

## WeatherSTEM comes to technology school

**Tuesday**

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HAINES CITY - School days typically go on rain or shine, but now students at Daniel Jenkins Academy can track the rain and shine.

On Tuesday, a WeatherSTEM unit that tracks data 24 hours a day for wind, wind speed, temperature, dew point, soil moisture and ultraviolet radiation, among many other things, was installed at the school.

"It's going to be really useful for studying clouds and weather systems," said Melanie Tucker, an environmental science teacher at Jenkins. "It really makes the learning hands-on and informational."

The newly installed unit is the second in Polk County, one of about 190 in Florida and one of about 220 nationally. The other unit in Polk County is located at Dundee Elementary School, and Winston Elementary School in Lakeland will receive one today.

"It seems like education is a big part of this, but public safety is as big a part of this," said Luke Hunnewell, installation coordinator for WeatherSTEM. "The nice thing about our gear is it's simple and reliable. As long as the school's system doesn't fail, we're good to go."

WeatherSTEM, based in Tallahassee, was founded by Ed Mansouri, one of the software pioneers for Florida Virtual Schools, as a way to give back and keep students engaged. Tucker learned about WeatherSTEM while watching

hurricane coverage on The Weather Channel.

"I saw the interview and I thought, 'I had to have this for my school,'" Tucker said. "It's very, very exciting."

The company, founded in January 2014, kicked things off by donating a unit to one school in each of Florida's 67 counties, which is how Dundee Elementary acquired its unit. Information taken by the minute from the unit is sent to a school-specific website that can be accessed by anyone in the world. In Jenkins' case, the site is [polk.weatherstem.com/dja](http://polk.weatherstem.com/dja) and will be activated by Thursday at the latest.

"Weather is really physics," Peter Birtolo, director of client service, told a group of students. "Every minute, the information from that system will hit our server and you can see it right here from your classroom."

The WeatherSTEM unit comes with a camera that points straight up at the sky and takes a photo every minute that can be watched online. A daily time-lapse shot of pictures taken every minute from a 24-hour period can be watched in a 30-second video. The data from the unit will be saved from the first day it was installed.

Through the school-specific WeatherSTEM website, teachers and students will also have access to 130 lessons - some of which use live data from the unit outside. Each lesson will meet certain Florida Sunshine State standards.

"We like working with the kids, but we really like helping out the teachers," Hunnewell said. "It's really interactive, very hands-on, very visual."

WeatherSTEM units, however, aren't limited to K-12 schools. Some are dedicated to farms, nurseries or other agricultural properties. One will be installed at a fire station in Lake County later this week.

Some are dedicated to universities. In fact, 11 of the 15 schools in the Atlantic Coast Conference have a unit on campus. By accessing the website specific to each unit, one can check five-day and hourly weather forecasts.

"A weather forecast is a guess; it's an educated guess," Birtolo told the students. "Weather forecasts are accurate 80 percent of the time. Even though it's not perfect, it's more accurate than the forecast you'll get from somewhere like an Orlando news station."

Jenkins' roughly 500 students can create accounts on the school-specific WeatherSTEM website and set email or text alerts for when temperatures, humidity or air pressure goes above or below a certain threshold. There is also an application that students can download on their phones. Entities with WeatherSTEM units are required to pay \$7.50 annually if they're in Florida and \$12.50 if they're outside of Florida, which covers the costs of software and any necessary maintenance.

"Our claim to fame at WeatherSTEM is that all the data taken from your WeatherSTEM is here for teachers to use," Birtolo said. "The websites, the data, the lessons - that's the real value in this."

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