

Friday 11:30am

Scratch

- Snap Lego type blocks together to build a program.
 - Can bring in your own graphic characters and sounds.
 - The word scratch comes from hip-hop where they scratch the records.
 - Bring in media that is meaningful to use.
 - Make it more social. There is an online community site. From the application you can directly upload your project like YouTube.
 - You can share your work and get feedback from the community about your project.
 - Build on each others work. You can download projects you see and remix what it.
 - Students need to learn how to give proper credit for any work they use.
 - Initially was used by kids at home and after school.
-
- More use in hs and college. Started scratched website in 2009 which has downloadable curriculum.
<http://scratched.media.mit.edu/>
 - Can be used without Internet access because it is a download installed on local pc.
 - The software can be configured to run on netbooks and smaller screens.

Questions

- Has any work been done with accessibility to make it available to students with disabilities.
- Not a lot has been done with scratch in this area.

Experiences

- Know your audience - engineering students could watch 20 minute video and then create their own scratch. Non- majors did not grasp the concepts. They needed more step-by-step instructions.
- The web site curriculum is in 20 modules about one hour each.
- One person ran five day workshop for 4 - 8 grade girls. Very successful.
- Non-computer activity - showed animation. Had the steps, blocks of the code and the students had to assemble them in the correct order to match the animation.
- Workshop for underprivileged students. Every student had to bring an adult. The adult was responsible for keeping the kid. On task and the instructor could help with the technical problems.
- Fix the bug in this program. It is supposed to do x but does y.

- Problem that students let the syntax of a programming language intimidate them. Students who went from scratch to python in the same course thought that python was hard.
- A lot of colleges seem to be using python. Introduce java in the beginning of data structures for about three weeks to get down the syntax.
- His teacher emphasizes design. Not allowed to start program in any language until they know how they are going to do it. Write on the board in English, then pseudo code, then in programming language. If they have a problem in the program, it is usually syntax and this is easier to correct than a logic error, especially when they don't know where they are heading with the program.
- Scratch developer stated that scratch is designed to allow the students to tinker.
- His teacher suggested that after they tinker, then say lets create x and plan it first.
- Titanium studio is a free product but is not object based, it is coding.