**Instructional Day**: 9

**Topic Description**: This lesson introduces the concept of broadcasting through role play and then provides students an opportunity to complete a broadcast event in Scratch.

**Objectives:**

The students will be able to:

* Broadcast events.
* Listen to and respond to events they create.
* Change the background of the stage.

**Outline of the Lesson:**

* Journal Entry (5 minutes)
* Discussion of journal entry (2 minutes)
* Role Play (20 minutes)
* Summer Story (28 minutes)

**Student Activities:**

* Complete journal entry.
* Participate in discussion of journal entry.
* Participate in role play.
* Create a Scratch summer story.

**Teaching/Learning Strategies:**

* Journal Entry: What does it mean to broadcast something (example the radio station is broadcasting music right now)? If a radio or television station is broadcasting something, does that mean that everyone is listening to it?
* Discussion of journal entry
  + Have a few students share their responses.
  + Stress that even though a lot of things are being broadcast, not everyone is listening to every thing that is being broadcast.
* Role Play
  + Solicit Volunteers to be the various characters.
  + Give the performers a paper with ONLY their part. See Scratch Broadcast Role Play.
  + Pass out the chart that shows all the parts to students that are not performing. See Scratch Broadcast Role Play Interwoven.
  + The students can think of it as a three act play where the scenes change. The difference here is that there are no curtains so they will see everything change.
  + The teacher will be the director and will make sure everything and everyone is in place during each scene. The teacher can yell action before the scene starts to signify that everything checks out.
  + Each performer’s paper is broken into scripts for the various scenes.
  + One performer will be in charge of setting the stage. They can do this by erasing and drawing pictures on the white board behind the stage.
  + The Cat’s first two scripts end with broadcasts. The cat will tell the director (teacher) that it is time to go on to the next scene.
  + You might want to have different students perform the role play a second time. This time the teacher will only yell out when the green flag is clicked. The students can check themselves to make sure that everything is okay.
  + Interesting Questions
    - Why do The Crab and the Date have only two scripts? (Possible answer: They remain hidden during the other scene.)
    - Instead of using broadcast, do you think you could just use “wait \_ secs” blocks? (Answer: yes.)
    - What might be an advantage to using broadcast instead? (Possible answer: One advantage is that if your entire program is based on waits, if you edit something in scene 1, it could possibly throw the timing off for the rest of the program.)
  + Discussion
    - In Scratch, any sprite can broadcast its own event.
    - One reason why The Cat is doing the broadcasts is because he is the last one to act in the first two scenes. Therefore he knows when the scene is over.
    - Other sprites (including the one that broadcasts the event) can receive the event and perform a script
* Scratch Summer Story
  + Show students
    - Directions: Summer Story Project
    - File to edit: summer.sb
    - Rubric: Summer Story Project Sample Rubric
  + Circulate the room and answer questions.

**Resources:**

* cratch Broadcast Role Play
* Scratch Broadcast Role Play Interwoven
* Summer Story Project
* summer.sb
* Summer Story Project Sample Rubric

**Scratch Broadcast Role Play**

This is meant to be performed in front of a white board. This can also be done using more elaborate props. Each character’s parts are broken down by events that are broadcast out to everyone. Select characters and give them their parts of the scripts. There is also a script so that observers can see the flow of the entire program.

Useful props: sunglasses, a basketball, and a bag of popcorn or chips

Characters:

The Cat: our main character

The Crab:

The Opponent:

The Date:

Stage: in charge of drawing the background of the scene on the board

Scripts for the individual actors:

The Cat

when GREEN FLAG clicked:

switch to costume: sunglasses

say: Hello!

say: I’m going to tell you about my summer.

say: I spent some time at the beach.

broadcast BASKETBALL SCENE (tell everyone it’s time for the next scene)

when I receive BASKETBALL SCENE:

switch to costume: basketball

say: I played lots of ball.

broadcast MOVIE SCENE (tell everyone it’s time for the next scene)

when I receive MOVIE SCENE:

switch to costume: bag of popcorn or chips

say: I went on a date. We went to the movies.

The Crab

when GREEN FLAG clicked:

show: (Go up on stage. You might want to pose like a crab by making your hands into claws.)

when I receive BASKETBALL SCENE:

hide: (Disappear from the stage)

The Opponent

when GREEN FLAG clicked:

hide: (Disappear from the stage)

when I receive BASKETBALL SCENE:

show: (Go up on stage. You might want to pose like a basketball player.)

when I receive MOVIE SCENE:

hide: (Disappear from the stage)

The Date

when GREEN FLAG clicked:

hide: (Disappear from the stage)

when I receive MOVIE SCENE:

show: (Go up on stage.)

wait 2 secs:

say: I can’t wait to see Get Smart. Would you believe I spent my entire check from work on these tickets? No? Would you believe that it cost me $15 for both using my student discount? No? How about a stick of gum and a nickel I found on the floor?

Stage

when GREEN FLAG clicked:

Switch to background BEACH: (Draw a picture of the beach on the white board. A sun in one corner and a wavy line for

sand is fine.)

when I receive BASKETBALL SCENE:

Switch to background BASKETBALL COURT: (Draw a picture of a basketball court. Drawing the backboard and rim should be fine.)

when I receive MOVIE SCENE:

Switch to background MOVIES: (Draw a picture of a movie theater. Drawing a sign that says movies should be ok.)

Scratch Broadcast Role Play Interwoven

|  |  |  |  |
| --- | --- | --- | --- |
|  | when GREEN FLAG  clicked | when I receive BASKETBALL | When I receive MOVIE SCENE: |

|  |  |  |  |
| --- | --- | --- | --- |
| The Cat | switch to costume:  sunglasses  say: Hello!  say: I’m going to tell you about my summer.  say: I spent some time at the beach.  broadcast BASKETBALL  SCENE | switch to costume: basketball  say: I played lots of ball.  broadcast MOVIE SCENE | switch to costume: bag of popcorn or chips  say: I went on a date. We went to the movies. |
| The Crab | show: (Go up on stage. Pose like a crab.) | hide: (Disappear from the stage |  |
| The Opponent | hide: (Disappear from the stage) | hide: (Disappear from the stage) | hide: (Disappear from the stage |
| The Date | hide: (Disappear from the stage) |  | show: (Go up on stage.)  wait 2 secs:  say: I can’t wait to see Get Smart. Would you believe I spent my entire check from work on these tickets? No? Would you believe that it cost me $15 for both using my student discount? No? How about a stick of gum and a nickel I found on the floor? |
| Stage | Switch to background BEACH: (Draw the beach.) | Switch to background BASKETBALL COURT: (Draw a basketball court.) | Switch to background MOVIES: (Draw a movie theater.) |

**Summer Story Project**

Finish a story about what the cat did over summer. Answer questions 1, 2, and 6 on paper.

1. Open the file summer.sb. Click the flag. What does it do so far?
2. Click on the cat and look at his script. What does the cat broadcast in the last block?
3. We’ll make a basketball scene (a second script)
   1. Drag a block into the script section.
   2. Click the empty box and choose “basketball scene”.
   3. Under looks, drag a block into your script
   4. Change costume1 to costume3
   5. Give the cat something to say about playing basketball over summer.
   6. Drag a block to the end of this second script.
   7. Click the empty box.
   8. new
   9. Type in movie scene and hit ok.
4. We’ll make the background change as well.
   1. Click on the stage
   2. Choose scripts
   3. Drag a block into the script section.
   4. Click the empty box and choose “basketball scene”.
   5. Under looks, drag a block into your script
   6. Change background1 to basketball-court
5. Now add a third scene about going to the movies.
6. Summarize how you can use broadcast to change scenes in a story. Get your work checked off.
7. Now add in another character into each scene like in the role play (i.e. The Crab, The Opponent and The Date). These characters should show and hide.
8. Feel free to add in additional scenes.

**Summer Story Project Sample Rubric**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Do you have?** | Points Possible | Yes | No | Points Earned |
| Answer question 1, 2 and 6 | 5 |  |  |  |
| Add in the second scene (basketball) | 5 |  |  |  |
| Add in the third scene (movies) | 5 |  |  |  |
| Add in additional characters into each scene that show and hid | 5 |  |  |  |
|  |  |  |  |  |
| **Extra Credit** |  |  |  |  |
| Add in additional scenes | 1 |  |  |  |
|  |  |  |  |  |
| **TOTAL:** | 20 |  |  |  |