Programming with Scratch in the Middle School Classroom

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Course Background

- 1st year of Exploratory Technology class.
- Students have 2 Exploratory Periods a day.
- Some students pulled for Interventions.
- Transitioned from semester length Computers Elective class.
- Continually evolving

Why Teach Programming?

- Computer literacy
- Problem solving
- Introduce students to potential careers

Why Scratch?

- Project from MIT
- Geared for Younger Students
- Visual
- Building Blocks (No Syntax!)
- Download for Free
- Cross-Platform (Windows, Mac, Linux)

How Class is Structured

- 9 Week Class
- Goal - All students create a video game
- Kick off by playing games
- Google form for game evaluation

What They Evaluate

- Helpfulness of Instructions
- Graphics
- Sound/Music
- Transitions to New Levels
- Difficulty

How I Teach It

- Part Exploration
- Part Demonstration
- Small Lab Projects Due every couple of days
- Larger Lab Projects Combine Concepts
- Video Game is final project

Final Project

- Graded Planning Sheet
- Setting
- Goal
- Minimal “Requirements”

Project Requirements

- Instructions
- 2 Different Sprites
- Sound
- Score
- Change Background at End

Student Projects

Resources

- http://scratch.mit.edu - Scratch Home Page
- http://scratched.media.mit.edu - Educators Forum
- http://learnscratch.org - La Salle Schools & Universities
- http://www.cs.wisc.edu/~cs202-1/index.html - University of Wisconsin- Madison CS Course

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