



Nevada Governor's  
Office of Science,  
Innovation and  
Technology



In partnership, the Nevada Governor's Office of Science, Innovation and Technology (OSIT) and the National Institute for STEM Education (NISE) are excited to announce the launch of the OSIT NCST Pilot Cohort! 35 educators and leaders, working in collaborative groups from five districts across the state, are engaged in high-quality STEM professional learning to positively impact Nevada students' success!

Upon completion of the OSIT NCST Pilot Cohort, participants will earn the National Certificate for STEM Teaching (NCST). NCST candidates are guided through the development of a portfolio that demonstrates proficient understanding of 15 teacher actions essential to STEM teaching and learning. Candidates demonstrate proficiency by completing observations, collecting and analyzing evidence of instructional effectiveness, and reflecting on opportunities for instructional improvement.

The NCST develops and elevates teacher understanding of the following 3 Domains and 15 Teacher Actions:

CREATING AN ENVIRONMENT FOR LEARNING	BUILDING SCIENTIFIC UNDERSTANDING	ENGAGING STUDENTS IN SCIENCE AND ENGINEERING PRACTICES
1 Creating a Positive Classroom Culture	5 Implementing Inquiry	10 Cultivating Scientific Investigations
2 Establishing Cooperative Learning	6 Addressing Student Misconceptions	11 Developing Engineering Solutions
3 Integrating Technology	7 Facilitating Questioning & Discourse	12 Fostering Data Utilization
4 Connecting Learning Outside the Classroom	8 Utilizing Assessment	13 Implementing Project-Based Learning (PBL)
	9 Building Scientific Literacy	14 Developing Scientific Explanations
		15 Promoting Scientific Argumentation

In addition to working both asynchronously and collaboratively with their cohort colleagues, candidates will participate in 12 hours of onsite professional learning sessions facilitated by OSIT and NISE. An additional 4 hours of virtual support sessions facilitated by NISE NCST Coaches are also provided.

The origin of this cohort was inspired by the fact that NV Designated STEM Schools have regularly communicated to OSIT the desire to:

1. Engage more teachers at their schools in STEM.
2. Continue STEM professional learning.
3. Advance their school to a higher tier of the NV Governor's Designated STEM School Framework.



OSIT seeks to learn in what ways the NISE NCST program impacts individual STEM instructional competencies and overall STEM School performance.

OSIT asserts that Developing STEM Schools require a student-centered focus to move to Established or Model tiers as defined in the Nevada Governor's Designated STEM School Framework. The NCST was designed upon three guiding principles:

- *Student autonomy*
- *Constructivism*
- *Explicit/reflective methodology for 21st-century skill building*

Educators who earn the NCST develop practical and relevant understanding of instructional shifts that increase student-centered learning.

To learn more about the National Institute for STEM Education or the National Certificate for STEM Teaching, visit [www.getstemcertified.com](http://www.getstemcertified.com).

To learn more about becoming a Nevada Governor Designated STEM School, visit [https://osit.nv.gov/STEM/Gov\\_Designated\\_STEM\\_Schools/](https://osit.nv.gov/STEM/Gov_Designated_STEM_Schools/).