

SEEDS

Supporting Early Engagement and Development in STEM

A program of the Foundation for Family Science & Engineering

Schools and communities all across Oregon are rapidly expanding their investments in early childhood education and full-day kindergarten. At the same time, education leaders are being challenged to increase parental engagement as well as provide more opportunities for learning science, technology, engineering and math (STEM). Now there's a program that provides assistance on all three fronts!



Supporting Early Engagement and Development in STEM (SEEDS) is an initiative developed by the Foundation for Family Science and Engineering to build school and community-wide capacity for fostering early STEM learning. *SEEDS* helps create sustainable connections between the early childhood education community, P-3 classrooms, parents with young children, and other community stakeholders in a unified effort to provide early STEM learning experiences and parent engagement to ensure increased school readiness for young children.

Building Professional Capacity for Early STEM

Early childhood and elementary classroom teachers as well as childcare providers often have limited experience or training in STEM education. *SEEDS* brings these individuals together for shared professional development on the nature of STEM learning, how to facilitate STEM learning experiences with young children, how to effectively engage parents and families, and how to identify and access resources available within their community to support STEM learning.

Parent and Community Engagement

The *SEEDS* program team helps communities develop and implement STEM-focused family learning events, parent education opportunities, and other community-based activities and resources targeted at families with young children. They also help identify community-based resources that support early STEM teaching and learning.



STEM Learning Resources

SEEDS provides a variety of STEM learning resources for use in a range of environments, including curriculum materials for use in formal preschool classrooms and smaller, informal childcare environments; hands-on activities and materials for family events; and unique *SEEDS* packets of take-home activities to reinforce what children are learning in preschool. *SEEDS* activities and resources are available in both English and Spanish language collections.

SCIENCE * TECHNOLOGY * ENGINEERING * MATH

SEEDS in Oregon

Following a successful round of funding through the Oregon Department of Education in 2014, the *SEEDS* program has recently been piloted in several Oregon communities, including Oregon City, Gladstone, McKenzie River and Marcola. Response has been enthusiastically positive from P-3 educators, administrators, family support agencies, and the children and families in these communities who benefitted from the following *SEEDS* program elements:

Professional Development Workshops: P-3 classroom teachers, Head Start and other community-based ECE personnel, and independent and household childcare providers came together for trainings focused on how young children learn and experience science, effective approaches to nurture exploration around STEM subjects, the importance of family engagement, and strategies and resources for facilitating quality STEM learning experiences.

Resources: The *SEEDS* program includes various resources for PreK-Kindergarten educators, child care providers, and families, including a notebook filled with reproducible family STEM activities, read-aloud books, movement activity suggestions, materials for STEM exploration activity stations, and tips for hosting family events.

Family Events: Family engagement is a key element of *SEEDS*. After-school science hours, as well as *SEEDS* evening community events bring young children and their families together in accessible, non-threatening environments to engage with fun, hands-on STEM activities.

How to participate in SEEDS

The Foundation for Family Science & Engineering (FFSE) is currently seeking new partnerships with local school districts, ESD's and regional Early Learning or STEM Hubs to help expand the *SEEDS* program throughout Oregon. The *SEEDS* program staff can assist local districts with their internal planning for expansion of early STEM learning and full-day kindergarten as well as assist in preparing competitive grant proposals to secure outside funding to support early STEM education.

For more information about how you can partner with the FFSE to implement *SEEDS* in your community, call 503-245-2102, or email info@familyscience.org.

The Foundation for Family Science & Engineering (FFSE) is an Oregon non-profit dedicated to increasing public appreciation of, and engagement in, science and engineering.