Institute Mission

The Goodlad Institute for Educational Renewal exists to promote justice-centered purposes of education by co-designing and studying processes for continuous renewal with schools, universities, and communities.

A message from the director

Now in our thirteenth year at the University of Washington, the Goodlad Institute for Educational Renewal continues the collaborative work of promoting innovation in communities and schools and the preparation of educators and future leaders. As we prepare to emerge into a post-COVID world, we are renewed in our commitment to anti-racist research pursuits, as the past year has uncovered the ways that systemic, historicized racism continue to exacerbate inequities in all sectors. I am more focused than ever on continuing the Institute’s focus on educational renewal from within communities as the best hope for ethical and just futures for all young people, their families, and communities. While we recognize schools as one place where this renewal happens, we also recognize that many young people find their most profound educational experiences in their communities. Therefore, at the Goodlad Institute, we are committed to anti-racist practices and partnerships as we learn together with community partners. This report covers the period of October 1, 2020 through September 30, 2021.

Carrie Tzou
Professor, Science Education
University of Washington Bothell
School of Educational Studies
Director, Goodlad Institute for Educational Renewal
Launched in 2008, the Goodlad Institute for Educational Renewal was chartered as a University-wide program and administered by UW Bothell within the Office of the Vice Chancellor for Academic Affairs. Beginning in 2018, the Institute discontinued the tri-campus partnership and is now solely dedicated to work at UW Bothell. The Institute is located on the UW Bothell campus in Husky Hall and provides work and meeting space for the Institute's principal investigators, project personnel, and graduate students. Dr. Tom Bellamy served as the founding director of the Goodlad Institute through December 2018 and transferred the directorship to Dr. Carrie Tzou effective January 2019. Kellie Holden serves as the Institute Administrator.

The Goodlad Institute for Educational Renewal honors the remarkable seventy-year career of John Goodlad and structures a collaborative framework within which his work can continue. Perhaps best known for celebrating the central importance of education in a social and political democracy, Dr. Goodlad was equally concerned with practical implementation, showing how actual school practices fall short of democratic ideals and then recommending how those gaps might be bridged.

The Goodlad Institute has grown out of over two decades of work by Dr. John Goodlad’s Institute for Educational Inquiry (IEI). The IEI articulated an enduring vision of the mission of public education in a democracy and successfully pursued that agenda through an integrated strategy of coordinated local demonstrations, critical inquiry, leadership development, and professional communications.

Dr. Carrie Tzou, Director

Carrie Tzou is a professor in science education in the School of Educational Studies and a PI in the Goodlad Institute. She holds a PhD in Learning Sciences from Northwestern University and an M.S. in Teaching and Learning with a concentration in science education from Vanderbilt University. Her research has three major components, all connected with an interest in addressing issues of culture, identity, and equity in science and environmental science learning: 1) ethnographic work to understand how youth and their communities are positioned and position themselves through place-based education, 2) design-based research to design curricula to bring youths’ out of school science and cultural practices into science and environmental science teaching and learning, and 3) research and design of elementary and secondary preservice teacher education that explores how to orient preservice teachers to the sophisticated learning and identities that their students construct both in and out of school in order to make science more accessible to all of their students.
Dr. Tom Bellamy
Tom is professor emeritus of Education at the University of Washington Bothell and the founding and former director of the Goodlad Institute. His 50 years of experience in education include work as a special education teacher, university faculty member, research center director, federal program executive, and university administrator. Tom has developed educational leadership programs for principal preparation and preparation of local special education administrators and is currently leading two leadership programs at UW Bothell, ECSEL and AIMS.

Dr. Yue Bian
Yue is an assistant professor in the School of Educational Studies at UW Bothell. Her scholarship explores effective teacher education practices that prepare all teachers to be linguistically and culturally responsive to emergent multilingual students in formal and informal learning contexts. As a transnational and bilingual scholar, Dr. Bian also attends to the lived experience of prospective and practicing teachers and teacher educators from transnational and multilingual backgrounds, particularly those who are first-generation immigrants.

Dr. Natasha Hakimali Merchant
Natasha Hakimali Merchant is an assistant professor of multicultural and social studies education at UW Bothell where she teaches courses in the social foundations of education as well as advanced courses in critical educational change. Her research interests revolve around the ways Islam is taught in secondary social studies contexts. Influenced by traditions of critical ethnographies, she seeks to understand the experiences of Muslim students as they encounter themselves as subjects in the classroom as well as the practices of justice-oriented teachers who seek to teach against Islamophobia.

Dr. Allison Hintz
Allison is an associate professor in the School of Educational Studies at UW Bothell. Her research and teaching focus on mathematics education. She studies teaching and learning alongside partners in formal and informal educational settings and focuses on beliefs and practices that support all children and families in lively mathematics learning. She is co-author of Intentional Talk: How to Structure and Lead Productive Mathematical Discussions.

Kellie Holden
Kellie is the administrator for program operations in the Goodlad Institute. She serves many functions within the organization including overseeing all aspects of the Institute’s fiscal affairs, managing all grant pre- and post-award activities, and coordinating faculty effort distributions. She applies wide-ranging knowledge of funding agency requirements and university regulations to ensure compliance and effective management of the Institute’s projects.

Dr. Veronica Cassone McGowan
Veronica is a research scientist and instructor at UW Bothell. She received her doctorate in Learning Sciences and Human Development from UW where she worked as a researcher for the Institute for Math and Science Education and LIFE Center. Her research focuses on broadening participation in STEM fields, particularly K-12 engineering and computational modeling, with a focus on connecting learning across settings in ways that incorporate learners’ everyday interests, identities and community knowledges as foundations for sociotechnical learning.

Nat Mengist
Nat is a research study lab coordinator in the OpenSTEM Research Group. He completed a Master’s in Education Policy after receiving a B.A. in Comparative History of Ideas, both at UW. He is also Outreach Coordinator for the Comparative History of Ideas Department at UW and the Board President of The Common Acre, a 501(c)(3) organization that creates space for science and stories across cultures. Nat’s research interests include facilitation design, posthuman learning, and plant consciousness.
Amy Pitt
Amy is the administrative assistant in the Goodlad Institute and provides support to all grant projects. She is responsible for routine fiscal activities including budget reconciliation, expense reports, reimbursements, and coordinating orders for project materials. Amy’s role requires knowledge of University systems and adherence to the UW records retention policies.

Dr. Priya Pugh
Priya is a post doctoral research scientist at UW Bothell and fellow at the University of Alaska Fairbanks. Priya received a certificate in Education for Environment and Community from IslandWood and has directed, designed, and been a field instructor for environmental education and STEAM-focused learning programs in Seattle. Priya’s research focuses on how youth, adults, and families understand and make sense of complex ecological phenomena, and the social and cultural influences on this sense making.

William Rasplica
William (Bill) has extensive experience in district-wide (PK-12) and school-based implementation of integrated MTSS, including the areas of universal screening, multi-level prevention systems, progress monitoring, and data-based decision making. Bill provides overall program coordination for both of the Institute’s leadership programs: ECSEL Program and AIMS Project. Bill retired after 18 years serving as the Executive Director of Learning Support Services for the Franklin Pierce Schools in Tacoma, WA.

Dr. Antony T. Smith
Antony, an associate professor in the School of Educational Studies at UW Bothell, has a research focus on the intersection of reading and mathematics and how exploring children’s literature can help deepen comprehension, develop vocabulary knowledge, and increase motivation and engagement for students to become lifelong readers.

Elizabeth Starks
Elizabeth (Zuni/Navajo) is a research scientist in the OpenSTEM Research Group. Her work as a cultural technologist and artist focuses on creating and using tools for empowerment of Indigenous communities through collaborative design processes. She co-designs with stakeholders to understand and communicate complex ideas through creative visual methods. She holds a Master’s degree in Software-Driven Systems Design, a Graduate Certificate in Museum Studies, and a B.S. in Studio Art.

Perrin Teal Sullivan
Perrin is an artist, designer and educator, and a research scientist at UW Bothell and the University of Alaska Fairbanks. Her work in STEAM education focuses on integrating art and science practices to help learners develop new perspectives and enhanced capacity for understanding, and creating, the world around them.

Jordan Sherry-Wagner
Jordan is a doctoral candidate in UW’s College of Education. He has worked as Co-director of a family childcare center, research assistant, curriculum developer, program coordinator, classroom teacher, and data analyst with a range of educational and professional institutions. His research investigates culture, learning, and development in early science and philosophy, specifically focusing on the role of ethical speculation in field-based science practices with early-grade children.

Dr. Blakely Tsurusaki
Blakely is a senior research scientist at UW Bothell. She holds a Ph.D. in Teaching, Curriculum, and Educational Policy from Michigan State University, an M.Ed. in Science Education from the University of Georgia, and a B.S. in Biology from the University of Puget Sound. Her research interests include how to better make connections between students’ everyday lives and school science, identity, engagement and equity issues, and environmental literacy in formal and informal settings.
Priority Areas & Program Development

Supporting Teacher Leadership for Curriculum Renewal
Curriculum and instruction are at the forefront of many current concerns – how to broaden the school curriculum beyond the narrow focus of state tests, how to increase achievement in mathematics and science, how to make learning more equitable, and so on. While such renewal involves simultaneous change in many different organizations and cultures that affect schooling, actual implementation depends most centrally on teachers changing their daily practices.

Preparing and Supporting School Leaders
Working at the nexus of community demographics, local expectations for schools, professional priorities, and public policy requirements, principals have experienced perhaps the most rapid changes among education professionals. An increasing number of children with limited English proficiency live in poverty or experience disabilities; they create learning challenges at the same time that public policies and district practices hold administrators accountable for immediate results. Each new proposal for reform simply underscores anew the critical role that principals play in any effort to improve school quality.

Renewing Professional Learning for Educators
This priority area focuses on preparation and support of educators who are skilled contributors to equity, inquiry and practice—both in and out of school. Partnerships are so central to the preparation and professional development of educators that they must span PK-12, community, and university boundaries, stimulating changes in each institution with the knowledge and challenges of the other. Renewal in PK-12, informal education, and higher education is supported when educators can work effectively across the cultures of schools, communities, and universities, modeling and fostering an inquiry stance that supports continuous improvement.

Supporting Renewal in PK-12 Schools and Informal Learning Environments
Public policies that emphasize achievement in core academic subjects for all children are juxtaposed with high levels of childhood poverty, limited English proficiency, and disabilities, which creates a challenging context for school renewal. And the process of continuing renewal becomes even more difficult when educators and their publics are committed to the broader purposes of education in a democracy.
Promoting Civic-Professional Collaboration for School Renewal

In broad terms, the need for local civic-professional collaboration for school renewal arises from the limitations of external efforts to impel educational reform through policies and funding. While external governance has its place, public schooling is also a very local endeavor that must constantly adjust to the aspirations and priorities of students and their families and communities. When reform efforts ignore or try to overpower local priorities and differences, implementation is, at best, tenuous, and often lasts only until the next issue or group takes the spotlight. But with so many competing local needs, it is often difficult to focus collective attention on young people’s learning, much less to reach agreement on what is needed and to take action toward improvement.
OpenSTEM Research

Several projects in the Institute form the OpenSTEM Research group. With an emphasis on learning beyond the school setting, these projects affirm fundamental goals of the Institute while creating a visible focus for work that broadens the access to STEM learning. Led by Dr. Carrie Tzou, OpenSTEM Research is committed to expanding opportunities for all students to engage with STEM learning environments across the settings and time points of their lives, including schools, libraries, other community settings, and from K-12 through workforce development.

Learning in Places

A National Science Foundation project, “Learning in Places: Gardens and Field Based Science Education,” aims to develop innovative field based science learning environments to help to prepare learners to meet, adapt to, and lead change in relation to the socio-ecological challenges of the 21st century. In partnership with Seattle Public Schools, Tilth Alliance, and Northwestern University, PIs Carrie Tzou and Megan Bang lead the effort to develop exemplar models of equitable science learning comprised of highly effective teaching practices, materials, and tools in outdoor learning environments including learning gardens and other green spaces in close proximity to schools. The four-year project began at UW Seattle in July 2017 and was transferred to UW Bothell in September 2018 with a total budget of $2.99 million. This project has entered into a no-cost extension year and will wrap up June 2022.

Fostering STEAM

PI Dr. Blakely Tsurusaki received funding from the National Science Foundation’s AISL program for her broad implementation project titled “Fostering STEAM through ISL professional development.” Fostering STEAM partners with the University of Alaska Fairbanks to build on the outcomes of the successful AISL project “Project STEAM” led by Dr. Carrie Tzou which ended August 31, 2017. Through this past work, the collaborative team articulated a set of STEAM design principles that incorporate effective practices for broadening participation in science which informal educators can adopt and incorporate into their STEAM learning activities. This grant provides $1.25 million over five years beginning September 1, 2017.

Grant Writing Workshops for Early Career Scholars in STEM & the Learning Sciences

In partnership with Drexel University, Dr. Carrie Tzou submitted a proposal to the National Science Foundation’s DRK-12 program to create workshops on writing grants for early career scholars in STEM & the learning sciences. This one-year project was awarded funding and will begin September 1, 2021 with a subcontract to UW of $10,697.
The group conducts research on supporting STEM-linked identities in young people by studying the design of learning environments that connect everyday activities and cultural and linguistic community resources with technology-enhanced STEM learning. In collaboration with partner organizations, the group also designs curriculum resources and conducts professional development for STEM teachers and informal practitioners.

**Multidisciplinary units on COVID-19 and social-emotional learning for K5**

PI Carrie Tzou will lead the subcontract to Northwestern University for this project to design and study K5 curriculum that addresses social-emotional learning in the time of the COVID-19 crisis. The project will work with curriculum designers, researchers, and K5 teachers to develop, test, and re-design comprehensive units that focus on social-emotional learning, science learning, equity, and COVID-19. Dr. Tzou will lead the effort to develop college credit pathways for high school students who engage substantially in the work of these informal science institutions. The 12.5 month project began in June 2020 with a budget of $141,000.

**K-5 Preservice STEM**

Dr. Carrie Tzou, in partnership with Northwestern University, submitted a proposal to the National Science Foundation’s Innovations in Undergraduate and STEM Education program. This project titled “Improving the STEM preparation of K-5 preservice teachers through a project-based, interdisciplinary approach” aims to design a two-quarter science content course sequence for preservice teachers that will be a prerequisite for entry into UWB SES’s elementary certification program. Dr. Tzou will receive $1,881,288 over four years beginning October 1, 2021.
Leadership Projects

Enhancing Capacity for Special Education Leadership

A statewide program to lead innovation in administrator preparation, the “Enhancing Capacity for Special Education Leadership” (ECSEL) project was funded through the WA State Office of the Superintendent of Public Instruction (OSPI) as a one-year pilot program. Initial funding of $171,000 launched the program with a cohort of 10 candidates. With this initial support from OSPI, a collaboration among five campuses of the University of Washington and Washington State University and the state’s Education Service Districts, ECSEL was awarded funding to continue and expand Washington’s first preparation program specifically designed to prepare local administrators of special education. This five-year grant from the U.S. Department of Education provided $1.25 million and concluded December 31, 2018. OSPI approved continued funding for the ECSEL program for the past seven years, providing enhanced supports for aspiring and new administrators of local special education programs. The OSPI ECSEL project, led by PI Tom Bellamy and Program Coordinator Bill Rasplica, is now funded at $150,000 each year.

Administrators Improving Multi-tiered Systems of Support (AIMS)

A proposal for a statewide program to support certificated school administrators as they develop competencies for and actively engage in leading local implementation of MTSS structures and components, the “Administrators Improving Multi-tiered Systems of Support” (AIMS) project was funded through the WA State Office of the Superintendent of Public Instruction (OSPI) with flow-through funding from the US Department of Education. PI Tom Bellamy leads this five-year program beginning October 1, 2020 with funding of $996,615.

Professional Learning Partnerships

Story Time STEM Beyond: Mathematizing Children’s Literature through Read-Alouds and Discussion

The aim of this current phase of the Story Time STEM project is to engage with children’s librarians to co-design and enact literacy-math integrated, or “mathematized,” read-alouds in family story times offered by public library systems. Working in a collaborative partnership between university literacy and math education researchers (Antony Smith and Allison Hintz), Washington STEM, and children’s librarians across a number of public library systems in the Puget Sound region, years one and two of this project (completed in autumn 2020 and 2021) balanced three goals: working alongside librarians to build strategies for engaging young mathematicians and their families in read-alouds and discussion of children’s literature, collaboratively participating in a librarian community of practice to explore math-literacy integration, and deepening our collective understanding of Diversity, Equity, and Inclusion (DEI) in libraries and communities. Year three, with a return to in-person library programming in 2022, will focus on librarian enactments of mathematized read-alouds and family and children’s ideas, including an emphasis on mathematical identities, practices, and content and content-area vocabulary. This project was supported by Boeing at $85,000 in 2020, $150,000 in 2021, and $150,000 for 2022.

St. Edward State Park Environmental Education Resource Center

The St. Edward Environmental Education and Research Center (EERC) is a new, university-led, environmental learning center at St. Edward State Park, located on the northeast shore of Lake Washington near Seattle Washington. Commencing operations in summer of 2021, the EERC will host a broadly interdisciplinary and equity centered program integrating environmental education, research, and community engagement with the purpose of advancing public understanding, scientific knowledge, environmental equity and justice, connection with nature, environmental sustainability, and stewardship of Pacific Northwest ecosystems and the larger world. With initial funding from the Chancellor’s Investment Fund of $600,000 over four years, the Goodlad Institute partners with campus departments including Community Based Learning and Research, School of Interdisciplinary Arts & Sciences, School of STEM, and the School of Educational Studies, and St. Edward Park.
GLOBE Mosaic Alliance

In partnership with the University of New Hampshire, Durham, Dr. Blakely Tsurusaki submitted a five-year grant proposal to the National Science Foundation’s INCLUDES Alliances program with the goal to create a networked improvement community with the PI team and GLOBE Partnerships across the United States that will (1) highlight the diversity of the GLOBE Partnerships as a strength in order to attract other organizations and expand the network (2) reinforce the backbone by increasing the support and its value to the GLOBE community and (3) offer professional learning and cross-collaboration for all levels of engagement including k-12 teachers, new and current partners, content trainers, STEM professionals who mentor student-teacher teams and GLOBE Alumni and (4) support teachers and students in carrying out environmental research in their communities. This $1,270,029 subcontract proposal did not receive funding.

I-RiSE

Dr. Blakely Tsurusaki submitted a proposal in partnership with North Seattle Community College for a project titled “I-RiSE” to the National Science Foundation’s Advancing Innovation and Impact in Undergraduate STEM Education at Two-year Institutions of Higher Education program. This four-year project aims to redesign gateway STEM courses across math, chemistry, biology, engineering, and computer science to provide progressive and innovative STEM curriculum that significantly improves student success and retention through building community engagement and STEM identity. If funded, Dr. Tsurusaki will receive $250,952 to complete this work beginning November 2021.

Mary’s Place Science Club

Dr. Carrie Tzou partnered with Fred Hutchinson Research Center (FHRC) to submit a proposal to the Nationals Science Foundation’s AISL program for a project titled “Mary’s Science Club: Science Identity Development in Youth Experiencing Homelessness.” The research contributes to an understanding of how an informal science education program that supports youths’ science identity development and builds on their assets and strengths can be co-designed with youth and families in transitional shelter housing. This includes studying how programmatic and institutional structures can contribute to youths’ “rightful presence” in science, recognizing that a legitimate sense of belonging is inextricably linked to acknowledging and centering the power-related and historized dimensions of their experiences. If funded, Dr. Tzou will receive a subcontract from FHRC for $69,995 over two years.
Our Team
Staff, principal investigators and affiliates

Administration
Institute Director Carrie Tzou
Institute Administrator Kellie Holden
Administrative Assistant Amy Pitt

OpenSTEM Research
Principal Investigator Carrie Tzou
Principal Investigator Blakely Tsurusaki
Research Scientist Veronica McGowan
Research Scientist Priya Pugh
Research Scientist Elizabeth Starks
Research Scientist Perrin Teal-Sullivan
Research Coordinator Nat Mengist
Research Assistant Jordan Sherry-Wagner

ECSEL Program / Washington AIMS Project
Program Director Tom Bellamy
Program Coordinator Bill Rasplica
Internship Supervisor Tricia Zurybida
Instructional Faculty: Franklin Day, Laura Matson, Stephanie King, Susan Ruby, Sarah Arden

Environmental Education Research Center at St. Edward’s Park
Dr. Santiago Lopez, EERC Faculty Director
Lily Cason, EERC Program Manager

Story Time STEM
Principal Investigator Tony Smith (Story Time STEM)
Principal Investigator Allison Hintz (Plus-Mathematics)

Other Project PIs
Dr. Yue Bian
Dr. Natasha Hakimali Merchant

PROJECT FUNDERS
- Boeing Foundation
- National Science Foundation
- OpenSciEd
- Spencer Foundation
- University of Washington Bothell
- University of Washington Seattle
- U. S. Department of Education
- Washington Office of the State Superintendent of Public Instruction
- Washington STEM

PROJECT PARTNERS
- Everett Community College
- Everett Public Schools
- King County Libraries
- Marysville School District
- Northshore School District
- Northwestern University
- St. Edward State Park
- Seattle Public Libraries
- Seattle Public Schools
- Tilth Alliance
- University of Alaska Fairbanks
- University of Arizona
- University of Edinburgh
- University of Washington Seattle
- University of Washington Tacoma
- Washington Higher Education Coordinating Board
- Washington STEM
Selected Institute Products


Educator Resources


Story Time STEM team (2020). Focused Read Planning Template. Bothell, WA: Story Time STEM.

Story Time STEM team (2020). Open Notice and Wonder Template. Bothell, WA: Story Time STEM.


Educator Frameworks


Project websites

Learning in Places http://learninginplaces.org

Tech Tales and TechStyle Tales http://techtales.online


Environmental Education and Research Center https://stedwardeerc.org

Story Time STEM https://washingtonstem.org/story-time-stem/#AboutSTS