

## **Umpqua Valley Regional STEAM Hub (UVRSH) Process to Request Funding**

*You are invited to become part of the energy to move forward the work of the Umpqua Valley Regional STEAM Hub. Attached you will find an application to request mini-grant funding to support learning experiences that demonstrate critical attributes of Quality STEAM Learning experiences, enhance and exemplify collaboration among community partners and indicate evidence of creating a positive collective impact on the success and future of youth in the Umpqua Valley.*

### **Umpqua Valley Regional STEAM Hub Unified Vision**

*By the year 2020, the Umpqua Valley Regional STEAM Hub (UVRSH) will be the major catalyst of community collaboration for future workforce development with collective impact around STEAM learning in the region.*

*The UVRSH will accomplish this by:*

- *Providing all youth with opportunities to learn 21<sup>st</sup> Century skills and aspire to STEAM-related careers*
- *Empowering youth, their parents, and other youth serving adults throughout the region*
- *Being responsive to regional stakeholder interests, needs, and expectations*
- *Inspiring curiosity through engaging, real-life STEAM learning experiences*
- *Measuring outcomes to ensure excellence and transparency at all levels*
- *Actively engaging schools, local businesses, nonprofits, and government agencies as partners*
- *Building a sustainable organization that strengthens existing resources and collaborations and attracts increased investments in STEAM learning in the region*

***The current round of mini-grant applications are due on December 8.*** Money awarded must be spent by June 30, 2015. A total of \$100,000 is currently allocated for mini-grants and will be awarded to those efforts that best address the vision of the UVRSH.

1. *A 3-5 member team\*\* will review proposals and recommend funding to the DCPSS Steering Committee. Team members will be individuals who would not have a direct advantage to the funding of the proposal.*
2. *Our year one priority is to initiate pilot learning experiences for youth across the Umpqua Valley that increases access, have potential to be replicable and scalable and meet the quality attributes for STEAM learning experiences (attributes attached).*
3. *All partners funded agree to collect appropriate data and evidence of impact on youth of the Umpqua Valley in partnership with DCPSS and the UVRSH.*

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## UMPQUA VALLEY REGIONAL STEAM Hub Proposal for Funding

This application must be submitted by a collaborative of partners working together to create a positive, collective impact on the futures of youth in the Umpqua Valley.

**LEARNING EXPERINECE (Collaborative) TITLE:**

**TOTAL FUNDS REQUESTED:**

1. Name of Key Contact:

Address:

City/State/Zip:

Phone:

Email:

2. Type of Project (Mark all that apply)

- Exposure                       Exploration                       Immersion  
 Mentor Opportunity               Internship                       Post-Secondary Connection  
 New Venture               Continuation of Existing Opportunity               Other (specify)\_\_\_\_\_

3. Learning Experience Objectives and Benefits to Youth of the Umpqua Valley

4. Description of Learning Experience. Briefly explain what you are proposing to do (attach supporting documents if more efficient). Clearly explain how the learning experience(s) will address the type of project you described above.

5. Location(s) of Learning Experience:

6. Proposed Dates of Learning Experience

7. Age Group Served (Mark more than one if appropriate):

- Early Childhood (Birth to Five)     Grades K-3     Grades 4-5  
 Middle School     High School     Post-Secondary     Adults Serving Youth

*Give more explanation if you feel appropriate such as a focus on a particular population of youth.*

8. Total Number of Youth Served:

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- How will this learning experience build on and lead to other learning experiences for youth that support a positive plan for the future? Are there links to future opportunities such as ongoing mentoring, follow-up experiences, intentional connections to pre-college and college planning, etc.)

**PARTNERS**

- List all partners and what role they will be playing on the attached chart.
- ENHANCEMENT OPPORTUNITIES** – *What enhancements and/or supports from the rest of the Umpqua Valley STEAM Hub would add overall impact for youth participating in your effort? What partnerships and connections would you like to foster?*
- What technical assistance or additional support would benefit the success of the learning experience (professional development of staff, curriculum development, ..... )?

**BUDGET SUPPORT**

- (Attach current budget) What financial support would be required to allow you to be successful and serve as a model for scaling up to reach more youth?*
- Other Funding Sources and Amount:

SOURCE	AMOUNT

**SCALING UP and SUSTAINABILITY**

- Describe the current vision of how your learning experience could best be scaled up to reach more youth and be sustained into the future.
- Describe how this learning experience will specifically open up opportunities for underserved and non-traditional youth. What are perceived barriers to equitable opportunity for all kids that you will address through this project?



## **DEFINITIONS for “TYPE of PROJECT”**

### **Exposure Programs:**

- Objective: introductory program that exposes students to STEAM related learning; students are exploring interest areas and are still deciding whether or not they want to pursue STEAM related career options.
- K-12 programs or presentations that are of have a more general content can be completed in 8 hours or less with a frequency of engaging the student a minimum of once per year.
- If there are multiple annual presentations, it is an identical presentation as opposed to a series or ongoing class. Series or on-going classes may be put into either the exploration or immersion categories dependent upon content.
- Offers students quick exposure to STEAM-related learning

### **Exploration Programs:**

- Objective: Entry-level exploration of STEAM-related learning and/or careers for students to be applied in careers or positive citizenry.
- Programs tend to be more than one day in length with multiple experiences and follow-up.
- Assists student in one or more of these areas: exploration in the STEAM-related learning environment, educating students on requirements for the career pathways, educating students on application in positive citizenry and assisting students with soft skills needed to be successful.

### **Immersion Programs:**

- Objective: Students in the program have been identified as having a definite interest in STEAM-related careers and have made a meaningful commitment to gaining direct application experience.
- Offers students a more focused and intense experience with STEAM-related education.
- Programs lasts for over an extended period of time.
- Students are identified as moving on to the college transition/career preparation stage and have begun creating their post-secondary education plan.

### **College Transition/Career Preparation**

- Objective: Students in the program have been identified as having a definite interest in STEAM-related careers and have made a meaningful commitment by intentionally earning college credit following a STEAM-related career pathway.
- Students have a clear post-secondary plan with projections for completion, work experience involvement and initiation into career.



## **Umpqua Valley Regional STEAM Hub**

### **Critical Attributes of Quality STEAM Learning Experiences**

#### **Year I Focus**

- *Develop sustainable partnership plan that mobilizes current assets and creates opportunities to transform how we deliver STEAM related learning experiences to youth of the Umpqua Valley*
- *Initiate pilot learning experiences for youth across the Umpqua Valley that increases access, have potential to be replicable and scalable and meet DRAFT attributes for Quality STEAM learning experiences (attributes attached: rubrics for early, developing, prepared and model experiences to be developed)*

#### **PROPOSED GRANT ACTIVITIES** (flexibility remains as partnership plan is developed)

##### **Mentoring (Navigators)/Internships**

- *Coordinator to develop relationships with adults and work sites*
- *Links to schools, non-profits and other places where youth are engaged*
- *Training for adults on developmental relationship skills*

##### **Out-of-School STEAM Activities linked to In-School Learning**

- *Contract with Curriculum Developer to scale-up existing programs to outlying areas*
- *Community and/or School based STEAM Clubs (OSU SMILE program support)*
- *OSU Traveling Engineering Lab*
- *UCC Traveling STEAM Lab*
- *Expansion of Science Friday, Summer STEAM camp, field trip opportunities with partners*

##### **Summer STEAM Institute for Youth**

- *Professional Career and CTE focus*
- *Connects to post-secondary options*
- *Problem-based, project oriented experiences for students building STEAM skills*
- *College credit*

##### **Summer STEAM Professional Development Institutes for Youth-Serving Adults**

- *Building adults skills in promoting critical thinking, problem-solving, creative innovation*
- *Skills for mentoring and working with youth – building developmental relationships*
- *Knowledge of post-secondary options and paths for access*



QUALITY ATTRIBUTES: STEAM LEARNING EXPERIENCES <i>(Not all attributes required or appropriate for all projects; Applicants are encouraged to consider how to increase impact by increasing attributes addressed in project)</i>	EMERGING	DEVELOPING	PRACTICED	MODEL	Not Applicable For This Project Notes For Future Development
<b>Community and School-based Integrated Science, Technology, Engineering, Arts and Mathematics (STEAM) curriculum, aligned with state, national, international and industry standards</b>					
1) Student initiated, project-based learning with integrated content and experience across STEAM subjects					
2) Connections to other effective in- and out-of-school STEAM programs and partners are evident					
3) Integration of relevant technology and virtual learning					
4) Authentic exhibition of STEAM skills					
5) Connections made from exposure to exploration to immersion to plans for future					
6) Outreach, support and focus on underserved youth, especially females, minorities, economically disadvantaged and those students at risk of dropping out and not engaging in positive plan for future					
<b>On-going community and industry engagement</b>					
7) Professional development includes integrated STEAM curriculum, community/industry partnerships and postsecondary education connections					
8) Professional Development on the role adults play in building Developmental Assets and Developmental Relationships					
9) STEAM work-based learning experiences, to increase interest and abilities in fields requiring STEAM skills, for each student and adults working with youth					
10) Business and community partnerships for mentorship, internship and other STEAM opportunities that extend beyond the classroom walls					
<b>Connections with postsecondary education</b>					
12) Alignment of student's career pathway with postsecondary STEAM program(s)					
13) Opportunity for credit completion at community colleges, colleges and/or universities					
<b>Demonstrates qualities of creating Collective Impact</b>					
14) Supports the Umpqua Valley Regional STEAM partnership plan adopted across education, communities and businesses					
15) Advances the reaching of shared goals through a collective impact approach					
16) Based on shared and mutually reinforcing activities with other partners					



## **DEFINITIONS for STAGES of QUALITY ATTRIBUTES**

**NOTE: Not all attributes are required or appropriate for all projects; Applicants are encouraged to consider how to increase impact by increasing attributes addressed in project.**

### **EMERGING**

Activities, practices or efforts are in the planning stage or very initial stages of implementation with no evidence of impact or success. Frequency is best described as rarely or a small portion of time.

### **DEVELOPING**

Activities, practices or efforts are in place, ready to collect evidence of impact or success. Frequency is best described as periodic or emerging as regular practice.

### **PRACTICED**

Activities, practices or efforts are frequent in nature and a part of regular expected practice. Routines are fine-tuned based on continuous improvement efforts. Evidence is regularly being collected to determine level of impact or success.

### **MODEL**

Activities, practices or efforts are in full implementation with strong evidence of positive impact or success. Activities, practices or efforts occur regularly as a way of “how things are done”, an expected part of the culture. What works is well documented and available to be scaled up and shared.

## **RESOURCES**

The Collective Impact Continuum: <http://www.strivetogether.org/blog/2013/10/the-impact-continuum-recognizing-the-value-of-collaboration-and-collective-impact/>

Working Paper – “How Cross-Sector Collaborations are Advancing STEM Learning”  
[http://www.noycefdn.org/documents/STEM\\_ECOSYSTEMS\\_REPORT\\_140128.pdf](http://www.noycefdn.org/documents/STEM_ECOSYSTEMS_REPORT_140128.pdf)

NC STEM Learning Network – STEM Attributes and Rubrics: <https://www.ncstem.org/stem-strategy/attributes-rubric.html>