An Outline for My Scratch in Control Presentation

I'm a teacher who has used Scratch in my classroom since 2007. Recent changes to the curriculum include a greater emphasis on using the computer as a tool to solve problems that pre-written applications software cannot tackle. In my presentation, I draw from my students' experiences of using Scratch to model and interact with the outside world.

1. From Animation to Simulation

We create animated diagrams to show how different control systems work - but you don't have to stop there. How about interacting with your system to show how you can save energy in real life? We write simple energy saving games in Scratch.

2. What Can Scratch Do That Office Apps Can't?

While both tools can be used for data capture and to present information, we have a lot more control over how we get our raw data, and what we do with it. Whether it's getting data from sensors or generating random data to make useful charts to explain real world situations; we've used Scratch to make diagrams that our Office applications suite could not create

3. Lifecycles: What Making a Game Can Teach You About Computer Science

We use game creation to teach about the system design lifecycle. Scratch programming is a useful way to introduce and discuss more complex concepts as students look for a better way to achieve their objectives. One example of assessing progression in terms of programming skills would be the use of variables, another is the student's consideration of the end-user.

4. Scratch in Control

Using Makey-Makeys to develop computer-moderated boardgames and interesting userinterfaces from recycled materials; using S4A, we can integrate the real world into a Scratch project to make interactive displays and other useful tools.

Web Resources

www.conservationist.info www.robo-sharks.com www.computerprogrammingclass.com scratch.mit.edu/users/David Hellam www.youtube.com/watch?v=PZSw2mG3AY8