



Smyrna Middle School students, (from left to right Rylee, Elise, Aubrey, Rebecca and Nicholas, smile for a photo with Marcos and his new modified car.

Compassion on the Move

Combining coursework and compassion in the classroom to give back to the community **BY DENÉE CRUMRINE**

STUDENTS STUDYING STEM curriculum at Smyrna Middle School (SMS) are currently applying their knowledge to modify battery-operated cars with adaptable gears, programming, switches and safety supports. Why? Staff at SMS desire to empower students to lead their own discovery and project-based learning, while incorporating the district's core value: compassion. The cars, in partnership with GoBabyGo!, are being tailored to meet the needs of children with mobility challenges.

At early ages, healthy children discover items that capture their interest. This creates opportunities to learn from their environment and form important neurological connections for brain and behavioral development. Children that have mobility challenges miss out on this integral part of growth. GoBabyGo! was created in 2012 by Dr. Cole Galloway through

the University of Delaware Mobility Lab. Dr. Galloway and his team modified off-the-shelf power cars (think Power Wheels) into mobility devices for these children with disabilities that limit or prevent normal mobility.

A teacher at SMS became personally involved with GoBabyGo! when her son was given a modified car. She saw the opportunity for the Smyrna School District to learn and give back at the same time.

"As teachers, often our lesson plans are focused on standards and assessments. But it is important to recognize that school is not entirely about academics. This project fosters activities that encourage compassion, leadership, perseverance, team work, and opportunities to build relationships within our community," said Denise Boyles, teacher at Smyrna Middle School. Denise and fellow instructor, Brian Hurd, oversee the program at

Superstars in Education

Smyrna Middle School.

In 2013, Smyrna Middle School began offering STEM learning opportunities to students through adopting the curriculum, Project Lead the Way. This new GoBabyGo! chapter at SMS allows students to address a need in their community in a meaningful way. Research from the 2010-2012 U.S. Census Bureau American Community Survey, Delaware reported approximately 1.41% of children under the age of five years old having an ambulatory disability. Additionally, there are currently zero pediatric power wheelchairs available for children under the age of two. GoBabyGo! at SMS not only expands students' understanding of STEM concepts, but also tackles the problem of young children needing access to mobility devices.

This year, students have designed and modified a total of four off-the-shelf cars with adaptable gears, programming, switches and safety supports. Students generally modify the ride-on cars by wiring in a switch and electrical relay,



Students wire in a switch, electrical relay and a speed controller to modify this car for a child.

changing the way in which the car moves, along with a speed regulator that the parent can control. Additional modifications like body and head supports further customize the car to each child's needs, and design-based changes like stickers and LED lights make the car unique.

Of the students involved, 65 percent are girls, whose participation is usually sparked by the district's core value of compassion – wanting to help the children in need. But now many of them have developed STEM-related interests and career aspirations, serving as proof that compassion and innovation go hand in hand.

“When a school project reaches beyond the walls of the classroom into the community to create a greater good for our families, education has reached its pinnacle. This is proof that classrooms in the Smyrna School District are full of amazing teachers and students whose generosity and social conscience are a hallmark of our Eagle spirit,” said Patrik Williams, Smyrna School District Superintendent. ■

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