



Indigenous-Language Immersion and Native American Student Achievement Study

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Executive Summary

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The Indigenous-Language Immersion and Native American Student Achievement Study, funded by the Spencer Foundation (2016-2023), examined Indigenous-language immersion (ILI) schooling, an approach in which all or most academic content is engaged through the Indigenous language (IL) with a strong culture-based curriculum. ILI approaches vary, but all aim to develop children's IL proficiency, promote cultural knowledge and identity, and produce academic outcomes in parity with English-medium approaches. This multi-method, multi-university study provides the only U.S.-wide database on ILI schooling – its distinctive features and effects. The goal is to contribute to research, policy, and practice to improve education opportunities and outcomes for underserved Native American students. In doing so, the study illuminates promising practices that promote the holistic academic wellbeing of students from diverse linguistic and cultural communities.



ILI Study logo by Mike Marin (Diné/Laguna Pueblo/Washoe)

Why This Study Matters

American Indian, Alaska Native, and Native Hawaiian students face enduring academic disparities – the legacy of colonial schooling and federal policies intended to eradicate Indigenous languages and cultural practices. More than a third of K-12 Native American students attend high-poverty schools. The public school graduation rate for Native students is 75%, lower than any group in the U.S. At the same time, there is growing concern among Native Peoples about the loss of ancestral languages and knowledge systems. In response, many Native Peoples have developed innovative ILI programs. Prior to this study, there was no comprehensive database on these programs. This study provides that database.

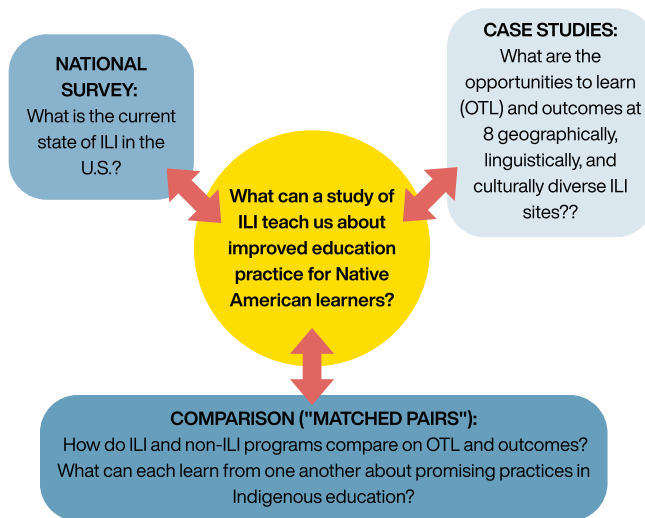
The study demonstrates that ILI students progress at the same rate as or exceed their non-ILI peers academically, even on tests in English. Through relational, academically rigorous, culture-based pedagogies, ILI students learn and/or maintain their Indigenous language, develop positive identities, and cultivate respect and responsibility to their communities and the natural world. In the process, ILI strengthens family-school bonds and parent engagement. The study thus illuminates promising practices that promote the holistic academic wellbeing of students from diverse linguistic and cultural communities.

Research Design and Methodology

The study used a rigorous multi-method design. Three research questions (RQs) guided the study:

- RQ1.** What is the current state of ILI schooling in the U.S.?
- RQ2.** How is ILI implemented in diverse regional, linguistic, and cultural contexts?
- RQ3.** How do opportunities to learn (OTL) and outcomes in ILI compare with those for comparable students in carefully matched nonimmersion schools?

To answer these questions, the study undertook a national survey of Indigenous language programs (RQ1); in-depth case studies of 8 diverse ILI schools (RQ2); and a matched-pair analysis of students' performance on locally administered assessments of English language arts (ELA), mathematics, and IL development (RQ3).



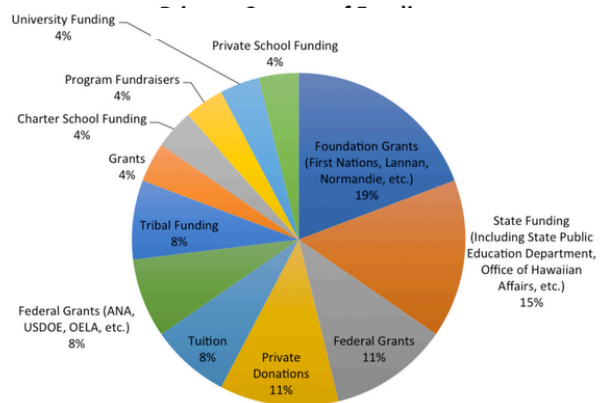
Case study Partner Schools represent diverse language communities and include large and small, urban and rural, public, charter, Tribal, and family/community-run schools. All have been operating for at least 10 years.

Data include more than 100 classroom-school observations; 174 in-depth interviews with educators, parents, and youth; culturally-based OTL assessments; teacher log-diaries; document, photo, and video collection; and local assessments of ELA, math, and IL development. The research is aligned with the “5 Rs” of Critical Indigenous Research Methodologies: respect, reciprocity, relationships, responsibility, and relevance.

Key Finding 1: Hundreds of IL programs exist, using diverse ILI approaches

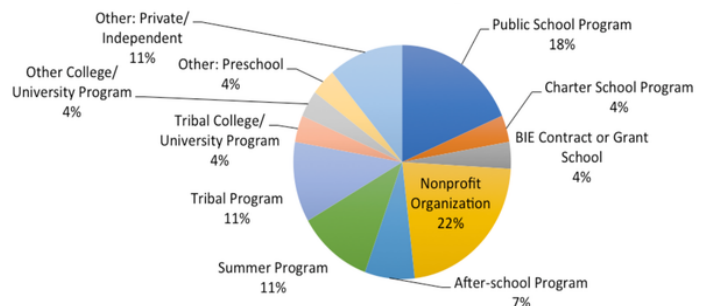
A descriptive survey was developed and disseminated to IL program leaders across the U.S. Federal Bureau of Indian Education and Administration for Native Americans databases were also searched, generating 600 analytic memos on IL programs. Survey results reveal hundreds of IL programs serving infants through adults in and out of school, with funding from Tribal, federal, and state governments and private donors (Figures 1 and 2).

Figure 1. Primary Sources of Funding



There are many programs and program types, but no "one-size-fits-all" approach. Indigenous-language programs are locally driven, reflecting community-based goals, resources and needs. Factors promoting the success of these programs include: (1) strong family and community engagement; (2) strong leadership and teacher-learner relationships; (3) perseverance, dedication, and internal and external support; (4) sense of family and belonging; and (5) a full-immersion and a rigorous, culturally responsive curriculum.

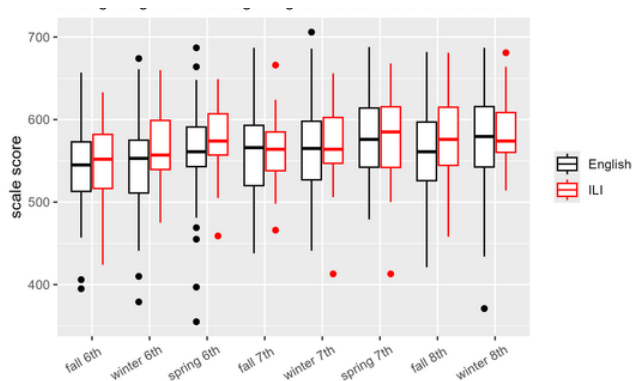
Figure 2. Which Best Describes Your Indigenous Language Medium/Immersion Program?



Key Finding 2: ILI students perform academically as well as or better than their peers in English-medium programs, while developing strong IL proficiency.

Students in ILI Partner Schools have high attendance, graduation, and college-going rates, and score as highly or higher on English standardized assessments than their Indigenous peers in English-medium programs. Figure 3 shows the distributions of 6th, 7th, and 8th grade ELA assessments for middle schoolers at one Partner School. The median scores of student groups are represented by the horizontal lines bisecting each box-and-whisker plot. In almost every assessment instance, for girls as well as boys, the median score of ILI students is as high or higher than that of the English-medium students.

Figure 3. 6th, 7th, and 8th Grade English Language Arts Assessment Scores Among ILI and English-Medium Students of Indigenous-Heritage



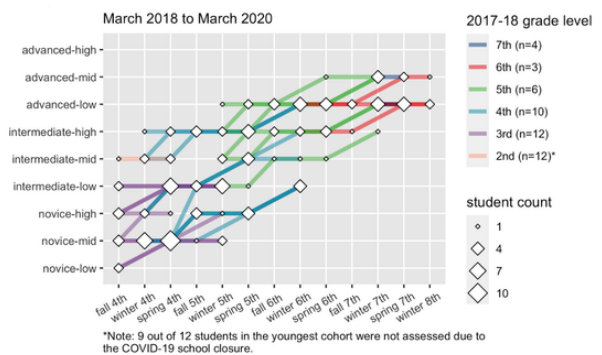
ILI students often develop remarkable proficiency in their ancestral language. Figure 4 shows results of a rigorous IL oral fluency assessment at one Partner School.

Recommendations

- For Indigenous Parents and Community Members:** Children in ILI programs thrive academically, linguistically, and culturally. Embrace your capacity to educate your child in your language, culture, and values! Be assured your child will also learn English and academic content, while developing cultural pride, respect, and responsibility to their community and the natural world. Learn about and partner with other ILI schools and organizations.
- For Education Practitioners and Leaders:** Learn from ILI schooling. Its relational pedagogy fosters children's academic development, bi/multilingualism, cultural and environmental knowledge, and wellbeing. There is no single "best" model; ILI must be driven by Indigenous community-based needs, resources, and goals. The key is strong, reciprocal, respectful school-community relations.
- For Policymakers:** Rigorous research using case studies and a quasi-experimental design shows ILI to be highly effective in promoting the academic and linguistic development and sociocultural-emotional wellbeing of Native American students. This is a call to eliminate barriers to Indigenous-language program development, ensure priority funding for Indigenous parents' choice of ILI schooling, and uphold Indigenous language, culture, and education sovereignty and self-determination.

Across cohorts and grade levels students demonstrate maintenance and growth in oral proficiency. By middle school, nearly all ILI students reached "advanced" proficiency, indicating an ability to give an abstract opinion and justification and combine complex speech into paragraph-length discourse approaching that of a first-language speaker.

Figure 4. Indigenous Language Oral Fluency Proficiency Results Among ILI Students



Key Finding 3: Relational, language- and culture-rich pedagogies foster holistic academic wellbeing

In-depth case studies at eight diverse ILI schools reveal a common innovative practice: a relational pedagogy that connects learners and academic content to people and place; emphasizes responsibility to self, others, and the natural world; and builds a familial school culture. The effect is to promote holistic academic wellbeing, including academic attainment, positive Indigenous identities, and strong school-community solidarity.



Figure 5. ILI nature walks teach science, social studies, math, language, culture, and earth care.

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For more information on ILI programs and resources, see the National Coalition of Indigenous Language Schools and Programs website: <http://www.ncnalsp.org>

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References

- Brayboy, B. McK. J., Gough, H.R., Leonard, B., Roehl, R.F. II, & Solyom, J.A. (2012). Reclaiming scholarship: Critical Indigenous research methodologies. In S.D. Lapan, M.T. Quartaroli, & F.J. Reimer (Eds.), *Qualitative research: An introduction to methods and design* (pp. 323-450). Jossey-Bass.
- Hermes, M., & Kawai'ae'a, K. (2014). Revitalizing Indigenous languages through Indigenous immersion education. *Journal of Immersion and Content-Based Language Education*, 2(2), 303-322.
- Jacobson, T.A. (2024). *Indigenous language immersion and Native American student outcomes: Quantitative findings from three case studies*. [Unpublished doctoral dissertation] University of California, Los Angeles, Department of Education.
- Lee, T.S., McCarty, T.L., Halle-Erby, K., Jacobson, T., Seltzer, M., McKenzie, J., & Nicholas, S.E. (2025). Indigenous language immersion schools: The link to sustainable and healthy Indigenous community futures. *Wicaso Sa Review*, 38(1 & 2), 59-72.
- Lee, T.S., & McKenzie, J. (2023). Indigenous language revitalization in the United States and Canada. In R.J. Tierney, F. Rizvi, & K. Ereikan (Eds.), *International Encyclopedia of Education* (4th ed., pp. 50-60). Elsevier.
- Lomawaima, K.T., & McCarty, T.L. (2025). *"To remain an Indian"—Lessons in democracy from a century of Native American education*. Teachers College Press.
- McCarty, T.L., Lee, T.S., Noguera, J., Yepa, W., & Nicholas, S.E. (2022). "You should know the name of the wind where you live"—Relationality and relational accountability in Indigenous-language education. *Comparative Education Review*, 66(3), 417-441.
- McCarty, T.L., Noguera, J., Lee, T.S., & Nicholas, S.E. (2021). "A viable path for education"—Indigenous-language immersion and sustainable self-determination. *Journal of Language, Identity and Education*, 20(5), 340-354.
- National Center for Education Statistics (NCES). (2024, May). High school graduation rates. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. <https://nces.ed.gov/programs/coe/indicator/coi>.
- Postsecondary National Policy Institute. (2023). Native American students in higher education. <https://pnpi.org/wp-content/uploads/2023/11/Native-AmericanFactSheet-Nov-2023.pdf>
- Seltzer, M., & Rose, M. (2011). Constructing analyses: The development of thoughtfulness in working with quantitative methods. In C.F. Conrad & R.C. Serlin (Eds.), *The SAGE handbook for research in education: Pursuing ideas as the keystone of exemplary inquiry* (3rd ed., pp. 245-262). SAGE.
- Smith, Linda T. (2021). *Decolonizing methodologies: Research and Indigenous Peoples* (3rd edn.). Bloomsbury.
- Wilson, W.H., DeCaire, R., Gonzalez, B.N., & McCarty, T.L. (2022). Progress, challenges, and trajectories for Indigenous language content-based instruction in the United States and Canada. *Journal of Immersion and Content-Based Language Education*, 10(2), 343-373.