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Deep Thoughts

Notes from the underground by Communications Director Constance Walter

Mentors, students learn from competition



Middle school students from Spearfish and Belle Fourche spent weeks designing, building and programming robots using LEGO Mindstorm kits for a robotics competition. They developed, altered and tested the course the robots would travel. On the day of the competition, they waved enthusiastically as their mentors, all students from Black Hills State University, took the robots nearly a mile underground to the 4850 Level where the competition took place.

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"The kids do all the work," said Sam Hintgen, a junior science education major at BHSU. "As their mentors, we give them advice and encourage them to try new things."

This is the second year Dr. Brianna Mount, research assistant professor of physics at BHSU, has overseen the competition. "Mentorship is an important component of this program and it means a lot to the kids."

Because the middle school students are too young to go underground, they watched the competition through a live internet connection, giving instructions and advice as their mentors placed the robots on the track. "Angle it this way," said one child to his mentor; "Move it to the left," said another.

In the end, only two of the nine robots made it all the way through the track. But the competition was friendly and will serve as a lesson for the next one.

"The best part about the competition is the trial and error," Hintgen said. "They use real science to build the robots and learn from their mistakes."

And the mentors learn as well.

"The kids are awesome to work with," said Taylor Watkins, a sophomore in environmental physical science at BHSU. "They are very appreciative and excited to see us every week. That's really cool." Brianna Mount watches as a BHSU mentor aligns a robot on the obstacle course. Students from Spearfish and Belle Fourche middle schools, designed, built and programmed the robots using LEGO Mindstorm kits.

Top Safety Performance



When water tanks on the 800 and 2600 levels began malfunctioning, Yates crew members Alvin Burns, lead man, and Michael Harvey and Alexis Novotny, infrastructure technicians, took action. Their experience lead them to believe the 4100 Level water drift could be affected, potentially causing problems with the fire suppressions system on the 4850 Level.

They found the problem and took the necessary steps to correct it. "This is a good crew," said Jack Stratton, Yates Shaft foreman. "In the Yates we're constantly moving people and materials, so they have to make sure things are safe at all times. They're very conscientious and look for everything. I'm proud of them."

Burns, Harvey and Novotny were recognized for their Top Safety Performance by the Sanford Lab Safety Committee.