

BRIAN SANDOVAL
GOVERNOR



BRIAN L. MITCHELL
DIRECTOR

STATE OF NEVADA
GOVERNOR'S OFFICE OF SCIENCE, INNOVATION AND TECHNOLOGY
100 North Stewart Street, Suite 220
Carson City, Nevada 89701
(775) 687-0987 * Fax: (775) 684-0990

K-5 STEM Education Proposal

Category One: STEM Classroom Equipment Grant

Purpose-

1. To increase the use of hands-on, evidence-based, experiential STEM learning in grades K-5.
2. To increase the percentage of elementary schools that teach science three plus hours per week.
3. To increase interest in, awareness of, and achievement in the subjects of science, technology, engineering, and mathematics in grades K-5, particularly amongst demographic groups that are traditionally underrepresented in STEM.

Rationale- The STEM Advisory Council surveyed teachers and administrators asking what the top barrier or challenge to better-integrating STEM education was at their schools. The top response amongst elementary-level educators (76%) was a lack of funding for small lab equipment.

Eligible Applicants- Educators and administrators from Nevada public schools.

Awards- Funds will be awarded for innovative and creative STEM projects. Projects should focus on classroom-level instruction and use technology or tools to increase student skills and engagement in STEM.

Application Requirements- Applicants must articulate in their application:

- The STEM project's goals and desired/expected outcomes;
- How purchases will directly tie to the goals and objectives of the project seeking funding;
- How equipment/curriculum purchased will enhance STEM teaching.
- How the proposal will prepare students to become college and career ready, particularly for a STEM career;
- How grant funds will increase the number of students participating in STEM;
- How the project fits within the school's long-term plans; and

- How the school will assess whether desired goals/expectations/outcomes have been met.

Support- Applicants must provide a signed letter of commitment from the principal demonstrating their commitment to STEM education, allowing for collaboration between teachers and departments, a commitment to providing the resources necessary to use the equipment purchased, including time for professional development, and a commitment to providing a detailed report to OSIT after one year detailing how the grant was used, the results of the grant on classroom instruction, lessons learned, and advice for other schools.

Requirements- Upon award, the applicant and the school will be required to:

- Sign a memorandum of understanding (MOU) of the grant requirements and expectations;
- Provide detailed accounting of how funding is spent, including proof of payment;
- Schedule a school visit with OSIT staff to see your project in action; and
- Provide a detailed report of the project and outcomes as described above.

Restrictions- Funding may not be used for

- Supplies, technology, or other equipment used solely by educators;
- Salaries or stipends for educators;
- Travel, lodging, or food;
- General office supplies or supplies unrelated to STEM; or
- Indirect costs.

Maximum award- \$1,500.

Category Two: Evidence-Based STEM Program Grant

Purpose-

1. To increase the prevalence of evidence-based, high-quality formal and informal STEM practices and programs in Nevada's elementary schools.
2. To increase the use of hands-on, evidence-based, experiential STEM learning in grades K-5.
3. To increase the percentage of elementary schools that teach science three plus hours per week.
4. To increase interest in, awareness of, and achievement in the subjects of science, technology, engineering, and mathematics in grades K-5, particularly amongst demographic groups that are traditionally underrepresented in STEM.

Eligible applicants- Educators and administrators from Nevada public schools.

Awards- Grants will be awarded to fund one of the programs on the STEM Advisory Council's list of recommended programs. Applicants that bring additional dollars to the project, whether from their own budget or other grant awards will be given extra weight in the scoring process.

Application Requirements-

- Describe how the program aligns with the school's long-term STEM goals and how the program aligns with the purposes of the grant;

- Given that this grant is intended as “start-up” funding, describe how the school plans to sustain the program in future years, including a discussion of future costs for consumables, licenses, professional development, etc.; and
- Describe how the school will establish a priority to increase interest in, awareness of, and achievement in STEM amongst students that are underrepresented in STEM or in high need.

Requirements- Upon award, the applicant and the school will be required to:

- Sign a memorandum of understanding (MOU) of the grant requirements and expectations;
- Provide detailed accounting of how funding is spent, including proof of payment;
- Schedule a school visit with OSIT staff to see your project in action; and
- Provide a detailed report of the project and outcomes as described above.

Maximum award- \$20,000.

Examples of Formal and Informal STEM Programs and Costs (Note: these programs may or may not be on the STEM Council’s final list of recommended programs):

- Project Lead the Way (Formal STEM Curriculum)- 1 classroom of 30 kids for grades K-5- \$18,462.86
- First Lego League and First Lego League JR (Informal STEM Program)- Individual team K-5- \$995-\$1,295
- Sierra Nevada Journeys (Informal STEM Program)- K-6- Packages vary with both level of exposure and number of students- \$1,200 for 1-grade level and four experiences