

CUTLER BAY

School unveils solar-powered electric car

BY CRYSTAL CHEW
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Students in an experimental science class at Cutler Bay Academy Senior High School have spent the past couple of months working in the school's wood shop to construct their own solar-powered electric kit car. The vehicle fully charges in a couple of hours, runs for about 40 minutes and can travel at speeds of 25 to 30 mph.

Through a vote, it was decided that junior Gabriel Hechavarria, 17, will be racing the car in an event at the FIA Formula E Miami ePrix race this Saturday against nine other schools, all of which received a grant from Florida Power & Light, which provided schools with the kit cars.

"It's amazing," said Gabriel, whose classmates voted for him to be the driver. "I honestly didn't expect to be picked."

Gabriel is nervous but will have a pit crew of six students with him.

"If something breaks, they'll know how to fix it," said Gabriel, who loves to talk about cars and hopes to be an engineer someday.

The class of about 20 students is part of the school's COAST Academy, one of the three academic tracks offered at Cutler Bay Academy. The COAST curriculum is built around marine and environmental science.

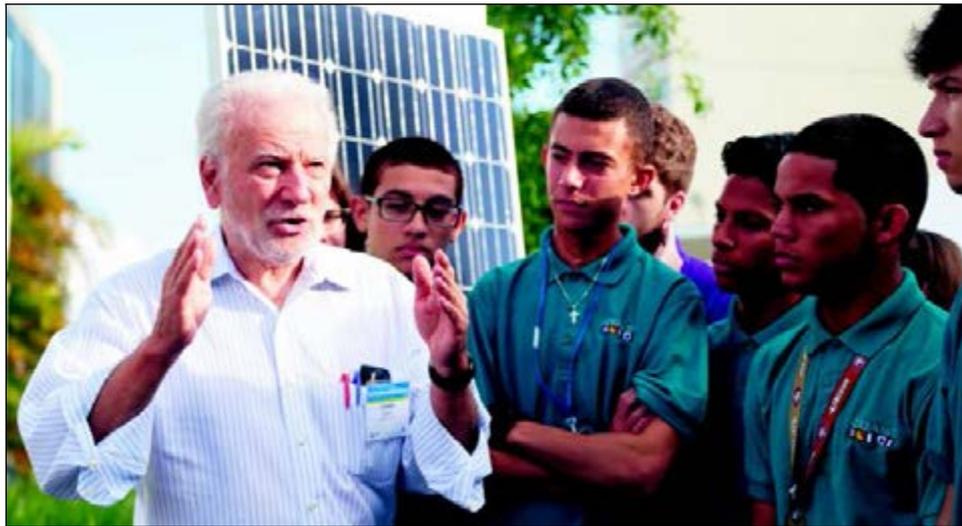
The other two programs focus on leadership and technology (iPrep Academy) and global studies and the humanities (Liberal Arts Academy).

According to the U.S. Department of Education, only 16 percent of American high school seniors are proficient in mathematics and interested in a STEM career.

"Advancing STEM education has become a priority of



TEST DRIVE: Gabriel Hechavaria, 17, whizzes past classmates on Monday, March 9, 2015 while driving Cutler Bay Academy's first solar-powered electric kit car.



EXPERT GUIDANCE: Joseph Zawodny, left, is a science teacher at Cutler Bay Academy who has spent that last couple of months helping to build the car. A total of 10 schools were selected by FPL to receive a grant that provided them with the kit cars and enabled them to compete for a \$5,000 prize.

the United States of America Department of Education, and we have embraced that priority right here at Cutler Bay Academy Senior High School," said Justin A. Koren, the lead teacher at the school.

"Through our COAST program, we have made these applications relevant — and I mean truly relevant

— to our students, to their lives and, most importantly, to their futures."

The school opened in 1976 and was previously a junior high school, Centennial Junior High School. In the mid '90s, it was renamed to Centennial Middle School.

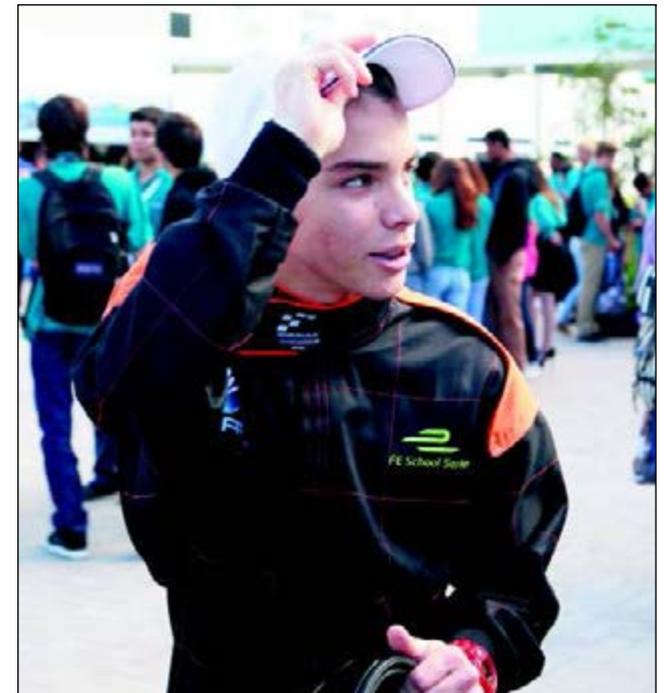
In 2012, a partnership between the town of Cutler

Bay and Miami-Dade County Public Schools opened the door for the school's first ninth-grade class, which will graduate next year as the class of 2016.

FPL will be awarding a grand prize of \$5,000 to the first-place winners. Second-place winners will be awarded \$2,500, and the



FINE-TUNING: Loxbey Montalvan, 16, tightens a loose bolt during the unveiling of their car, which will be raced this Saturday as part of the FIA Formula E Miami ePrix in downtown Miami.



FUTURE PLANS: Driver Gabriel Hechavaria is in the 11th grade and hopes to someday become an engineer.

third-place winners will receive \$1,500. The money will go to further the STEM or robotics initiatives of the winning teams.

"It's great to see the kids work on a project, learn and get a great experience out of it," said Marshall Ruffo, the

lead teacher of the COAST Academy. "But then it's also fun at the end to have the competition part."

Once the students are done with this project, they will go on to build a dory skiff boat that holds up to four people.