

Teacher Survey

Introduction

In 2013, the Nevada legislature passed S.B. 345 which established the Advisory Council on Science, Technology, Engineering and Mathematics (STEM), which is charged to "develop a strategic plan for the development of educational resources in the fields of science, technology, engineering and mathematics (STEM) to serve as a foundation for workforce development, college preparedness and economic development in this state." At this time, the Nevada STEM Advisory Council would like your input on STEM education in Nevada's K-12 system. The Advisory Council will use the information collected from this survey to first assess and describe current efforts in STEM education and second, draft recommendations for improving STEM education efforts.

Please note that the survey is completely anonymous and it will be impossible to identify you or your school affiliation. The survey will take approximately fifteen minutes. Before taking this survey, please read the following definition of STEM education so that all answers you provide are based on this particular definition.

STEM Definition

STEM (science, technology, engineering, mathematics, in addition to computer science) education focuses on active teaching and learning, relevant experiences, problem-solving, and critical thinking processes. Nevada STEM education emphasizes the interconnectedness of science, technology, engineering, and mathematics (and computer science) along with their connection to other disciplines. This interconnectedness elevates the capability and proficiency of the industry of Nevada through its workforce and serves as the intellectual and innovative catalyst that propels the economic prosperity of the state.

Classification Information

1. I teach at the (select one):

Elementary school level

Middle school level

High school level

2. My subject area/specialty is (select all that apply):

All subjects

Reading/language arts

Mathematics

Social studies

Science

Special education

Other _____

3. I have taught for (select one):

Less than one year

One to five years

Six to ten years
Eleven to twenty years
More than twenty years

4. I have taught at these grade levels (select all that apply):

K
1
2
3
4
5
6
7
8
9
10
11
12

5. I currently teach in the following geographic location (select one):

Northern Nevada
Southern Nevada
Rural Nevada

Curricula, Programs, and Online Programs

Curricula, programs, and online programs include those which are commercially available to purchase or use. They may be specifically linked to target standards and/or skills.

6. I use these specific curricula, programs, and online programs with my students in the classroom or a lab (select all that apply):

Biz town
Compass learning
Cool math
Delta
FOSS
Engineering is elementary
Gateway to technology
Introduction to robotics
Investigations
IXL
Junior achievement
Kahn academy
Lego robotics
Manga high
Math magician
Mathletics

Moby max
Mountain math
Project lead the way
Rocket math
Spatial temporal (ST) math
Study island
Sumdog
Other _____
Other _____
Other _____
Other _____
Other _____

7. Of these specific curricula, programs, and online programs that I use with my students in the classroom or a lab, I would recommend that other teachers use (select all that apply):

Biz town
Compass learning
Cool math
Delta
FOSS
Engineering is elementary
Gateway to technology
Introduction to robotics
Investigations
IXL
Junior achievement
Kahn academy
Lego robotics
Manga high
Math magician
Mathletics
Moby max
Mountain math
Project lead the way
Rocket math
Spatial temporal (ST) math
Study island
Sumdog
Other _____
Other _____
Other _____
Other _____
Other _____

8. I feel that the current curricula, programs, and online programs that are available to me meet the state standards and the Next Generation Science Standards (select one):

Yes

No

Somewhat: Please explain. _____

9. I am not currently using STEM curricula, programs, and online programs because (select all that apply):

They are not available at my school.

I would have to purchase some materials to use them.

The materials are not high quality for STEM education.

I do not have the training needed to use them.

I do not have the time during the day to use them.

My principal wants me to focus on reading, language arts, and math only.

This question does not apply to me - I am currently using STEM curricula, programs, and online programs.

Activities and Structures

Activities and structures include special days, trips, fairs, and teaching strategies that lend themselves to STEM focused learning.

10. I use these specific activities or structures with my students in the classroom or a lab (select all that apply):

Banking

Chess

Children's Science Museum Programming (Reno/Las Vegas) (e.g. House Calls, Senses)

Cooperative learning

Desert Research Institute Green Kits

Engineering day (Ecological, Lego, etc.)

Engineering explorations

Engineering Fair

Engineering field trips

Engineering online homework

Environmental leadership camps

Flipped classroom

Flooding assembly

Junior chef

Math day (Pi, Mighty, Mad, Metrics, etc.)

Mathematical explorations

Mathematics Fair

Mathematical field trips

Mathematical online homework

Project based learning classroom

Red Rock Desert/Desert Tortoise programs

Science day (DaVinci, Super, Mad, etc.)

Science explorations

Science Fair

Science and Engineering Fair

Science field trips
Science online homework
STEM day
STEM explorations
STEM Fair
STEM field trips
STEM online homework
Technology day
Technology explorations
Technology Fair
Technology field trips
Technology online homework
Other _____
Other _____
Other _____
Other _____
Other _____

11. Of these specific activities or structures that I use with my students in the classroom or a lab, I would recommend that other teachers use (select all that apply):

Banking
Chess
Children's Science Museum Programming (Reno/Las Vegas) (e.g. House Calls, Senses)
Cooperative learning
Desert Research Institute Green Kits
Engineering day (Ecological, Lego, etc.)
Engineering explorations
Engineering Fair
Engineering field trips
Engineering online homework
Environmental leadership camps
Flipped classroom
Flooding assembly
Junior chef
Math day (Pi, Mighty, Mad, Metrics, etc.)
Mathematical explorations
Mathematics Fair
Mathematical field trips
Mathematical online homework
Project based learning classroom
Red Rock Desert/Desert Tortoise programs
Science day (DaVinci, Super, Mad, etc.)
Science explorations
Science Fair
Science and Engineering Fair
Science field trips

Science online homework
STEM day
STEM explorations
STEM Fair
STEM field trips
STEM online homework
Technology day
Technology explorations
Technology Fair
Technology field trips
Technology online homework
Other _____
Other _____
Other _____
Other _____
Other _____

12. I feel that the current activities or structures that are available to me meet the state standards and the Next Generation Science Standards (select one):

Yes

No

Somewhat: Please explain _____

13. I am not currently using STEM activities or structures because (select all that apply):

They are not available at my school.

I would have to purchase some materials to use them.

The materials are not high quality for STEM education.

I do not have the training needed to use them.

I do not have the time during the day to use them.

My principal wants me to focus on reading, language arts, and math only.

This question does not apply to me - I am currently using STEM activities or structures.

Clubs, Competitions, and Extracurricular Activities

Clubs, competitions, and extracurricular activities typically occur outside of regular school times and can support STEM education goals, objectives, and/or standards.

14. I host these specific clubs, competitions, or extracurricular activities at the school site (select all that apply):

Bridge building

Chess club

Forensics CSI club

Future city competition

Garden club

Math counts team

Math kangaroo contests

Mathematics Olympiad team

- Robotics team
- Science bowl team
- Science Olympiad team
- Zookeeper club
- Other _____
- Other _____
- Other _____
- Other _____
- Other _____

15. Of these specific clubs, competitions, or extracurricular activities that I host at the school site, I would recommend that other teachers host (select all that apply):

- Bridge building
- Chess club
- Forensics CSI club
- Future city competition
- Garden club
- Math counts team
- Math kangaroo contests
- Mathematics Olympiad team
- Robotics team
- Science bowl team
- Science Olympiad team
- Zookeeper club
- Other _____
- Other _____
- Other _____
- Other _____
- Other _____

16. I feel that the clubs, competitions, or extracurricular activities that are available to me assist in meeting the state standards and the Next Generation Science Standards (select one):

- Yes
- No
- Somewhat: Please explain _____

17. I am not currently hosting STEM clubs, competitions, or extracurricular activities because (select all that apply):

- They are not available at my school.
- I would have to purchase some materials to use them.
- The materials are not high quality for STEM education.
- I do not have the training needed to use them.
- I do not have the time during the day to use them.
- My principal wants me to focus on reading, language arts, and math only.
- This question does not apply to me - I am currently hosting STEM clubs, competitions, or extracurricular activities.

Equipment, Facilities, and Resources

Equipment, facilities, and resources include the physical items available in the classroom or at the school site that could be used as tools in meeting STEM education goals, objectives, or standards.

18. I use this specific equipment, facilities, and/or resources with my students on a regular basis (select all that apply):

- Animal lab
- Computer lab
- Earth/space science lab
- cybermissions
- Engineering lab
- eportfolios
- Experiment stations
- Exploration tables or centers
- Gardens
- Inflatable planetarium
- Life science lab
- Mathematics lab
- Nutritional center
- Observatory
- 1 to 1 iPads, itouch, ipods
- Outdoor learning lab
- Paleontology dig station
- Physical science lab
- Promethean/smart/active boards
- Science library and exhibits
- Shared ipads, itouch, ipods
- Space shuttle simulator lab
- STEM lab
- Technology lab
- Wii lab
- Other _____
- Other _____
- Other _____
- Other _____
- Other _____

19. Of this specific equipment, facilities, and/or resources that I use with my students on a regular basis, I would recommend that other teachers use (select all that apply):

- Animal lab
- Computer lab
- Earth/space science lab
- cybermissions
- Engineering lab

- eportfolios
- Experiment stations
- Exploration tables or centers
- Gardens
- Inflatable planetarium
- Life science lab
- Mathematics lab
- Nutritional center
- Observatory
- 1 to 1 iPads, itouch, ipods
- Outdoor learning lab
- Paleontology dig station
- Physical science lab
- Promethean/smart/active boards
- Science library and exhibits
- Shared ipads, itouch, ipods
- Space shuttle simulator lab
- STEM lab
- Technology lab
- Wii lab
- Other _____
- Other _____
- Other _____
- Other _____
- Other _____

20. I feel that the current equipment, facilities, and/or resources that are available to me assist in meeting the state standards and the Next Generation Science Standards (select one):

Yes

No

Somewhat: Please explain - _____

21. I am not currently using STEM equipment, facilities, and/or resources because (select all that apply):

They are not available at my school.

I would have to purchase some materials to use them.

The materials are not high quality for STEM education.

I do not have the training needed to use them.

I do not have the time during the day to use them.

My principal wants me to focus on reading, language arts, and math only.

This question does not apply to me - I am currently using STEM equipment, facilities, and/or resources.

22. I am currently working with a community group and/or business to develop STEM (select all that apply):

Activities

- Clubs
- Competitions
- Curricula
- Equipment
- Programs
- Resources

This question does not apply to me – I am not currently working with a community group and/or business.

23. The amount of time I dedicate to STEM education in the classroom with my students each week is approximately (select one):

- None
- Less than 1 hour
- 1-2 hours
- 3-5 hours
- 6-10 hours
- More than 10 hours

24. My school _____ have a STEM coordinator.

- Does
- Does not

25. I would like to see the following STEM curricula, programs, activities, clubs, competitions, equipment, and resources made available to me:

26. This is what I need in order to implement STEM curricula, programs, activities, clubs, and/or competitions:

27. The STEM Advisory Council is charged with developing a strategic plan to improve STEM education (K-16). What curricula, programs, activities, clubs, competitions, equipment, and/or resources are needed to improve and/or expand STEM education in Nevada?

28. Describe how your school is implementing STEM education. Please provide two to three examples.

29. What are some of the STEM curricula, programs, activities, clubs, competitions, equipment, and resources that work well at your school? Are there programs that you would like to see scaled up and made available throughout the state?

30. Is there anything else that you would you like to share with the STEM Advisory Council?

THANK YOU FOR YOUR TIME!