Thank You for a Great Summer at USU STARS! GEAR UP

Here at USU STARS! GEAR UP, we look for any opportunity to encourage the pursuit of post-secondary education. One of the ways we do this is by hosting on-campus experiences for our students. Summer camps are one of the ways that we promote positive pre-college experiences on the USU campus.

This summer, we provided that experience for nearly 300 students – all on full scholarship. Each camp costs between $300 and $1,700 per student, including planning, instructors, room and board, and support activities. All of this was made possible because of the generous support of our partners, including the Space Dynamics Laboratory, USU College of Engineering, the Center for Women and Gender at USU, and many others, collaborating on our mission of improving high school graduation rates and enhancing college-readiness for Utah students. This newsletter features stories on each of our summer camps.
This year, USU STARS! GEAR UP teamed up with environment engineering faculty, graduate, and undergraduate students for the third straight year to put on an education-filled week for camp-goers. In addition to experiencing campus life, Engineering Camp offered opportunities for GEAR UP students to explore the field of engineering while learning about specific areas of study.

At the beginning of the week, students were divided into groups led by science teachers from GEAR UP schools from across Utah. Students quickly became friends with their group members while learning how to build a submarine out of PVC pipes, foam, and other common materials. Through team work, discussions, and some help from their teachers, students built remote-controlled submarines with some interesting and creative outcomes.

In addition to learning about what engineers do, students visited the many different places and environments where engineers work to solve problems that improve people's lives. Campers visited workspaces ranging from classrooms and laboratories on campus to nature and field studies in Logan Canyon. Using a drone to collect atmospheric data, students learned about the vital role engineers play in monitoring and addressing current air quality concerns in Utah.

Another outdoor activity took students to First Dam at the mouth of Logan Canyon where they analyzed water depth and quality. Students took full advantage of their time near the water to also test the remote-controlled submarines they built earlier in the week, collecting additional data for their final poster projects.

“Communication of technical information is... an essential element of data-driven fields,” said Ryan Dupont, USU professor of civil and environmental engineering. Awareness of the importance of data provides the students with “experiences that they can hopefully relate to when they are critically reviewing and analyzing information that other people have generated.” Other USU faculty members and presenters included Kurt Becker, Nancy Mesner, and Max Longhurst.

As future engineers, students worked in teams to analyze what they learned and draw conclusions using the information and data gathered throughout the week. Questions and hypotheses were formed into research posters which were presented on the final day of camp, to peers, mentors, and university engineering professionals.

Engineering Camp is one of many examples of USU STARS! GEAR UP activities that provide critical early college awareness, giving students the chance to explore new material and ways of thinking while fostering opportunities that are both educational and memorable.
USU STARS! GEAR UP partnered with the Center for Women and Gender at Utah State University to offer a Smart-Girl Summer Camp for 27 students entering 8th and 9th grade. These Mt. Logan Middle School students met on the USU Logan campus from June 25-27 to learn about leadership, communication, and team-building.

As part of the Smart-Girl Camp experience, students visited research laboratories and discussed topics ranging from high school preparations to career explorations. Girls were given the chance to discuss topics leading them to learn about themselves, how to communicate with peers and adults, and why they should consider continued education after high school.

“Every girl that I have personally witnessed participate in the Smart-Girl summer camp has benefited in some way,” said Konie Humphreys, Smart-Girl Trainer. “The positive change and relationships built are life changing.”

One memorable activity involved having the girls participate in a discussion led by two female college students. They talked about building confidence and overcoming obstacles that got in the way of gaining a degree. Kristin Brubaker, Director of USU STARS! GEAR UP Cohort 3 said, “It was fun to see the campers grow and gain new skills to prepare them for success in the classroom and their futures.”

“I was absolutely delighted by the GEAR UP staff support that made our Smart-Girl camp run so smoothly,” said Michelle Hixson, Coordinator of Programs Center for Women and Gender. “The GEAR UP staff ensured that all of our student arrivals, tours, lunches, and lectures and departures ran on time so our Smart-Girl leaders could focus on the campers engaging with our research-based curriculum.”

Smart-Girl Camp is a great example of partnerships that USU STARS! GEAR UP forges between groups sharing a similar mission of empowering students to become more confident and see college as a necessary step in reaching their future goals.

Girls from Mount Logan Middle School participated in a day camp that focused on developing leadership and communication skills.

**STARS! Spotlight**

We are thrilled to introduce the newest member of our team, MaryAnn Parlin, who is the Director of Cohort One of USU STARS! GEAR UP. MaryAnn was born in St. George, but grew up in Las Vegas, Nevada. She enjoys art, and creating pieces out of paper/fiber. At a gallery in Park City, Johnny Carson once bought one of MaryAnn’s art pieces. She is currently learning how to fly a plane, and loves playing with her labradoodle, Daisy.

MaryAnn received all of her degrees at Utah State University and has a background in Instructional Technology. MaryAnn is excited to work with GEAR UP because her life has been hugely benefitted by education and believes everyone should have the opportunities that she has had. When asked why GEAR UP is a useful tool for students, MaryAnn emphasized the many resources GEAR UP provides to help students succeed in school and learn about various career paths. MaryAnn offers her advice for students preparing for college. “Remember to take it a day at a time, a step at a time,” says MaryAnn. “Take advantage of all the educational supports that are there for you [and] don’t be afraid to ask for help.”
This past June, 183 Utah students came from as far away as Gunnison and Ephraim to attend the USU STARS! GEAR UP Transition Camp. The camp, formally known as Big Blue Journey, targets students entering the ninth grade, and has two purposes: to inspire positive high school and college experiences, and to give students the tools and confidence they need to succeed in school while starting to see college as a possibility.

The goal of Transition Camp is to make camp accessible to all students, and make learning fun, while focusing on skills that the students will use while transitioning from middle to high school. Instead of “classes,” Transition Camp is made up of workshops, with many of the topics led by advisors from USU’s Academic Success Center. Workshop topics include college awareness, study skills, mental health, math, financial aid, and designing your life, all aimed at building life-skills to help prepare students for high school and beyond.

While students arrived with their classmates, they were soon divided into groups of 15 students, most of whom have never met, and three group leaders. These group leaders are college students or recent graduates, with backgrounds reflecting the diverse pool of GEAR UP students. Their goal is to be a mentor to participants, fostering a connection by showing the campers someone who was very much like themselves only a short time ago. These group leaders demonstrate to their groups what success in college looks like.

“Transition Camp was amazing because it shows the importance of higher education and that anything is possible with hard work,” said Betty Flomo, group leader. Students and group leaders engaged with each other through a variety of games and physical challenges to help build familiarity and trust. On the second day of camp, students overcame fears and worked together on problem solving skills at the USU Challenge Course.

The learning experience continued into the evenings with sports and swimming at the HPER, campus recreational center. One evening, USU students performed for campers during Aggies around the World, showing Native American, Polynesian Islands, and Korean Pop dances. Following the show, students created their own dances in small groups, and performed for each other. Needless to say, it was an entertaining evening for all.

Students formed new friendships and lasting bonds at Transition Camp. Group leader, Kengo James, described one of his student’s experiences by saying that on the first day of camp, the student “sat far away from the group, wasn’t really interested and kept telling us he wanted to go home… it was amazing to see the transformation of this young man. During the last reflection time he told us how he felt like we were a family, how much he loved us, and how he didn’t want to go home!”

Transition Camp remained true to its name, giving students a positive pre-college experience on the USU campus, thanks to the dedication of mentors and students that make the camp a success.
Space Quest

Space Quest, a one-week STEM workshop, was the newest camp launched this summer. USU STARS! GEAR UP partnered with Space Dynamics Laboratory (SDL) to bring 24 students entering 10th grade to USU. With the help of Sara Richardson, Systems Engineer at SDL, engineering student Christian Morrill, and our staff, participants gained the skills to build and launch a CricketSat satellite.

On arrival, students were given a challenge: to measure atmospheric temperatures up to 5K into space while staying on the ground. Starting in the laboratory, students learned about atmosphere, electricity, and electronic circuits by building breadboards. Next, they gained basic soldering skills needed to build JiggyBots before customizing their creations for competition.

Students then applied what they learned, working in teams of three to build CricketSats for collecting data. With accurate calibration, these satellites were launched throughout Thursday, collecting data for each team. Compiled and analyzed data was used for group presentations. Students solicited reviews from mentors and peers in preparation for their presentations.

“It was rewarding at the end of the week to watch the students who struggled with the lessons, circuits, and soldering, now beam with pride and confidence as they gave their final presentations in front of peers and professionals,” said Lauren Resendes, Assistant Program Coordinator USU STARS! GEAR UP. Students praised Space Quest, saying that they learned more in this one week of camp than in any other class that they have taken. Others said seeing how this camp worked made them want to run their own business.

“The best part is watching the students succeed in something they didn't think they could before, and learning how to approach future challenges with new confidence,” said Resendes. At the closing ceremony, each student was awarded a certificate of achievement in front of an audience of their peers and invited guests. They left camp with new friends, and successfully launched experiments.

After days of hard work and problem solving, Space Quest students were finally able to launch their CricketSat creations.