Congratulations

CLASS OF

2018

This year, we are excited to announce that our first year of USU STARS! GEAR UP scholars have graduated with their high school diplomas. After years of hard work throughout their education, these dedicated teenagers are now moving on to the next chapter of their lives! We, as the GEAR UP Administration Team, are extremely proud of all of the preparation by the scholars, parents, and educators for this exciting time. We cannot wait to see what wonderful futures our GEAR UP scholars have in store for them!
Over 150 scholars gathered on April 26th, 2018 for the annual Greenpower Invitational. Held at the Utah Motorsports Campus in Tooele, 17 schools from across Utah designed and built electric cars to compete in the race. Throughout the year, scholars spent hours after school with their teacher constructing their cars, learning about force and resistance, as well as mechanical and electrical engineering. The Greenpower Invitational was created to inspire scholars to think about careers within the STEM fields. Scholars gained experience in problem solving, teamwork, and effective communication as they assembled their cars.

Before the races began, scholars knew the principles of the science and engineering behind the cars’ builds. Over the course of the project, scholars learned how to counteract forces such as drag and lift. They examined the principles behind aerodynamics such as how lightweight bodies could make their cars faster and more efficient. Their skills certainly showed during the race, as each team brought their best efforts to the track for the qualifying round!

The races were divided into two categories depending on their car type. Elementary schools designed the kit-style Goblin cars, while middle and high schools worked on creating their impressive F24 cars. The cars within the F24 category began the day with a qualifying race, where they tested out their creations. The pit crews practiced problem solving capabilities, quickly fixing issues that arose, and switching drivers. Next, the Goblin cars raced for 45 minutes, followed by an exciting drag race to see how fast each car was able to go. The final event of the day consisted of a race to see which cars could get the most laps within the 90-minute period.

While each team brought impressive cars to the track, it was Gunnison Valley Middle School that took the title home. With 41 laps and their fastest lap speed of less than two minutes, Gunnison Valley Middle School proved themselves in the F24 race. Gunnison Valley High School took second and Edith Bowen Phoenix clutched third. The overall results for the winner of the Greenpower Invitational included a combination of race points, fastest lap, as well as the quality of the video of their car that they submitted to the GEAR UP administrative team. Gunnison Valley Middle School took home the grand prize. They were awarded with a traveling trophy - a golden wheel that they will be able to display for the year before next year’s USU STARS! GEAR UP Greenpower Invitational. Manti High School took home second and Gunnison Valley High School came in at third.

USU STARS! GEAR UP partners with Greenpower USA and Siemens Corporation to make this wonderful event happen each year. We would like to thank them for their part in making this event a success.
STARS! Spotlight

Our GEAR UP Administration Team has decided to highlight Jessica Henderson, who is the Site Coordinator for Logan High School. Jessica has done a great job this year at ensuring that her GEAR UP scholars are preparing for higher education opportunities.

One of Jessica’s favorite parts about being a GEAR UP site coordinator is watching students’ progress and build confidence in themselves. “Some students come from difficult backgrounds and have little or no support at home,” says Jessica “It’s fulfilling to see them rise above that.” Jessica described one student who was discouraged about attending college because of his low ACT score. However, he took time to work with tutors, fill out FAFSA forms, and retake the ACT and now he is confident in his abilities to do well in college. Jessica is also proud of her scholars and their talents presented in the Ritchie Science Fair, where each of the six teams placed. One team is even competing nationally in Pittsburgh.

A unique feature about GEAR UP at Logan High School is their Grizz Center - a place for students to come and receive tutoring, guidance, and educational advice. College students from Utah State University are recruited for extra help, and nearly all of their tutoring is funded by GEAR UP.

Jessica’s advice for getting parents involved with GEAR UP is educating them on the help and resources that GEAR UP provides. By hosting back to school nights, parent nights, and FAFSA nights, Site Coordinators can be a means of information that parents are not aware of. “Once parents are informed, they can participate in many ways,” says Jessica. “They can chaperone field trips, volunteer as tutors and mentors, [and] do presentations on their jobs or experiences.”

Logan High School pays special attention to providing tutoring, mentoring, ACT prep, useful software, clubs, and a wealth of information for scholars to ensure that they succeed in their educational endeavors.

LHS Science Fair Achievements

This past May, USU STARS! GEAR UP scholars from Logan High School participated in the Intel International Science Fair in Pittsburgh, Pennsylvania. Many scholars achieved outstanding awards that each person worked extremely hard for.

A science team of three, Gareema Dhiman, Michelle Jung, and Andre Nguyen, have been working together for three years developing a project looking at seed germination. They received awards for their investigative topics in seed biology and viability in terms of space travel applications. An excellence award and the US Stockholm Junior Water Prize was given to Bailee Raymond and Diana Ruiz, seniors, for their water quality investigation of local headwater sources. Senior Simon Rhoufiry also earned the Stockholm award, along with a 3rd place medal for his investigation on the river velocity changes and the new river channel constructed in the Logan River. Because of their Stockholm award, they are now able to compete at the national competition at the University of North Carolina in June. Two 10th graders, Paige Ihen and Peiyi Hu, earned an honorable mention award for their investigation of the invasive crack willow tree in the Logan River Restoration area.

Above (L to R): Gareema Dhiman, Michelle Jung, and Andre Nguyen worked for three years on an award winning project studying seed germination.
USU STARS! GEAR UP Highlights

This semester, schools across Utah and Nevada participated in many events throughout the semester that contributed to the prosperous learning environment of each school. These are just a few of the many activities that took place over the course of the semester.

Dual Immersion Academy participated in STEM Fest, which is an event that celebrates innovations in science, technology, engineering, and mathematics. Science Professor Duane Merrell, from BYU, and his team of Utah science teachers presented to students the importance of STEM. To encourage students to pursue careers in STEM, each of the students were able to participate in several fun-filled activities. These hands-on experiences included the Marshmallow Challenge, which required students to build a tower out of spaghetti noodles and marshmallows.

Ninth grade scholars from American Preparatory Academy took part in Make a Difference Day. They started their day by visiting Head Start schools to volunteer and serve at-risk students who come from disadvantaged homes. APA's ninth grade curriculum is gear towards peer mentorship. This event ensured that the GEAR UP scholars were able to be mentors to students as they did crafts, and read and played games together.

During May, seventh grade scholars from Mount Logan Middle School arrived at the Utah State University campus excited to learn about the many things college life has to offer. The visit started out by scholars hearing from Jenny Varela, a current Utah State student, and Wade Hirschi, a Utah State alumnus, who are both a part of the USU STARS! GEAR UP team. After learning more about what gaining a higher education is like, each student was able to take a campus tour that highlighted various factors on campus. During the day, students learned about aspects of careers in a variety of fields that included entomology (the study of bugs), journalism, and art.

GEAR UP has established many pathways in order to pave the way towards college for youth across Utah and Nevada. In order to keep up on the activities and events going on throughout the year, follow our social media accounts for daily updates. Check out GEAR UP’s social media handles locate on the front page.
Rocky Mountain Power and NSMS Partnership

On May 22nd, Rocky Mountain Power presented a check for more than $575,000 to North Sanpete Middle School to launch the largest Blue Sky renewable energy project in over a decade. The project includes a powerful solar array that can generate 80% of the school’s energy.

“It’s going to be providing (daily) power to the school,” says O’Dee Hansen, “[And] be used as an emergency backup for freezers and (refrigerators) in the immediate area.” In addition, the project will provide countless and priceless educational lessons about renewable energy technology and potential careers for students interested in the STEM field.

North Sanpete Superintendent Sam Ray mentioned that the project “moves our students to the cutting edge of technology and renewable energy.” Salt Lake Community College is also working with the district on developing a program to train students about careers in green energy, including solar installation.

Ultimately, the project has multiple advantages, including that the money saved through lower energy usage will be used to help pay off the cost of the project over time. The most exciting part about this project is the educational value it provides for GEAR UP scholars. For years to come scholars at North Sanpete Middle School will gain exclusive, quality knowledge about renewable energy and the scientific factors behind it.

Above: This 206-kilowatt solar array installed at NSMS was a project worth $6 million. The school district plans on adding courses to teach GEAR UP scholars the aspects behind the installation and testing of solar panels.