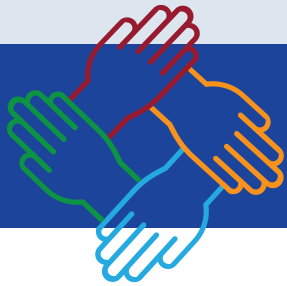




Culturally Responsive Practices to Support American Indian English Learners' Success

REL SOUTHWEST | Regional Educational Laboratory

To learn math, science, and other academic subjects, students need to understand the language and context used to explain these subjects. Teachers can use several culturally responsive strategies to support English learners, particularly American Indian English learners, in their understanding of the vocabulary and content they encounter at school. This infographic highlights components of promising culturally responsive practices to support American Indian students, along with training takeaways and resources for teachers from Regional Educational Laboratory (REL) Southwest.



Supporting the academic success of American Indian students with culturally responsive instructional approaches

Although the research around supporting American Indian English learners is emerging, three studies have demonstrated a positive impact of culturally responsive curricula on the academic outcomes of American Indian students:



- ▶ One study found that two modules of a culturally based mathematics curriculum **significantly improved the mathematics test scores of Alaska Native students**.¹ The modules included modeling, inquiry-based approaches, and collaboration between Alaska Native elders and culture-bearers, teachers, and students in cultural settings.



- ▶ Another study found that a mathematics module based on the summer fishing season—a cultural touchstone for Yup'ik Alaska Native students—**was associated with higher academic achievement**.² The activities included traditional and contemporary stories about the Yup'ik community, student inquiry, and dialogue modeled after local patterns of interaction.



- ▶ In one Southwestern tribal nation, a study found that a curriculum incorporating the Center for Research on Education, Diversity, and Excellence [Standards for Effective Pedagogy](#) **was associated with higher mathematics achievement among American Indian students**.³ The curriculum included activities chosen by individual students or small groups, modeling, collaboration and dialogue between teachers and students, and content designed to cognitively challenge students.



Which culturally responsive strategies may help American Indian English learners achieve academic success?

The following promising instructional strategies, which were part of the successful interventions listed above, may be associated with higher academic achievement among American Indian students:¹⁻⁴

Using modeling and demonstration techniques. For example, teachers can think aloud to demonstrate the logic behind answering a question. This strategy is used in traditional teaching and learning practices within American Indian communities.

Allowing students to direct small-group activities. For example,

- ▶ Create student-led small groups where they generate questions;
- ▶ Facilitate information-sharing with peers; or
- ▶ Host activity centers, where students rotate and work on different mini-projects.

Uncovering knowledge in partnership with students. For example, teachers can collaborate with students to research information and share together with the full class. Learning can be most effective “when teachers and students work jointly to solve practical, real-world problems.”^{3,5}

Developing language and literacy skills across content areas. For example, teachers can provide student-friendly definitions for new words or have students complete word maps to connect new words with familiar ones. The What Works Clearinghouse Practice Guide [Teaching Academic Content and Literacy to English Learners in Elementary and Middle School](#) recommends several practices for explicitly teaching new vocabulary.

Using content-related dialogue. For example, the [Teaching Academic Content and Literacy to English Learners in Elementary and Middle School](#) practice guide recommends having students use subject-specific vocabulary to explain how they completed a math problem or to describe what they are learning in science class.

Incorporating culturally-specific American Indian communication styles and structures. For example, one study reviewed a teaching method that incorporated expert-apprentice modeling into math instruction for Alaska Native students.¹ The modeling was developed in collaboration with elders and teachers from the Yup'ik community.

Connecting academic content to the lives and cultural contexts of students. For example, teachers can seek reading passages from tribal newspapers or libraries that speak respectfully about contemporary American Indian perspectives and issues. Teachers can also write story problems that are connected to local cultural practices.

Engaging students in cognitively challenging activities. For example, teachers can start with culturally grounded activities and then connect those activities to rigorous instruction and academic standards.

Collaborating with cultural and subject-matter experts. For example, teachers can leverage existing organizations and community connections, such as tribal education leaders and associations, cultural commissions, and parent committees associated with Title VI and Johnson-O'Malley Program funding.

Participating in professional development and implementation support. Meeting the needs of American Indian English learners requires ongoing professional development and practice. The 2019 National Indian Education Survey found that in schools where American Indian students comprise at least 25 percent of the student population, nearly half of the teachers in grades 4 and 8 had never participated in professional development focused on supporting American Indian students.⁶





How is REL Southwest helping teachers to support American Indian English learners?

Through the [Southwest English Learners Research Partnership](#), REL Southwest works with the New Mexico Public Education Department (NMPED) and other partners to help all English learners reach their full potential. The partnership reviewed the literature and hosted a training for teachers of American Indian English learners:



REL Southwest [reviewed the research](#) on practices that may improve academic achievement among American Indian students.



The REL Southwest team consulted research-based resources about helping English learners expand their academic English vocabularies in different subject areas. These resources included a [professional learning community guide](#) that REL Southwest developed, which was based on the What Works Clearinghouse practice guide [Teaching Academic Content and Literacy to English Learners in Elementary and Middle School](#).



Combining the research on supporting American Indian students and supporting English learners, NMPED and REL Southwest [developed training materials](#) and hosted three training sessions for teachers. The sessions highlighted culturally responsive practices that may help American Indian English learners understand academic language.



Where can I find more information to support American Indian English learners?

REL Southwest has several resources for teachers to support English learners:



Videos

- ▶ [Walking in Both Worlds: Native American Students and Language Acquisition](#)
- ▶ Video series: [Insights on English Learner Students' Development of English Language and Academic Proficiency](#)



Webinars

- ▶ [Implementing Biliteracy Seals to Strengthen Bilingual Education and Support Cultural Awareness](#)
- ▶ [Culturally Responsive School Practices to Promote the Success of Native American English Learners](#)
- ▶ [Teacher Collaboration: Aligning Content and Language Instruction](#), presented jointly with the Office of English Language Acquisition, U.S. Department of Education



Blogs

- ▶ [Walking in Both Worlds: How Native Language Preservation Benefits Native American English learners](#)
- ▶ [Cultivating English Learner Students' Home Language Reaps Benefits for Learning English](#)
- ▶ Placeholder for forthcoming blog post: Supporting American Indian English Learner Students



Other resources

- ▶ [Professional Learning Communities Facilitator's Guide for the What Works Clearinghouse Practice Guide Teaching Academic Content and Literacy to English Learners in Elementary and Middle School](#)
- ▶ [REL Southwest English Learners Research Partnership](#)

Notes

- ¹ Kisker, E. E., Lipka, J., Adams, B. L., Rickard, A., Andrew-Ihrke, D., Yanez, E., & Millard, A. (2012). The potential of a culturally-based supplemental in mathematics curriculum to improve the mathematics performance of Alaska native and other students. *Journal for Research in Mathematics Education*, 43(1), 75–113. <https://eric.ed.gov/?id=EJ978873>
- ² Lipka, J., & Adams, B. (2004). *Culturally-based math education as a way to improve Alaska Native students' math performance* (Working Paper No. 20). Appalachian Collaborative Center for Learning, Assessment, and Instruction in Mathematics. <https://eric.ed.gov/?id=ED484849>
- ³ Hilberg, R. S., Tharp, R. G., & DeGeest, L. (2006). The efficacy of CREDE's standards-based instruction in American Indian mathematics classes. *Equity & Excellence in Education*, 33(2), 32–40. <https://www.tandfonline.com/doi/abs/10.1080/1066568000330206>
- ⁴ The studies referenced on page 1 did not have designs that could identify if specific intervention components were related to the overall positive results of the intervention; therefore, we refer to these as promising instructional strategies.
- ⁵ The Center for Research on Education, Diversity, and Excellence cites teacher–student collaboration as one of its [five standards for effective pedagogy and learning](#).
- ⁶ Rampey, B. D., Faircloth, S. C., Whorton, R. P., & Deaton, J. (2021). *National Indian Education Study 2019* (NCES 2021-018). ERIC. <https://eric.ed.gov/?id=ED612596>