

Office of Science, Innovation and Technology

2019-2020 Nevada STEM Leaders Academy

The Governor's Office of Science, Innovation and Technology (OSIT)'s mission is to grow and develop high-quality science, technology, engineering, and mathematics (STEM) education programs throughout the State so that Nevada's workforce can meet the demands of its growing and diversifying economy. Through the Nevada STEM Leaders Academy (Academy), OSIT seeks to grow the number of schools in Nevada with daily high-quality STEM instruction and grow teacher and administrator familiarity, confidence, and capacity in STEM. As a result, OSIT expects that student interest and awareness of STEM education and career opportunities, especially among groups that are traditionally underrepresented in STEM fields will increase, and that the number of students enrolling in and completing formal and informal STEM programs at all levels, K-20, will grow.

The Academy brings together teams of teachers and administrators from schools across Nevada over a one-year period to receive STEM professional development leading to a site-specific STEM strategic plan and a roadmap for applying for the Governor's STEM School Designation. Schools will complete the Academy with a clear understanding of what STEM is, best practices in STEM instruction, leadership, and community engagement, and a plan for improving STEM education throughout the entire school site.

Additionally, schools that participate will have the opportunity to apply for a grant from OSIT for up to \$20,000 to support the implementation of the strategic plan developed during the Academy.

If your school is interested in sending a team to the 2019-2020 STEM Leaders Academy, please submit the attached application, along with a letter of commitment from the school's principal, [to Tracey Gaffney at tgaffney@gov.nv.gov](mailto:tgaffney@gov.nv.gov) by Monday, March 18, 2019.



Office of Science, Innovation and Technology

2019-2020 Nevada STEM Leaders Academy

Plan: Provide consulting and technical assistance to leaders from aspiring STEM schools to create a strategic plan and school-specific roadmap for achieving the Governor's STEM School Designation.

Program Overview: OSIT invites applications from schools across the state to participate in the year-long Academy to improve STEM education and achieve the Governor's STEM School Designation. Participating school teams will receive STEM professional learning, develop a strategic plan, and have the opportunity to submit a grant application to OSIT for up to \$20,000 to implement their strategic plan. Participating schools are invited to apply for the Governor's STEM School Designation following the implementation of the strategic plan.

Requirements:

- School teams must consist of 5-8 people, and must include at least one administrator.
- Administrators must commit to implementing the school's strategic plan.
- Full teams must commit to attending and participating in all workshops. (Funding for substitutes is not provided by OSIT.)

Application: Due Monday, March 18, 2019. See pages 5-6 to apply.

Application components:

- School information
- Team roster
- Current STEM initiatives
- STEM vision
- Goals for the academy
- Commitment letter from administrator

Note: Schools at all levels of implementation are invited to apply. Four to five school teams will be selected to participate in each regional Academy.



Northern Nevada STEM Leaders Academy Details

*Dates Subject to change

Date	Time	Agenda
Late April/Early May 2019	9am-4pm	Orientation
June		Homework: Plan for 2019-2020 & “the talk”
July 12, 2019	9am-4pm	Workshop 1: What is STEM?
August		Homework - Staff PD: What is STEM?
August-September	(1-2 hrs)	Site Visits by OSIT
September 13, 2019	9am-4pm	Workshop 2: Pillars
October		Homework - Staff PD: Pillars
November 8, 2019	9am-4pm	Workshop 3: Outcomes
December		Homework - Staff PD: Outcomes
January 17, 2020	9am-4pm	Workshop 4: Action Steps
February		Homework - Staff PD: Action Steps Site Visits by OSIT (Optional)
March 6, 2020	9am-4pm	Workshop 5: 2020-2021 Roll Out & Grant Writing
April		Homework - Staff PD: 2020-2021 Roll Out Grant Application Due
May 1, 2020		Workshop 6: Implementation

Academy Topics

- 3D Learning
- College and Career Connected Learning
- Engineering Design Process
- Equity
- Grant writing
- Integration across academic content areas
- Phenomena
- Problem-based unit planning
- Science and Engineering Practices
- Stakeholder engagement
- Teacher efficacy
- Teaching through Inquiry
- Teamwork/Collaboration

Strategic Plan

- Define STEM
- Create a common language
- Investigate the Nevada Framework
- Develop a vision
- Logic Model:
 - Pillars
 - Outcomes
 - Action steps
 - Resources
 - Benchmarks



Southern Nevada STEM Leaders Academy Details

*Dates Subject to change

Date	Time	Agenda
Late April/Early May 2019	9am-4pm	Orientation
June		Homework: Plan for 2019-2020 & “the talk”
July 19, 2019	9am-4pm	Workshop 1: What is STEM?
August		Homework - Staff PD: What is STEM?
August-September	(1-2 hrs)	Site Visits by OSIT
September 20, 2019	9am-4pm	Workshop 2: Pillars
October		Homework - Staff PD: Pillars
November 29, 2019	9am-4pm	Workshop 3: Outcomes
December		Homework - Staff PD: Outcomes
January 24, 2020	9am-4pm	Workshop 4: Action Steps
February		Homework - Staff PD: Action Steps Site Visits by OSIT (Optional)
March 13, 2020	9am-4pm	Workshop 5: 2020-2021 Roll Out & Grant Writing
April		Homework - Staff PD: 2020-2021 Roll Out Grant Application Due
April 24, 2020		Workshop 6: Implementation

Academy Topics

- 3D Learning
- College and Career Connected Learning
- Engineering Design Process
- Equity
- Grant writing
- Integration across academic content areas
- Phenomena
- Problem-based unit planning
- Science and Engineering Practices
- Stakeholder engagement
- Teacher efficacy
- Teaching through Inquiry
- Teamwork/Collaboration

Strategic Plan

- Define STEM
- Create a common language
- Investigate the Nevada Framework
- Develop a vision
- Logic Model:
 - Pillars
 - Outcomes
 - Action steps
 - Resources
 - Benchmarks



Office of Science, Innovation and Technology Nevada STEM Leaders Academy 2019-2020 Application

Instructions: Please submit the following information, answers to the questions on the next page, and a letter of commitment from the school's principal, to Tracey Gaffney at tgaffney@gov.nv.gov by Monday, March 18, 2019.

School Name:

School Address:

District:

Number of students enrolled:

Demographic breakdown of student population:

Are you interested in applying to become a [Governor Designated Nevada STEM School](#) in the future?:

Team

Role	Name	Email



Office of Science, Innovation and Technology Nevada STEM Leaders Academy 2019-2020 Application

1. Describe your school's STEM vision. (Max 500 words)
2. Describe your school's current STEM characteristics. Include areas of strength and areas with potential for improvement. This may include, but is not limited to, mission and vision, personnel support, current practices, curriculum, professional development, content integration, climate, resources, community outreach, etc. (Max 750 words)
3. What are your school's expectations for the STEM Leaders Academy? Please include why you are applying for the academy, and what you hope to gain from the academy. (Max 750 words)
4. What is your plan to engage the entire staff in the work being done at the academy around STEM education? Please give specifics regarding collaboration at your school and when will your STEM Leaders team will meet with the others at your school. (Max 500 words)
5. Include a Letter of Commitment from the administrator. The letter should commit the school to at least:
 - Full team attendance to each Academy workshop
 - Continued Academy work at school sites between workshops
 - Implementation of the strategic plan developed during the Academy

