Welcome to our new GT Site Coordinators!

We are pleased to announce new site coordinators in the following schools and are excited to see what great things they will be implementing with their GT groups!

- Cedaredge Elementary – Peggy Lampton
- Cedaredge High – Ginger McPherson
- Delta Middle – Evan Cummings
- Hotchkiss K8 – Curtis Hintz
- DAAL – Wendy Reed

The 2014-2015 school year is off to a great start! We’d love to have you join our quarterly Parent Council meetings; it’s a great place to find out what’s happening in the gifted and talented program. This year’s meeting dates are October 20, February 9, and March 23 at 6:00p at the District Office. If you are unable to join us you can always get updates from our website at: http://specialservices.deltaschools.com/gifted-talented.php.

C-GER Visit

The C-GER (Colorado Gifted Education Review) team reviews each district in the state approximately every five years; their review of Delta County School District (DCSD) was October 6-8 this year. They review the district’s efforts to serve GT students and the district’s compliance with state statues. This team is comprised of a group of professionals from around the state. At the end of their review, they will give DCSD GT Program an exit review giving suggestions for improvement and highlighting strengths.
**After School programs at Lincoln Elementary**

Lincoln Elementary is off to great start with our Gifted and Talented Program. We have met with parents and are working on beginning some after school programs. We are looking at starting a GT game club and continuing the Language of Lincoln Newspaper.

**Delta High School Students Excel with Summer Camp Opportunities**

This past summer two of Delta High School’s outstanding young women attended separate engineering-related summer camp experiences at university campuses in Michigan and Greeley, CO. Below are their stories and highlights of their amazing opportunities. GT funds help sponsor a portion of their trip.

**Sara Jurca**

This summer I had the life-changing experience of attending Michigan Technological University’s (Michigan Tech’s) Women in Engineering (WIE) summer camp. I spent a week in Houghton, Michigan, which is at the far tip of the Upper Peninsula. My ability to attend the camp was through a scholarship program, and included a fairly lengthy application, but I have to say it was well worth it.

When I arrived in Hancock, Michigan, the town right next to Houghton (just on the other side of the portage, a long canal that shortens the trip around the tip of the peninsula), I was amazed at how beautiful it was. It reminded me of being in the mountains in Colorado but only 607 ft. above sea level. Michigan Tech’s campus was just as beautiful as the surrounding area. The campus is small, easily smaller than Colorado Mesa, but the school own miles of hiking trails for students to explore the area.

WIE began on Sunday. There were 150 girls there from all over the country and the world, including three girls from Bahrain. We stayed in the dorms on campus with one roommate. My roommate was probably one of the greatest people I have ever met, and an unexpected highlight of my experience. Most of the first day was spent waiting for people to arrive, orientation, and welcome activities. The next day we delved into our engineering sessions.

Over the course of the week, we had 9 engineering sessions, covering topics including environmental engineering, chemical engineering, civil engineering, computer science, mechanical engineering, materials engineering, electrical engineering, geological engineering, and nanotechnology. Each session offered an overview of what you would do in that field along with an activity. In many of the sessions we went into the labs. The activities ranged from making ice cream using liquid nitrogen to performing an acid-base titration in one of the labs.

Along with the engineering sessions, we had group projects. There were many options. My project was saponification, a fancy name for the process used to make soap, and webpage design. Each group project was specific to a certain type of engineering. My projects were for chemical engineering and computer science. Both were fantastic. In webpage design we used html to create a webpage and a simple game. In saponification we learned about the process of making soap, using two different processes to create our own soap.

Every evening after dinner there were activities to participate in. The first night we went to McLain State Park and had a picnic by Lake Superior. One night was an expo where we could go talk to professors in each of the departments to learn even more. Another night we went out to Lake Superior to an area called the “Breakers” and lit lanterns. The whole scene felt like I was in a real life depiction of the Disney movie *Tangled*. Other nights offered hikes such as a trip to Hungarian Falls, my favorite activity. It was absolutely beautiful! Along with learning about engineering, we also got to explore the stunningly beautiful U.P.
It was wonderful to be at a camp with other girls who are passionate about learning, and girls who want to make a difference. I met some phenomenal people and although we live all over the country, we still keep in touch. WIE was amazing. It was easily one of the most phenomenal experiences of my life. I learned so much about engineering. I totally recommend it! For more information, check out their site at http://www.syp.mtu.edu/courses-scholarship.php.

Kaisa Simon

This summer, I was awarded the opportunity to attend the Frontiers of Science Institute, a six-week summer camp in Greeley at the University of Northern Colorado. The program selects thirty students who want to apply their passions in the STEM (science, technology, engineering, and math) fields. The six weeks included: a trip to South Dakota, many field trips, four classes, and much research. Each student had to choose a research project within the STEM field. I’m a planetary nerd, and am fascinated by our solar system, so my research project was all about detecting exoplanets. Other student projects included things like extracting proteins from snake venom and analyzing neuroblastoma cells. Research projects were college level, including the use of all of their tools and resources. Each project is guided by a mentor, but we were responsible for completing the project all on our own. Groups shared presentations of our research through visual PowerPoint and visual designs, as well as a student designed website, and a research paper. I earned four college credits from FSI for only $200. The funding from the program is all scholarship based, and only four of the 31 students paid the full price to attend.

We stayed in the university dorms with a roommate; and got to meet other high school juniors and seniors from across the state- fellow peers who also shared my same enthusiasm for advanced math, sciences, and engineering. The experience was like a preview for college. Though we had RA’s and advisors to ensure our safety, we had many freedoms including weekends, and after five on weekdays. Meals were served at the college cafeteria, or we could go out into the town. There were two types of days at FSI: a normal workday, and a field trip day. On a normal day we attended classes, and worked on research projects. Field trip days took us to amazing behind the scenes tours of places like Sparkfun, CU Boulder’s Fiske Planetarium, CSU’s BioMedical department, and cave tours, just to name a few.

This experience was really life changing. It was the perfect fit for me, and I came out of it knowing so much more than before. FSI was also a really great snapshot of college life: it gave me a better grasp of college expectations and opportunities, and it helped enhance my college transcripts and scholarship applications. There was a lot of science, but science is my passion, so it was tons of fun! Check out their program at http://mast.unco.edu/fsi/about.php

North Fork Montessori at Crawford Creature

Two students this year are in the process of creating Field Guides. One Field Guide is of animals and plants that one can find in the Amazon. The other is of mythical creatures. Mythical creatures were researched and two were chosen to put into the field guide. This student didn't quite find one he was thinking of in his research, so he's creating his own! These two students want to join forces and create an environment where all these living things can cohabitate.

One of the mythical creatures is an Akkorokamui - a giant octopus up to 120 meters long that has been spotted in Japan. It is a striking red color. Because of its size, the Ainu people believe it can be seen from really far away. The Akkorodamui is feared but some believe that it is a benevolent creature.
Engineering Makes a Debut at PHS

Hands-on STEM: UCCS Pipes Program offers DL Introduction to Arduino

In the fall and spring of this school year, the Capacity Building - Distance Learning Project will be piloting online interactive video workshops with the STEM outreach program at the University of Colorado at Colorado Springs. PHS has 20 kids in the Engineering class and about a third are GT, and over half of them are girls, a huge excitement to our school knowing that girls are seriously underrepresented in Math and Science fields as careers. The full program name at UCCS is the CSTEME (Center for STEM Education) and PIPES (Partnership in Innovative Preparation for Educators & Students) Research Program. This unique distance learning opportunity is an innovative collaboration between the Colorado Governor’s Office of IT, the University of Colorado at Colorado Springs, and a Boulder-based company- SparkFun Electronics to bring open source physical computing to students across the state.

The project will provide pilot workshops at selected school sites in Introduction to Invention (elementary and middle school) and Introduction to Innovation (high school level) using the Arduino system, an open-source electronics prototyping platform based on flexible, easy-to-use hardware and software. The outcomes of these workshops may be an increase in hands-on projects, creativity, and invention in Colorado classrooms.

What is Arduino?

At its simplest, it is a system for learning to build things that can interact with users and the environment.

It is a system for making devices that can sense and control more of the physical world than a desktop computer. It's an open-source physical computing platform based on a simple microcontroller board, and a development environment for writing software for the board. Arduino can be used to develop interactive objects that can use inputs from a variety of switches or sensors, and can control a variety of lights, motors, and other physical outputs.

Why Arduino?

Embedded computers in the form of microcontrollers are all around us, from our coffee makers to our communication satellites. In the past, microcontroller technology was accessible only to engineers and technicians with years of education and experience. That has changed. Today, it is possible to go from zero programming and building experience to having the ability to control LED’s, motors, and sensors in a matter of hours instead of years. It’s now possible because new advances in open-source hardware and
software have made this world of physical computing open to hobbyists, artists, educators, and tinkerers of all sorts through the Arduino family of microcontrollers. These amazing little devices open up new opportunities in robotics, automated devices, wearable electronics, and art displays. Additionally, the open-source nature of the hardware and software means that there is huge community of online users posting their projects and code for others to use.

**Great Test Scores at DHS**

Great academic success was experienced by students at Delta High School in the 2013-2014 school year. Amongst the group of 16 GT students at Delta High School that were enrolled in AP Classes during the 2013-2014 school year, there were 18 qualifying scores earned. Qualifying scores are determined on a 5 point grading scale as set by Advanced Placement and the College Board and result in guaranteed college credit for those specific courses. On September 30th, each student earning a qualifying score was presented $100 per test they passed as part of a grant through the Colorado Education Initiative in partnership with the National Math and Science Institute. Along with that, the average ACT score for GT juniors in the 2013-2014 school year was a 26.8, with each student showing growth from taking the PLAN test their sophomore year to taking the ACT their junior year.

**Gifted and Talented Program Information**

The Delta County GT Program has provided each school with a GT Site Coordinator (SC). The purpose of the SC is to provide:

- A Back to School Night to inform you of all GT programming options and answer any questions you may have regarding your child’s gifted program.
- Individual meeting to develop and explain your child’s Advanced Learning Plan (ALP) and/or Individual Career and Academic Plan (ICAP).
- The best learning environment for your child, so his/her learning needs are met.

If you have questions or concerns about your child's learning needs during the school year, please go through the proper channels to answer these questions.

1. Contact your child’s GT SC
   a. If you are unable to get your questions answered then,
2. Contact your child’s principal
   a. If you are still unable to get your questions answered then,
3. Contact Sandie Jungers at Special Services

Sandie Jungers is the DCSD GT Program Director. She is located at the Special Services Building and oversees the GT Program. She has created a GT website. A GT Handbook that answers all questions relating to GT can also be found on the website. The web address for the handbook is [http://specialservices.deltaschools.com/content/misc/GT-parent-handbook.pdf](http://specialservices.deltaschools.com/content/misc/GT-parent-handbook.pdf).
Additional GT Resources:

Western Colorado Assoc. for Gifted & Talented  http://www.gifted51.org/
Colorado Assoc. for Gifted & Talented  http://www.coloradogifted.org/
National Assoc. for Gifted & Talented  http://www.nage.org/
The Davidson Institute  http://www.davidsongifted.org