Webinar Recap: Play Your Way Into CS
October 6, 2016

Presenters: Tom Heck, Michael Stone

As technology continues to blur the lines between learning and play, Tom Heck of Makey Makey and Michael Stone of devX PD shared simple strategies for using emerging cyberphysical systems like Makey Makey to seamlessly weave rigorous computer science experiences into highly interactive edutainment opportunities for students. From creating a banana piano to orchestrating an electronic symphony in a school hallway, participants were exposed to a vast array of easy-to-use entry points to consider when working both to hook students and to demonstrate the potential of computer science.

Click here to watch a recording of the webinar and access the presentation slides here.

Related Resources

- **Makey Makey:** Makey Makey is an invention kit for the 21st century that turns everyday objects into touchpads. Combined with web-based programing environments like *Scratch*, students with minimal experience in computer science can design and build fully interactive systems capable of manipulating programs as simple as noise makers, or as advanced as retro-arcade games!
- **StarLogo Nova:** Intended for children ages 10 and up, StarLogo Nova is an MIT project that provides teachers with a free, web-based visual programming language that allows users to develop games and simulations to "study diverse concepts in science and math." Additionally, the site includes access to a wealth of predesigned resources that empowers teachers to quickly and easily integrate CS into their everyday material.
- **Phiro:** Phiro is a kick-started funded robotics system that provides school-age children with an intelligent and robust toy that can operate with or without access to a computer. The device integrates an innovative "offline" coding system that allows young students to begin to code using "swish cards" (essentially barcode-based binary coding) and sequential programming on the device. Once students are acclimated to the fundamentals of coding, the device can be programmed to carry out more complex routines using web-based languages like *Snap!* or *Scratch* and it can interact with mobile apps made through applications like *Pocket Code*.

- **Sphero:** It's almost impossible to talk about blurring the lines between play and computer science without mentioning Sphero. With the release of their new *Lightning Lab* online suite, the team at Sphero has delivered a complete system for teachers to leverage the joy of play to introduce and develop computer science concepts. By simply turning a device to landscape mode, users can shift from playing with a spherical remote control vehicle, to coding simple algorithms. With a bit of time and ingenuity, users can program these fully interactive devices to carry out complex routines and even to respond to environmental stimuli autonomously. These great little "toys" can be used effectively as young as first grade, but their speed and authentic physics make them an engaging option throughout high school.