects, interpretation and dissemination. As a research team, we were always mindful of the Belmont Report principles, securing not only consent from Myaamia leadership, but individual participant consent as well. As a practice, CER has been sensitive to the need for considering additional ethical guidelines such as actively involving community members in the research process; respecting community culture; community consent as well as individual consent; accessibility of data and results; and dissemination of results (Gostin, 1991; Weijer et al.,1999). Parker et al. (2019) specifically crafted an ethical framework which further heightened our sensitivity to ethical adherence. At the center of developing and sustaining relationships with tribal communities this framework encourages researchers to: do good, invest time, obtain community approval, build trust, include culture, consider vulnerabilities, partner in regards to dissemination, and maintain high ethical standards. More specifically, Baldwin, the Executive Director of the Myaamia Center, collaborated with the elected leaders of the Miami Tribe of Oklahoma to determine how the ethical review of research should occur for any research conducted regarding the Tribe. Together, they determined that the Myaamia Center would serve as the funnel through which all research on the tribe would be examined and conducted or co-conducted. All research, including the current scholarship, is reviewed by staff within the Myaamia Center for ethical considerations, and specifically

by the executive director. Additionally, the work is and was reviewed by the Human Subjects-Institutional Review Board (IRB) at Miami University (#01742r for Eemamwiciki programs and #00692e for Heritage Award Program; contact Miami University IRB with more questions at humansubjects@miamioh.edu). The Miami University IRB approved the study; however, they asked us to substantiate that tribal leaders were not coercing members to participate, a request with which we complied.

3.3 RESEARCH DESIGN

Guided by our research questions and with tribal knowledge-bearers' input, we used a mixed methods approach to data gathering that included surveys, interviews, archival data, and observation. We utilize a longitudinal two-phase QUAN/QUAL concurrent triangulation design in which we collect both qualitative and quantitative data on an annual basis and engage in data analysis of the quantitative and then the qualitative data, allowing them to inform and build off of one another. The results are then presented in a holistic, merged fashion where we compare the results for both quantitative and qualitative datasets by each research question. We then integrate the results into conclusions based on the research questions. (Creswell & Plano Clark, 2011).

This mixed-methods approach was chosen because (a) it was most useful during the early phases of the study's development when building a theoretical and ontological foundation was critical due to such scant research in this area of study, (b) the Myaamia knowledge system was (and still is) in an ongoing process of development, (c) qualitative data are needed to inform the quantitative results, (d) tribal input and knowledge are respected in the process and needed to inform every stage, and (e) this is an ongoing longitudinal study and mixed methods best helps to explain the ongoing results (Shea et al., 2019).

This study's qualitative components use a participant-observer ethnographic approach. The researchers are continuously embedded within the tribal community at all major community events, the Heritage Award Program classes, and the Eemamwiciki Summer Program. All three authors/researchers are participant observers, engaging in community events at differing levels (with the first author most involved as a member of the Myaamia community). Qualitative approaches included participant semi-structured interviews (for Heritage Award Program participants) and detailed field notes (for all three programs). We conducted semi-structured interviews so as to ensure all participants are being asked the same questions, but allowing room to follow up and clarify information during the process. Rigor is established by triangulating sources of data as well as using multiple coders and researchers to agree upon themes for the results.

Description of qualitative analyses are presented next. Field notes were analyzed the same way across all three programs. Analysis of the field notes taken at all events was based on Musante &

DeWalt's (2010) guide for participant observation. We first focused on a data reduction process by compiling and simplifying the field notes followed by coding and triangulating them against other sources of data.

3.4 PARTICIPANTS

3.4.1 HERITAGE AWARD PROGRAM

Since its inception in 2003, there have been 106 graduates of the Heritage Award Program. All students in the Heritage Award Program are informed of and invited to participate in the research process during their pre-college activities. Here, we are reporting on data from 35 total participants between 2017 and 2022 (with an updated research protocol in 2017 the Cultural Connectedness Scale was added; see below for description). Participants are college-aged students (on average 18-23 years) at Miami University who all have confirmed Myaamia heritage.

3.4.2 EEMAMWICIKI PROGRAM

We have collected tribal summer program data since 2018, when it initially included only two camp experiences (Saakaciweeta for ages 6-9 and Eewansaapita for ages 10-16). In 2020, the programs were expanded to include Maayaahkweeta for ages 17 & 18 and Neehsapita for ages 18+. For the sake of brevity, we are only describing the assessment process, measures, and results from the Eewansaapita program (ages 10-16). However, note that the process is similar across all programs. All participants in the program are informed of the research process and invited to participate in the research. There are 108 of participants in this study. See the data dashboard in Table 5 below for a further demographic breakdown.

3.4.3 TRIBAL EVENTS

Participants in tribal events include Myaamia community members in attendance at major events (including but not limited to Annual Meeting, Winter Gathering, Language Workshops, etc.). Observations at some of these events have been conducted since 2012 and participant attendance numbers documented when possible.

3.5 PROCEDURES & MEASURES

3.5.1 HERITAGE AWARD PROGRAM

There are three sources of data collected from students in the Heritage Award Program. First, we interview and survey students at two timepoints: the pre-test interview and survey with first-year students in the fall before classes begin and the post-test interview and survey with seniors in the spring right before graduation. The interviews take place in the office of the first author in the Myaamia

Center. The interviews are audiotaped and consist of 11 questions (see Appendix B Heritage Program Interview). These interviews ask participants about their identity, college experience, emerging connections, and engagement with tribal activities. These interviews were also transcribed by a professional transcription service. The first author as well as a Graduate Assistant read through and coded the interviews using qualitative analysis software Dedoose. Saldaña's (2015) coding manual was used to inform the descriptive coding process. Coders obtained an interrater reliability of 0.84.

Snowshoe et al.'s Cultural Connectedness Scale (CCS) is a 29-item scale with 3 dimensions: identity, traditions, and spirituality standardized for Indigenous populations of Canada (Métis, Inuit, and First Nations; Snowshoe et al., 2015). The CCS was modified for this project and administered to Heritage Award Program students at the same time as their interviews. The modified CCS consists of 23 of Snowshoe's original items and two new items specific to Myaamia culture (25 items total, 10 dichotomous and 15 on a 5-point Likert). The Myaamia modified CCS full-scale and 3 subscales, as established by Snowshoe et al., were tested using Chronbach's Alpha reliability. The modified CCS had an overall reliability of $\alpha = .92$ (pretest) and $\alpha = .77$ (posttest). There are three subscales in the CCS including identity (with items such as ,*"I have spent time trying to learn more about what it means to be Myaamia."*), traditions (with items such as, *"I have an elder who I talk to."*), and spirituality (with items such as, *"When I am overwhelmed with my emotions, I look to my Myaamia heritage (knowledge) for help."*). Subscale reliability measures were: identity (11 items) $\alpha =.94$ (pretest) and $\alpha = .94$ (posttest); traditions (6 items) $\alpha = .80$ (pretest) and $\alpha = .16$ (posttest); spirituality (6 items) $\alpha = .87$ (pretest) and $\alpha =.76$ (posttest). The results show that data collected with this modified survey were reliable per use of the research standard of 0.75, except for the traditions subscale. We conducted a paired t-test to examine the difference in pre-test and post-test scores on the CCM for participants across time (see Table 1).

Second, we make extensive field observations as participant observers at activities and events in which students participate, like the Heritage Award Program class and tribal events (Winter Gathering, Myaamiaki conference, etc.). From these observations we glean levels of student interaction, language use and cultural practice, taking particular note of students' expression of identity and what it means to be Myaamia.

Third, to assess academic attainment and levels of engagement with one another, the university, and tribal community, students complete several surveys including institutional data from the National Survey of Student Engagement (NSSE), ACT scores, and graduation rates. The NSSE is administered to all students at Miami University regardless of this research project and we work with the Office of Institutional Research and Effectiveness to leverage those data for our own purposes. Heritage Award Program student graduation rates are recorded annually and kept by the MC Director of Tribal Relations as well as by the university institutional research office. Given that higher education

academic retention literature asserts that college graduation is impacted by multiple variables, and to complement the academic attainment validation, a logistical-regression analysis was conducted to determine whether ACT scores and/or participation in the heritage course predicts whether or not the Heritage Award Program students graduate.

Scale Name	Number of Items in Scale	Chronbach's alpha (α)pretest	Chronbach's alpha (α)posttest
Modified CCS Full- Scale	25	0.92	0.77
Identity Subscale	11	0.94	0.94
Traditions Subscale	6	0.80	0.16
Spirituality Subscale	6	0.87	0.76

Table 1: Modified Cultural Connectedness Scale reliability scores

3.5.2 EEMAMWICIKI PROGRAM

For our data collection process, we first collected informed consent from the parents of participants and assent from the participants themselves when they arrived to the summer program. We then administered pre- (on the first day of camp) and post- (on the last day of camp) program surveys to participants that assessed their goals, program learning outcomes, and levels of connection to the tribal community (see Appendix A for an Eewansaapita sample survey). We also administered a post-program only survey to the parent/caregiver of participants (for youth programs), asking about their own goal for their child's participation in the program, impetus for attending, learning outcomes, levels of cultural connectedness, and their overall camp experience. Throughout the programs, we also make group observations using predetermined factors that the assessment team is looking for (uses greeting/parting terms, sings songs, demonstrates values, etc.). The entire assessment team engages in observations of participant interaction, interaction with program counselors (who are Heritage Award Program students), and engagement with language use and curricular materials (arts, games), and then we consolidate our observations for thematic coding.

The Eewansaapita participant program survey consists of 24 items, with items in Likert, dichotomous, and open-ended formats (see Appendix A for a sample survey). This survey was created

by the research team at the Myaamia Center in consultation with Eemamwiciki program directors to determine their goals and needs for the assessment (see assessment loop in Figure 1 above for description of this process). The resulting survey was reviewed by program directors and the Executive Director of the Myaamia Center, Baldwin, to determine whether it aligns with the desired areas of inquiry and Myaamia knowledge system. Additionally, there are 18 items in the Eewansaapita parent/guardian survey. The surveys ask about participant knowledge gained, language use, and overall impact of the program on participants.

The surveys and specific questions we ask participants have changed each year due to changes in the curriculum, goals for assessment, refining of the instruments, changes in programming due to COVID, etc. Therefore, we are not yet able to compare data across time. However, we are currently in a standardization process and this will be part of our work in the future.

3.5.3 TRIBAL EVENTS

For Myaamia community public tribal events, we collect extensive field notes, observing both individual and group phenomena. These observations include the total number of tribal members in attendance, tribal member interaction with one another, tribal member participation in the cultural event content or practice, questions asked by participants during tribal events, use of Myaamia language, and reported intent to use the cultural practice. All these observations are intended to better understand the impact of revitalization on the community.

3.6 SUMMARY OF PROCEDURES AND MEASURES

To summarize, currently we have launched three studies, each designed to assess the impact of language and cultural revitalization within the Myaamia community. One study focuses on tribal college students, one on tribal youth, and one on the greater tribal community. Below we detail all three (see Figures 2-4).

Heritage Award Program	
Participants	Myaamia college students taking Heritage Award Program courses
Research Questions	*To what degree does language and cultural education improve academic attainment? (be wise) *Does language and cultural education impact physical and mental health? (live properly, help each other) *Does language and cultural education strengthen ties to community resulting in increased community engagement? (one mind, one heart)

	*How do language and cultural education shape beliefs and feelings towards national/tribal growth and its continuance? (remember where we are from and care for those not yet seen)
Mixed Method Measures	1. Graduation rates 2. Reports of what it means to be Myaamia 3. Interviews and observations about experience and engagement 4. Cultural Connectedness Scale

Figure 2: Heritage Award Program research questions, participants, and methods

Eemamwiciki Program	
Participants	Myaamia youth ages 5-16 in Eewansaapita and parents/care-givers of participants
Research Questions	*Does language and cultural education strengthen ties to community resulting in increased community engagement? (one mind, one heart) *How do language and cultural education shape beliefs and feelings towards national/tribal growth and its continuance? (remember where we are from and care for those not yet seen)
Program Evaluation Questions- Student Outcomes	1. Speak language and integrate into daily life 2. Practice values 3. Myaamia songs and dance 4. Live on the land 5. Know kinship bonds 6. Know the earth and sky 7. Know Myaamia games 8. Integrate Myaamia culture into their lives
Mixed Method Measures	1. Student survey (which includes a few CCS items) 2. Student observation 3. Parent survey 4. Teacher reflection 5. Language use

Figure 3: Eemamwiciki program research questions, participants, and methods

Tribal Events	
Participants	Myaamia community members participating in tribal events
Research Questions	*Does language and cultural education strengthen ties to community resulting in increased community engagement? (one mind, one heart) *How do language and cultural education shape beliefs and feelings towards national/tribal growth and its continuance? (remember where we are from and care for those not yet seen)
Mixed Method Measures	1. Community observations 2. Participation levels

Figure 4: Community programs research questions, participants, and methods

4. FINDINGS TO DATE

4.1 HERITAGE AWARD PROGRAM

Here we present select findings on academic attainment (be wise) (also connected with the value of "we strive"), identity (what does it mean to be Myaamia), and tribal contributions (called "giving back", and also tied to the community value of "we care for each other") from the Heritage Award Program (henceforth Heritage Program) student sample. As of 2021, the 6-year Heritage Program student graduation rate was 92.1%. As a comparison, the 6-year graduation rate for Myaamia students at MU before the Heritage Program began (pre-2003) was 56%, the general student body non-Myaamia student 6-year graduation rate at MU is 82% (Miami University-Ohio, 2023), and the 6-year graduation rate for Native American students in public college nationwide is 40% (National Center for Education Statistics, 2019).

To further discern which variables contribute to this increase in graduation rates, we conducted a logistical-regression controlling for ACT scores (American College Testing) since literature suggests ACT is often a predictor of college success (Radnuzel & Noble, 2012). When comparing the sample of students who completed the Heritage Program (coursework and senior project) versus those that did not (pre-2003), and controlling for ACT score, we find the program is a predictor of successful graduation, not the ACT. A test of the full model against a constant-only model is statistically significant, indicating that the predictors as a set reliably distinguish between those who graduated and those who didn't (χ^2 = 11.30, p < .01, df = 2). Nagelkerke's R^2 of .194 indicates a moderate relationship between prediction and grouping. Prediction success overall was 80.5% (100% for those that graduated and

0% for those who did not). The Wald criterion demonstrated that only completion of the Heritage Program courses predicted whether students graduated or not (p = .001). This finding suggests that the Heritage Program promotes success for Myaamia students above and beyond what standardized test scores foretell when a student enters college.

Identity is measured by interviewing Heritage Program students who self-report how they culturally identify and by identity subscale measures from the modified CCS. Each year, as part of the course curriculum, Myaamia Heritage Program students write about "What does it mean to be Myaamia?" The researchers obtained permission from the IRB and course instructors as well as consent from the students to utilize this course assignment in our data collection process. Here, we see Participant 1 as a freshman and then as a senior, followed by Participant 2, who is a senior, reflecting on their college experience. These statements below illustrate an emerging sense of self in connection with community and Myaamia cultural contexts:

Participant 1, Freshman Year (2005):

> "I am a college student. I am a son. I am an athlete, friend, cousin and somewhere in the mix, I am a Miami Indian. At family reunions, in a survey, on an application: this is where, in the past, I have felt my Native heritage. It is a facet of my life I have been at best, unacquainted with my entire life. Living far from tribal contact has an effect; and in my case its effect was a casual ambivalence… I had no idea what it meant, other than one of my relatives was Chief Little Turtle".

Participant 1, Senior Year (2009):

> "Being Myaamia is an integral part of who I am and I am proud in the face of derision because I know the depth or meaning in that identity and the strength of support from others who are Myaamia. The last four years have been a journey for me as I discover myself and delve into my people's history. I now hope to be able to help other people discover their Myaamia heritage as well so they can have the same experience as me".

Participant 2, (2010; Excerpts from a retrospective identity statement)

> "My freshmen year I answered this question with stating that being Myaamia means being who I am. After four years I still believe that to be true but I understand so much more about that statement. When someone hears that I am a member of the Miami Tribe they say 'oh so you are Indian' and often times I simply shake my head in agreement because I don't have the time to explain to them that I am not Indian but I am Myaamia.. ………Being Myaamia is the way I see the world and the way I interact with other people in this world. This year we have taken the time to look around "our world" or at least observe our surroundings on campus. We watch as nature interacts

and see how one thing can affect many and how everything is connected to something else. We have also been able to see how our actions can affect things as well. Being observant and using the resources given to us is how our ancestors were able to not only survive but thrive. I try to use that same mindset in my life by being mindful of my surrounds and using my resources to the fullest. …... But only Miami has the class where I can learn about my culture and heritage. The class not only helps us learn about the Tribal community at large by teaching us the language, telling us the history, and updating us on the current affairs of the tribe but it brings the students together. That gathering is a community of young tribal members who share a past and now share a future together as Myaamia people. Being part of that community and sharing a culture, a history, a language is what being Myaamia means".

As these excerpts illustrate, during the first year we generally observe some uncertainty or a segmenting of self into roles. By senior year there emerges a more integrated, nuanced, and multidimensional sense of self grounded in a Myaamia identity. We speak more to this in the discussion section of this chapter.

From the modified version of Snowshoe et al.'s CCS, findings suggest a significant difference between pre and post measures. Paired t-test results show significant identity measure increases (t=-10.0, 33, p=.00). The traditions sub-scale (t=-10.23, 34, p=.00) and spirituality subscale (t=-7.73, 34, p=.00) show similar significant and positive shifts from pre to post measurement.

Pre-post item pair	n	Pre		Post		t(33)	p
		M	SD	*M*	SD		
Identity Subscale	34	33.67	11.9	48.03	8.8	-10.00	.00
Tradition Subscale	35	15.48	7.6	26.80	3.3	-10.23	.00
Spirituality Subscale	34	13.52	5.5	20.00	8.7	- 7.73	.00

Table 2: Paired t-tests for Heritage Award Program seniors pre and post identity CCS sub-scale scores

The overall pre- versus post-test dependent t-test full-scale CCS measure shows significant differences overall (t=-10.09, 31, p=.00). Both full-scale and sub-scale CCS measures suggest an emerging alignment with and integration of Myaamia cultural practice over time as student participants

matriculate through the Heritage Award Program courses. See Table 2 for a pre- and post-test comparison of each of the CCS subscales. Note that this table contains the Cultural Connectedness scale scores from the 2017 through 2022 senior cohorts of Myaamia students. Scores of their freshman year responses (pre-Heritage Program course) were compared to their senior year responses (post-Heritage Program course).

The final data point for the Heritage Program student sample is the students' contributions to the tribe. Each year we chronicle how Myaamia students find ways to contribute to the tribe whether through formal means of career choice, volunteering, or by being intentional with their tribal engagement. Below are current ways in which Heritage Program students are "giving back" to the tribe, also representing the response to research question 4 (commitment of continuance of tribal community- remember where we are from and care for those not yet seen).

Number of Former Miami Tribe Heritage Award Program Students	Giving Back to Support Tribal Growth and Continuance
5	Working on Myaamia research while pursuing graduate studies.
1	Working as a Myaamia Graduate Assistant while pursuing graduate studies.
1	Teaching Myaamia language to the tribe.
6	Storytelling at tribal gatherings.
4	Doing ecology and environmental research.
65	Choosing to conduct senior research projects that focus on a tribal need.
7	Serving as Eewansaapita and Saakaciweeta program coordinators.
53	Serving as Eewansaapita and Saakaciweeta camp counselors.
1	Working on Myaamia research as a professor.

Figure 5: Heritage Award Program student contribution to tribal community from 2012-2022

These numbers represent an increase in student engagement from 2012 to present, and this level of contribution is yet another signal of the impact of revitalization. Next, we present findings on the tribal youth as seen with the Eewansaapita summer experience.

4.2 EEMAMWICIKI PROGRAM

The impact of revitalization on tribal youth is evident in summer program assessment data. For example, a 2019 program participant stated: "Knowing our land and how to use it helps us to know each other. It brings us together by food, medicine, and knowledge." The collective participant survey data of 108 *Eewansaapita* participants from 2018 (n=39), 2019 (n=47), and 2022 (n=22) in Oklahoma and Indiana (where camps are held) show that participants report gaining more knowledge about Myaamia cultural practices and an increase in their use of Myaamia language over the duration of the camp. In 2018, participants were asked to respond to the statement "I learned many things about my Myaamia heritage." A simple t-test revealed that participants were significantly more likely to agree with this statement at post-test compared to pre-test, t_{27}= -2.274, p<.05. Further, Eewansaapita parents/caregivers report "improvement in child behavior and respect for elders, children seemed happier, and children have an interest in and use more language and cultural knowledge." In both Oklahoma and Indiana, parent and child survey responses signal that learning goals are being met through camp participation (90-100% agree that they met their learning goals).

Below are results from the most recent summer experience showing two key features. The first key feature is, participants are learning cultural content, and the second is, they have a growing sense of connectedness to the Myaamia culture and desire to learn more languages. By the end of the 2022 summer experience, 100% (11) of Eewansaapita participants responding in Oklahoma to the survey question about *learning culture* and 89% (8) of participants responding in Indiana report learning about Myaamia culture. When asked if they had a *strong sense of belonging to the Myaamia community* (a CCS question), 100% of the 11 Oklahoma participants responded yes and 78% (7) of the Indiana respondents answered in the affirmative. When asked if it was *important to know the Myaamia language,* 100% of Oklahoma and 56% of Indiana participants (6) responded yes. Also, in the 2022 sample, 88% (16) of total responding participants reported wanting to learn more Myaamia language. Another interesting result is that 88% (16) of the 2022 participants who responded to the *knowledge use* question reported that they used the knowledge they had gained from the previous summer experience. To further illustrate the impact of the Eewansaapita program on tribal youth knowledge, parent/caregiver feedback data are inserted below.

SURVEY QUESTION	YEAR Participant N	2018 N=13	2019 N=22	2020 N=10	2022 N=10
My child can understand some Myaamia language		100%	80%	NA	NA
My child knows Myaamia values		77%	80%	NA	92%
My child knows how to play a Myaamia game		100%	80%	NA	100%
My child has sung me a song in Myaamia		100%	80%	NA	92%

Table 3: Eewansaapita & Saakaciweta parent/caregiver responses

The data in Table 3 and the Eemamwiciki multi-year data in Table 5 that follows provide a summary of the impact of revitalization on tribal youth through summer programming. Note that not all survey questions are included in these tables due to limited and online programming in 2020 and 2021 because of the COVID-19 pandemic. Participants and parents alike report increased knowledge of games, songs, or the value system. Our multi-year analysis supports the notion that tribal youth practice what they learn in between camps, know Myaamia games, want to learn more cultural content, have fun, and have an increased sense of belonging. For example, Table 4 shows that at the beginning of camp, first-time participants and participants reporting they had attended camp two or fewer times, had a significantly lower sense of belonging compared to returning participants who had attended three or more times.

	n	Mean	SD	*t*	*df*	*p*
First time attending	20	3.70	1.08	2.16	25.28	**.041**
Previously attended	42	4.26	0.63			
Attended 2 or fewer times	35	3.83	0.92	2.86	60	**.006**
Attended more than 3 times	27	4.41	0.57			

Table 4: Sense of belonging by camp attendance, all Eemamwiciki Programs, 2022

Following the multi-year Eemamwiciki data (Table 5), we present findings centered on the tribal community's engagement and language use.

Key Survey Questions[1]			2019			2020[2]			2021[2]			2022		
	Sample Size		22 P	30 S	44 E	10 P	2 S	7 E	10 P	5 S	6 E	34 P	25 S	22 E
1	Average Age	S					7.25			6.8			7.6	
		E					12.28			12.33			12.3	
	Gender F/M (%)	S		58/42			50/50						64/36	
		E		44/56			50/50						55/45	
2	P Said Goals Met (%)			100			75			100			100 (S) 92 (E)	
3	Important To Know Language (%)[3]						70			100			81 (S) 78 (E)	
4	Use Language at Home (%)												78 (S) 55 (E)	
5	Share Knowledge with Others (%)			70			82			79			96 (S) 95 (E)	
6	Reports Having Myaamia Name (%)			26			27			90			60 (E)	
7	Know Values (%)			28			27			50			88[4] (S) 40 (E)	
8	Know Game (%)			38									80 (S) 90 (E)	
9	Connection, Sense of Belonging (%)[5]												77 (S) 90 (E)	
10	Had Fun (%)			100			100			100			100 (S) 100 (E)	

Table 5: Multi-Year dashboard trend analysis-Eemamwiciki (youth post scores only)[6]

[1] S = children participating in Saakaciweeta; E = children participating in Eewansaapita; P = parents with children participating in either program

[2] Virtual format.

[3] For Likert questions (%) is agree + strongly agree combined.

[4] Proxy variable: "I know how [Myaamia] treat others".

[5] For Likert questions (%) is agree + strongly agree combined.

[6] Oklahoma, Indiana camps are combined; post scores only presented; some missing data and low survey response rate during COVID years.

4.3 TRIBAL EVENTS

General tribal community engagement was measured by counting the number of tribal members in attendance at various events. While there is variation in attendance due to many reasons, data in Figure 6 shows that over the years of tribal revitalization efforts (workshops, conferences, language courses, storytelling, annual meeting), participation in tribal events has been strong.
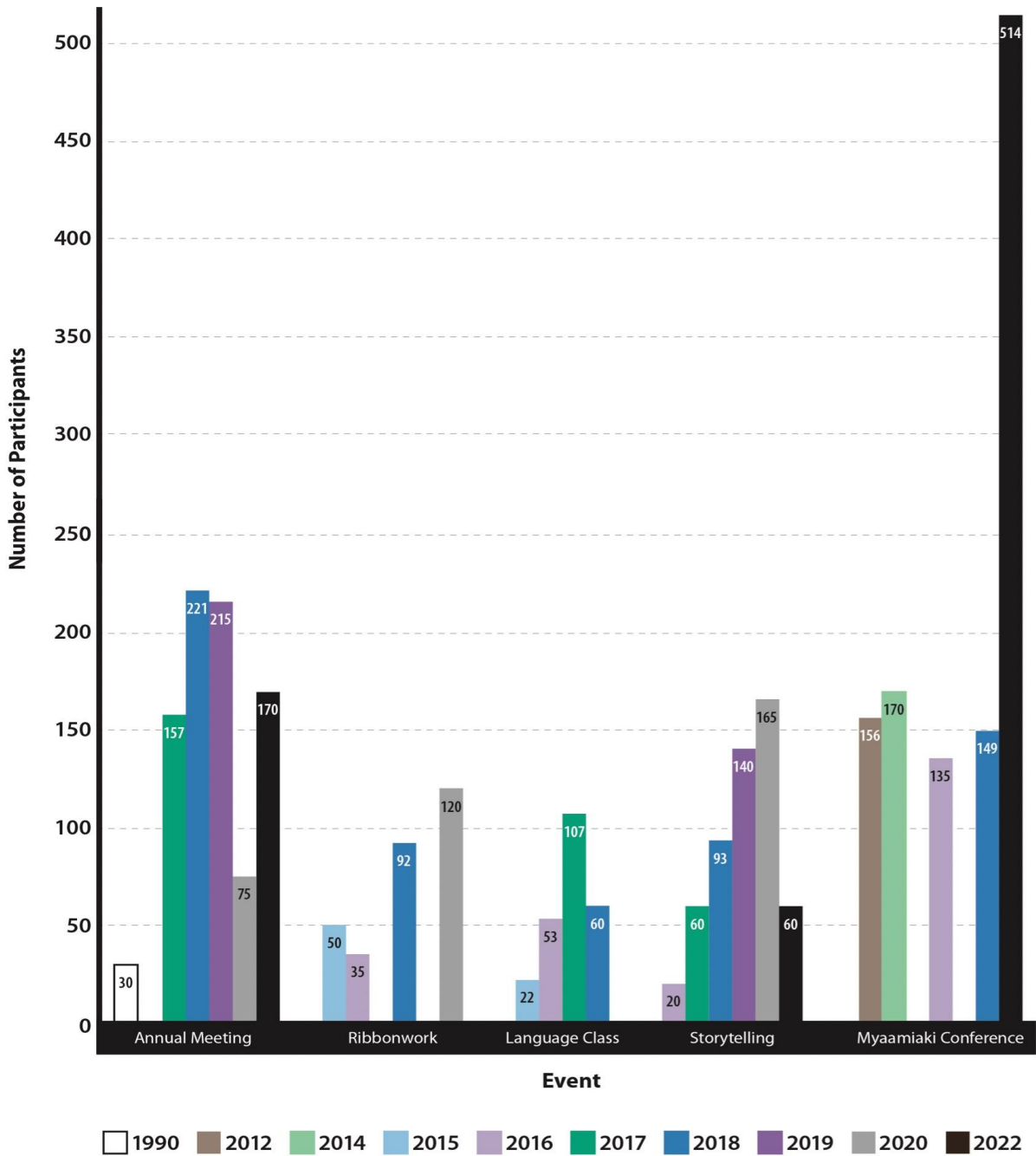

Figure 6: Annual community engagement data from select tribal event observations (2020-2021 COVID adapted)

We take a more focused look at two tribal events here, the biennial Myaamiaki conference and language use experiences. The Myaamiaki conference is held every other year and provides an opportunity for the Myaamia Center staff to present various research findings, cultural experiences, and exhibit the Heritage Award Program student experience to the community and beyond. Before the interruption caused by the COVID-19 pandemic, the conference was held in-person on the Miami University campus. It was canceled in 2020 and offered in a hybrid format in 2022 (in-person and virtually). At the most recent conference, 514 persons attended (323 in-person; 191 virtually), and 210 were Myaamia tribal citizens. We suspect this dramatic increase is due in part to the community being anxious to gather after the COVID hiatus, the ease of joining virtually, and the excitement of hearing about cultural and research developments.

As we were noting impacts in our established data collection measure of engagement (e.g., numbers of participants), we also noticed increases in language use across a variety of settings as an impact of overall revitalization efforts. These informal observations of a kind of engagement are part of a broad plan to be cognizant to the context in which other specifically measured behaviors exist. This kind of seemingly peripheral, contributive information can shed light on related impacts. And, as such, it can potentially be incorporated more rigorously later as part of future assessment measures. We saw and documented these developments in a variety of circumstances, including active participation at language workshops, use of the Memrise language learning app and the online dictionary app. The Miami-Peoria Dictionary on the Indigenous Languages Digital Archives platform, for example, contains 2100 primary entries with associated audio and multiple additional sentences/words related to each entry. "Popular searches," when an entry or its associated word/phrase accrues 49+ unique searches, are tracked. As of August 2022, there have been 21,472 such "popular searches," indicating that tens of thousands of terms have been repeatedly targeted and sought out. According to J. Baldwin, Myaamia Language Coordinator, community members continually and increasingly request words and indicate that they use the dictionary regularly (personal communication). The ongoing work with dictionary entries is user-driven, focusing on words of interest for use in daily life and conversational interactions, as well as for specific projects such as developing a ethno-botanical database. Documenting this kind of additional supportive information can enhance a view of the primary effects being studied by providing a sense of ancillary impacts of interwoven components.

As an additional example, growing interest in and use of the Myaamia language was noticed at community gatherings and summer camps. One catalyst contributing to this increased interest was identified during a community event, held on June 29, 2018. The chief of the Miami Tribe of Oklahoma began using the Myaamia language and invited citizens to join him in using it. At an annual business

meeting, the chief invited Myaamia citizens to share with him Myaamia words they had learned. This event has since been called the Chief's Challenge. At the first implementation of the challenge, twenty citizens lined up before the chief to demonstrate what they had learned. Several citizens reported that they could have never imagined this happening in previous years. An offhand comment like this can serve as an indicator of potential community interest in knowing more, and the community-driven aspect of Myaamia research is flexible in a way that allows for additional areas of data collection to be incorporated. Each subsequent year there has been a continued and growing interest in sharing language learning with the chief. An activity such as this and observed use of everyday terms and expressions, such as *aya* 'greetings' and *neewe* 'thanks' now being familiar among many tribal members serve as evidence that language efforts are taking hold where they had not been observed previously. Language is an intricately connected aspect of the cultural fabric and is but one tool for making connections to heritage and community. We listen for its use, look for its inclusion, and monitor its integration into the community's practices and interests.

Data suggest a broad range of areas where revitalization programming has increased knowledge, engagement, and sense of self. In the discussion that follows, we examine more deeply the implications of this work.

5. DISCUSSION

Through examples of a community-driven approach, we have shared a process of assessment with respect to Myaamia revitalization efforts and how the data suggest impacts on Myaamia Heritage Award Program students, tribal youth participating in summer programs, and community members' engagement. Here we further discuss findings regarding specific concepts of interest (i.e., attainment, identity, commitment to continuance, engagement) as well as associated assessment constructs.

To examine attainment, we first collected information from our university students over time, as well as from national databases to form the basis of our comparisons. Specifically, we documented the 6-year graduation rates for all Myaamia students enrolled at Miami University from 1991 to present and found that prior to the establishment of the Myaamia Center and Heritage Award Program in 2001, the Myaamia student graduation rate was 56%. In contrast, as of 2021, we are at a near 92% 6-year graduation rate for participants in the Heritage Award Program. This is notable within the university itself and also striking in comparison with the national average graduation rate for Native American students, which is consistently in the low to mid-40% range according to US Department of Education data (National Center for Education Statistics, 2019). This indicates that participation in this particular aspect of revitalization efforts has a significant impact on our Heritage Award Program students' educational attainment. To examine a different aspect of attainment, we assessed degree of knowledge gained by Myaamia youth in their summer camp experiences. The camps are designed for

youth to have fun while learning to speak *Myaamiaataweenki* (the Myaamia language) and practice *Meesiminaakosiyankwi* (culture) and values, as well as to make space for both in their lives. For this situation, data took the form of direct surveys to participants and parents who both consistently report increased knowledge of games, songs, language, and an understanding of community values and kinship. These two different perspectives on attainment within the Myammia community, related to participants of different ages in different learning opportunities, requires different assessment measures. As a community determines what is of interest to measure, it is important keep in mind, as shown here, that a variety of measurement options can be considered.

To look at the impact of revitalization with respect to identity, an examination of Heritage Award Program student statements on what it means to be Myaamia and their CCS identity subscale scores provided data indicating that there is a deepening sense of what it means to be Myaamia. This sense of belonging or articulated identity is grounded alongside other dimensions of their expressed selves (i.e., family cultural identities, their vocation, gender), and is evident in connectedness scores as well. Throughout the Heritage Award Program, students can explore and reconnect with cultural knowledge, as well as support each other in making meaning of this knowledge within their everyday lives. Designing an appropriate assessment may require a multiplicity of complementary questions to build a robust picture of multiple contributors to a complex concept such as identity. It will be incumbent upon a community to determine the factors that shape an area of interest, identity for example, from multiple perspectives and with respect to multiple factors.

An example of data collected to assess the area of impact related to commitment to continuance of the tribe was in the form of level of contribution that Heritage Award Program students choose to devote to the tribal community. The analysis indicated that a significant number of students choose to contribute their skill, time, and effort toward tribal initiatives. These findings are meaningful because there is evidence that this level of involvement was not present prior to the Heritage Award Program. Additionally, complementary survey information indicated a personal sense of the importance of maintaining a connection to the tribal community. Multiple measures were implemented to provide a fuller picture of student tribal commitment. Finding an appropriate area to investigate and then the relationship between a question and choices of measures to provide relevant information are core to assessment design. Assessment is multi-dimensional not only in terms of implementation and analysis, but also in terms of planning beforehand. In this case, student contributions and personal valuing of the importance were used together in comparison to previous participants.

Measuring engagement through in-person observations, reviewing sign-in sheets and counting people present provided evidence of increased participation, with participants seeking to learn Myaamia cultural ways of being. These quantitative counts took place at community events (e.g., tribal annual meetings, winter gatherings). This information was complemented with qualitative notations of

context. In the past, storytelling was presented by a few elders who knew the stories. However, recent years have shown a shift to an inter-generational group of story-tellers (Heritage Award Program students with adult tribal members) who know and tell the Myaamia stories, signaling a growth in engagement, knowledge and breadth of knowledge bearers. In addition, another form of data showed that a growing number of young tribal adults include Myaamia traditions in their wedding ceremonies, and tribal leaders and youths offer prayers in the Myaamia language, again demonstrating a growth and embracing of cultural knowledge. Other observations of engagement supplemented the information about community events. These included the role of lacrosse as a strong anchor of youth activity, workshops on ribbonwork (a traditional Myaamia art form) offered periodically during Annual Gathering, language classes drawing strong attendance, and the biennial Myaamiaki conference (designed to communicate research findings and cultural knowledge to the tribe and public). These cultural practices and events have emerged as a part of the revitalization effort and hold great significance in the Myaamia tradition. Their re-emergence is symbolic of the growing reclamation and affinity for Myaamia culture and values. Communities wishing to consider engagement as an area to assess will need to establish baseline participation numbers and subsequent changes in attendees at events and activities based on implemented programming. Supplementing counts with descriptive information will provide context for changes and inform decision-making for future planning.

In addition to the implementation of assessment with findings that seem to affirm positive impact of the Myaamia community's revitalization work, a critical aspect throughout the process is the feedback loop. Data are analyzed to document what is happening and what is working well, but also to identify what needs modification or improvement. Results are shared with interested parties such as the Myaamia education department, Cultural Resources Officer, tribal leadership and staff in charge of specific programs. Adjustments can then be made accordingly to better serve community needs. That is, a positive comment from participants noted by the assessment team and shared with those responsible for programming indicates that the activities targeting that goal are working. If a goal is to connect Myaamia people to other Myaamia people and survey respondents indicate that they felt a connectedness to other members of the tribe, then there is a match between intended and actual outcomes. In terms of making changes, a critique functions similarly by providing information about what might be adjusted. For example, parents/caregivers of Eemamwiciki summer program participants requested ways they could understand and embed curricular content at home, which prompted discussion of how such resources could be developed by the Myaamia education staff. As communities undertaking revitalization efforts consider incorporating assessment, it will be critical to determine an appropriate process for sharing data and for reflection on the data's implications so that next steps are informed by assessment findings.

Language and cultural revitalization are valued for myriad positive outcomes such as reconnecting Native peoples to knowledge systems and within a community to one another and to their history. And, at more granular levels, important effects of revitalization efforts include establishing sense of identity (Davis, 2016), valuing uniqueness, enhancing graduation rates (Shea et al., 2019), supporting children's development (Renshaw, 2019) as well as health and wellness (Shea et al., 2019; Whalen et al., 2022) among other benefits. To characterize impacts of language and cultural revitalization requires data, and assessment provides this data. In this chapter, we have outlined a variety of approaches to measuring impacts of specific programs within the Myaamia community. Documentation of different aspects of programming forms a comprehensive view at the multi-faceted component parts, detailing their impact. Assessment findings indicate that Myaamia revitalization efforts have an impact. Overall, implementing assessment as part of revitalization efforts should include formulating a focused purpose for doing so with requisite questions established to address tribal goals and determination of whether revitalization efforts have had an impact. Once these have been established, specific methodologies for data collection and analysis such as those provided in the Myaamia examples can be determined and findings then used to inform decision-making.

6. CONCLUSIONS

Assessing language and cultural revitalization initiatives is critical for strengthening and improving such efforts and determining their impact. We have learned that being guided by a community's needs provides relevant context for assessment. Further, a community's overarching questions about their revitalization efforts need to serve as the framework for the assessment process and its measures. In turn, assessment measures need to be community-specific (aligned with cultural values and knowledge systems), and program indicators of success (measures) need to be culturally tailored. Ideally these measures are collaboratively constructed in partnership with scholars who have expertise in assessment yet are guided by a community lens. The assessment process is not a static one and can be designed to examine how revitalization programs, dynamics, and variables evolve over time and within the contextual space of the community and its needs. Assessment should be fitted to each community and address key components unique to their needs. As the Myaamia community has done with respect to their revitalization work, each community seeking to assess its revitalization efforts can leverage this assessment approach, yet create an assessment approach informed by its own goals, unique cultural attributes, and within the context of its needs and community-specific characteristics.

The case study shared in this chapter focuses on the community-driven assessment model within the Myaamia context. This community's knowledge and value systems, its pre-existing relationship with university scholars, and its decades-long deliberate process of inquiry and reflection guided our assessment process. Each community's own knowledge and value systems will serve to guide its own

processes and assessment questions. Capacity, infrastructure, and relationship building are key elements for the success of assessment research. It is hoped that this case study will aid others in crafting their own assessment of language and cultural revitalization efforts.

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AUTHORS' NOTES

APPENDIX A

Eewansaapita Experience Survey

Participant Version- Post

1.) **Participant #_____**

The following questions are general questions about you, your eewansaapita experience or the Miami Tribe. Some questions are about what you learned or did not learn at camp or about how you are thinking about Myaamia heritage.

Please answer each of the following questions by marking an (X) by your response, circling your response or writing your response where asked. There are no right or wrong answers to these questions, only your honest answers.

Kiwiinsooni 'name'_____

taaninhswi pipoonweeyani 'how old are you'? _____

Circle what applies: BOY   GIRL

Do you know what the name of the camp "eewansaapita" means?

iihia   moohci

If you answered iihia, explain it here in English: _____

List 3 things you learned this week at eewansaapita camp.

1.

2.

3.

If you know some of the Myaamia language, please write a few examples of what you know here. You can list words or tell us what you have learned *about* the language.

Do you share what you know about the Myaamia language with others? Please describe how. If you have been to an Eewansaapita camp before, what have you shared about camp with your family or friends (including people who aren't Myaamiaki)?

What clan were you in this week? _____

This year's camp theme is "weecinaakiiyankwi weecikaayankwi/ "mihtohseeniwinki ašiihkionki." Please explain what this means in English.

The next set of questions are about your camp experience and what you learned. Please check the number that best shows your response to each question.

QUESTIONS	1 moohci Not at all	2 not really	3 neutral	4 somewhat/ for the most part	5 iihia definitely
I enjoy trying or exploring new things on my own					
I feel connected to others in my tribe.					
I like to cook.					
I like Myaamia food.					
I like playing sports.					
I like doing things outside.					
I like working in the garden or on a farm.					
I like hiking and watching birds and animals.					
I like singing.					
I like dancing.					
I like to do things online (like surf the Internet) or use computers.					

Keetwi kiilhswa noonki?

How do you know when a lunar month begins? And when does it end?

How are iihkisaminki and siihsipaahkwi made?

Why do some years have 12 lunar months and some 13?

What do we call our lands in Oklahoma? Where else do Myaamia people live?

What have you learned about pahkohkwaniši (American Elm) and why is it important to some Myaamia people?

Were Kiilhsoohkwa and Waapimaankwa (the woman and her son in the older photo) really "the Last of the Miamis"?

What did you do this week when you didn't understand a Myaamia concept (a word, song, project, art lesson, etc.)? You can write multiple things you did.

QUESTIONS. Now that I have been to camp . . .	Strongly Disagree	Disagree	Agree	Strongly Agree
I will spend time trying to find out more about being Myaamia, such as its history, traditions and customs.				
When I learn something about Myaamia, I will ask someone more about it later.				
The visual icons of the tribe carry a lot of meaning to me (tribal seal, turtle, crane)				
It is important to me that I know my Myaamia language.				
I want to spend more time trying to find out what it means to be Myaamia				

I have a strong sense of belonging to Myaamia community or Nation.					

Question. Now that I have been to camp---	YES	NO
I have a cultural/Myaamia name (skip question if you had a Myaamia name before coming to camp)		
I can understand some of my Myaamia language		
I learned many things about my Myaamia heritage		
I know the Myaamia values If Yes, Write 2 of them in the "yes" column.		
I know how to play a Myaamia game		
I know the visual symbols of the tribe		
I can sing a song in Myaamia		
I can say a greeting in the Myaamia language		
I learned ribbon work (or substitute another skill)		
I have shared some of what I learned in camp with my family		
I learned a lot about song and dance this week.		
Question about the theme (earth-sky, family, home, land)		
I had fun at eewansaapita		
I would like to attend eewansaapita next year		
Will you ask your siblings or cousins to come with you next year?		

APPENDIX B

Heritage Program Course Interview Questions (Audiotaped)

EDL 316 Myaamia Course

Bold type contains instructions to interviewer. INTRO: Thank you for agreeing to this conversation. Although we are taping, I may take a few notes, just to keep my thoughts clear about what you are saying. This is meant to be a conversation…and there are no right or wrong answers to the questions I am asking….just your views and responses. Please let me know if you need any clarification as we move forward.

1. Think back before you enrolled in this class, what did you anticipate learning in this course?

2. How would you identify yourself? **[If respondent does not name an ethnicity/cultural/racial identity—ask them directly about it---IF respondent says "Myaamia" –SKIP TO Q9]**

3. If you use the term "Native American", can you define that term "Native American"? What do you think about this term and its use?

4. How does the knowledge you are gaining/will gain in this course play a role in your sense of who you are?

4a. What do you think about the teaching techniques in class, or the way class is run so far?

4b.What is the role of your peers in what you are learning in class? Or their role in what you are learning?

4c. Do you share the knowledge from this class experience with others? If so, with whom?

5. Did you attend eewansaapita or any other youth or language camp? At what age? How did it impact you?

6. Is Miami University a place where you feel comfortable or you feel you belong? In what ways? What helps you feel that you belong?

7. Who do you socialize with outside of class time?

8. What does it mean to be "Myaamia"?

8a. Do you associate being "Myaamia" with a place or places? **[If branched here from Q2, now go back to Q3 to continue the interview]**

9. Does knowing the Myaamia language play a role in your identity? How much does this make a difference?

10. In what ways do you plan to contribute to the Miami Tribe in the future?

11. How do you see your Senior Project as contributing to the future of the Miami Tribe?

12. Can you give us your general views of your experience in this course? What about your general experience at Miami University?

Demographic Questions:

- What is your age

- Year at Mami …first year; second….

- Gender

- Insert ethnicity (as stated in Q 2)

- Mother's highest education level? _____ ethnicity_____

- Father's highest education level? _____ ethnicity_____

- home town/state or where were they raised for the majority of their life?

Read: Thank you for your participation. Do you have anything else you wish to add to your interview responses? INTERVIEW FINISHED