

Ready, set, battle

Area students take to robot battles at Camp Umatilla near Hermiston

BY JOHN TILLMAN
Hermiston Herald

Area students with a desire to enhance programming, engineering and design skills took to battle this week.

Using robots they made with Legos in an arena taped off on a floor.

Ten boys but no girls attended the August session of STARBASE Academy, which concluded Thursday, Aug. 4, at Camp Umatilla, the military facility west of Hermiston. The first camp this year was July 12-14.

"This is the first camp we've had without any girls," STARBASE Oregon Deputy Director Colin Haines said. "Last session's winning BattleBot was built by Cayden Zamudio and a friend. They named it King Bob. This session we have another King Bob. I just learned about the character in Minions."

Haines also teaches engineering at Hermiston High School.

"Last year the course ended with a water hazard," he said. "but that deal failed, with wet robots."

Haines replaced the water hazard with a pyramid of cans.

The Camp Umatilla STARBASE is one of four science, technology, engineering and mathematics academies at military bases in Oregon, thanks to funding from the U.S. Department of Defense. Twice each summer, Camp Umatilla hosts fourth to seventh grade students from Oregon and Washington for three-day sessions to enhance their programming, engineering and design skills.

In small group settings, students designed, built, programmed and tested Lego robots. Then took their projects into a double elimination BattleBots tournament.

The students employ strategy and tactics when it comes to the BattleBot action. David Young of Kennewick stripped down this bot to basics.

"It doesn't have a weapon or a spinner," he said. "Just a wall. I think it will be able to push well."

Young's Superbot won its first round against a bigger robot weaponized with a hammer. His BattleBot pushed its opponent Copybara out of the ring within the three-minute time limit.

If neither entrant drove at least one wheel or tread of its opponent out of the ring, Haines declared a winner based upon objective criteria, including aggressiveness. He dramatically announced each contestant with an improvised rhyming introduction.

After the first round with five matches, contestants took a 15-minute break to tweak their robots.

Lucas McCann of Stanfield won the tournament with Spot Da Bomb. The day before, his robot had come close to setting the obstacle course record.

The other three STARBASE Academies in Oregon are at Portland and Kingsley, Klamath Falls Air National Guard Bases and Army Guard Camp Rilea, Warrenton.

"When the kids first walk in the classroom, they can be somewhat intimidated," according to Denise Kortez, state director for STARBASE Oregon. "But right away we start with concepts and the design wheel, introducing why it's okay to fail. By failing you learn something."

The BattleBot summer camps take students from learning to make basic movements with their robots to having them transverse inclined planes and navigate an obstacle course.

"They think they are just having fun, but right away they are learning not only about robotics and physics, but learning how to overcome setbacks through trial and error," Kortez said.

On the final day comes the battle royale.

During her 10 years with STARBASE education, Kortez said she has not just seen the program grow but has witnessed the lasting impact it has made on the students who attend the summer camps and programs during the school year.

"We have things that kids can experiment with that some of the schools in the area cannot afford," she further explained. "In 2014 we started using iPads because they saved paper and printing cost, and were more interactive for the students. It also took time to print out booklets and, really, the kids were not that interested in using those materials. Once we introduced the work on iPads, it only enhanced their interest in technology."

The STARBASE Academy at Camp Umatilla is the newest academy in Oregon.

"Oregon is one of the few states that has four academies," Kortez said. "Just in Portland, we're seeing 60 school classes from different public schools in an academic year, where the kids are getting 25 hours of work during those five days in the classroom."

There is no testing or grades, she added. Therefore, everything the students do in the program is a success because the program is designed around innovation and working in groups to develop solutions.

"The first day they arrive, the kids work on the programming aspect of robot building, which includes sensors to get their robots to function with automatic controls," said Colin Haines, who has served as the Deputy Director of STARBASE Umatilla since the site opened two years ago. "The second two days are focused on engineering, so that their robots are agile, and can battle each other."

The small class size of 10 to 12 campers helps Haines teach the class and offer one-on-one feedback the campers have. Each team of two has its own table, upon which they can assemble the motors, Lego parts and other pieces to build the ultimate BattleBot.

"Teamwork is key," Haines said. "No. 1, it gives them confidence, and secondly, social learning is often the best learning. Collaboration gives them multiple ideas. They turn the learning into play."

Haines said the BattleBot camp needs to be exciting given all the other choices youths have for summer fun.

"We really need to go above and beyond the fun level because they could be playing baseball or at home with video games," he said. This is another aspect with the STARBASE program, which helps bridge those gaps that some schools are missing in STEM education.

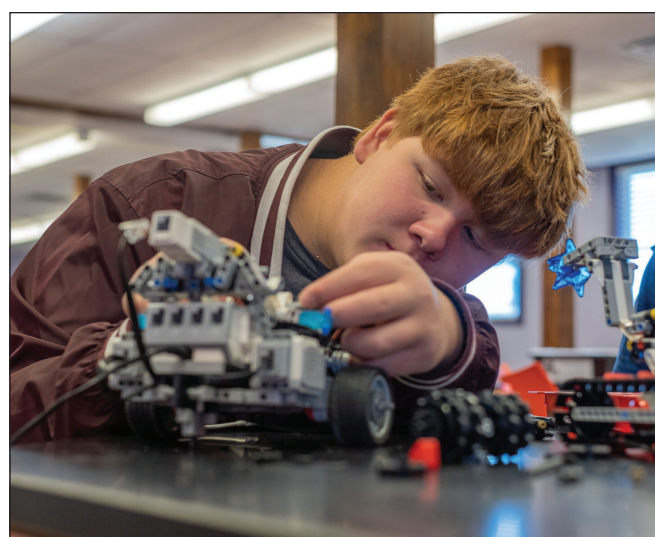
"When you can get kids to accidentally learn something when they are goofing around, that's a real win," Haines said. "That just makes you feel good to know these kids want to actively stay engaged... we live for that 'Ah ha moment,' when they connect to something new."



BattleBots stand at the ready near their young creators Aug. 4, 2022, at STARBASE Academy at Camp Umatilla near Hermiston.



Tristan Baches, 10, of Hermiston, adds final touches to his robot Thursday, Aug. 4, 2022, at the STARBASE Academy at Camp Umatilla near Hermiston. "It takes a couple of hours to build. I like to be able to make them do things," he said.



Caleb Belgard, 13, of Plymouth, Washington, assembles his robot Thursday, Aug. 4, 2022, at the STARBASE Academy at Camp Umatilla near Hermiston. "It's my first time building a robot," he said. "I'll definitely do it again. It's fun to put pieces together."



Samuel Vanderstelt, 11, of Hermiston, celebrates his robot battle victory Aug. 4, 2022, at the STARBASE Academy at Camp Umatilla near Hermiston.



David Young, of Kennewick, 10, prepares his robot control pad Thursday, Aug. 4, 2022, at the STARBASE Academy at Camp Umatilla near Hermiston.



David Young, 10, of Kennewick, armed with a control pad, enters the BattleBot arena Thursday, Aug. 4, 2022, at the STARBASE Academy at Camp Umatilla near Hermiston.



Colin Haines, STARBASE Oregon deputy director and Hermiston High School engineering teacher, hosts the BattleBot competition Thursday, Aug. 4, 2022, at Camp Umatilla near Hermiston.

"When the kids first walk in the classroom, they can be somewhat intimidated. But right away we start with concepts and the design wheel, introducing why it's okay to fail. By failing you learn something."

— Denise Kortez, state director for STARBASE Oregon

Photos by Yasser Marte
Hermiston Herald

SAVE THE DATE
HERMISTON FALL FESTIVAL
OCTOBER 7-9TH
BEER, BBQ & MUCH MORE!
Eastern Oregon TRADE & EVENT CENTER
EOTEC
541.289.9800
eotechermiston.com

GROCERY OUTLET
bargain market
NOW AVAILABLE ON
instacart
shop.groceryoutlet.com

Life Pulling You In Too Many Directions?
The right therapist can help you navigate the way. Whether you're in a time of transition, struggling with anxiety or depression, or simply feeling stuck, we're here to help.
Adult, child & family therapy
*Mental health & crisis services
*Psychiatric evaluation & treatment
*Chemical dependency & substance abuse treatment
Community Counseling Solutions
Changing Lives
595 NW 11th St., Hermiston, OR • 541-567-2536
331 SE 2nd St., Pendleton, OR • 541-276-6207
299 N. Columbia Milton Freewater, OR
541-276-6207
104 SW Kinkade Rd Boardman, OR 97818
(541) 481-2911