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STREAM

STREAM makes a splash at Christ the King School

By Patrick McPartland
Managing Editor

Students at Christ the King School are jumping into STREAM education to develop skills for the future.

The Amherst school has integrated science, technology, religion, engineering, art and math education into the school day to provide students with hands-on, higher-level thinking activities, said Maureen Pfeifer, STREAM coordinator at Christ the King School.

"STREAM allows them to think, create and cooperate with others," Pfeifer said.

Many Catholic schools have their STREAM academies after school or as clubs. Christ the King School decided to incorporate its STREAM academies into the school day. For the first hour every Wednesday for eight to 10 weeks, all students attend a STREAM academy. Some examples of academies include robotics, arcade and kitchen chemistry.

The school's STREAM academies were created three years ago after Pfeifer and Principal Samuel Zalacca submitted an application to the diocese, and the application was accepted. That summer the teachers attended STREAM academy training courses.

"We decided that we wanted all the students to experience it and all the teachers to experience it," Zalacca said.

"We ran our first schoolwide academy, running two 10-week sessions within the school day," Pfeifer said. "This was done to allow all students to participate in the academy courses."





DAN CAPPELLAZZO/STAFF PHOTOGRAPHER

Christ the King School Kindergarten teacher Kate Zaepfal, and assistant Michelle Scherer, help second grader Juliet Peters and 1st grader Michael Streif prepare a Thanksgiving cornucopia during the schools STREAM program.

Zalacca picked Pfeifer as STREAM coordinator because she had successfully developed a unit for her class that encompassed the STREAM standards before the school certified for the program. She posed an issue to her students, which was survivors of natural disasters facing a lack of clean water.

"My students had to devise a filtration system that could be used in a disaster situation," Pfeifer said.

She provided them with various materials, like coffee filters, sand, gravel and charcoal to use as filters. Pfeifer collected water from Ellicott Creek, and the students filtered it for clarity and odor only.

"We did not test for taste as I didn't have the resources to ensure its safety," Pfeifer said.

One current academy at the

school is the Arcade Academy.
Kindergarteners through secondgraders must work together to plan,
design and build their own working
arcade games out of cardboard, tape
and rubber bands. Each game must
be tested to see whether it works.
If it does not, then the team must
work together to correct it.

Each December, the diocese holds a competition at St. Joseph's Collegiate Institute called the X-STREAM games. Students participate in various activities based on the academy courses.

"Mock Shark Tank" will return to the games this year. Modeled after the TV show, students present inventions to a panel of judges.

"My students entered two inventions that year and won the top awards," Pfeifer said.

Partnerships with several

businesses and groups, such as the Buffalo Zoo and Buffalo Museum of Science, have been created with the school as part of STREAM. The Buffalo Zoo did a unit with kindergarteners on the five senses and how scientists use the senses to observe the world around them.

Students created science journals to record their observations using their five senses. The students later went to the zoo and witnessed observations in practice with the scientists who work there.

Maria Wangler, vice principal of curriculum instruction/professional development sees benefits to STREAM education.

"We are building children who are critical thinkers, and we are not losing our Catholic identity," Wangler said.