

## Nevada Governor's Office of Science, Innovation and Technology

# A Pathway to Success for All Nevadans

STEM Mission: to coordinate and align efforts by K-12 and higher education, workforce development, and employers to improve science, technology, engineering, and mathematics (STEM) education and STEM workforce development so that Nevada's workforce can meet the demands of its growing economy.



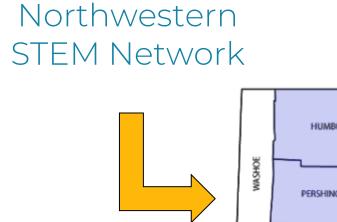
### Regional STEM Networks Northwestern, Rural, Southern

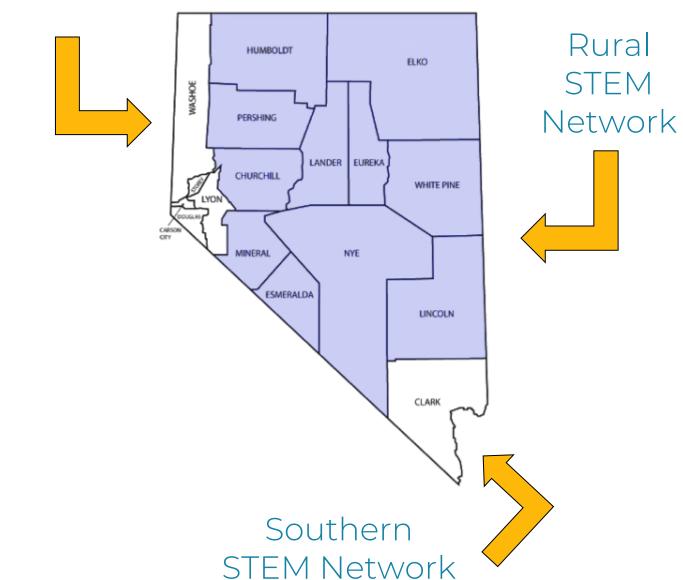
In order to increase student, school, family, and business engagement in STEM in diverse communities throughout Nevada, the Governor's Office of Science, Innovation and Technology (OSIT) has created three regional STEM Networks. Networks in Southern, Northwestern, and Rural Nevada will coordinate partners representing K-12 and Higher Education, business, industry, public libraries, after-school providers, non-profits, government, and philanthropy to identify and scale up high-quality STEM programs that will prepare students for Nevada's STEM workforce. OSIT's STEM staff will oversee these efforts in the three regions.

Each Regional Network has organized an Advisory Committee made up of STEM stakeholders living in the region. Each Advisory Committee has developed a strategic plan to advance STEM education in the region. Subcommittees in each region will work to advance equity in STEM, availability of high-quality STEM education, and awareness of STEM opportunities in the region. Network Advisory Committees will work with OSIT to award small grants to promote STEM or fund the creation or expansion of high-quality STEM programs.

### The Networks aim to:

- Identify on-the-ground programmatic gaps or implementation challenges in need of a state-level solution.
- Increase the number and quality of formal and informal STEM-focused education programs in all communities in Nevada.
- Increase student awareness, interest, enrollment, and achievement in formal and informal STEM-focused education programs.
- Grow the number and depth of schoolbusiness-community STEM partnerships.





### Governor Designated STEM Schools



Our vision is that every student in Nevada will have access and opportunities to experience a high-quality science, technology, engineering and mathematics (STEM) education, with the ultimate objective that students are prepared to thrive in the New Nevada economy. Key to realizing this vision is the effort to encourage all schools, with a particular focus on reaching underrepresented groups, to adopt practices that engage and expose students to real-world problem solving, creative design, innovation, critical thinking, and career opportunities through STEM-focused formal and informal education.

OSIT is charged with identifying and awarding recognition to not more than 15 schools in Nevada each year that demonstrate exemplary performance in STEM. These schools are designated as Governor's STEM Schools and are recognized at an annual recognition event held in Carson City. Designation as a Governor's STEM School denotes that the school meets the highest standards of STEM instruction and is a model for schools around the state. Designations may be used to promote the school.

The mission of the Governor Designated STEM School program is to increase student interest and achievement in the fields of science, engineering, technology, and mathematics, leading students to fulfilling careers in the New Nevada economy.

Advanced Technologies Academy - Las Vegas Lied STEM Academy - Las Vegas McCaw STEAM Academy - Henderson Southeast Career Technical Academy – Las

Southwest Career & Technical Academy – Las West Career and Technical Academy - Las Vegas David E. Norman Elementary School - Ely

#### Established STEM Schools: Dorothy Lemelson STEM Academy - Reno Empire Elementary School - Carson City Incline Elementary School - Incline Village Incline High School - Incline Village J. Marlan Walker Elementary School –

- Joseph Neal STEAM Academy Las Vegas Kate Smith Elementary School - Sparks Leavitt Middle School - Las Vegas Mabel Hoggard Math & Science Magnet School
- Rancho High School Las Vegas Roger Gehring Academy of Science and Technology - Las Vegas The STEM and Medical Academy at Jim Bridger Middle School - North Las Vegas

Walter Bracken STEAM Academy - Las Vegas

#### Developing STEM Schools: Berkeley L. Bunker Elementary School – Las

Clark High School - Las Vegas Coral Academy of Science, Sandy Ridge Campus D.L. "Dusty" Dickens Elementary School – North

Doris French Elementary School – Las Vegas

- Frank J. Lamping Elementary School Hyde Park Middle School - Las Vegas Incline Middle School - Incline Village Jackpot Combined School - Jackpot Kenny C. Guinn STEM Academy - Las Vegas Lomie G. Heard Elementary School - Las Vegas
- O'Callaghan Middle School i3 Learn Academy -Las Vegas Riverview Elementary School - Dayton Roberta C. Cartwright Elementary School – Las
- Northwest Career and Technical Academy Las Sandra B. Abston Elementary School Las Vegas Smithridge STEM Academy - Reno Somerset Academy, Aliante Campus - North Las Theron & Naomi Goynes Elementary School –



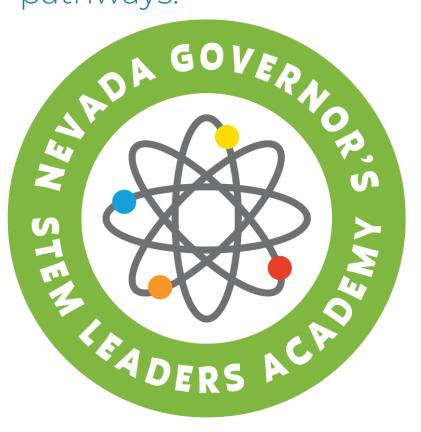
### Professional Development Opportunities

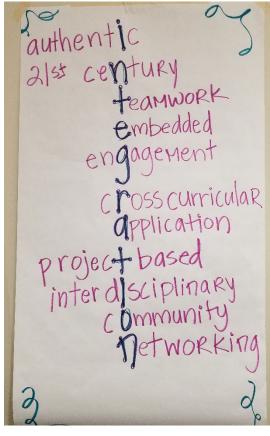
OSIT provides professional learning opportunities to K-12 teachers and school administrators. The two largest programs include the STEM Leaders Academy and the Engineering Fellows Program.

The STEM Leaders Academy was created to increase the quality of STEM education throughout the State by providing consultation and professional development to leaders from aspiring STEM schools. During the year-long academy, school teams will be guided through a process to create a strategic plan and school-specific roadmap for improving STEM education and earning the Governor's STEM School Designation.

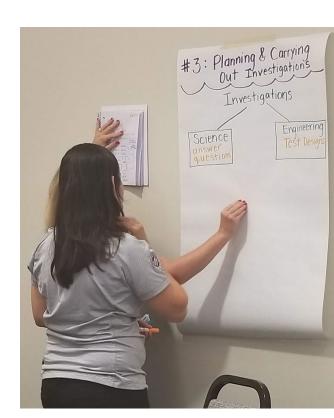
Schools across the state are invited to convene for a series of informational sessions, workshops, and team planning meetings. Participating school teams will receive STEM professional learning, develop a strategic plan, receive tools and resources, and have the opportunity to submit a grant application to OSIT for up to \$25,000 to implement their strategic plan. Participating schools are encouraged to apply for the Governor's STEM School Designation after implementing their plans.

Academy topics include Defining STEM, School-wide systems that support a STEM culture, STEM equity, Staff buy-in, Logic models, SWOT analysis, Engineering, Science and Engineering Practices, 3D Learning, STEM integration, Nevada STEM Framework, Phenomena, Teamwork and collaboration, Professional development, Real-World problem solving, Stakeholder engagement, Community partnerships, and College and career STEM pathways.





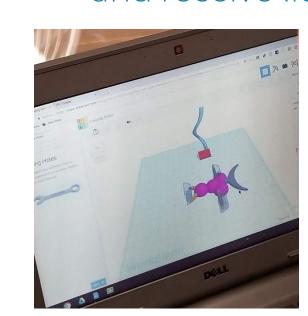






The Nevada Engineering Fellows Program offers a unique opportunity for teachers of K-5 students across Nevada to improve, develop and integrate NGSS-aligned engineering lessons with real-world applications into everyday teaching and existing curricula.

Engineering Fellows Investigate grade-level NGSS, phenomenon, problem-based, and best practices for teaching engineering; Collaborate with professional engineers and university engineering professors and students to bring real-world scenarios to the classroom; Learn how to enhance existing science lessons with engineering practices; Receive a bank of vetted lessons designed by other fellows; and receive license renewal credit hours and a supplies stipend.







## Other Programs

Nevada STEM Teacher of the Year / STEM Advocate of the Year Each Regional STEM Network recognizes one STEM teacher and one STEM advocate for their contributions to STEM education. From these candidates, one teacher and one advocate are selected as the state-wide winners. The winners receive a small stipend and are recognized by the Governor at our annual recognition event.

North Las Vegas





### Nevada STEM License Plate

Nevadans can purchase a personalized STEM license plate from the DMV, with proceeds going to our office. These funds support the STEM Teacher of the Year program.





### Nevada STEMList

To supplement the Department of Education's approved vendors and curricula, OSIT manages the STEMList of Recommended STEM Programs. STEM programs on the list have gone through an extensive vetting process and demonstrate attributes of high-quality learning experiences. Schools use this list to select STEM curriculum, programming, and field trip experiences.



OSIT offers professional book studies to teachers to keep the State's most important workforce up-to-date on the latest STEM Education research



## Learn More

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