Interactive Storytelling for Literacy Skills

Class or Subject Area: Composition & Literacy; ELL; Can be applied to many content areas as well, such as science or history

Specific Learning Objectives:

<u>After completing this project</u>

- ⚲ When given an assignment to write a story, students will write plot developments that make sense given the characters in the story
- ⚲ Students will create realistic characters that appeal to readers because readers can relate to the choices made by the characters
- ⚲ Students will write a narrative structure that is logical and leads appropriately to the ending of the story

Grade Levels: 6,7,8

Activity Summary:

During this activity students will work with a partner to write and animate an interactive story (popularly known as "Choose Your Own Adventure") that provides viewers with at least 3 different branching points during the story, and at least 2 different options at each branching point.

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Literacy is one of the most important skills students can learn in school and affects their ability to understand and communicate nearly any topic they will come across. Digital literacy is becoming increasingly important as more information is being delivered through digital means and often includes audio and video in addition to text. As student-created projects are on the rise, with the popularity of project based learning and student-centered classrooms, it is more important than ever for students to be able to communicate ideas clearly using narrative and multimedia.

Storytelling in education

Story creation is a powerful learning tool – the act of dramatizing encourages children to think in more sophisticated ways and provides a way for children to to more easily imagine and remember ideas than if they tried to think about them out of context. When students are responsible for articulating ideas to others they become more sensitive communicators and develop an improved awareness of the use of story elements.

Story creation encourages students to develop decision making skills, increase understanding of emotional repercussions of decisions, analyze motivations behind decisions, and to synthesize information found in the stories. These things are possible because stories provide details about characters' personalities and past experiences, not just facts (Goodwin & Jenkins, 1997).

Digital storytelling

Digital stories are more visual than traditional writing assignments and separate the elements of storytelling (character, plot, setting, theme) from the words usually used to describe them and can engage otherwise poor writers and readers. Sharing is learning – creating for an audience of peers can provide students with immediate feedback and allows for deeper reflection, an act that is essential for learning but can be difficult to achieve (Sandars & Murray, 2009). Amory (2007) argues that new understandings arise through social interactions mediated by technology.

Interactive storytelling

In its best form, storytelling is a co-creative act - stories are created and recreated every time

they are told, through the psychological interpretation of Its listeners (Amory, 2007). Narrative can be described as a dialogue between people, involving both writers and readers (Madej, 2003). Interactivity also deepens engagement with learning (Lim, Nonis, & Hedberg, 2006).

This project encourages students to place themselves in the viewer's shoes and anticipate how they will experience the story. Additionally, they will have to consider the different potential paths through a story, and how different character choices within the story can affect the development of the plot. This creates a deeper understanding of how story elements fit together to create a compelling story.

Project overview

In this project students will use Scratch, a free downloadable animation program, to create interactive stories, commonly known as "Choose Your Own Adventure" (CYOA) stories. Students will first outline the branching story using a word processing program and check the flow of the story branches to make sure each one makes sense. Each story will have at least 3 branching points, and each branch will offer viewers at least 2 distinct story options from which to choose.

Tools

- Word processor
- Scratch – A program that makes it easy to create your own interactive stories, animations, games, music, and art -- and share your creations on the web. Free download from http://scratch.mit.edu/
- Source of graphics (optional) – Clip art site, or creative commons licensed resource
- Paint.NET (optional) - This is a graphics editor, similar to Paint but much more powerful. It features support for layers, unlimited undo, special effects, and a wide variety of useful and powerful tools found in programs like Photoshop. Free download from http://www.getpaint.net/

- Audacity (optional) - An easy-to-use audio editor and recorder. Audio can be exported as wav or mp3 files and imported into Scratch. Free download from http://audacity.sourceforge.net/

- **Inspiration!** This can come from almost anywhere - existing stories (read about copyright issues and when they don't apply!) in books or movies, events in a student's life, or even fairy tales and nursery rhymes.

- A partner

Description

Students will work with a partner to create a CYOA story using Scratch, an animation tool that includes several commands that provide interactivity. Groups will summarize their stories first using Word, and are free to use whatever format they are most comfortable with. Stories can be described using an outline, brief paragraphs (clearly numbered), flowcharts, or any other format that makes sense to the students.

Once the story has been finalized and approved by the teacher, students can start working in Scratch. They should start by choosing artwork for representing characters and other sprites in their stories, including backgrounds. These can be taken from the default art that comes with Scratch, from an online clip art site, or a creative commons licensed source.

Scratch has a pretty intuitive interface. Kids can import sprites on the right side of the screen under the stage, drag commands from the left column into the middle, and then play the animation to see the results of their work.
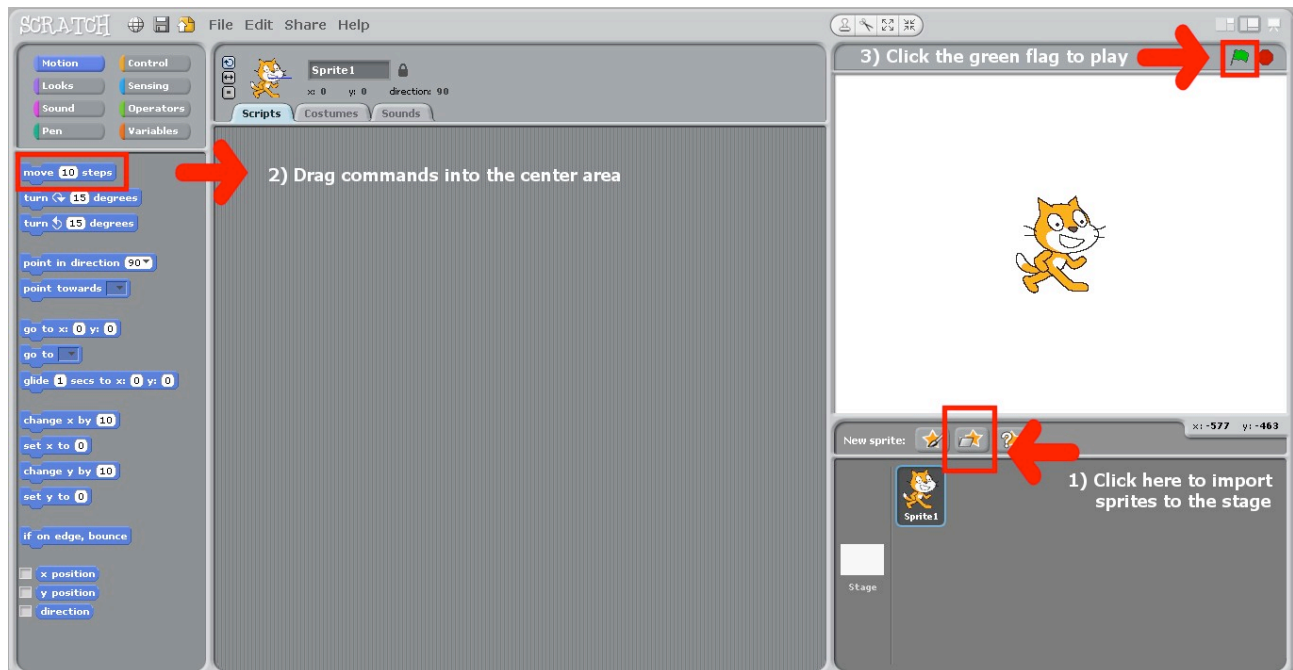
Scratch also has a number of commands that accept input from the user when an animation is playing and senses whether a certain key has been pressed, or whether a sprite has been clicked on.
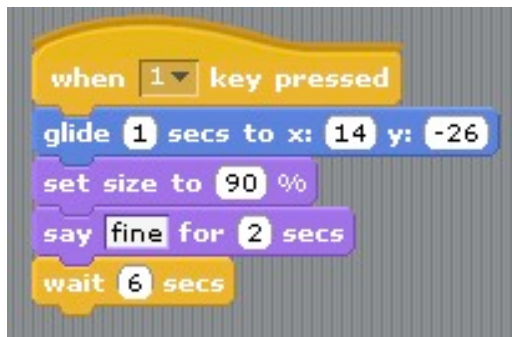

This is what we're going to use to set up the interactivity for our CYOA stories.
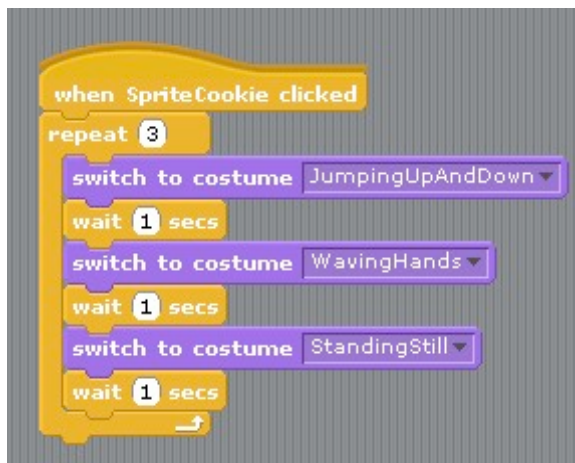
Example of key press:

This set up uses the following commands for each keypress:

Example of clicking on a sprite:

Click the food that Don should eat

This set up uses the following commands for each sprite:

Of course you can have any combination of commands attached to the "When Sprite*x* Clicked" puzzle piece, these are just simple examples. Both forms of choice, keypress vs sprite clicking, result in giving the viewer the ability to control the outcome of the story, but some students will simply prefer one method over the other.

Encouraging different types of thought

As you can see, the process of creating a story in Scratch requires some thought as to what commands will produce the desired result – it encourages analytical thinking. The reason I find it helpful for students to have their stories worked out on paper first is so that while working with Scratch they can focus on the logic of putting the story together using the most efficient combination of commands. Personally, I find the act of creating the flow of a story to be very different from the analytical act of analyzing Scratch commands, and see students producing better work when these cognitive demands are separated and they can focus on each one by itself.

This technique of creating visual CYOA stories encourages students to think about a story through the eyes of the viewer. How will the other person experience what I am creating? What options can I provide that will make this story more satisfying? Which options are they more likely to choose? Will different types of people be able to enjoy this story? This process will teach the student to have a deeper understanding of how viewers of their animations, and reader of their written stories, will experience what they've created and how character development can affect the outcome of the plot. Knowing how someone else might manipulate a story can make an author provide a more consistent – and ultimately more satisfying – story.

Project use across content areas

This type of assignment fits very well in a literature or creative writing class. However, it can also work very well with other subjects such as math, science, history, and even foreign language learning. Nearly any content area can benefit from providing storytelling opportunities for students. A story can illustrate a principle, serve as example, or explain a situation.

Conclusion

Stories give context to individual experiences, and enhance comprehension (Nelson, 1989). Context is important in learning – people tend to be poor at remembering information received out of context, or before they are able to apply it to a real situation (Gee, 2003). Historically, story has been the connection between memory and imagination – despite current feeling that these are two distinct methods of learning that cannot be connected. In fact, story is a powerful tool that stimulates the imagination and promotes fact learning (Egan, 1989). Encouraging students to turn fact knowledge into a story provides a cognitive framework that makes it easier for students to both remember and retrieve information (Nelson, 1989). Allowing students to become storytellers is also a good way for teachers to evaluate what students have learned about a particular topic (Tsou, Wang, & Tzeng, 2006).

Students must experience learning in context in order to assimilate new knowledge; stories provide this much-needed context. The technique described in this paper of creating visual, interactive stories is a fun, creative activity that can be enjoyed by students of varied ages and can be applied to many disparate content areas.

References

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