Daily Lesson Plans Instructional Day: 1

Topic Description: This lesson introduces the Scratch programming language, including the basic terms utilized in the language.

Objectives:

The students will be able to:

• •Name the basic terms used in Scratch.

• •Create the beginning of a simple program in Scratch. Outline of the Lesson:

• •Journal Entry (5 minutes)

• •KWL chart about programming/Scratch (15 minutes)

• •Scratch introductory video (10 minutes)

• •Model of how to start name assignment (25 minutes)

Student Activities:

• •Complete journal entry.

• •Complete KWL chart about programming/Scratch.

• •Groups take turns sharing out their K’s and W’s orally.

• •Watch Scratch introductory video.

• •Follow along with Scratch open as teacher models how to start name assignment.

Teaching/Learning Strategies

•Journal Entry: How do you think programs like Microsoft Word, Internet Explorer and Windows are made?

o Discuss what it means to program a computer. Remind students that in the previous unit they used a markup language to provide instructions to the computer on the layout and content of web pages. Programming languages are used to translate algorithms into a language that a computer can execute.

•KWL chart

o Students meet with groups and each group completes a KWL chart. (Know, Want to Learn,

Learned)

o Groups take turns sharing out their K’s and W’s orally. Encourage them not to repeat anything

that has already been said.

o Put KWL charts up in the classroom; tell students that they will finish the L towards the end of

the unit.

•Scratch introductory video

o Played with sound. Can be played over a projector. •Model of how to start name assignment

o Address how sound will be handled in the classroom.

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Resources:

Scratch lends itself to playing sounds so it can get noisy. The teacher needs to decide how to address this. Headsets with microphones are one solution.

o Build a name project similar to name.sb. o Emphasize

• Every character in Scratch is called a Sprite.

• Although Scratch is programming, it is not used in industry. Point out a few languages

that are used in industry—Java, C, C++. Throughout the unit, you will want to reinforce

that the basic constructs used in Scratch are also used in “industrial strength” languages.

• How to choose a Sprite from a file

• How to paint your own sprite

• Each sprite has its own scripts.

• You can right click any block and select help to get more information on how to use it.

• How to change the language in Scratch (for your English Learners)

• How to go to full screen mode and back

• How to switch back and forth between sprites by clicking on them

• X and Y coordinates on the screen are shown on the bottom right below the stage

• How to save in the proper location (the default is to save in the Scratch Projects folder

(C:\\Program Files\Scratch\Projects))

• The following blocks should be modeled:

• •Move \_ steps

• •If on edge, bounce

• •Turn \_ degrees

• •Forever

• •Change color effect by \_

• •When the green flag is clicked

• Encourage students to experiment. They can’t break the computer by dragging the wrong block.

• Show students where they can access ScratchGettingStarted.pdf. (It would probably be useful to have printed copies for each student.)

• Show students Name Sample Rubric.

• •KWL Graphic Organizer Chart.pdf (UCLA SMP)

• •ScratchIntro.wmv (scratch.mit.edu)

• •ScratchGettingStarted.pdf (scratch.mit.edu)

• •name.sb

• •Name Sample Rubric

• •http://scratch.mit.edu

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Name Sample Rubric

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

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Do you have?

Points Possible

Yes

No

Points Earned

Have a separate sprite for each letter of your name.

5

Have at least 3 different interesting behaviors for the letters in your name.

5

All the letters have a behavior

4

Use the “when green flag clicked” block

3

Use the “forever” block

3

Extra Credit

Have your name reinitialize itself when the green flag is clicked. In other words, all the letters will start off in the right location facing the correct way.

2

TOTAL:

20