

Orlando Sentinel

SEMINOLE COUNTY NEWS NEWS

‘Physics Bus’ rolls into Seminole schools to teach kids with interactive science experiments



By LISA MARIA GARZA
ORLANDO SENTINEL | JAN 21, 2020 | 5:15 PM



Jeffrey Dudukovich poses for a portrait aboard the Physics Bus. Dudukovich will lead students in lab classes on the mobile classroom. (Sarah Espedido/Sarah Espedido)

Seminole County elementary students can now learn about Einstein’s theory of relativity and Newton’s cradle from a new “Physics Bus.”

The converted school bus, repainted blue and gray with images of cogwheels and atomic models, debuted Tuesday at Hamilton Elementary in Sanford and will act as a mobile classroom.

School district officials said the goal of the program is to engage kids early on and develop an interest in STEM subjects — science, technology, engineering and mathematics — through a fun, hands-on setting.

“We really, really believe as a district that getting these opportunities into all students’ hands, at a young age will break down racial barriers, will break down gender barriers and will give all students the experience and confidence that they need to pursue STEM and higher mathematics and sciences throughout their career,” Superintendent Walt Griffin said.

The bus is the first of three expected to launch this year and will be making scheduled stops at the district’s 37 elementary schools and community events.



The SCPS Physics Bus debuted at Hamilton Elementary Magnet School. (Sarah Espedido/Sarah Espedido)

Paul Cottle, physics professor at Florida State University who was on hand for a ribbon cutting ceremony, said introducing the subject at the elementary school age increases the chances of a student excelling in high school and college.

“This bus will not only introduce students to physics and higher-level math — subjects that so many parents avoided when they were growing up — it will help the teachers be better teachers and talk with the parents,” he said.

The bus program is a partnership between the district and Physical Science Research Associates, a national education initiative that developed the “Physics in a Box” program. Funding also came from Disney, School Board member Tina Calderone and the Foundation for Seminole County Public Schools.

Each bus contains eight stations. Students are given a “physics passport” when they board and go through each station equipped with “Physics in a Box” tool sets.

Each box contains 100 experiments, designed at the fourth- and fifth-grade level, which demonstrate to students’ concepts such as oscillation, speed and density.

“Physics in a Box’ is what America needs to compete in a global market,” said Anatoliy Glushchenko, founder of the initiative and creator of the box. “The program provides schools with the opportunity to teach math and science the way it’s taught in Europe and Asia — with physics as a fundamental cornerstone. It’s been built to be easily incorporated as a plug-in to existing school programs.”