



One student stands by her works at Bite Me Cake Co.

# Pueblo County Extension Pathways

# Where We've Been...

Restorative Justice Programming for At-Risk Youth in Pueblo County By Jane Crayton, Extension Agent/4-H Youth Development/STEAM

In June of 2016, the Pueblo County STEAM program hosted the first photography camp for at-risk Department of Social Services (DSS) clients. Working closely with DSS, we wanted to create a successful program that would provide some restorative justice programming to help youth find positive outlets through art making. We created a real-world experience for them focused around the First Friday Art Walk in downtown Pueblo.

The first day of the camp focused on photography basics and introduced several career opportunities for photographers. Then we headed to Sangre de Cristo Art Center for a tour of the Ansel Adams and National Parks photography shows. There Liz Szabo, the curator, discussed aspects of working in an art museum, and she suggested possible jobs for the youth working at the arts center and with art in general.

Then we headed to the Riverwalk to eat lunch and take pictures along the outdoor park. Next, we headed to Bite Me Cake Company to see where their art would hang. We also checked out the John Deaux Art Gallery where artist Radeaux showed them his studio and discussed mounting techniques for hanging art in galleries. The youth then walked around downtown and continued taking test pictures along the railroad museum and through Neon alley. Then we returned to the Extension office for a photography demonstration by Michael Fisher a local, accomplished wildlife photographer and Pueblo County Extension Director. He discussed techniques and tips for taking wildlife photography and showed the youth several of his printed photographs.

On the second day, we headed to Garden of the Gods Park in Colorado Springs were students shot scenic landscape photography, much like Ansel Adams had done. The afternoon was spent shooting images around Old Colorado City and a different section of the Garden of the God's park.

On the third day, we took the youth to Pueblo Community College to work in a computer lab. They used Adobe Photoshop to edit their photos. I collected the final .tiff images and sent them to Reed Art and Imaging for printing. On June 28th, we hosted the matting and framing workshop at Create Art Studios, there Joshua demonstrated how to cut mat board and he and his assistants helped the youth mat and frame their photos.

The next day, the youth met at Bite Me Cake Company and we hung their artwork for the First Friday Art Walk Opening on July 1<sup>st</sup>. We had one of the Steel City Makers, Tim Rouch help us measure and mark the walls for installation of the 12 photos.

On Friday, July 1<sup>st</sup> the Pueblo Chieftain published a lengthy article about the program with pictures of the girls shooting photography. The article encouraged people to show up for the First Friday Art Opening at Bite Me Cake Company that evening from 5pm to 7pm. The opening was a success with more than 50 people in attendance. Each of the youth had sold at least one photo by the end of the evening. Youth will receive the money from the sales to help pay any fines or fees they may owe to the court. This was part of the restorative justice programming that we built into the program for these at-risk youth.

The program was a huge success, with the youth stating that they were certainly interested in participating in another similar program or repeating the program again next year. Some even suggested they have found new career interests. The youth engaged in learning technology through arts as they adjusted their cameras to improve their photos and edited their photos using photo editing software. They also built some life and personal skills which they were able to apply in a

community setting while interacting with the public at their art show and also by interacting with several businesses as professional artists over the course of this camp. I'm looking forward to hosting this program again next year, and working with DSS in the future to develop further restorative justice programs for at-risk youth in Pueblo County.



Practicing photography skills at the Riverwalk

## Where We've Been..

## The Science of Horticulture

Fountain International Magnet School (FIMS) in Pueblo had their 8th annual Science Day this May. Colorado Master Gardener Kata Schmidt, and CSU Extension Horticulture Coordinator Sherie Caffey were happy to participate in the event this year.

The goal of Science Day was to show the young children of FIMS all of the different science fields there are, and that they could one day have a career in one of those fields. The school had 19 presenters this year, all representing a different scientific area. All of the presenters were from Colorado (most from Pueblo) which shows the students that science is alive right here in our own community. The students cycled through stations and learned about things ranging from crime scene investigation, geospatial technology, internal human anatomy, and of course horticulture!

The CSU Extension/Master Gardener station aimed to teach the kids about careers in horticulture, and also help them to learn the purpose of the different parts of plants. The kids got a brief introduction to the basic plant parts; seeds, stems, flowers, leaves, and fruits. The main goal was to show the kids that each part is very important to the plant as a whole, and that they all have a specific job. The kids also got some information on how plants use animals to disperse their seeds, and creepy crawly explanation of how spiders the development of a plant in the seed. They even learned a new big word to take home and impress their parents, the leaves that first emerge from the seed are called "cotyledons".

The favorite part of the station for most of the students was the plant part scavenger hunt. The kids got into small groups and set out to find a stem, flower, leaf, seed and fruit in their school yard. The kids learned things

like, grass has flower, and tree trunks are stems. This activity really increased the kid's awareness of the plant parts they encounter every day. After each team returned with their plant parts, they were rewarded with an orange slice, and a seed to take home and plant.



Colorado Master Gardener Kata Schmidt teaching a group of kids how chocolate is a vegetable, and how spiders taste with their feet!

After it was all said and done, the CSU Extension/Master

Gardener booth reached 400 students and 26 parents. Many of the adults actually learned something new as well. The station wrapped up with Kata giving the kids some science fun facts. She taught the kids that chocolate comes from a plant, and technically is a vegetable (they loved this!), and she gave a taste with their feet. This event was a great opportunity to promote careers in science to young children!

# Where We're Going...

# Maker Fun coming to CSU Extension - Pueblo County By Jane Crayton, Extension Agent, 4-H Youth Development/STEAM

Maker mania is happening at the Extension STEAM Lab in Pueblo County. Ok, so its just my office, but I'm printing 3D artifacts like mad, and building lots of DIY activities to spark some imagination in our local youth. The Maker program is just starting, but it's already gaining some interest in the local community. We held our first 4-H Maker Club meeting at the end of June, and we've planned a bunch of Maker activities for County Fair, Adventure Day Camp and after-school programs starting in the fall.



3-D printed samples of artifacts from an archaeological dig in Oaxaca, Mexico.

For Family Fun Day July 29<sup>th</sup> at the Pueblo County Fair, I will be hosting an archaeological dig for children 5 years and under. The aim of this project was to introduce the youth to the science of archaeology and to engage them in the application of technology and science-based education. I printed several archaeological artifacts that I had previously captured using photogrammetry technology in Oaxaca, Mexico. I used those photogrammetry models to create 3D prints of the artifacts that will then be buried in sand for kids to excavate. When they find an object, they will then match it to the printed versions of the artifacts posted on a nearby wall. During this exhibit, I plan to also offer the kids the opportunity to get 3D scans of their bodies, where they can see the 3D image of themselves on a

nearby monitor. Kids will then understand how the 3D artifacts were created by engaging in the 3D scanning process. A 3D printer will also be on display and will be printing additional artifacts as an example of the technology.

Adventure Day Camp is also hosting three Maker activities during the three day camp. The first activity is using the Makey Makey which turns simple everyday objects into touchpads and combines them with the internet or any simple software application. Makey Makey's use alligator clips to assign actions to the board, which sends a keyboard message, making your computer think it's a normal keyboard. At Adventure Day Camp the campers will build their own controllers to DJ music on a laptop, allowing them to control the music and mix tracks live.

Another Maker style activity being hosted at Adventure Day Camp is citrus circuits, where students will build LED dream catchers that are powered by citrus. The students weave copper and zinc coated wire to create a simple circuit. Instead of powering it with a battery, the students will squeeze lemons over the circuit connections on the edge of the dream catcher to power the LED. Similarly, the campers will build another LED powered light using pennies, zinc washers and vinegar to light up their stained glass jars and make them into night lights.

Adventure Day Camp is also going to visit the 3D printing lab at CSU-Pueblo on the last day of camp; they will get 3D scans of themselves and get to check out the 3D printers in action. Each child will get to choose a 3D printed pendant to add to their solar bead necklaces they made earlier in the camp.

To keep the Maker movement happening in Pueblo County, I have also developed a program called Growing STEAM Makers, which is an after-school program for youth Makers. I have partnered with several local libraries, Pueblo House and the Steel City Makers to host after-school activities for FREE one day a month at multiple locations, with multi-day after-school camps for extended fee based projects. I am very excited about the interest in the Maker Community here in Pueblo County. I think that the Maker movement has the ability to help change the STEM graduate deficit for Pueblo County youth, ultimately affecting the multi-generational poverty issues facing Pueblo area residents.

Colorado State University Extension

### **Upcoming Events**

Call 583-6566 or visit http://pueblo.colostate.edu for details.

#### Family and Consumer Programs

• The search is underway for a new Family and Consumer Agent. The position is under review.

#### **Horticulture Programs**

- Pollination Maker Workshop Series
   — Going
   Batty. Saturday, August 13, 9:00 am-1:00 pm
   \$35.00
- Rain Barrel Workshop-Tuesday, August 2, 9:00 am-12:00 pm, \$15/person or \$25 for couples sharing
- All Pueblo Grows Seed Library, collecting and packaging seeds, last Saturday of every month, Rawlings Library, Idea Factory - 2nd Floor.

#### **4-H/Youth Development**

Ongoing Club and County Programs Including:

- Pueblo County Fair
- Colorado State Fair

#### **4-H STEAM**

- Adventure Day Camp, August 8-10– FULL
- Growing STEAM Makers— at Pueblo area libraries starting in September. Call for details— 719-583-6566

#### **EFNEP (Expanded Food and Nutrition Program)**

• Nutrition classes—Ongoing-call for schedule

#### Ag/Range/Natural Resources

- Site visits and consultations

   Ongoing, upon request
- What You Need to Know to Protect Your Flock– Poultry Diseases, Aug 9, 7:00 pm, Free, Call to register 719-583-6566

#### **Pueblo Youth Naturally**

Program under review.

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## **Awards and Recognition**

## Devin Engle & MJ Fisher Win 2016 Regional Extension Awards

CSU Extension has three regions across the state. Pueblo County is one of thirty-one counties in the Peaks & Plains Region.



During this year's Peaks

& Plains Regional Extension meeting, five people received "Extending Excellence Awards." Pueblo County Youth Development Extension Agent, Devin Engle, and Pueblo County Extension Director, MJ Fisher were two of the recipients. Devin's award was in the "Volunteer Manager" category and reflected her effort and commitment to fostering strong relations between 4-H and local volunteers. The nomination included input from both the Extension office and Pueblo County volunteers. MJ received the award for "Outstanding

Communicator." Among other contributions, the nomination recognized this newsletter as evidence of MJ's communication skills.



Extension programs are available to all without discrimination. If you have a disability for which you seek an accommodation, please notify CSU Extension at 719-583-6566 at least five (5) business days in advance of the event. Colorado State University Extension, U.S. Department of Agriculture and Colorado counties cooperating.