

**STEM Advisory Council  
Sub-Committee B&C Meeting  
July 9, 2014  
10:00 am – 10:40 am  
Minutes**

The meeting was video conferenced between the following locations

Nevada Department on Economic Development  
808 West Nye Lane  
Carson City, Nevada 89703

**Present – Carson City**

Shelace Shoemaker  
Mike Pacheco – DOE Representative

Nevada Commission on Economic Development  
555 E. Washington Avenue  
Suite 5400  
Las Vegas, Nevada 89101

**Present – Las Vegas**

Richard Knoeppel  
Judy Kraus  
Sharon Pearson  
Dennis Perea  
Joyce Woodhouse – Nevada State Senate  
Mark Newburn – State Board of Education  
Ashley Perdichizzi - Nevada Virtual Academy

**1. *Call to Order: Roll Call: and Pledge of Allegiance.***

**Mike Pacheco** Called to Order, performed roll call, and Pledge of Allegiance

**2. *Public Comments:***

None

**3. *Review and discuss the bill and the expectations for the sub-committee.***

**Sharon Pearson** read from STEM Bill 345 as it pertains to the sub-committee:

- *A plan for identifying and awarding recognition to pupils in this State who demonstrate exemplary achievement in the fields of science, technology, engineering and mathematics; and*
- *A plan for identifying and awarding recognition to not more than 15 schools in this State that demonstrate exemplary performance in the fields of science, technology, engineering and mathematics.*

**4. *Discuss the STEM definition as we know it at this time.***

**Sharon Pearson** Read –

**Nevada STEM Definition**

*Science, Technology, Engineering, and Mathematics (STEM) education focuses on active teaching and learning, centered on relevant experiences, problem-solving, and critical thinking processes. STEM education emphasizes the natural interconnectedness of science, technology, engineering, and mathematics, and their connection to other disciplines, to produce informed students that possess and apply their understanding to expand Nevada's STEM-capable workforce in order to contribute to a healthy Nevada economy and compete in a global society.*

**Sharon Pearson** – The Council discussed visiting this as a whole group.

5. ***Review and Discuss all the research the sub-committee has completed surrounding STEM Schools and Student Recognition.***

**Sharon Pearson** – Group found STEM rubrics or progressions from North Carolina, Ohio, and West Virginia among others. They also reviewed the *Nevada STEM Implementation Framework for K-12 Schools* created by Nevada’s STEM stakeholders in education, government, business and community.

6. ***Present and Discuss the Rubric for Recognition of STEM Schools created by the sub-committee.***

**Sharon Pearson** – Many rubrics were broken down by grade level but Sub Committee looked at a K-12 rubric to ensure equity.

**Dennis Perea** – We certainly want Equity across K-12. Look at what is available around the state.

**Sharon Pearson** – Shelace attended a STEM conference

**Shelace Shoemaker** – Confirmed

**Sharon Pearson** – Rural can’t get outreach from multiple STEM companies/business as suggested by some rubrics so it was decided not to include the requirement.

Many of the headings were changed from the *Nevada STEM Implementation Framework for K-12 Schools* in the creation of the group document.

**Judy Kraus** – This document focuses on STEM programs instead of whole school.

**Sharon Pearson** - The focus on programs allows more schools to qualify.

The printed document has some text stricken out, a version will be provided with that text removed and the word DRAFT watermarked on it.

**Mike Pacheco** – Asked if the law read STEM program or STEM school

**Judy Kraus** – No more than 15 STEM Schools.

**Dennis Perea** - How can they address STEM impact. Aren’t programs small?

**Richard Knoeppel** - In his experiences in Clark County STEM schools lead to STEM schools.

Comprehensive high schools are expanding their STEM programs after seeing the successes of STEM Schools and programs.

**Dennis Perea** – Compared the process to a growing seed.

**Richard Knoeppel** – The implementation of the committee’s document and the pressure from business should help foster the growth of STEM in Nevada.

**Dennis Perea** – Is this broad- based or...?

**Judy Kraus** – Broad-based; Elementary is very broad and the focus narrows in higher grades.

**Richard Knoeppel** – STEM exists in high schools and magnet schools address some narrowing.

**Dennis Perea** - Will this document treat different districts differently?

**Richard Knoeppel** – The committee tried to address this concern. Made the document more generic or global.

**Judy Kraus** – Motion to present the rubric to the whole Council.

**Richard Knoeppel** – Second

**-Motion passed unanimously**

7. ***Present and discuss the student recognition structure.***

**Sharon Pearson** – Committee had the same concerns with this document about making the system equitable statewide.

**Judy Kraus** – Committee looked at other programs; Liked the idea of a statewide symposium. STEM professionals present their work to students and time would be given for students to present their work. The recognitions would be open to more students this way.

**Judy Krauss** Read:

*Nevada STEM Student Recognition*

*Nevada's STEM Student Recognition Program is designed to bring students to a Nevada STEM Symposium, featuring professionals from the fields of science, technology, engineering and mathematics. The Symposium would enable every school to select a student to attend, either the live event or via teleconference, in order to develop a broad interest in STEM careers across the state. This will expose all schools to the opportunities that exist and foster relationships with individuals, institutions and corporations in the STEM fields.*

*The Symposium will have two components – a student poster session and community professional presentations.*

*Students selected will participate in a poster session describing the process and the STEM project they have been investigating, enabling a wide range of students and community members to see the plethora of quality work produced in Nevada. This will allow elementary, middle, and high school students to mentor each other in a collegial atmosphere while interacting with professionals in STEM fields.*

*The Symposium will close with presentations from leaders in STEM fields. Students will be able to interact with professionals that have taken their passion and made it a career.*

*Attendees will receive a certificate of participation.*

**Sharron Pearson** – Such a system would allow recognition of more students. Students would have the opportunity to show what they know.

**Judy Krauss** - Motion to present the document to the whole Council

**Richard Knoeppel** - Seconded the Motion

-Motion passed unanimously

**8. Public comment**

**Mark Newburn** – Addressed the passage of the Next Generation Science Standards. These standards will help expand the work of the STEM council. An amazing time for STEM in Nevada.

**Joyce Woodhouse** – Complemented the Sub Committees work, some great steps forward. Asked the group for their needs required for the symposium. The legislature is looking at spending bills for the next session.

**9. Questions of Comments**

None

**10. Meeting Adjournment**

**Sharon Pearson** – motion to adjourn

**Richard Knoeppel** – Second

-Motion passed