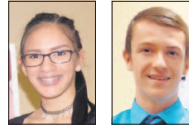


More than homework

Berrien students get serious about research

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BERRIEN SPRINGS — Whether they plan to be engineers or go to medical school, area high school seniors attending the Berrien County Math & Science Center know the value of being able to take college classes and conduct scientific research.

Friday, the research side of the experience was on full display as the Math & Science Center hosted the Michigan High School Research Symposium. Southwest Michigan students were able to mingle with students from around the state as and present results of their year-long research projects and short public service announcements on a variety of issues.

Berrien Springs High School sophomore Joo Young Chung made lead poisoning the subject of his PSA, which touched on the Flint water crisis, effects of lead poisoning and what can be done to combat it. He said he's been able to learn a lot of useful information this year, which will be helpful when he goes to medical school to become an oncologist.

Watervliet High School senior Mia Pelton studied the "synthesis and hemagglutination properties of arginine-based boronic acids." In layman terms, that means she spent the last several months working to see if she could develop a solution able to clot blood and replace the use of gauze in medical procedures.

"I want to be a dentist, and this knowledge of chemistry and biology helps me a lot," she said. "I chose this experiment because I knew I was going into dentistry, and I don't like to feel gauze in my mouth. In the case of a tooth extraction, it would be good to be able to spray this solution instead of using gauze to clot the blood."

Mia said she's gained a lot from the research experience, though the results didn't turn out exactly as she predicted. "Being able to do my own research gives me a better advantage," she said. "This really has prepared me for my future career."

She plans to attend St. Mary's College and then transfer to the University of Detroit Mercy for dental school. At Watervliet, she's on the cheerleading and wrestling teams.

Coloma High School senior Greg Olsen drew on his own experiences when he chose his research project. He worked last summer for a farmer and traveled with him to Chicago-area farmers markets. He decided to try to find pesticide alternatives after hearing people ask about

what chemicals they used on their crops.

His project was "synthesis and insecticidal activities of indanol derivatives" in which he experimented with chloride ester material to see if he could develop pesticides and insecticides that are more environmentally friendly. He had mixed results with one ester mix proving to be somewhat effective.

He plans to attend Michigan State University to take a pre-med course of study with the goal of becoming a trauma surgeon in the Air Force. Besides attending the Math & Science Center, which he calls the best decision he's made in his life, he takes an auto shop class at Coloma, a drama class at Lake Michigan College and an astronomy class at Andrews University.

"This experience has progressed me as a person," he said. "I've met incredible people. I never thought I'd do research like this in high school. A lot of college students don't do it. I now know different lab procedures and how to do research and write papers. I'm glad I did it."

Mia, Greg and the other Math & Science students say that attending the center has been a good preparation for college and careers. They've learned time management and being able to work independently.

Buchanan High School seniors Donovan McPherson and Taylor Sobolewski said they're glad they decided to be part of the center four years ago and have learned a good work ethic. Donovan plans to attend the University of Michigan to study engineering, while Taylor will attend Indiana University at South Bend to study engineering.

Friday's symposium gave two dozen Benton Harbor High School students a taste of what experiences they could have at the center. Freshmen Onjanae Howard, Mikela Kirby, Takaijh Favorite and Desiree Malone said they liked what they saw and would be interested in taking classes at the center next year.

Benton Harbor does not participate in the Math & Science Center, but education coordinator Rita Seay and teacher Tim Strong said they're looking to send students to the center. "We like what we see, absolutely," Seay said. "This will give kids the opportunity to see how math and science is used in the real world when it comes to research."