



The Institute for Native-serving Educators (INE) is a collaborative initiative to strengthen schools across Indian Country.

Housed in NAU's Office of Native American Initiatives, we partner with Native Nations, Indigenous-serving schools, and public school districts on and bordering Native communities to develop culturally responsive professional development and educator preparation opportunities that meet community needs.

# WHY focus on strengthening teaching in schools serving Indigenous youth?

Schools have been the sites of assimilatory practices and trauma for Indigenous communities

Significant, long-term, patterns of inequities between Indigenous students and their peers

**Education is a key component of Native Nation (Re)Building**

Teacher quality is the most impactful school-based factor on student learning and engagement

Building teacher capacity increases opportunities to engage students' funds of knowledge about their heritage languages, histories, connection to land, and ceremonies/culture in a meaningful way

# What is the DINÉ (Diné Institute for Navajo Nation Educators)?



Teacher-led professional development approach

Inclusive of all content areas

8-month seminar designed to increase teacher content knowledge, curriculum-development skills, cultural responsiveness, & leadership ability

Seminar is led by an NAU faculty member with relevant expertise; Elders also guest lecture

Teachers conduct research to deepen their content knowledge

Each teacher creates and writes a culturally responsive curriculum unit for use in their classroom

Curriculum units must align to district, state, national, and Department of Diné Education standards

Curriculum units are published online and widely available

***“My curriculum unit is trying to make this connection between the mathematical reasoning of geometry and the cultural aspect of Native American artistry. Rug weaving is a complex and ancient craft, which is still part of our Diné society. To most people, rug weaving appears to be a simple form of artistry, but it requires visual thinking and a sophisticated understanding of geometry. By having my students rediscover the abilities of our people in the past, they might be enticed into learning their own abilities for the future.”***



# Research Project Overview

## Research Questions:

- To what extent and in what ways does a nationally-implemented professional development model for urban teachers translate and operate with teachers from schools in two distinct rural, Indigenous communities?
- To what extent and in what ways does the DINÉ professional development model impact teachers' STEM curriculum development *and* instructional practice in Native-serving schools?
- To what extent and in what ways are culturally responsive approaches to STEM curriculum development *and* instructional practice engaged by teachers in the DINÉ?

## Methodology:

- Collective case study (also called “multiple case design”): Multiple cases are studied in order to better understand an issue or phenomenon (Creswell 2012; Johnson and Christensen 2012; Stake 1995; Yin 2008). Within our case study design, each seminar cohort of each year is a case (i.e., unit of analysis).
- Critical Indigenous Research Methodologies (CIRM): Developed out of a long tradition of Native scholars and communities who have argued that research with Indigenous peoples must adhere to a set of guiding principles. These principles include foregrounding the inherent sovereignty and self-determination of tribal nations, honoring and building on relationships within and between researchers and community members, and pursuing research questions that will advance community needs and interests (Brayboy, Gough, Leonard, Roehl, and Solyom, 2012; Smith, 1999; Wilson 2008).

## Partnerships:

- K12 teachers & university faculty
- Over 115 public schools (17 districts) on and bordering the Diné Nation
- Over 80 additional BIE (Bureau of Indian Education) and tribally-controlled schools on the Diné Nation
- Department of Diné Education (similar to a State Education Agency)
- Arizona Department of Education, Office of Indian Education
- Northern Arizona University
- Various funders

# How do we Develop and Maintain Partnerships? Key Design Decisions

**Partnerships are really about relationships.  
Relationships require humility, deference, commitment,  
sustainability.**

**Begins with them**

**Being present**

**Listening**

**Following  
through**

**Time**

# Critical Lessons Learned





# Partnerships are never neutral

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- ❖ Partnerships can't be acontextual or ahistorical. Context and history always matter.
  - ❖ Partnerships usually benefit White institutions (including White people who make up the majority of those institutions). So an intentional disruption of this pattern is necessary.
  - ❖ Partnerships are often understood as a benevolent act, extended from the more dominant, to the more marginalized. We need to work against generations of settler-colonial actions and patterns of operating.





## Wellbeing always matters

- ❖ Wellbeing is central to cultural responsiveness, which says we must center Indigenous Knowledge Systems and address systemic racism
- ❖ Indigenous Knowledge Systems: “A circular worldview that connects everything and everyone in the world to everything and everyone else, where there is no distinction between the physical and metaphysical and where ancestral knowledge guides contemporary practices and future possibilities...Curriculum and subject matter must be tied directly to the lives of students and their Indigenous teachers. Separating the two makes them arbitrary and fails to recognize the knowledge system that is rooted in the ways of the community” (Brayboy & Maughan, 2009, pp. 13–14)
- ❖ We cultivate connections between the various people and ideas in INE because we know that connectivity – our relationality – keeps us spiritually, emotionally, intellectually, and physically well.

# Native Nation (re)building should always be the goal

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- ❖ “Tribal nation building refers to the political, legal, spiritual, educational, and economic processes through which Indigenous peoples engage in order to build local capacity to address their educational, health, legal, economic, nutritional, relational, and spatial needs...[I]t is an intentional, purposeful application of human and social capital to address the needs of tribal nations and communities” (Brayboy, Castagno, & Solyom, 2014, p. 578).
- ❖ Sovereignty and self-determination must be foundational, explicit, and central to partnerships with/in Indigenous communities.
- ❖ Teachers/educators are Nation builders. Students are Nation builders.





*“After participating in this program, my purpose as an educator has changed to focus on the overall education of a child and to bring together a balance of culturally responsive instruction with the westernized approach to education...”*

*...Teachers must be able to inquire sensitively, listen carefully, and look thoughtfully at student work and assessments to determine their next step in culturally responsive instruction. As teachers, we have the opportunity to start focusing on student needs. We need to support their holistic growth as Diné students using values, Diné culture, and language as a foundation...Therefore, it is imperative that there be a more explicit focus on sovereignty, self-determination, and Indigenous epistemologies in the establishment of CRS for our children across our Diné Nation.”*

# To Learn More About Our Work...

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Castagno, A.E., Tracy, T.\*\* , Denny, D.\*\* , Davis, B.\* , Kretzmann, H.\* . (2020). “You are never too little to understand your culture”: Strengthening early childhood teachers through the Diné Institute for Navajo Nation Educators. *The eJournal of Indigenous Early Childhood Education*, 1(1), 1-14. <https://nau.edu/wp-content/uploads/sites/30/The-eJournal-of-Indigenous-Early-Childhood-Education-1.pdf>