The HP Sprout: Helping STEM to Take Root in Schools

Read how this unique all-in-one dual-workspace computer with 3D capture capabilities can help today’s educators and administrators transform learning for students.

What if you could combine a powerful all-in-one desktop PC with a scanner, projector, and an innovative touch-sensitive projection surface and use that technology to empower STEM learning? That’s why Intel Education gave away an HP Sprout desktop device to one lucky educator.

Blue River Valley Jr. Sr. High School is a school northeast of New Castle, Indiana that serves four communities. Approximately 46% of the student population is on the Free and Reduced Lunch program. The insulated area and its humble economy have resulted in students having very little knowledge of the world outside of their small rural community.

“It is difficult for our students to see how content can reach beyond the walls of the school,” says Blue River Valley Jr. Sr. High School Media Specialist Stacia Guarisco. “This challenge tends to keep students from reaching their full potential.”

As a High School Media Specialist, Guarisco wears many hats. She assists teachers in integrating technology, usually through collaborative teaching. She is also in charge of book purchases—encouraging reading and information literacy—while improving curriculum through technology.

Guarisco often works with students through programming: designing programs to promote a new technology or book in hopes of getting her students more excited about their education. This is one of the many reasons that she was so excited to win an HP Sprout for use in her school.

“There are so many possibilities!” Guarisco says. “First of all, I have discovered students are excited to see what is outside the school walls. Some did not even know that 3D scanning existed. I asked them to sit at the machine and explore. Their task was to teach me what was immediately available. Within ten minutes, students who are ‘reluctant learners’ taught me the basics.”

Guarisco’s group started brainstorming how math, science, and art classes could use the HP Sprout during collaborative projects. One student pitched the idea of creating a business. The group then suggested that the math and business departments team up with the English department, with the students designing their own businesses with real world applications. The students would ultimately design a product to sell using the HP Sprout’s 3D imager, creating publicity as well. One of the students even suggested using the piano on the Sprout to compose a jingle to promote the product!
“[Students] were suddenly excited to learn. I can’t wait to see what amazing projects come from the use of this machine.”

—Stacia Guarisco
High School Media Specialist
Blue River Valley Jr. Sr.

“I felt the students came alive,” says Guarisco. “They were suddenly excited to learn. I can’t wait to see what amazing projects come from the use of this machine.”

Blue River Valley Jr. Sr. High School has recently moved to being a 1:1 school. And though the school is working towards providing students with a technology integrated curriculum focusing on project based learning, STEM subjects currently play a very small role in the school’s curriculum. As a Media Specialist, however, Guarisco is working to motivate teachers toward project based STEM collaboration. The school is creating a high tech Media room that will be used for tech collaboration with the STEM subjects and Media Specialist.

Guarisco sees devices such as the HP Sprout as the future of education. And her family shares this vision of a technology-enabled world. One of Guarisco’s sisters is a scientist who works from home doing virtual simulations via webcasting. Her other sister is an art professor who designs gallery exhibits using 3D scanners and printers. And her brother-in-law is a preacher who relies on social media and podcasting to reach his parishioners.

“This is the world our students live in,” Guarisco says. “If we aren’t exposing them to these devices prior to graduation, we aren’t doing our job.”

At A Glance

Size: 59.3 cm x 57.6 cm x 60.4 cm
Operating System: Windows 10
HP Illuminator: Powered by the HP DLP Projector, the HP High-Resolution Camera with up to 14.6 megapixel resolution and the Intel® RealSense™ 3D Camera
HP Touch Mat: 20” diagonal, 20-point touch-enabled touch mat with an ultra-resistant top coating
Stylus: Adonit Jot Pro stylus
Processor: 4th generation Intel® Core™ i7-4790S Processor
Graphics: NVIDIA™ GeForce GT 745A with 2GB DDR3 dedicated memory
Integrated Display: 23” diagonal, 10-point touch-enabled, Full HD (1920x1080) Wide Viewing Angle, White-LED backlit LCD Display
Memory: 8 GB DDR3-1600 (expandable to 16 GB)
Hybrid Drive: 1TB SATA Solid State Hybrid Drive with 8GB flash acceleration cache
Webcam: HP High Definition 1MP Webcam
USB Ports: Dual USB 2.0 ports and dual USB 3.0 ports, including a powered port to charge phones or other USB devices
Memory Card Reader: HP 3-in-1 Media Card Reader