

Community Partnership Manual

Nevada STEM Advisory Council Review DRAFT
May 2018



The subject draft is not to be circulated or used as an official document.

Prepared by
Nevada STEM Advisory Council
Community Partnership Subcommittee

Preface

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 Community Partnerships.
2. To assist with student engagement activities through community partnerships that provide a variety of learning experiences (e.g., field trips, job shadows, mock interviews, internships).
3. Identify best community partnership practices, and successful models, for productive and meaningful community partnerships.
4. Provide roadmap for how to establish a successful community partnership.
5. To assist and strengthen communications and desired outcomes of the diverse agencies, organizations, operators, and partners committed to improving learning in Nevada.
6. Provide one voice regarding the varied opportunities for Community Partnerships to support and benefit Nevada's educational system resulting in strengthened student performance.

Relation of the Community Partnership Subcommittee in the NSAC (2017) Strategic Plan:

Priority 2: Quality and Scope

Goal 1: Improve quality and quantity in schools

Priority 4: Engagement and Alignment

Goal 2: Increase STEM education coordination

Contents

- 1. INTRODUCTION 1
 - 1.1 Target Audience 1
 - 1.2 How does the Community Partnerships Subcommittee differ from the Informal STEM Learning Environments (ISLE) Subcommittee?..... 1
 - 1.3 Background 1
 - 1.4 Established Community Partnership Programs in Nevada 2
- 2. THE LEARNING ENVIRONMENT AND THE IMPORTANT ROLE OF COMMUNITY PARTNERSHIPS..... 4
 - 2.1 The “Who” 4
 - 2.2 The “What” 5
 - 2.3 The “Why” 6
 - 2.4 The “Where” 7
 - 2.5 The “When” 8
 - 2.6 The “How” 8
 - 2.7 Operational Community Partnership Types 8
- 3. AWARENESS OF ACADEMIC STANDARDS 9
 - 3.1 What are Academic Standards? 9
 - 3.2 Why should businesses care about Academic Standards? 10
 - 3.3 Correlating Academic Standards to Workforce Skills 10
- 4. HOW DO WE FORM A COMMUNITY PARTNERSHIP? BUSINESS TO EDUCATION..... 13
- 5. HOW DO WE FORM A COMMUNITY PARTNERSHIP? EDUCATION TO BUSINESS..... 15
- 6. PARTNERSHIP EVALUATION 17

Nevada STEM Advisory Council Subcommittee – Community Partnerships

Community Partnerships Manual

1. INTRODUCTION

1.1 Target Audience

This document was generated to serve business representatives interested in establishing, or improving, community partnerships with formal educators (i.e., schools and classroom teachers).

1.2 How does the Community Partnerships Subcommittee differ from the Informal STEM Learning Environments (ISLE) Subcommittee?

The focus of the ISLE subcommittee is how to define a successful informal learning program, and how that learning occurs. The Community Partnerships subcommittee is focused on how to establish partnerships to support learning, and how to evaluate partnerships to ensure they are meaningful.

1.3 Background

Business 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 lag 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 supported through Community Partnerships students will be able to move through the scientific and engineering practices (that is, the activities 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 (NGSS, 2017).

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 to facilitate the blending of the necessary skill sets.

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 variety of community partnerships and review the critical role of community partnerships in the learning environment (Section 2)
- Review how academic standards can be used to strengthen community partnerships (Section 3)
- Provide suggestions for how to establish a community partnership (Sections 4 and 5)
- Provide a strategy to evaluate a community partnership (Section 6)

1.4 Established Community Partnership Programs in Nevada

Before community partnerships are dissected and defined (below), it is important to recognize that in Nevada there is great diversity regarding established community partnerships and partnership opportunities.

This document is intentionally generic and presents community partnerships from a high-level view and serves as a primer, but is certainly not comprehensive. Community partnerships will be different in each community. Those interested in establishing community partnerships are encouraged to learn from those population centers who have organized relationships or agencies that support partnerships. There is not a "right" or "wrong" community partnership; there is not a one-size-fits-all solution. What is important is that both partners are served, their expectations are met, and Nevada students benefit from the partnership.

Five such partnerships are highlighted below to provide examples of the breadth of community partnerships in Nevada. They are included in this document simply as examples and were selected because of the personal connection with at least one of the authors of this document. This is certainly not intended to be an exhaustive list, nor does inclusion constitute any type of endorsement by the Nevada STEM Advisory Council. Reading about these five very diverse examples should only serve as a primer to the variety of community partnerships in Nevada.

- **Connecting Hands: Offering Lifelong Learning Adventures (CHOLLA):** CHOLLA "is a consortium¹ of community agencies and the Clark County School District that collaborate to provide opportunities for connecting and extending classroom learning" (www.nvoutdoorkids.org/cholla2). The goals of CHOLLA are "to correlate educational experiences with State Standards, give

¹ CHOLLA partners include National Atomic Testing Museum, Las Vegas Natural History Museum, Clark County Parks and Recreation, Discovery Children's Museum, US Forest Service, US Fish and Wildlife Service, Clark County Wetlands Park, Nevada State Parks, National Park Service, Bureau of Land Management, The Planetarium, Shark Reef Aquarium, Secret Garden and Dolphin Habitat, Outside Las Vegas Foundation, City of North Las Vegas, Public Lands Institute, Nevada Department of Wildlife, Springs Preserve, Clark County School District, Southern Nevada Regional Professional Development Program, Southern Nevada Agency Partnership, Black Canyon/Willow Beach River Adventures, Southern Nevada Water Authority, Skydance Studio, Red Rock Canyon Interpretive Association, Airborne Raptors Unlimited, The Neon Museum, The Mob Museum, Las Vegas Inspiring Connections Outdoors, Gilcrease Nature Sanctuary, Nevada Council for History Education, Tortoise Group, University of Nevada Cooperative Extension, Lost City Museum, Bureau of Reclamation, and College of Southern Nevada (source: www.nvoutdoorkids.org/cholla2 on Jan 4, 2018).

students direct experiences with the real world, match the educational programs of agencies with school curricula, allow students to interact with professionals and see career opportunities, and introduce students to lifelong voluntary self-directed learning”.

- School-Community Partnership Program, Clark County School District: The mission of the School-Community Partnership Program is “to improve academic achievement, foster successful individuals and enrich student experiences by connecting schools with business and community resources (<http://ccsd.net/community/partnership/>).” The Program has been in existence since 1983, and encompasses several programs including Focus School Project, Stay In School Mentoring, Reclaim Your Future Mentoring Project, Professionals and Youth Building a Commitment (PAYBAC), Safe Routes to School, Support a School Program, and numerous curriculum-based programs.
- Clark County Magnet Programs: Northwest Career and Technical Academy in Las Vegas is one of the 37 magnet schools in Las Vegas. The mission and vision of the Northwest Career and Technical Academy is to, “To boldly educate today’s learners for tomorrow’s challenges by developing advanced skills through unique hands-on experiences in a professional setting, utilizing community partnerships, innovative ideas, and contemporary technologies.” The Academy relies on internships to provide real-world experience to their students.
- Various Informal Competitions: Informal competitions provided by international groups such as Future City Competition and First Nevada Robotics Programs can be found throughout the state. For every informal competition, there are community partners deeply involved providing funding, materials, and people. For Example, the Future City Competition is sponsored in part by DiscoverE (formally known as the National Engineers Week Foundation), a formal coalition of more than 100 professional societies, major corporations and government agencies, is dedicated to ensuring a diverse and well-educated future engineering workforce by increasing understanding of and interest in engineering and technology careers among young students and by promoting pre-college literacy in math and science.
- Fernley Science, Technology, Engineering, and Mathematics (STEM) Council: Established in 2013, the Fernley STEM Council is a volunteer group of citizens that sponsors the annual Fernley STEM Festival. Once a year the Fernley STEM Festival connects their rural community members to local businesses that practice STEM everyday through an evening of interactive and hands-on activities provided and staffed by the local business people. This event draws over 1,000 participants of all age ranges and exposes Fernley to the diversity of STEM in their local community. Past participants included Animal Care Center, Nevada Cement, Nevada Virtual Academy, Nevada State Bank, City of Fernley, Discovery Museum, Lyon County Sheriff Department, North Lyon County Fire Protection District, and others.

2. THE LEARNING ENVIRONMENT AND THE IMPORTANT ROLE OF COMMUNITY PARTNERSHIPS

The learning environment, in its totality, is the path that moves a very important learner (an individual) to a known place they want to go (dreams and goals), throughout their lifetime (Figure 1). It compasses formal education (going to school), informal education (for example, going on a field trip or to a museum), family and spiritual experiences, and general life experiences and those related to on-the-job training. Each of these wheels move independently, but also in concert, to carry a person towards a destination. The hope is that the destination is positive and reflects the individual's potential. However, it is all too often witnessed how one of the wheels may fail an individual and the resulting path is less than desirable. While community partnerships, per se, are not identified in Figure 1, there is an intrinsic understanding that the community partnerships are there, providing learning opportunities within the stated categories. For example, evidence that can be used to support this assumption is that most students in Nevada have experienced a field trip to a museum or some activity, which is most likely the result of a community partnership.

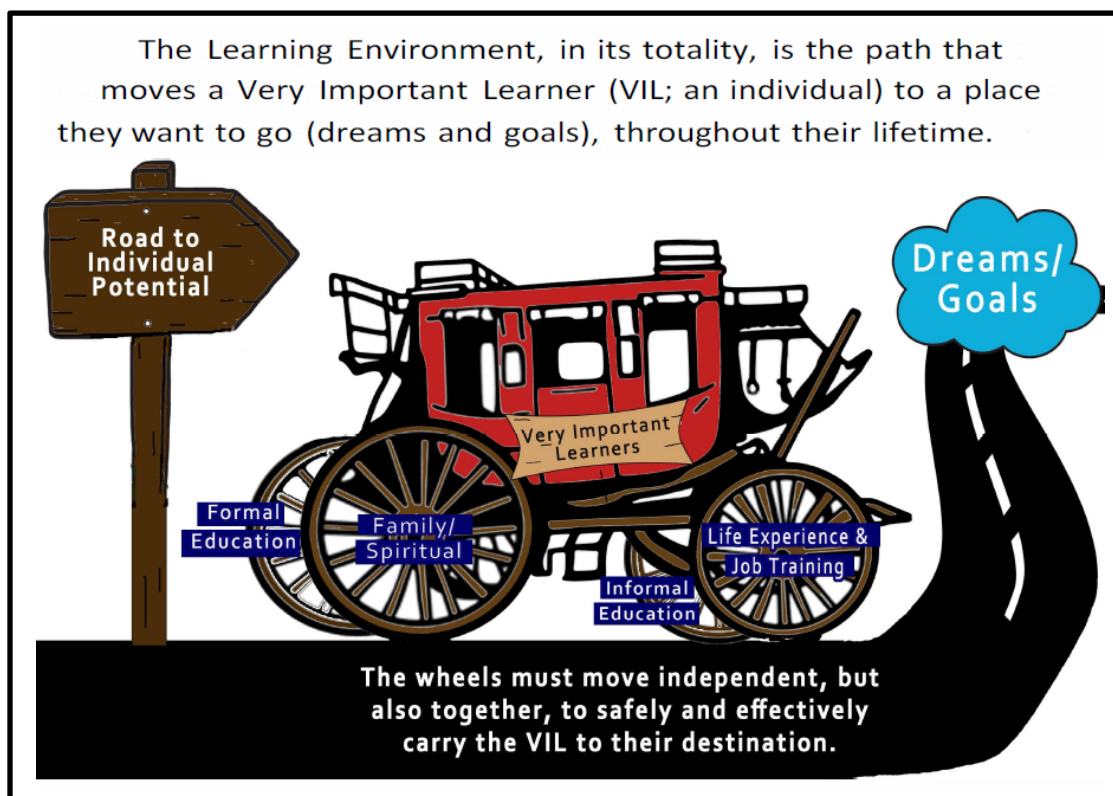


Figure 1. The Learning Environment. (Source: Open-Gate Foundation)

2.1 The “Who”

A community partnership is a relationship between an entity or an individual with a very important learner, usually through or via another established entity (e.g., a school, museum, or employer), that provides or

supports learning opportunities intended to move a learner towards a goal. The “who” of community partnerships is a wide net; there are numerous entities that provide learners with opportunities. Figure 2 presents some of the more common entities within the given roles (wheels, i.e, formal education, etc.), however, is in no way is it comprehensive. What Figure 2 does provide however, is a glimpse at the beginning of the complexity associated with defining or describing community partnerships; community partnerships can look very different. To further articulate the complexity of community partnerships so operational definitions can be established the following sections will continue to tease apart the “what”, “why”, “where”, “when”, and “how” to complete the picture.

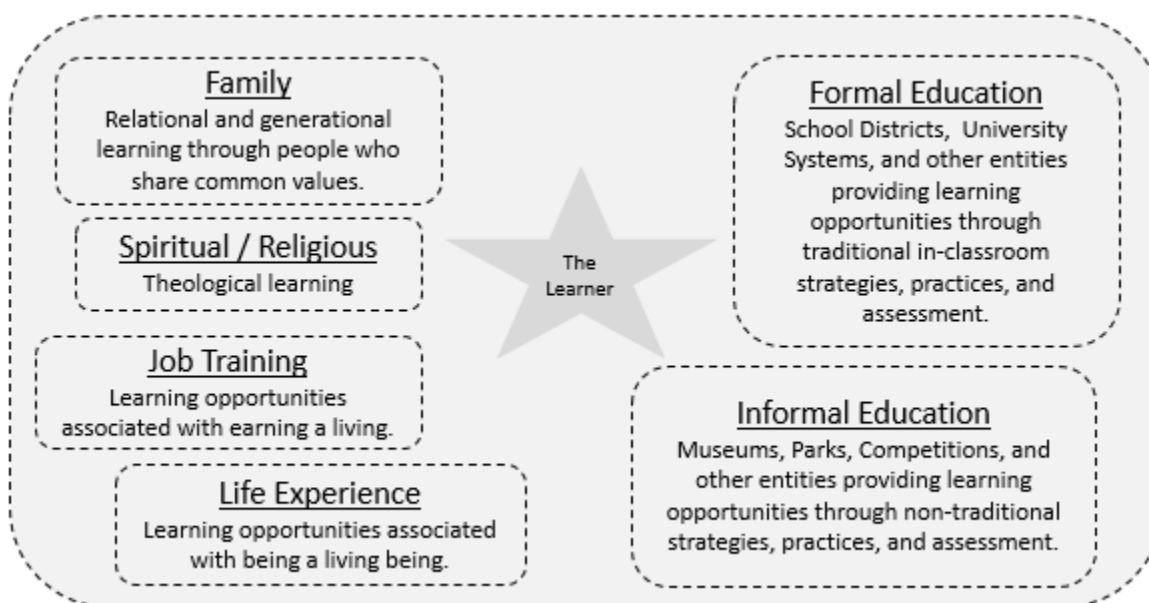


Figure 2. The “who” that provides the learner with learning opportunities (not comprehensive).

2.2 The “What”

The “who” can provide learning experiences (the “what”) to learners in a variety of forms (Figure 3). Learning opportunities may be:

- Structured: in a classroom or in a formal education environment.
- Non-structured: free-flowing, self-directed learning
- Authentic: naturally evolved lessons from life

A single entity may provide one, or a combination, of the different types of learning experiences. For example, job training may have structured components (e.g., formal classroom training experiences), as well as non-structured learning experiences that are guided by the need-to-learn, and authentic learning experiences that can only occur while experience is being obtained in real-life scenarios.

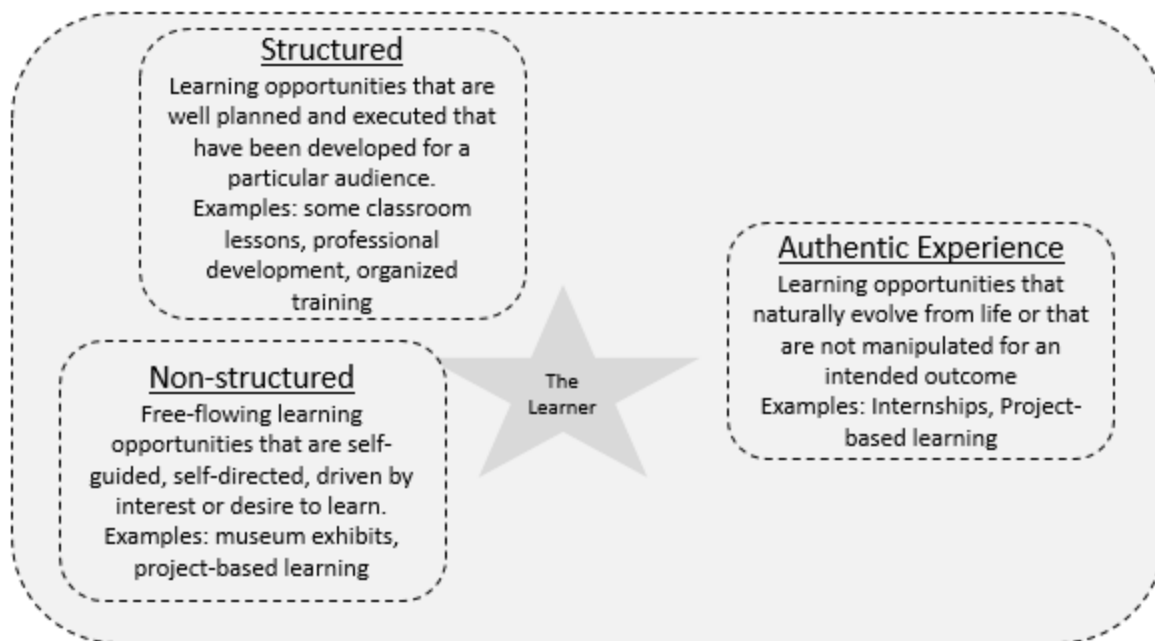


Figure 3. The “Who” can provide learning experiences (the “what”) to learners in a variety of ways.

2.3 The “Why”

The “Who” provides or supports opportunities for learning for a variety of reasons, the “why” (Figure 4). For example, some community partnerships are financial relationships which support learning opportunities, but do not actually provide a learning experience, per se. Whereas, other community partnerships are driven (established) by federal or state mandates, and funding may or may not be provided. Some community partners provide materials to be supportive of curriculum. Other community partners provide experiences through internships or other mechanisms to help expose learners to new information or to inspire/instill dreams and goals, or to promote future workforce development.

The “why” can also be multi-dimensional; there are usually several reasons why businesses want to contribute to learning. There is also the concept of “return on community” that reflects how a business is giving back to the community. When businesses partner with local schools they can have a positive impact on their local community by not only providing jobs, but by being actively involved in their community. Sharing their expertise, improving the future workforce, and inspiring the next generation are positive outcomes of community partnerships.

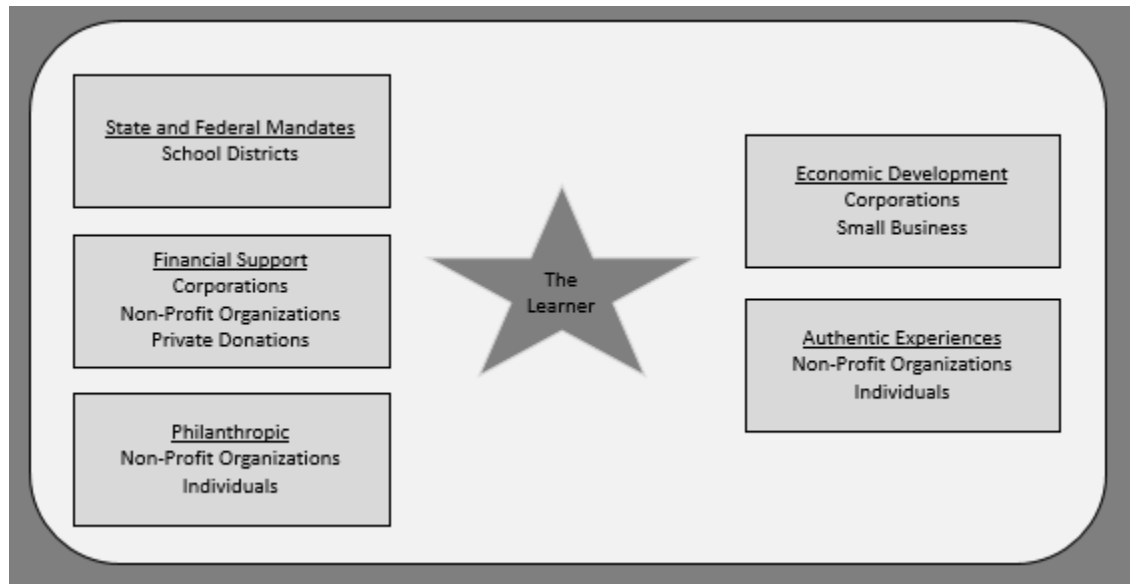


Figure 4. The “Who” provides their opportunities or support for a variety of reasons, the “why”.

2.4 The “Where”

Community partnership learning opportunities occur in a variety of places (Figure 5). They may be place-based, such as at school, museum, or business. In the 21st century, much of our learning occurs via the virtual world, through the internet or games. Learning also can occur via materials such as books. Other powerful learning experience venues are competitions or theme-based event, such as festivals.

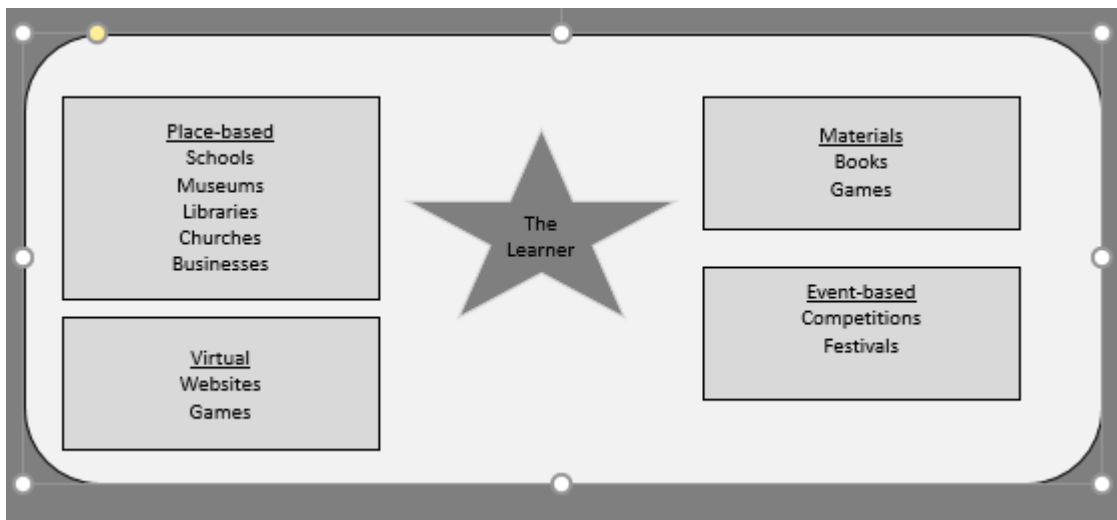


Figure 5. The “Who” provides learning opportunities through many venues.

2.5 The “When”

Learning should be occurring throughout a learners’ lifetime (Figure 6). If community partnerships are limited to “school-age” then there are many years that are not considered.

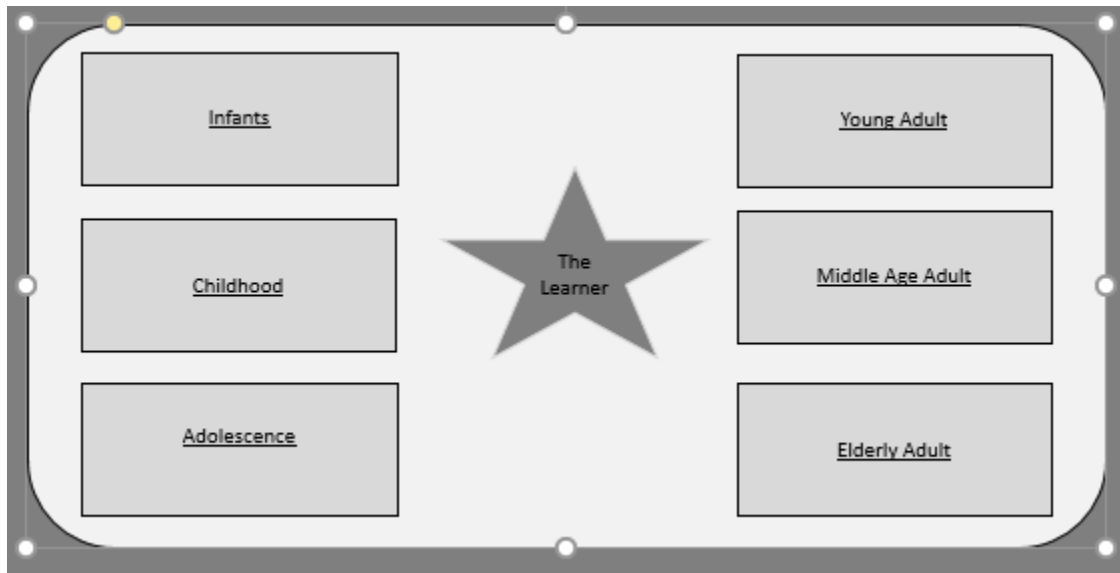


Figure 6. The “Who” can reach learners throughout a lifetime.

2.6 The “How”

Finally, the “how”, or a time commitment, of a community partner to an individual can also vary greatly. For example, the engagement between a community partner and a learner may be through a special event, like a science fair. Or, the engagement may be a one-time experience, such as a guest lecture in a classroom, or a science seminar at a museum. Community partnerships may also be much longer term, providing mentoring that lasts for months or years.

2.7 Operational Community Partnership Types

There are numerous types of partnerships, as evidenced by the breakdown of the 5-W’s in the previous sections. Listed below are some typical partnership types. Partnerships may also be a combinatorial, meaning that a single partnership encompasses a combination of several types. Clearly identifying the partnership type is helpful, if for no other reason, for evaluative purposes. The different community partnership types are intrinsically attached to different expectations, and having “a name” on the partnership may help minimize unmet expectations.

2.7.1 Financial Partnership

Financial partners contribute money to an entity. The money may be used for a variety of purposes, but the partnership is exclusively monetary; there is no expectation that services, such as expertise or materials, will be provided.

2.7.2 Material or Resource Partnership

Material or resource partners contribute materials or resources (supplies) to an educational entity.

2.7.3 Special Event Partnership

Special event partners serve at/for a particular event or host an event. Special events can be science fairs, science festivals, competitions (e.g., Lego League or Future Cities). A special event may also be a lecture or lecture series. Special event partners provide expertise, for example judges, or space, such as meeting space. Special event partners can also provide monetary support, in conjunction with other contributions.

2.7.4 Content Knowledge Partnership

A content knowledge partner provides expertise on a subject. For students, the outcome is usually in the form of a classroom lecture or field trip. For teachers, the outcome may be professional development on a subject or topic, or special training.

2.7.5 Career Awareness Partnership

A career awareness partner provides the opportunity for students to be exposed to careers. Activities such as career fair participation, mock interviews, internships, and field trips to businesses would align with a career awareness partnership.

2.7.6 Mentor Partnership

A mentor partner supports for an extended period of time and supports students (or teachers) in the production of a product or in support of a project.

2.7.7 Internship Partnership

Working together, educators and business leaders can work together to provide real-life experiences to students. Student internships are supervised work experiences, either part-time or full-time, and can be paid or unpaid. See Appendix C for internship brochures from Clark County School District.

3. AWARENESS OF ACADEMIC STANDARDS

Educators are familiar with academic standards; however, business partners generally know very little about academic standards. Students benefit when partners understand the role of academic standards. An understanding of academic standards minimizes frustrations and helps to ensure alignment of activities and opportunities to academic standards, which then strengthens the academic performance of Nevada's students and teachers.

3.1 What are Academic Standards?

Academic standards are the benchmarks or expectations for which learners are expected to learn. Academic standards generally are composed of practices, those things learners are expected to be able

to “do”, and content, the “knowledge” of a subject. Each academic discipline has “standards”. Standards are the basis of curriculum, or what is taught in a classroom.

The Common Core State Standards were drafted by educational and business experts including teachers at local levels. The Common Core State Standards provide clear and consistent guidelines for what every student should know and be able to do in math and English Language Arts (ELA) from kindergarten through 12th grade. English language arts incorporates standards in reading, writing, speaking, and listening. The standards are designed to ensure that students are prepared to enter entry-level careers, freshman-level college courses, and workforce training programs (Common Core 2018).

The Next Generation Science Standards are the coordinated effort of 26 Lead-State Partners, the National Research Council, the National Science Teachers Association, and the American Association for the Advancement of Science. These standards identify the science all K-12 students should know upon completion of high school (NGSS 2018). The Next Generation Science Standards also includes engineering and the engineering design process.

The Nevada Department of Education (NDE) adopted the Common Core State Standards in 2010, and the Next Generation Science Standards in 2013. Nevada also has academic content standards for computer science, visual arts, music, theater, dance, and media arts. The academic content standards for Nevada schools can be found on the Nevada Department of Education website.

3.2 Why should businesses care about Academic Standards?

Business leaders should be interested in academic standards because the academic standards dictate what is being taught in the classroom, and therefore impacts the preparedness of the workforce and competition at local, national and international levels. When a business is invited into a classroom, the visit will be maximized if the business-person can support the educator in the teaching of the academic standards, not just entertain the students. Students need to see real-world connections to the things they are learning, and business partners can help provide these opportunities for students.

In addition, Nevada students and teachers benefit greatly from opportunities to practice academic language. Academic language are words and terms not used in casual or informal language situations. Examples of academic language include terms such as, summarize, evaluate, classify, contrast, compare, demonstrate, and estimate. Academic language is paramount within the academic standards, and is used in testing and assessment situations, but too often not practiced in our classrooms. The authentic experiences that community partnerships provide can bolster to the use of academic language in the classroom.

3.3 Correlating Academic Standards to Workforce Skills

Educators are highly trained individuals in teaching students, however, they do not necessarily have experiences outside classrooms and schools or understand how the knowledge is transferred or applied in workplaces. Therefore, business partners are critical for helping educators correlate academic standards into workforce skills. For example, a high school biology teacher can teach about photosynthesis, mitosis and meiosis, and genetics. But, it is a perhaps a greenhouse owner, and a genetic counselor that can help the students see how what they are learning applies to the real-world. Real-world connections provide the answers to the age-old question of “why we have to learn this?”.

As educators and business leaders continue to work together, there will be an improvement in the appreciation and understanding of the challenges and limitations associated with creating a productive

member of society. Then, working together, the “developer” and the “user” can work together to overcome some the challenges and limitations so that there is an improved workforce ready and willing to serve their community when the K-12 education system “delivers” into the world.

It may also be time to return to and review an older report that was written in 1991, but appears to be very timely in 2018. The Secretary’s Commission on Achieving Necessary Skills or SCANS report produced by a committee appointed by the Secretary of Labor determined the skills young people need to succeed in the work world. The goal of the report was to encourage a high-performance economy based on high-skill, high-wage employment, with the objective to help teachers understand how curriculum and instruction is needed to enable students to develop the required high-performance skills. Their report titled, “What Work Requires of Schools” outlines “fundamental skills” and “workplace competencies”. See Box 1 for a summary of the listed skills and competencies.

BOX 1: Summary of the Fundamental Skills and Workplace Competencies from the Secretary's Commission on Achieving Necessary Skills report (SCANS 1991)**Fundamental Skills****Basic Skills:** Reads, writes, performs arithmetic and mathematical operations, listens and speaks

- A. Reading--locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules
- B. Writing--communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts
- C. Arithmetic/Mathematics--performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques
- D. Listening--receives, attends to, interprets, and responds to verbal messages and other cues
- E. Speaking--organizes ideas and communicates orally

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

- A. Creative Thinking--generates new ideas
- B. Decision Making--specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative
- C. Problem Solving--recognizes problems and devises and implements plan of action
- D. Seeing Things in the Mind's Eye--organizes, and processes symbols, pictures, graphs, objects, and other information
- E. Knowing How to Learn--uses efficient learning techniques to acquire and apply new knowledge and skills
- F. Reasoning--discovers a rule or principle underlying the relationship between two or objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

- A. Responsibility--exerts a high level of effort and perseveres towards goal attainment
- B. Self-Esteem--believes in own self-worth and maintains a positive view of self
- C. Sociability--demonstrates understanding, friendliness, adaptability, empathy, and
- D. Self-Management--assesses self accurately, sets personal goals, monitors progress, and exhibits self-control
- E. Integrity/Honesty--chooses ethical courses of action

Workplace Competencies**Resources:** Identifies, organizes, plans, and allocates resources

- A. *Time*--Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules
- B. *Money*--Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives
- C. *Material and Facilities*--Acquires, stores, allocates, and uses materials or space efficiently
- D. *Human Resources*--Assesses skills and distributes work accordingly, evaluates performance and provides feedback

Interpersonal: Works with others

- A. *Participates as Member of a Team*--contributes to group effort
- B. *Teaches Others New Skills*
- C. *Serves Clients/Customers*--works to satisfy customers' expectations
- D. *Exercises Leadership*--communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies
- E. *Negotiates*--works toward agreements involving exchange of resources, resolves divergent interests
- F. *Works with Diversity*--works well with men and women from diverse backgrounds

Information: Acquires and uses information

- A. *Acquires and Evaluates Information*
- B. *Organizes and Maintains Information*
- C. *Interprets and Communicates Information*
- D. *Uses Computers to Process Information*

Systems: Understands complex inter-relationships

- A. *Understands Systems*--knows how social, organizational, and technological systems work and operates effectively with them
- B. *Monitors and Corrects Performance*--distinguishes trends, predicts impacts on systems operations, diagnoses deviations in systems' performance and corrects malfunctions
- C. *Improves or Designs Systems*--suggests modifications to existing systems and develops new or alternative systems to improve performance

Technology: Works with a variety of technologies

- A. *Selects Technology*--chooses procedures, tools or equipment including computers and related technologies
- B. *Applies Technology to Task*--Understands overall intent and proper procedures for setup and operation of equipment
- C. *Maintains and Troubleshoots Equipment*--Prevents, identifies, or solves problems with equipment, including computers and other

4. HOW DO WE FORM A COMMUNITY PARTNERSHIP? BUSINESS TO EDUCATION

This section provides an overview of the steps and considerations to establish a community partnership, from business reaching out to education.

STEP 1: Determine Your Partnership Interest

Based on the different types of partnerships (Section 2.8), decide what type of partnership best suits your business and prepare a listing of what you are willing to offer.

STEP 2: Consider how you are going to handle sensitive information and safety hazards

Inviting students and teachers into your workplace may provide unique challenges regarding trade secrets and/or safety. Considering these potential sticky-situations beforehand will help you be better prepared for visitors.

If people are not coming to you, but you are sending employees out to represent your company, consider providing guidelines for what can and cannot be shared.

STEP 3: Research your local area to determine if there is a formal Community Partnership Office for your local school district.

STEP 2a: If yes, contact them and they will guide you in your next steps. School district contact information can be found on the Department of Education website.

STEP 2b: If no, contact the school of interest directly and start a conversation about a potential partnership. Before calling, it is a good idea to know what you want to offer the school, with as many specifics as possible.

STEP 4: Select Who to Send or Have Represent Your Business

Young, energetic and dynamic representatives are usually who you want to send to represent your business. However, it is important to balance youth versus experience. If the presenter is not knowledgeable and able to accurately answer questions, both technical and about your business, then you may do a disservice to both your business and the students. If it is logistically possible, it may be best to send a team to represent your business.

STEP 5: Prepare for Engagement

Depending on the partnership, there may be various levels of engagement. For example, there may first be engagement with the school by connecting with the school administrator, and then an engagement with students where your representative directly interacts with students. Or, another alternative might be an engagement with the school that results in school-wide programs that certainly impacts students, but doesn't involve your business representatives directly interacting with students, for example, donating technology or funding for a school garden. Both are potentially powerful partnerships! Therefore, you are encouraged to have a conversation with the school administration about what you can offer, and what the school needs. If the partnership moves in the direction of direct interaction with students, the following provides tips and hints for a successful engagement.

Connect with the teacher ahead of time and discuss expectations! Learn about what academic standards are associated with your invitation. Ask about academic language and work to incorporate it into your presentation/experience. Learn about what exposure the students will have had before your time with them, and how your visit will be followed-up in the classroom. This information can be used to help tie your presentation to previous knowledge or expectations.

Things to consider:

- Provide time for practice and dry-run. If you are doing an activity, if possible, practice with kids!! You will be amazed at how differently kids and adults think, process information, and move. What makes sense to you, or what you can easily do with your adult dexterity may not be true for kids.
- Don't bore them to death with a PowerPoint presentation. Try to minimize or not use PowerPoint, instead think of hands-on activities or games that can be used. If you do use a computer presentation, use few words with more pictures and graphics to interest the students.
- Remember that you are usually more effective as a facilitator than a lecturer. Ask them questions about their knowledge about your topic and meet them where they are.

Key characteristics for a successful *classroom presentation* are:

- Be a model for students by being familiar with laws, school and classroom rules and expectations.
- Interact with students on a personal level – have informal conversations relevant to what students are learning or expected to know and be able to do.
- Not afraid to go “off script” and allow the engagement to evolve where the students take it
- Prepared and organized (may include contact information, handouts, etc)

Key characteristics for a successful *field-trip experience* are:

- Develop and maintain a schedule
- Have a back-up plan for unexpected events (like weather and transportation)
- Be sure everyone in the group can hear the presenter. For example, you may need to invest in portable audio-enhancement equipment.
- Be sure everyone can see what you are talking about. If a tour, walk through with a group ahead of time and be sure that a group can fit and see.
- Use written signs to reinforce information.

Key characteristics for a successful *interview*:

- Have questions readily available and be sure you are familiar with them so you can ask them fluidly.
- Introduce everyone in the room. Don't use only fancy titles, help the interviewee understand how each person might relate to them if they secure the position
- Provide a comfortable setting, minimize interruptions.
- Demonstrate the same skills and competencies you are looking for in them, start on time, finish on time, be polite, respectful, and neat.

STEP 6: Evaluate the Experience

After the experience, it is important to take the time to evaluate the experience. Often this is overlooked due to time, the pressure to “get back to business”. However, taking a few minutes to evaluate the experience may be very beneficial. Reflection allows us to observe what worked, what didn't and think about how to improve for the next opportunity.

The evaluation should include three parts:

1. The reflections of the *teacher or school* you served. Potential questions to ask the teacher or school are:
 - Was it a fit?
 - Was this the right age group?
 - Would you want to repeat this experience?
 - What would you have the presenter do differently?
 - What did the presenter do really well?
2. The reflections of the *presenter*. Potential questions to ask the presenter are:
 - Was it a fit?
 - Was this the right age group?
 - Would you want to repeat this experience?
 - What would you have the teacher or school do differently?
 - What did the teacher do really well?
3. Get *student* feedback, too often we don't students what they thought! Potential questions to ask students are:
 - How did the presenter keep you interested?
 - What could the presenter have done differently?
 - What would you have liked to have experienced?
 - Name two things that surprised you.
 - Name two things you already knew, but learned more about.
 - If you were the presenter, how would you have presented the topic?

Section 6 provides more detailed information on evaluation tools.

5. HOW DO WE FORM A COMMUNITY PARTNERSHIP? EDUCATION TO BUSINESS

Schools in search of business partners will benefit from this section. It provides an overview of the steps and considerations to establish a community partnership.

STEP 1: Clearly identify your need.

The more specific the better. Businesses often “what to help”, but they need specifics.

STEP 2: Determine what type of community partnership will fill your need.

Based on the different types of partnerships (Section 2.8), decide what type of partnership best suits your school. Looking at your School Improvement Plan and your stated goals may help you identify potential business partners.

STEP 3: Research your local area to determine if there is a formal Community Partnership Office for your local school district.

STEP 3a: if yes, contact them directly and they will help you with your next step.

STEP 3b: if no, you can solicit support by directly contacting a business. Even if there is a formal partnership office, schools are still encouraged to find partners independently. Additional ways to solicit

support is to reach out through your parents and your Parent Teacher Organization to see if any of their contacts can help fill your need. Professional organizations are another avenue for which to solicit support. There is also the Nevada STEM Ambassador Program that helps connect STEM Practitioner with educators. You can register for assistance at their website, www.nvstem.org.

STEP 4: Prepare for Engagement

Depending on the partnership, there may be various levels of engagement. For example, there may first be engagement with the business by the school administration reaching out, and then a business representative interacts with students. Or, another alternative might be an engagement with the business that results in school-wide programs that certainly impacts students, but doesn't involve business representatives directly interacting with students, for example, donating technology or funding for a school garden. Both are potentially powerful partnerships! Therefore, you are encouraged to have a conversation with the business representative clearly articulating what your needs are. Having a clear and defined "ask" helps a business know if they can or cannot meet your needs. If the partnership moves in the direction of direct interaction with students, the following provides tips and hints for a successful engagement.

Connect with speaker ahead of time! Determine how you think standards align to what the presenters can provide, and share that with the presenters so they can help you meet your goals. When in conversation with the speaker, consider the opportunities for team teaching for this presentation. What might that look like? Also, consider how to increase the numbers of students who can benefit from this opportunity. Can you or should you invite other classes? How can others help maximize this experience?

Before the event consider ways that you can extend the visit with pre-event preparations and post-event activities. Discuss this in advance with the presenter, and share your plans so they can meet you where your class is. Having students write about the experience can be a powerful reflection opportunity.

STEP 5: Evaluate the Experience

After the experience, it is important to take the time to evaluate the experience. Often this is overlooked due to time, the pressure to "get back to business". However, taking a few minutes to evaluate the experience may be very beneficial. Reflection allows us to observe what worked, what didn't and think about how to improve for the next opportunity.

The evaluation should include three parts:

1. The reflections of the *teacher or school* you served. Potential questions to ask the teacher or school are:
 - Was it a fit?
 - Was this the right age group?
 - Would you want to repeat this experience?
 - What would you have the presenter do differently?
 - What did the presenter do really well?
2. The reflections of the *presenter*. Potential questions to ask the presenter are:
 - Was it a fit?
 - Was this the right age group?
 - Would you want to repeat this experience?
 - What would you have the teacher or school do differently?
 - What did the teacher do really well?

3. Get *student* feedback, too often we don't students what they thought! Potential questions to ask students are:
 - How did the presenter keep you interested?
 - What could the presenter have done differently?
 - What would you have liked to have experienced?
 - Name two things that surprised you.
 - Name two things you already knew, but learned more about.
 - If you were the presenter, how would you have presented the topic?

Section 6 provides more detailed information on evaluation tools.

6. PARTNERSHIP EVALUATION

There is a plethora of information on the importance and value regarding the evaluation of any project, including community partnerships. Program evaluation is certainly an art and science, in its own right. If your budget can manage it, contracting with a professional evaluator may be a good idea since there are a lot of intricacies in “formal” program evaluation. However, if your budget cannot afford a professional evaluator, it is possible to introduce “informal” evaluation into your practice. Presented in this section is simply a primer to emphasize the importance of evaluation and encourage you to include program evaluation in your community partnership program.

Evaluation provides a formal mechanism to establish criteria for a successful relationship. Community partnerships can be strengthened by a critical look at the relationship and assessing how each partner is addressing critical needs to build capacity.

There are also several levels at which the evaluation could, and perhaps should, be occurring. The differences in the community partnership may vary widely between the strategic (highest level; Administrators, Partners and Directors), tactical (mid-level; Managers, Coordinators), and operational (lowest-level; schools and classroom, presenters) levels. For example, from the strategic standpoint the relationship may be working well because there are benefits of having a relationship, such as high visibility of a company's logo, but at the operational level needs are not being met due to poor performance by presenters or the lack of in classroom resources.

Listed below are some areas to consider when creating your evaluation tool, and three templates from which you could start, one for a strategic evaluation, one for an operational level evaluation, and one for student input. Each evaluation tool should be specific to your community partnership, there is not a one-size-fits-all evaluation tool. The type of partnership (review Section 2.7) will certainly influence the questions being considered for an evaluation. Below are some possible considerations to include.

When evaluating partnering relationships (e.g., strategic or tactical level) possible considerations include:

- Communication: is the frequency enough? Does there need to be more face-to-face time? Response time acceptable?
- Commitment: is each partner contributing? Are expectations being met?
- Impact: how are lives changed? Are students being reached?

When evaluating presentations in schools (e.g., operational level) possible considerations include:

- Communication: was there adequate and meaningful communication between teacher and presenter prior to presentation? Connect with students? Speak to their level?
- Technology: Was technology used appropriately? Did it enhance or hinder message?
- Engagement: Was it a strict lecture or death by PowerPoint or was the speaker facilitating learning?
- Visual Aids: Used appropriately? Enhance or hinder?
- Demonstration: Could everyone see? Hear? Good explanations? Engaging questions? Summary?

When gathering information from students:

- Be sure your language is age-appropriate. For younger audiences consider using smiley faces instead of words, and be sure to read the question to them multiple times.
- Encourage them to think critically and provide genuine feedback. Remind them that the evaluation is not linked to their grade in anyway.

1
2
3
4
5
6
7

Community Partnership Evaluation Template²

Partnership Name: Partnership Evaluation Date:

Partnership Audience: Partnership Key Player(s):

Communication	Weak	Good	Strong	n/a	Ideas to Improve
Good channels of communication exist.					
Regular and frequent communication occurs. Frequency of communication meets needs.					
Face-to-face communication occurs as needed.					
Care and Co-Investment					
Partnership is something both partners care about.					
Partnership provides something valuable to both partners.					
Partner invests and devotes resources necessary for nurturing partnership.					
There is a willingness to work through problems.					
Expectations of both partners are clear.					
Expectations are met.					
Facilitation and Integration of Partnership					
Ongoing facilitation and development of partnership occurs.					
A physical “binder” exists to document partnership for transfer of knowledge.					
Community partner is well integrated into school.					
School is well integrated into Community Partner.					
Student Integration					
Students can describe the importance of the partnership.					
Students can talk to the partners about their reflections and learning.					
Community partner understands students’ aspirations and can support students.					

8
9
10

² adapted from Course-Community Service – Learning Partnership Assessment Rubric, by Dan Shapiro, California State University, Monterey Bay

Community Partnership Event Evaluation Template³

11
12
13
14
15
16

Event Name:

Event Date:

Event Audience:

Event Key Player(s):

For Presenter	Score	Comments
Was communication handled in a timely manner by your Educator? 1 = poor, 10 = best ever!		
On a scale of 1 - 10 (10 being the best thing ever) how would you rate your experience? Why did you rate your experience what you did?		
On a scale of 1 - 10 (10 being the best partner ever), would you work with this Educator again? Why?		
What suggestion(s) can you provide to make the experience better?	n/a	
After this experience, will you recommend this experience to a colleague? 1 = no way, 10 = totally!		
For Educator		
Was communication handled in a timely manner by your Ambassador? 1 = poor, 10 = best ever!		
Approximately how many students were reached? Enter #.		
On a scale of 1 - 10 (10 being the best thing ever) how would you rate your experience? Why did you rate your experience what you did?		
On a scale of 1 - 10 (10 being the best partner ever), would you work with this Ambassador again? Why?		
What suggestion(s) can you to make the experience better?	n/a	
After this experience, will you recommend this experience to a colleague? 1 = no way, 10 = totally!		

³ adapted from Nevada STEM Coalition, Nevada STEM Ambassador Program

Community Partnership Event Evaluation Template – For Students⁴

Event Name:

Event Date:

Do NOT write your name on this! Help the presenter become a better presenter, please be honest in your answers, but also be kind.

Write at least one, and up to three, things you liked about the presentation.
1.
2.
3.
Write at least one, and up to three, constructive criticisms, something the presenter could improve on:
1.
2.
3.
A question I still have is:
If I were to present this I might have included or used:

Things to consider:

Voice projection, was loud enough
Eye-contact with you, wasn't just reading from notes
Well-organized
Original ideas and interesting
Used PowerPoint slides well, didn't read from them
Told good stories
Didn't chew gum

Kept to time limit
Spoke at the right level, I could understand
Good use of handouts
Good activities

⁴ adapted from Nevada STEM Coalition, Nevada STEM Ambassador Program.

REFERENCES

Free Dictionary. Electronically accessed December 20, 2016 at www.encyclopedia.thefreedictionary.com

Nevada STEM Advisory Council (NSAC). 2017. Advisory Council on Science, Technology, Engineering, and Mathematics - STEM Strategic Plan 2017. Nevada Governor's Office of Science, Innovation, and Technology (OSIT). Carson City, Nevada.

Next Generation Science Standards (NGSS). 2017. Electronically accessed at nextgenscience.org on April 2, 2018.

STEM Council Sub-committee on Informal STEM Learning Environments (ISL). 2017. Informal STEM Learning in Nevada. Nevada STEM Advisory Council.

What Work Requires of Schools: A SCANS Report for America 2000. The Secretary's Commission on Achieving Necessary Skills, a publication of the US Department of Labor, June 1991.

GLOSSARY

Acronyms/Abbreviations

NDE

Nevada Department of Education

NSAC

Nevada STEM Advisory Council

NVACS-S

Nevada Academic Content Standards - Science

STEM

Science, Technology, Engineering, and Mathematics

Operational Definitions

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

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

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 arise.

Community Partnership: A relationship between an entity or an individual with a very important learner, usually through or via another established entity (e.g., a school, museum, or employer), that provides or supports learning opportunities intended to move a learner towards a goal.

Learning Environment: In its totality, the path that moves a very important learner (a person) to a known place they want to go (dreams and goals), throughout their lifetime.

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

Formal Education: Education occurring inside a traditional school setting

Informal Education: Education (Learning) outside of a traditional school setting. This includes museums, zoos, aquariums, nature centers, science centers, public lands, and youth, community, and out-of-school programs (ISL 2017).