Lesson Plan: Building Mazes in Scratch II

Topic Description: Students learn how to change the locations of the sprites, as well as the direction the villain travels, and make new backdrops that incorporate portals.

# Objectives:

The student will be able to:

* Change the position of the sprites.
* Choose the direction that the villain travels.
* Make mazes and backdrops that have portals.

# Outline of the Lesson:

* Demo Sprite Repositioning (5 minutes)
* Independent Sprite Repositioning (15 minutes)
* Demo Introduce Villain Direction (5 minutes)
* Independent Work in Scratch (30 minutes)
* Journal Entry (10 minutes)

# Teaching/Learning Strategies:

## Demo to introduce repositioning sprites (5 minutes)

* Open “Part 1, Day 5 Template” from “World 0- Template” from MyCS\_Student.  Click “see inside” then press “Remix”.
* Show the students that by clicking and dragging the sprites on the grid you can move them to a new position.
* Show also that when “Reset” is clicked (in the More Blocks section of the Scripts for Sprite) that sprite goes to start, and villain goes to villain start.****

Before Reset After Reset

## Independent sprite repositioning (15 minutes)

* Have the students move “sprite”, “start”, “end”, “portal enter”, “portal exit1”, “portal exit2”, “villain” and “villain start”.
* (To edit a different sprite, click on their icon under the grid)

## Demo to introduce villain direction (5 minutes)

* From here click on the villain sprite under the grid.
* Click on the More Blocks section to see the blocks “Villain Up”, “Villain Down”, “Villain Left”, “Villain Right”
* Add one of these blocks to the “when flag is clicked block” to have the villain move in that direction.



## Independent work in Scratch (30 minutes)

* Have students move the sprites, including portals, to different locations than in the Template.
* Have students have the villain move in some direction.
* Challenge students to create their own sprites and backdrops to incorporate in their mazes.

Journal Blog Entry

* Students will answer the question, “what did you learn today”?

Resources:

* <http://scratch.mit.edu>