#SAMSuccess story: The Joy of Teaching STEAM through "Tinkering with Technology"

Customer: Catlin Gabel School, Portland, OR
Teacher: Rob van Nood (Education Technology Specialist)
Grade(s) taught: Preschool all the way to high school
Challenges and goals: Creating environments where students can ask 'big' questions, getting them to collaborate and problem-solve together, normalizing mistakes, challenging misconceptions about STEAM and coding.
He uses: SAM Labs STEAM Kit

The whole ethos behind Rob's STEAM and coding lessons is "Tinkering with technology" – encouraging students to use their curiosity to explore technology and make their own discoveries. This student-led, hands-on approach with SAM Labs hardware has created a great enthusiasm for STEAM projects at the school.

Rob on how curiosity and innovation with SAM Labs hardware: "I invite my students to explore and see if they can discover their own way to some answers. At some point they make a new discovery about the blocks, and soon everyone in the class has removed the covers of the hardware and begun exploring the electronic components inside. Then, more questions begin to be thrown out. At some point – usually in the first 20 minutes – someone in every class makes a discovery that unleashes a whole new level of excitement. It's always amazing to watch glee in a child who first discovers how to turn something on without instruction."

On his student-led approach: "I could've spent three minutes telling everyone what these SAM Labs devices were and how they worked, but the joy of discovery on that first day is what I'm really after. It's that wonder that will carry us through a year of 'tinkering with technology' together. What starts as tinkering with hardware leads to the creation of a musical instrument, a working vending machine, or a remote control car."

On challenging misconceptions of coding: "I think that Sam Labs does allow for a more playful nature to computer programing and computational thinking that is open-ended and open to interpretation. This in turn opens the door for students who might view coding as boring or out of their wheelhouse."

On working with us: "The benefit of having this partnership with SAM Labs was that they easily exchange any products that got broken in the classroom. I felt the company had my back – things work which makes it helpful for me."

[Hear more about Rob's story HERE](#).

If your school or learning environment would also benefit from tailored support from SAM Labs, you can review our entire suite of [solutions](#) or get a [FREE trial of SAM Studio](#). If you're an existing customer and need assistance, visit our [Support Center](#).

Rosie Carr
Rosie is a writer and storyteller with a passion for tech and learning, with nearly a decade's experience writing for small tech startups and large brands alike. In her free time she enjoys walks with her pet greyhound Boris, singing in a jazz quartet and making new music.