Project Abstract
Science Education for Equity in K-6 (SEEK)

The project aims to serve the national need of developing highly qualified teacher leaders in science at elementary grade levels. The quality of science instruction at the elementary level is inconsistent and varies between districts and schools. Yet, equitable science instruction, centered in students' experiences and communities, must start at an early age for all students to see themselves as participants in science and to see science as relevant to their lives. This project will build capacity to develop elementary science teachers' knowledge and skills to lead change toward equitable, high-quality science instruction in high-need schools, while working with university teacher educators to align curriculum and practices in teacher preparation courses.

This project at Western Washington University includes partnerships with high needs schools in four districts in Northwest Washington: Bellingham, Mount Vernon, Nooksack, and Sedro-Wooley, as well as with the Northwest Educational Service District (NWESD). Project goals include: (1) Determine the needs and capacity for change toward equitable, NGSS-aligned science teaching in elementary schools in Northwest Washington; (2) Co-construct with school partners a sustainable model for teacher leadership that enables the sharing of expertise across districts while being responsive to school contexts; and (3) Create a plan for science education faculty and elementary teacher leaders to engage in reciprocal learning that will result in aligned teacher preparation and science teaching in schools. Through this work, teacher leaders will develop a community of practice and strengthen school-university partnerships. This Capacity Building project is supported through the Robert Noyce Teacher Scholarship Program (Noyce). The Noyce program supports talented STEM undergraduate majors and professionals to become effective K-12 STEM teachers and experienced, exemplary K-12 teachers to become STEM master teachers in high-need school districts. It also supports research on the persistence, retention, and effectiveness of K-12 STEM teachers in high-need school districts.