

# **R**EQUEST FOR **A**PPLICATIONS

# K-5 STEM PROGRAM GRANT

# **IMPORTANT INFORMATION**

Purpose:	To increase the prevalence of evidence-based, high-quality formal and informal STEM practices and programs in Nevada's elementary schools. To increase the use of hands- on, evidence-based, experiential STEM learning in grades K-5. To increase the percentage of elementary schools that teach science three-plus hours per week. 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.		
Proposals Due:	December 19 <sup>th</sup> , 2017		
Funding Available:	Up to \$20,000 per grant award		
Bidder's Call:	November 15, 2017 at 3:00 p.m. Dial in Number: 775-687-0999 Passcode: 70987#		
Eligibility:	Educators and administrators from Nevada public schools in the following school districts: Carson City, Churchill, Douglas, Elko, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, Washoe, White Pine.		
Website:	Updates to the Frequently Asked Questions document will be posted at <a href="http://osit.nv.gov">http://osit.nv.gov</a> . Please check the website regularly for updates. Additionally, information about past awardees can be found on the OSIT website.		
Contact:	Brian Mitchell 775-687-0987 or blmitchell@gov.nv.gov		



# **REQUEST FOR APPLICATIONS –**

# **GOVERNOR'S OFFICE OF SCIENCE, INNOVATION AND TECHNOLOGY**

#### **INTRODUCTION:**

The Governor's Office of Science, Innovation and Technology (OSIT) of Nevada was established by the Legislature (NRS 223.600) to coordinate and align efforts by K-12, higher education, workforce development, 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.

According to the research, one-third of boys and girls lose an interest in science by the fourth grade and a child's interest in STEM is largely formed by the time he or she reaches upper elementary and middle school.<sup>1</sup> The same research also finds that early exposure to STEM, especially for girls, makes children more likely to succeed in science and pursue STEM fields in college. Yet, just 38% of Nevada's elementary schools report offering STEM during the school day.<sup>2</sup> Therefore, if the State's goal is to increase the number of students participating in STEM programs in middle and high schools that prepare them for success in post-secondary STEM degrees and careers, research suggests STEM concepts should first be introduced at the elementary level.<sup>3</sup>

## SECTION I: DESIRED OUTCOMES

# Purpose:

This grant seeks to promote equitable access to and increased quality of STEM programs in elementary schools in order to better prepare students for a career pathway to success in the New Nevada. This grant program aligns with three key strategies identified in the <u>State STEM Strategic Plan<sup>4</sup></u>.

- 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.

# SECTION II: GRANT OVERVIEW

Eligible Applicants:

<sup>&</sup>lt;sup>1</sup> Daugherty, Michael K.; Carter, Vinson; and Swagerty, Lindsey (2016) "Elementary STEM Education: The Future for Technology and Engineering Education?," Journal of STEM Teacher Education: Vol. 49 : Iss. 1, Article 7.

<sup>&</sup>lt;sup>2</sup> According to a statewide survey of STEM practices conducted in May, 2016 by the NV STEM Advisory Council.

<sup>&</sup>lt;sup>3</sup> DeJarnette, N. K. (2012). America's children: Providing early exposure to STEM (science, technology, engineering and math) initiatives. *Education*, 133(1), 77–84.

<sup>&</sup>lt;sup>4</sup> http://osit.nv.gov/uploadedFiles/osit.nv.gov/Content/STEM/A%20STEM%20Strategic%20Plan%20for%20Nevada%20Final(1).pdf



Educators and administrators from Nevada public schools in the following school districts: Carson City, Churchill, Douglas, Elko, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, Washoe, White Pine.

#### Eligible Uses of Funds:

Grants will be awarded to fund one of the programs on <u>the STEM Advisory Council's list of recommended programs</u><sup>5</sup>, including initial professional development expenses. 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.

#### Funding Restrictions:

Funding may not be used for:

- Ongoing or sustaining funding for one of the programs on the STEM Advisory Council's list;
- Consumables for an existing program;
- Supplies, technology, or other equipment used solely by educators or adults;
- Salaries or stipends for educators or adults;
- Travel further than 50 miles one-way from the school site (except professional development);
- Lodging or food;
- General office supplies or supplies unrelated to STEM; or
- Indirect costs.

## Targeted Grades:

Grant funds must be exclusively used in Kindergarten through 5<sup>th</sup> grades.

Maximum Award:

\$20,000.

#### Sustainability and Future Funding:

The grant is intended to fund one-time costs for STEM resources that will be sustainable long-term. Applicants should submit their funding request with no expectation of future grant funds.

#### Grantee Requirements:

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

- Sign an award contract agreeing to the grant requirements and expectations;
- Provide detailed accounting of how funding is spent, including proof of payment;
- Make lesson plans available to OSIT for use by other teachers in Nevada;
- Schedule a school visit with OSIT staff to see your project in action; and
- Provide a report of the project and outcomes.

#### SECTION III: APPLICATION INFORMATION

Application Requirements:

<sup>&</sup>lt;sup>5</sup> http://osit.nv.gov/STEM/STEMWorks/



**READ CAREFULLY:** Please respond to each of the following questions in *Project* Information individually in <u>150 words or</u> <u>less</u>. All questions require a response. In your application, please number your responses to match the number of the question. Please copy each question to the beginning of your response and then respond below the question. Please be as thorough and detailed as possible in your answers within the word limits. The more detail you provide, the better reviewers are able to evaluate your application. Please submit your application as a PDF document.

## Project Information:

- 1. Please state your name, phone number, and email address.
- 2. Are you a teacher or administrator?
- 3. What is the name of your school?
- 4. What is the name of your district? For charter schools please indicate "charter."
- 5. How many students will this project impact each year?
- 6. What grade(s) are targeted by the project?
- 7. Provide a brief overview of your school and the student population you serve. Include your school's mission statement.
- 8. Which program from the STEM Advisory Council's list of recommended STEM programs are you seeking to fund?
- 9. Please provide an overview of the application.
- 10. Please outline a timeline for the project, including planning and preparation.
- 11. Which Nevada Academic Content Standard(s) does the program align to?
- 12. What are the STEM project's goals and desired/expected outcomes? How do they align with the school's long-term STEM goals or the school's mission?
- 13. How will the STEM program from the Council's list directly serve to accomplish the goals and objectives of the project seeking funds?
- 14. How will you assess whether desired goals/expectations/outcomes have been met? How will you measure the program's impact on student learning? Please indicate specific measurement tools beyond State or district tests.
- 15. How will the proposal prepare students to become college and career ready, particularly for a STEM career? Will the project attempt to make the connection between what students are learning to possible STEM careers?
- 16. 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.
- 17. 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. Please note, there should be no expectation of future funding for your project.

# Supporting Documents:

Applicants must provide a signed letter of commitment from the principal demonstrating their commitment to STEM education, such as allowing for collaboration between teachers and departments; a commitment to providing the resources necessary (if any) to use the equipment purchased, including time for professional development; and a



commitment to providing a required reports to OSIT detailing how the grant was used, the results of the grant on classroom instruction, lessons learned, and advice for other schools.

#### Budget:

<u>Please submit a detailed budget in a separately attached Excel spreadsheet</u>. The budget must include all expenses. Do not estimate, include exact costs. Please include a description of why the item is needed and why the quantity is needed. You will be required to report on your expenditures including providing proof of payment for all expenses that matches the dollar figures in your budget.

Item	Quantity	Cost	Description
Total:			

## SECTION IV: APPLICATION & SUBMISSION INFORMATION

Submit one (1) electronic copy of the application in a single pdf by 5:00 p.m., December 19, 2017, to:

# Brian Mitchell Governor's Office of Science, Innovation and Technology blmitchell@gov.nv.gov

#### SECTION V: AWARD ADMINISTRATION INFORMATION

#### **Grant Review and Selection Process**

Eligible applications are reviewed, evaluated, and competitively scored by a review committee. Applications selected to receive a grant award will enter into a contract with OSIT in compliance with the State of Nevada regulations. OSIT reserves the right to award all, part or none of the available grant funding during this grant round.

#### **Grant Commencement and Duration**

Project implementation must be initiated within thirty days (30) after funding is awarded. Requests for an exception to this rule must be justified and submitted in writing within thirty days of award. At the discretion of OSIT, the grantee risks losing the award if the project does not commence as required.

All grant funding must be spent by June 30, 2018. Projects must demonstrate sustainability beyond the initial reporting period. By submission of the grant application and acceptance of the award, the grantee is certifying its intention to continue and sustain the program beyond the initial grant implementation award. There is no expectation of funding beyond awarded grant funds.



#### **Fiscal Responsibilities**

All recipients of funding are required to identify a fiscal agent if the grantee is not its own fiscal agent. All recipients of funding are required to establish and maintain accounting systems and financial records to accurately account for awarded funds. All grant awards are subject to audits during and within three years after the grant award reporting period has concluded.

#### **Reporting Requirements**

All recipients of funding are required to submit fiscal reports detailing with proof of payment how funds were spent. Additionally, recipients must submit detailed reports on the project and outcomes.

#### **Additional Information**

All materials submitted regarding this application for OSIT funds becomes the property of the state of Nevada. Upon the funding of the project, the contents of the application will become contractual obligations.

#### **Bidding Process**

The grantee must follow all applicable local, state and/or federal laws pertaining to the expenditure of funds. Proof of Invitation to Bid, contracts, and any other pertinent documentation must be retained by the grantee. Likewise, all local, state, and federal permits required for construction projects must be acquired by the grantee within 90 days after the contract is entered into.

#### Access for Persons with Disabilities

The grantee shall assure that persons with disabilities are not precluded from using OSIT grant funded facilities. Projects must meet requirements as set by the Americans with Disabilities Act.

#### **Maintenance and Operation**

The grantee is responsible for seeing that OSIT grant-funded projects are maintained and operated in a condition equal to what existed when the project was completed; normal wear and tear is accepted. Maintenance and operations standards should be adopted upon completion of the project.

#### <u>Signs</u>

Grantee shall post and maintain appropriate permanent signs or decals upon project sites or equipment acknowledging funding assistance from the appropriate grant fund upon the start of the project or purchase of equipment.

#### **Nondiscrimination**

Projects funded with OSIT grant funds shall be available for public use, regardless of race, religion, gender, sexual orientation, age, disability, or national origin.

In any instance that the grant notice, award, rules, regulations, and procedures are silent – prior written approval is required.



# SECTION VI: OSIT CONTACTS

Grant Administration Contact: Jodi Bass Governor's Office of Science, Innovation and Technology 100 North Stewart Street, Suite 220 Carson City, NV 89701 775-687-0989 jbass@gov.nv.gov

*Thank your interest in applying for STEM K-5 Grant funding. You will be contacted if further information is required. Do not begin your project or incur costs until you have received, signed and returned a grant award contract.*