

The STEM Center

At the heart of the network will be a STEM Center managed by a world-class staff with expertise in policy, programs, and communications. The Center itself will provide direct support to schools, districts, and institutions of higher education by serving as a clearinghouse and broker of information on evidence-based practices, programs, and policies to support STEM teaching and learning. As a grant-making organization, the STEM Center will fund Technical Assistance Partners and Learning Coalitions to support implementation efforts across the state. The Center will play an active leadership role in state-level policymaking, advocating for effective curriculum, materials, and resources, to assure that all students benefit from high-quality STEM educational experiences.

"Thanks to the collaborative efforts supported and facilitated by the Washington STEM Initiative, the state's education policy is becoming smarter, resources are being allocated to ensure maximum effectiveness, teachers are getting access to tools to support more relevant, research-based instruction, a culture of continuous improvement is taking hold in more schools, and successes are being more closely documented and widely shared."

Policy Director, Washington STEM Center



Washington STEM Initiative

Our economy and our future depend on the degree to which we can make the leap from small, incremental improvements in math and science to transformation changes that foster broad-based literacy in science, technology, engineering, and mathematics (STEM). We need fundamentally different results for our students, and achieving them will require that we work in fundamentally different ways.

The Washington STEM Initiative will catalyze the formation of a statewide network of K12 schools and districts, institutions of higher education, and business and community partners with a common focus: Dramatically scale up the development and dissemination of best practices in STEM teaching and learning to benefit all students.

Technical Assistance Partner

Technical Assistance Partners, typically based at universities, nonprofit, or for-profit organizations, will support schools, districts, and institutions of higher education throughout the state in their shared efforts to improve instructional effectiveness. The STEM Center will engage Technical Assistance Partners based on their demonstrated expertise in supporting specific program, practice, and policy needs identified in the education system. The STEM Center will partner with local, state or national programs to enhance their capacity to provide high-quality assistance on a statewide level.

"Our Summer Content Immersions have generated improvements in teacher content knowledge and their understanding of how students learn. Partnering with the STEM Center has allowed us to collaborate with other institutions of higher education and school districts to enhance the program and increase our reach. We've gone from serving about 150 teachers a year to nearly 5000 in just two years while maintaining the same quality and getting improved results year after year."

Math Faculty, Local University

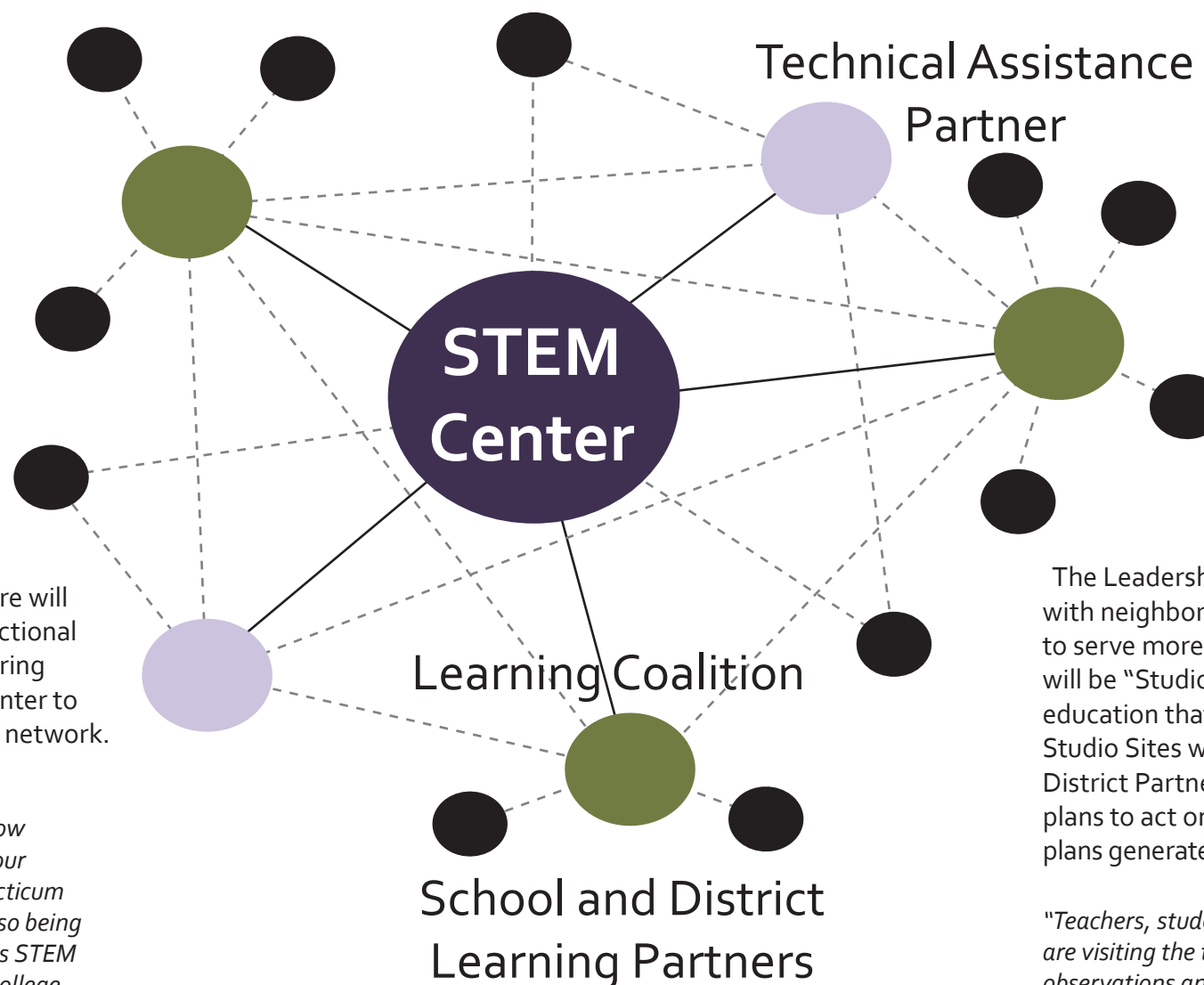


Learning Coalition

STEM Learning Coalitions are partnerships among businesses, higher education, and K-12 school systems to foster collaborative learning about effective instructional practices and to incubate ideas to generate knowledge to address current challenges. A Leadership Core will utilize their combined resources, knowledge and skills to support instructional improvements within the Coalition and expand the network to neighboring schools and districts. The Leadership Core will also partner with the Center to test innovations that will spur continued improvements throughout the network.

"Two years into our work, improvements are evident. The school day schedule now allows all of the middle and high school students to spend one month at one of our local engineering firms to complete a real-world design challenge. Practicum experiences for preservice teachers in our regional university are also being held in those company classrooms. Undergraduates are serving as STEM mentors to K-12 students from underrepresented groups, while college faculty and admissions staff are visiting their families to discuss two- and four-year degree paths and scholarship options. As a result, 80 percent of those students have enrolled at one of our regional two-year colleges or the regional university to become teachers or engineers."

District Superintendent and Coalition Leader



School and District Learning Partners

The Leadership Core within each Coalition will reach out to form partnerships with neighboring schools and districts to ensure the network grows over time to serve more and more students. A centerpiece of each Learning Coalition will be "Studio Sites" set in schools, districts, and institutions of higher education that will serve as "living laboratories" of effective practices. These Studio Sites will promote practice-based, peer-to-peer learning. School and District Partners will access Studio Sites to see what is possible, construct plans to act on what they learned, and access Technical Assistance ensure their plans generate improvements for students.

"Teachers, students, parents, and administrators from five neighboring schools are visiting the three Studio Sites in our Learning Coalition. Classroom observations and lesson studies are fostering discussions about instructional and collaborative practices that support student learning. In just two years, more than 250 teachers serving 16,500 students have engaged in learning experiences in the coalition. Our superintendent and principal are making changes at the building and district level to ensure our long term participation in the Coalition."

Teacher Leader, School Learning Partner

