

# Activity: Creating a Simple Digital Movie: Getting Started with Alice Storytelling (now Alice 3)

Contributed by: Kansas State University, Computing and Information Systems Department, National Science Foundation GK12 INSIGHT Program

Prepared for <http://www.teachengineering.org/>

## \*Subject Area(s)

Computer Science  
Science and Technology  
Problem Solving

## \*Associated Unit

Lights, Camera, Action! Digital Storytelling with Alice

## \*Associated Lessons

Creative Writing with Characters  
Designing a Custom Nerdbot

\*Grade: 6 (5-7)

## Time Required

45 minutes

## Group Size

As a class

**Cost Per Group** Free (if each group has a computer and can install free software)

## \*Summary

Students learn the basics of programming while practicing communication and language arts. This unit integrates logical processing and technical communication with an introduction to computer programming concepts while students have fun planning, writing, and bringing own characters to digital "life" in a multi-disciplinary unit that encourages teamwork and creativity while building important technical foundations.

## \*Engineering Connection

Logical processing and computer programming are common skillsets in all types of

engineering, from civil, industrial, and mechanical, to chemical, petroleum, nuclear, and environmental. Engineers excel in process design and analysis and use computers to enhance their ability to calculate, evaluate, analyze, and simulate complex systems. However, engineers must not only demonstrate analytical competence, they must be excellent communicators, able to work well in teams, and practice creative thinking to develop innovative solutions. This unit gets students excited about not only using the tools that engineers develop, but creating, modifying, and extending those tools as well.

### **\*Engineering Category**

1. Relating science and/or math concepts to engineering

**\*Keywords:** Alice, programming, logic, language, problem solving, computers, storytelling, creative thinking.

### **\*Educational Standards**

Shawnee School District Grade 6 (2010) Science Objectives:

- 4006.02 - Design and conduct investigations safely using appropriate tools, mathematics, technology, and techniques to gather, analyze and interpret data.
- 4006.03 - Identify relationships between evidence and logical conclusions.

Literacy Common Core - College and Career Readiness Anchor Standards for Writing (6-12) Text Types and Purposes

- 2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- 3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.
- 5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- 6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

### **Prerequisite Knowledge**

- none

### **\*Learning Objectives**

After this activity, students should be able to:

- Download and install the Alice programming environment.
- Follow step-by-step directions to create a simple movie scene.

- Customize the scene based on their creative writing example and share their movie with others.
- Understand basic programming concepts.

### **\*Materials List**

Each group needs:

- One copy of the handout.
- A computer with Alice and the starter project installed.

To share with the entire group:

- One instructor guide

### **\*Introduction / Motivation**

A fun and visual way to introduce core programming concepts while encouraging creative thinking.

### **Vocabulary / Definitions**

<b>Word</b>	<b>Definition</b>
Alice	An innovative educational software program that allows students to create digital 3D movies with characters, dialogue, movements and camera action.
programming	Also called "coding". The process of communicating instructions to a machine so that it can perform the actions you describe.
starter project	A program set up before the class begins so the students have a partially-working program already and all they have to do is modify it.

### **\*Procedure**

#### **Background**

#### **Before the Activity**

#### **With the Students**

- Download Alice from <http://www.alice.org/>.
- Install the Alice program.
- Open the sample scene.
- Customize Your Scene
- Share Your Movie

## **Safety Issues**

none

## **Troubleshooting Tips**

For additional information about the Alice programming environment, go to <http://www.alice.org/>.

## **Investigating Questions**

How can I create a lasting set of instructions so that a computer will perform a series of actions whenever I ask?

## **Assessment**

To evaluate the effectiveness of this unit, a pre-activity assessment is available that can be administered prior to beginning the activity and a post-test is available that can be administered after students have completed the activity.

## **Attachments**

## **Additional Multi-Media Support**

## **References**

## **Other**

## **Redirect URL**

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**\*Supporting Program**

Kansas State University, Department of Computing and Information Sciences,  
National Science Foundation GK-12 INSIGHT Program



Image from the Alice website: [http://www.alice.org/3.1/materials\\_introduction.php](http://www.alice.org/3.1/materials_introduction.php)