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‘Making’ an Education

By Doug Webster

Vermont students are making their mark in the “maker” movement. At this year's Champlain Maker Faire, 11-year-old Noah Schwartz stood in front of dozens, including a group of angel investors on motorcycles, FreshTracks Road Pitch Riders, to pitch “Noah's Fizzy Maple Lemonade”. Noah, competing against those who graduated college and beyond, won first place.

Noah started his lemonade business to help fund his air-compressed rocket business he began at age 8, after attending the first Champlain Maker Faire. Noah’s compressed air rockets allow kids to make their own rocket out of paper and tape. He has been nominated for the NBC show *Little Big Shots* with Ellen DeGeneres and Steve Harvey. “Noah did a better job pitching than most adults,” said the Road Pitch Riders.

Never heard of a Maker Faire? No idea what “making” means? Making is creating, producing, crafting, shaping, tinkering, composing, and building. It sits at the intersection of art and science, and at the crossroads of technology and design. It engages people of all ages, creates solutions to real-life problems and stimulates growth of the “innovation force.” It is as much about people as it is technology.

For our youth, making fosters a culture of imagination, innovation and growth, allowing them to personalize their educational experiences. It allows them to connect to the adult world with a common intellectual mission. Making offers a platform for collaboration, multiple perspectives, initiative, persistence, and expanding a child’s natural curiosity. It allows students to transform content versus simply reciting it. Making provides the “pull” in learning versus the “push” often associated with standardized testing and regulations. Making provides youth a forum for exhibiting, presenting, selling, collaborating, and can be a “sport for the mind.”

In short, making is cool.

This year’s Champlain Maker Faire included activities that address all aspects of the Maker spectrum:

- igniting interest of youth in STEM and maker projects;
- exhibits of experienced makers where many commented on the increased sophistication of projects; and

- maker-to-market, including FreshTracks Road Pitch and CMF Adopt a Maker Pitch.

In addition to the second year of the ChampBot Challenge, the fair included a new Drone Derby, a Swap-Stitch-Make workshop sponsored by Vermont Teddy Bear, and a Robot Battle. There were more than 50 maker exhibits. These are things that get kids excited about STEM and STEAM education (science, technology, engineering, art, and math). We want kids to say, "Yes, I can do that!"

ChampBot is a great example of creating with form and function. Teams are scored based on performance and aesthetics. Most school teams take pride in their ChampBot and display them at their school.

Joe Chase, science instructor at Essex High School said, "Making, sharing, and reflecting show the deepest levels of knowledge, and the Maker Faire has them all."

Although the Champlain Maker Faire and Rutland Maker Faire are for all ages, there is an upcoming Maker Faire specifically for students, teachers and parents to come together and share their creations. The Aiken K-12 Maker Faire is scheduled for November 21 at UVM Davis Center from 10:00am to 2:00pm.

See www.aikenk12makerfaire.com . And, if you are interested in starting a school maker faire in your community, contact the Agency at doug.webster@vermont.gov or register at www.makerfaire.com/global/school.

Doug Webster is an engineer, innovative thinker, and artist who is all about building the new 'innovation force'. He founded and produces the Champlain Maker Faire, is past president of the National Association for Workforce Improvement, producer of the RETN TV Series, "A Renewed Culture of Innovation" and "Makers on Screen", and he works to strengthen STEAM education for the Vermont Agency of Education.