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[www.msudenver.edu/case/multi](http://www.msudenver.edu/case/multi)

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MULTI Webpage

[www.msudenver.edu/case/multi](http://www.msudenver.edu/case/multi)

## MULTI Newsletter

A Community Approach to Engaging Students  
and Teachers in Effective STEM Education

### *STEM Career Watercooler Series*

In May and June, we are sponsoring various informal science education organizations to share their expertise and exciting programs. These groups have partnered with us for STEM Expo events we have sponsored in the past.

May 6, 3-4pm, Zoom Webinar (RSVP by May 5<sup>th</sup>)

The first webinar will feature Analise Harris, the founder of Curls on the Block, an enrichment program for girls of all curls and colors to embrace, explore and empower their natural selves while working to increase engagement, investment, and commitment to careers in science, technology, engineering, art, and math (STEAM).

Register for the first STEM Career Watercooler Event by May 5

<https://forms.gle/f6EKAX2ktnQACskF9>

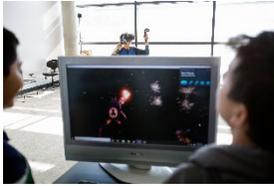
### *STEM For All Video Showcase*

A video highlighting MULTI STEM activities has entered into the NSF-funded STEM For All Video Showcase. We would love for you to watch and **vote for our video** (and other great videos). We are honored to be included in this free, interactive event featuring over 170 federally-funded projects. The videos are available from May 5 to May 12 for viewing at (<https://stemforall2020.videohall.com/>)

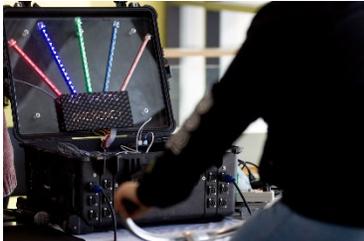
### *MULTI STEM Summer Institute: Field Biology*

We are sad to announce that our scheduled Summer Institute field camp at the Rio Mora National Wildlife Refuge has been cancelled in the wake of social distancing rules. We were so excited to replicate some of the impactful experiences that Dawn's Community College of Denver students have shared during the past three Institutes.

We **are** actively planning for a similar field research workshop at a Denver area wildlife refuge (such as the Rocky Mountain Arsenal) for July 14-17 with some of the same experts from the Denver Zoo that work at Rio Mora. We have some hurdles to clear in terms of ensuring social distancing, but are hopeful that this will be a great culminating experience as our 4-year NSF grant comes to an end. Go to the MULTI webpage for details and registration info soon.



Students view the virtual reality experience of a classmate.



Pedal power at STEM EXPO



Snow science



Students learning from each other at Research Showcase



At the SACNAS table

## *Student Research Showcase & Expo* *Research Showcase*

MULTI STEM hosted a student research symposium on February 8, 2020. This was an opportunity for students to present their research projects using data they have collected. A highlight of the student research showcase portion of the event were two high school groups from Navajo Prep in New Mexico who shared community-relevant water quality focused on tribal land in the four corners region.



Navajo Prep students from Shiprock, NM share via ZOOM

MULTI STEM was honored to provide travel and registration funding for the Navajo Prep groups to present at the 5<sup>th</sup> annual GLOBE Southwest Region Student Research Symposium in Austin, Texas). Unfortunately, the GLOBE SRS was cancelled this year, but we would encourage teachers from Grades 5-12 to consider the rescheduled Austin SW SRS in 2021.

Students were able to view research posters by Community College of Denver and Metropolitan State University students. We hope that such near-peer interactions inspire future scientists.

### *STEM EXPO*

College student groups including SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science) provided hands-on activities for students and their families. The EXPO also included stations from Curls on the Block, macroinvertebrates from Denver Water, virtual reality, and electricity-generating bikes. It was great to see families attending to support their students providing an early exposure to STEM fun for younger siblings.

## ***STEM Teaching Tools Unconference***

### Upcoming Events

(See stories in this issue or MULTI web site for more details)

#### **May 6, 3-4pm**

STEM Career Watercooler  
Curls on the Block

#### **May 5-12**

STEM for All Video Showcase  
Viewing and Voting

#### **May/June**

Additional STEM Career  
Watercooler Events

#### **July 15-17**

MULTI STEM Summer  
Institute, Field Research at  
Rocky Mountain Arsenal

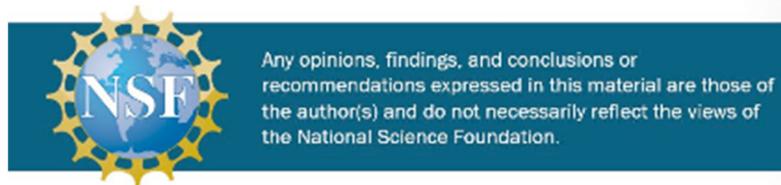
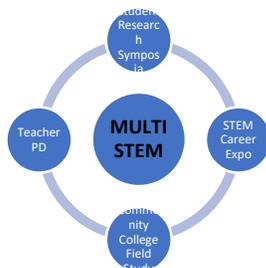
#### **August**

STEM Teaching Tools  
Unconference hosted by  
MULTI STEM

The MULTI STEM team has been asked to serve as host for the upcoming regional STEM Teaching Tools Unconference sponsored by the ACESSE Collaborative, Council of State Science Supervisors, University of Colorado, and the University of Washington. “An unconference is a participant-driven meeting. The term ‘unconference’ has been applied, or self-applied, to a wide range of gatherings that try to avoid hierarchical aspects of a conventional conference, such as sponsored presentations and top-down organization.” (Wikipedia) It is a meeting self-organized by participants into emergent workgroups around topics of interest. People vote with their participation. Attendees will come from states in the western region of the US to share innovative and equitable science pedagogy. MULTI STEM teachers will be asked to share some of the work they’ve been doing in their own classrooms.

## ***STEM Teaching Tools Book***

STEM Teaching Tools (<http://stemteachingtools.org/tools>) is an Open Education Resources project sponsored by NSF. We are so impressed by the project that we are assembling an impactful set of 1-page teaching practice briefs into a bound collection to distribute to interested teachers. Examples include *Why should students learn to plan and carry out investigations in science and engineering?* and *Getting their hands dirty: Engaging learners in authentic science practices outside the classroom*. We are applying our NSF grant research (thanks to MULTI teachers’ collaboration) to create teaching practice briefs to add to the collection. You should have received an e-mail on how to opt-in for receiving this great resource.



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