

School adds art to traditional STEM program creating 'STEAM'

KENDALL PARK - The St. Augustine of Canterbury School gym was transformed into an exhibition center as the school held its first STEAM Expo, May 11. "STEAM" expands on traditional STEM (science, technology, engineering, mathematics) by adding an art component to foster creativity along with critical thinking skills. The Expo showcased the five elements of STEAM individually and in combination at booths featuring collections of student projects from Pre-K 3 to Grade 8, interactive demonstrations, and hands-on activities for the nearly 200 visitors that filled the gym at any one time.

When Principal, Religious Teachers Filippini Sister Mary Louise Shulas, presented the idea of a STEAM Expo, the original plan was simply to breathe new life into the school's annual Middle School Science Fair. With the enthusiastic support and teamwork of teachers, students and parents, the event took on a life of its own and mushroomed into an unforgettable evening that brought the entire community together to experience STEAM first hand.

Guests were greeted at the door by a large flat-panel display showing a map of the Expo complete with a QR code they could scan and have a copy of the map downloaded to their mobile device. The gym was filled with excitement and exploration as visitors made their way to the various exhibits. Crowds gathered around the grade units' interactive booths, which

were filled with individual and collaborative student projects exemplifying the STEAM ideal. Another table featured students happily demonstrating and having guests play the math-based boards games they created in class, while in the center of the gym groups of students performed a variety of science experiments with the help of willing volunteers from the crowd. The balcony became a fine arts gallery, with displays of artwork in various media and techniques created by students of every grade. Mrs. Vakil, a school parent, commented, "Every age is represented here tonight and you can see the progression of learning. It is so impressive to see in the projects beginning in the Pre-K and in the kindergarten. Everyone is participating and having fun learning."

STEAM-themed extracurricular activities were on display as well. The school's Odyssey of the Mind and Robotics teams gave demonstrations of their competition projects, while members of the Knights Television Network crew gave visitors a behind-the-scenes look at its daily good news broadcast. The Mad Science program booth was a popular stop with its resident "Mad Scientist" making nearly 200 samples of multi-colored slime for the delighted onlookers. Next door at the Bricks 4 Kidz table, the program staff displayed motorized boats, planes, and other gadgets made with LEGO® building blocks. Also popular was the Google Earth display where guests could go virtu-

ally anywhere in the world with the touch of their fingers by manipulating a globe displayed on a touch-sensitive 70" LCD panel.

oubtedly the makerspace area manned by the school's Tech Team which embodied the spirit of STEAM and the maker movement. A big attraction was the 3D printer, amazing onlookers as it turned a three-dimensional computer model into a solid object before their eyes. On display were the team's long-term projects: remote-controlled race cars which featured 3D-printed bodies designed in the modeling program Tinkercad and hand-decorated by the students, a motorized chassis built with snap-together electronic components called littleBits, and radio controllers also assembled from littleBits components. Team members took turns driving their cars around, and offered "test drives" to all who were interested. Visitors were also encouraged to try the many hands-on maker activities set up on tables around the makerspace. One table had a Makey Makey Kit that turned potatoes into video game controllers. Another had Snap Circuits Jr. and RC Rover kits with snap-together circuits used to build electrical projects and a fully-functional remote-controlled Rover. The younger children were drawn to the Wonder Workshop robots Dash and Dot, which could be operated using a coding app running on an iPad Mini. Families enjoyed building bridges using the STEM Bridge Building

Center kits, and replicating a scene from the story of "Strega Nona" with STEAM kits containing common dollar-store items.

As they exited the Expo, guests were presented with one final twist: a display of "deconstructed social media" in which they were invited to post their comments and impressions of the event not on a digital wall with keyboards, mobile devices and hashtags, but rather on the window of the school office with markers and Post-It notes. One student wrote, "The STEAM Expo was fantastic! So much fun" and drew a smiley face, confirming that Emojis can also exist outside of cyberspace. Another wrote, "I loved making slime and looking at all the science experiments! I enjoyed and had fun with all the interactive activities."

Comments from the adults were equally positive. Wrote one parent, "God has truly blessed St. A's, and tonight He's showing off! It's all wonderful." Said another, "Great fun for the kids & moms & dads alike. A must for next year!" But perhaps the best comment of all really captured the spirit of the evening: "It was wonderful to see how STEAM is alive and well at St. A's!! The students' work was really creative. I loved seeing students explaining what they have been doing and seeing their creativity. So many students were engaged in the activities and their faces came alive as they participated in the activities. My kids had a blast! Thanks!"

Catholic Charities accepting registrations for summer camps

Registration is open for full-day summer camps offered by Catholic Charities, Diocese of Metuchen. Availability is on a first-come, first-serve basis.

"Our camps provide an excellent mix of fun and learning with lots of outdoor exercise and opportunity for new experiences in a safe environment," said Marianne Majewski, executive director of the organization. "Our dedicated staff is looking forward to another successful season for our campers."

In New Brunswick, the camp is at the Youth Enrichment Center, 115 Commercial Ave., from July 5 to Aug. 31. The program serves school age children ages five to 13 from 7 a.m. to 6 p.m. Full-day preschool services are also offered at this location from 7:30 a.m. to 5:30 p.m.

The Hillsborough Summer Camp is at Triangle School, 156 South Triangle Road. The camp operates from June 20 to Aug. 12; 7 a.m. to 6 p.m. for ages five to 13.

In Phillipsburg, the camp is at the Early Childhood Center, 459 Center St., July 5 to Aug. 26, 7:30 a.m. to 5:30 p.m., for children age three to 12.

At the Hackettstown Middle School, 500 Washington St., a camp will be held from June 27 to Aug. 19;

7:30 a.m. to 6 p.m. The program serves children ages five to 13.

The camps offer a different theme each week. For example, Around the World explores different cultures, The Big Top takes a look at the circus, and So You Think You Have Talent provides performance opportunities for campers.

Camps feature recreation, STEM (science, technology, engineering, and math), arts and crafts, swimming, field trips, special visitors and presenters.

Some of the trips scheduled for this summer include: Sky Zone, Camel Beach Waterpark, Great Wolf Lodge, Adventure Aquarium, Liberty Science Center and Branchburg Sports Arena.

Last year, 1,530 children enrolled in Catholic Charities Child Care Programs, including 190 in preschool, 935 in school age child care and 405 in summer camp programs.

Financial assistance is available for those families who may qualify. Catholic Charities Summer Camps accept state subsidy through the county Child Care Resource & Referral Agency.

Applications are available on the web at www.ccdom.org/child-care or by calling (732) 934-2800 in Somerset or Middlesex Counties or (908) 454-2074 for Warren County.



Above, Children from a past summer camp program operated by Catholic Charities, Diocese of Metuchen, in Hackettstown enjoy a presentation by the Dove Environmental Education Program. Registration is now open for this year's program which will be held at the Hackettstown Middle School. Right, Children in last year's Catholic Charities, Diocese of Metuchen, Summer Camp program in New Brunswick follow their counselor on a trip to the Farmer's Market at Rutgers Gardens. — **photos courtesy of Catholic Charities**

