Title: Programming with SCRATCH – Animate Your Name

Subject Area: Computer Science

Grade Level: 2 (suitable for 8 and older)

Related Standards of Learning:

CSTA K-12 Computer Science Standards
   CPP - Computing Practice & Programming
   CT - Computational Thinking

ISTE Standards for Students
   1 - Creativity and Innovation
   2 - Communication and Collaboration
   4 - Critical Thinking, Problem Solving, and Decision Making
   6 - Technology Operations and Concepts

Common Core English Language Arts Standards
   L – Language
   SL - Speaking & Listening

Common Core Math Standards
   G – Geometry
   MP - Math Practices

Classroom Set-up:

1. Students need a computer or tablet with Internet connection.
2. Students need accounts for SCRATCH. Instructor needs Teacher account and student accounts can be established under Teacher account. Accounts can be obtained at SCRATCH.MIT.EDU
3. Projector for Powerpoint slides and videos

Objective:

Animate the letters of your username, initials, or favorite word.

Scratch is a programming language and online community where you can create your own interactive stories, games, and animations -- and share your creations with others around the world. In the process of designing and programming Scratch projects, young people learn to think creatively, reason systematically, and work collaboratively. To learn more about Scratch, check out the About Scratch page.
The ability to code computer programs is an important part of literacy in today’s society. When people learn to code in Scratch, they learn important strategies for solving problems, designing projects, and communicating ideas. Scratch is designed especially for ages 8 to 16.

**Summary:**

Please refer to [https://resources.scratch.mit.edu/www/guides/en/AnimateYourNameGuide.pdf](https://resources.scratch.mit.edu/www/guides/en/AnimateYourNameGuide.pdf) for the Educator’s Guide for this lesson. The guide is also pasted below in the Description section.

**Vocabulary:** Algorithm - Say it with me: Al-go-ri-thm

This lesson has two vocabulary word that are important to review:

- Al-go-ri-thm is a list of steps that you can follow to finish a task
- Pro-gram is an algorithm that has been coded into something that can be run by a machine

**Materials:**

Computers/laptops and power point slides.

**Procedure:**

Play introductory Computer Science videos. See Slides below for useful links.


Project on screen and demonstrate step by step instruction. See steps below.

Use Educator resources at [https://scratch.mit.edu/tips](https://scratch.mit.edu/tips).

**Programming Steps: Animate Your Name**

1. Choose the First Letter
2. Add Color Effects
3. Add a Sound
4. Add a Backdrop
5. Add Your Next Letter
6. Make It Spin
7. Finish Your Name
8. Share Your Project
Animate Your Name

This guide offers ideas for leading a one-hour workshop using Scratch. Participants will gain experience with coding as they animate their names.

![Image of animated name]

This guide is designed for use with this tutorial: scratch.mit.edu/name

Preparing for the workshop

Try the tutorial

Print the cards

scratch.mit.edu/name

scratch.mit.edu/name/cards

Make sure participants have Scratch accounts

Join Scratch

scratch.mit.edu

Set up a projector or large monitor (if available)

Workshop plan

1. **Imagine**
   - Start as a group, introducing the project theme.
   - 5 minutes

2. **Create**
   - Support participants as they create projects, working at their own pace.
   - 20-30 minutes

3. **Share**
   - Gather together to share and reflect at the end of the session.
   - 10 minutes

Sample projects

- **Animate a Name Studio**
  - See video: scratch.mit.edu/studios/432299

Imagine

Introduce the idea to the group and get them brainstorming.

Inspire

Show the intro video from the Animate Your Name tutorial for ideas and inspiration.

Warm-up: Introductions

Gather the group in a circle. Ask each participant to say their name, what their favorite animal is, and one word that describes that animal.
Share
Have participants share their project with their neighbors.

Ask questions they can discuss:
- What do you like best about the project you made?
- What was the hardest part?
- If you had more time, what would you add or change?

Variations
Other Names
Animate the name of a favorite character from a book or movie. Or, animate the letters of the name of your school or town.

Start with an Image
Have participants bring in a picture or find a picture on the web and animate a word that goes with the picture.

Acrostics
Make an interactive acrostic poem in which the first letters of each line spell out a word reading down.

Support collaboration
- When someone gets stuck, connect them to another participant who can help.
- See a cool idea? Ask the creator to share with others.

Encourage experimenting
Help participants feel comfortable trying different combinations of blocks and seeing what happens.

To understand their thought process, you can ask questions:
- What are you working on now?
- What are you thinking of trying next?
Algorithms and Programs

• Al-go-ri-thm is a list of steps that you can follow to finish a task
• Pro-gram is an algorithm that has been coded into something that can be run by a machine

SCRATCH

• SCRATCH is a programming language
• You can use it to program your own interactive stories, games, and animations — and share your creations with others in the online community.
• https://vimeo.com/144905435
• http://scratch.mit.edu/classes/29970/registrer/e47b5eb90b9d4761a53cb89d3a4da348
Discussion:

- What was your favorite part about this activity?

Note: Most of the programming classes are very tight on time because of the hands-on help that is needed for the students so we had very little time for discussions after the lesson. Also, the teacher was very helpful with hands-on assistance. Depending on the number of students you might need additional help.

References/Sources:

Activity was adapted from Scratch.mit.edu at