

## **Nevada STEM Advisory Council Subcommittee – Community Partnerships**

### **Clarifying and Strengthening Community Partnerships**

**DRAFT – May 2017**

The Community Partnership subcommittee of the Nevada STEM Advisory Council (NSAC) was established in March 2016. The purpose of the subcommittee is to advise the NSAC on issues pertaining to Community Partnerships.

#### **Roles and Responsibilities for the Community Partnership Subcommittee:**

1. To articulate the greater benefits for learning through meaningful (strategic and tactical) Community Partnerships.
2. To recognize common goals between formal, non-formal, and informal learning communities.
3. To assist and strengthen communications and desired outcomes of the diverse agencies, organizations, operators, and partners committed to improving learning in Nevada.
4. Provide one voice regarding the varied opportunities for Community Partnerships to support and benefit Nevada’s educational system to strengthen student performance.

#### **Background:**

Business and industry leaders in Nevada are increasingly concerned about the lack of a highly skilled pool of workers for their companies. An unforeseen result of the former No Child Left Behind Act was that many schools in Nevada reduced or deleted instruction in science, not to mention technology, physical education, and the arts, to meet requirements in math and reading.

Nevada's science scores lags behind the nation. Numerous national reports on Nevada have documented the lack of science and mathematics content knowledge and credential requirements of Nevada’s K-8 teachers, resulting in many Nevada teachers who do not have adequate skills for teaching science.

In addition, the adoption of the Nevada Academic Content Standards for Science (NVACSS), derived from the Next Generation Science Standards (NGSS), by the Nevada Department of Education (Feb 2014) reflects the reality that science is so much more than just the rigid Scientific Method and “hypothesis based” science that has historically been taught in schools. The NVACSS allows for integrated teaching of Science, Technology, Engineering, and Mathematic (STEM) disciplines with reading, and encourages the application of practices and knowledge.

Given the challenges of limited qualified teachers and rising expectations, the importance of high-quality Community Partnerships has risen to a new high. The desire for partnerships that allows for the sharing of respective knowledge and the creation of authentic, fun and interesting curriculum is at a premium. Through curriculum that is forged and supported thru Community Partnerships students will be able to move through the scientific and engineering practices (that is, the things scientists and engineers do daily) identified by the National Research Council, the National Science Teachers Association, and the American Association for the Advancement of Science (REF).

The identified practices represent skill sets such as asking questions, collecting and analyzing data, and communicating information, that are used by STEM Professionals. These skill sets are not necessarily the skill sets that traditional educators possess. The blend of specific skills when STEM professionals and classically trained educators collaborate is powerful. Collaboration is necessary to create effective lessons for Nevada's students, and forging effective and productive community partnerships is a critical step in order to facilitate the blending of the necessary skill sets. WHO ELSE IS DOING THIS? EXAMPLES?

Community partnerships draw from a broad range of resources and expertise. Establishing new relationships with entities that are not familiar with the established educational system requires communication, training opportunities, and oversight. To successfully solve the complex challenge of raising student achievement an objective and systematic process should be implemented to continually assess if and how partners are improving learning in Nevada.

In support of the NSAC, and with a focus on Community Partnerships, this paper will:

- Begin to define the universe of community partnerships with operational definitions (Section 1)
- Provide a list of established community partnerships within Nevada (NSAC Priority 4, Goal 2, Strategy 4) (Section 2)
- Provide suggestions for how to establish community partnerships (Section 3)
- Provide a strategy to evaluate community partnerships (Section 4)

Future papers will address:

- How productive community partnerships can improve/support teacher evaluation (NEPF) (NSAC Priority 4, Goal 2, Strategy 3)
- How productive community partnerships can support formal education goals. (NSAC Priority 4, Goal 2, Strategy 3)

## **Section 1. Breath of Relationships**

- Short-term requests and special events
  - Science fair judges

- Single lectures
  - guest speakers
  - special presentations around specific themes
- Single support of an activity or experiment
  
- Long-term requests and ongoing needs
  - mentoring
  
- Formal vs Informal – **define these and then give examples...**
  - Established competitions (like Lego League, Future Cities)
  - After-school entities (like Boys and Girls Clubs)
  - Community resources (like museums)
  - Between schools? (like High School coming to Elementary School)

NAME SOME FOR SECTION 3

## **Section 2. Rubric for Successful Relationship**

This section

- sets up criteria for a successful relationship
  - Link relationships to standards (reinforces what is happening in the classroom?)
  - Evidence of student learning
  - Evidence of cost-benefit relationship
  
- gets at the data that will need to be collected and how it can be used to make decisions.

## **Section 4. FAQ: “How do I get involved?” (This is part of Priority 2, Goal 1, Strategy 7 (pg 9))**

Consider audience of these...need to go in both direction, from teacher and from industry/business/professional

**Write one of these for each of the types/groups identified above?**

**Provide list of who to contact for some of the more established entities? By county / school district?**

Clark County – has Cheryl’s office  
STEM Ambassador Program?  
Others? NV STEM Hub???

Trainings/Education for non-education people on the NGSS and other standards

## **Section 5. Definitions and References**

Operational Definitions:

Stakeholder: An individual or group or organization who is impacted by a process or decision, but not necessarily actively involved [Source.....]

Cooperator: An entity actively partner involved in a process or decision-making activity and/or sharing of resources. Synonym: Partner [Source.....]

Collaboration: an open and inclusive process, a communication tool used by groups to engage a broad array of diverse entities ~~that~~ come together to find solutions for issues/problems as they [Source.....]

Partnership: shared values, shared goals, and active contribution [Source.....] understand desired outcomes and federal and state accountability elemens for students and schools.

Provider: [Source.....]

Formal Education: Education occurring inside a ~~transitional-traditional?~~ school setting [Free Dictionary]

Informal Education: Education (Learning) outside of a traditional school setting. This includes homeschooling, mass media, museums, libraries, zoos, after-school groups and other community-based and cultural institutions. [Free Dictionary]

References:

Free Dictionary. Electronically accessed December 20, 2016 at [www.encyclopedia.thefreedictionary.com](http://www.encyclopedia.thefreedictionary.com)

---

NOTES FROM STRATEGIC PLAN:

Priority 2: Quality and Scope (pg 9)

Goal 1: Improve quality and quantity in schools

Strategy 7: increase number of opportunities and expand

Priority 4: Engagement and Alignment (pg 15)

Goal 2: Increase STEM education coordination

Strategy 3: Incentivize time for teachers

|

|

|

|



|

~~Strategy 4: Broker and maintain partnerships~~