Stories of Culture and Place and Green Screen Digital Storytelling
Blending oral, written and digital storytelling in a unique approach to art, literacy and content exploration

For more information contact:

Dr. Jason Ohler
President’s Professor, Educational Technology
Director, Stories of Culture and Place
University of Alaska Geography Program
University of Alaska
Email: jason.ohler@uas.alaska.edu
Phone: 907-796-6427

Digital storytelling in 3 Parts:
www.jasonohler.com/storytelling

Green screen technology and techniques

Pictorial report on the Nome Elementary Green Screen project
www.jasonohler.com/nome

DVD of student performances available on request

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For information about the University of Alaska Geography Program, contact:

Dr. Michael Sfraga, Director
University of Alaska Geography Program
O’Neill Bldg., Suite 303
Fairbanks, AK 99775
www.geographyua.org

michael.sfraga@alaska.edu / 907-474-7494 / Fax: 907-474-6184
Stories of Culture and Place
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Overview

Stories of Culture and Place is a program that helps students research, create, illustrate and perform original stories about their cultures and the places in which they live. It uses a cross-curricular, project-based approach to learning that addresses a number of content and skill areas simultaneously. Students develop oral and written literacy skills. They research geography, local history and cultural values so they can apply their research results to the creation of an original story. They learn project planning skills that are transferable to other activities. They create original artwork to support their stories. They learn about using computers and other digital technologies to help tell their stories. And they develop the self-confidence and social skills that come with performing before an audience.

The final product is a DVD of student performances in which their original artwork is added to their recorded performances during post production using the chroma key editing process. The result is students performing original stories in front of original artwork.

The Storytelling Process

Stories of Culture and Place uses the following story and media development process:

1 – Students research issues and ideas related to their culture and place within the context of an academic area, such as geography, social studies or language arts. Their research becomes the basis of an original story.

2 – Professional storytellers lead students through a story creation process that uses story mapping, the writing process and other literacy development techniques.

3 – Professional storytellers teach students how to use a number of effective storytelling techniques in order to prepare them to perform in public.

4 – Students create “background” artwork, typically on regular size paper (typically 8½” X 11) using local materials (paints, crayons, etc.)
5 – After writing and rehearsing their stories, students perform them before an audience in front of a “chroma key” background, like the weather announcer uses. Typically this is a painted wall or sheet.

6 – Students record their performances, working as video, audio engineers and studio “floor managers.”

7 – During post production, student artwork is scanned and “slid behind” student performances to serve as story backgrounds. A final DVD is created and distributed to students and their families, as well as other interested community members. Students are as involved in post production activities as time and circumstances allow.

School Requirements

Typically, a project requires the following to be successful:

1. **A committed teacher.** The project requires a classroom teacher who is willing to spend time with the project. Typically, this involves helping students research, write and practice their stories, as well as create the background art needed for the final production. Time commitments vary from project to project, but usually involve 1–2 hours per day over the course of two weeks.

2. **A performance venue.** This can be makeshift. Ideally, the background is a wall that is painted green for chroma key editing purposes. Otherwise, a portable green background cloth can be used. The better the lighting, the better the quality of the DVD. The venue should be large enough to accommodate the anticipated audience. While students usually perform in front of peers, parents and the public are always welcome.

3. **Parent permissions and community participation.** Because students are being taped, parent permission is key. Without it, their kids’ stories can’t be recorded and/or distributed. Period. Also, I always try to involve community members who have a stake in the stories kids are telling. If I am working with Alaskan Native students, then I involve elders. If I am helping students with a particular area, like local geography or
history, then I try to involved local geographers and/or historians. This builds a very solid bridge to the community.

The following websites should be helpful:

Digital storytelling in 3 Parts:  
www.jasonohler.com/storytelling

Green screen technology and techniques  

Pictorial report on the Nome Elementary Green Screen project  
www.jasonohler.com/nome

Sample DVDs of student performances are available upon request. To contact the program, email Dr. Jason Ohler at jason.ohler@uas.alaska.edu.

We look forward to talking to you about how to adapt Stories of Culture and Place to your unique school environment.
Guidelines for a successful green screen production

Artwork
Guidelines for creating background artwork:

1. **Students should use regular paper.** If students are creating their own artwork, 8 ½ X 11 paper works just fine.

2. **Turn the paper on its side.** This better resembles the actual shape of a TV or computer monitor, allowing the artwork to completely fill the background.

3. **Use simple media – or not, as you wish.** Using crayon and paints works well, though students can also use photographs, PhotoShop creations, digitized movies and other digital sources.

4. **Large objects and vibrant colors are best.** These show up much better than smaller objects in more subdued colors in the background artwork. The more contrast in the artwork the better.

5. **Place the main object in the artwork off center.** This is because performers tend to stand in the middle of the stage when they perform, blocking whatever is behind them. Placing an important character or object off to the side a bit will keep this from happening.

6. **Have students move as they tell their stories.** This allows the entire piece of artwork to be seen.

7. **Don’t wear the chroma color!** Make sure storytellers don’t wear anything that is close to the color of the chroma green used in the background. Otherwise the artwork they create will show up on their clothes! I send home a note to parents the night before the performance with a stickie on that says “don’t wear this color!”

Chroma backgrounds
Some of the more important considerations are as follows:
1. **Monochromatic color is more important than the actual color.** The background does not need to be green or blue, it just needs to be one solid color. Green or blue have become industry standards because they are distinct and easy to avoid and therefore tend not to interfere with actors’ clothing.

2. **Use a sticky pad color.** I use a particular shade of “yuck” green that I found on a sticky pad (as in Post–It–Notes). I then use the stickies to cover up plug plates, cracks and other imperfections of the wall. I also use it for two other purposes: showing the paint mixer at the hardware store what color I want, and showing parents what color their kids shouldn’t wear on performance day – I just stick the stickie on a note home. Very handy.

3. **The best background is a painted wall.** It is cheap and easy to do and has fewer wrinkles than a sheet. Wrinkles create shadows and we don’t like shadows because they create an uneven color. The more even the color, the better the chroma effect. In addition, it is permanent, leading schools to want to continue green screen storytelling projects.

4. **You can use a monochromatic sheet as a chroma background.** Some bed sheets come in distinct colors that work. You can also dye a sheet. One sheet typically doesn’t do it. You will need 2 or 3.

5. **Companies make “chroma sheets” that work well in a pinch;** that is why I usually travel with one. But you need to steam it or iron it for best results. Bottom line: try to paint a wall first, use a chroma sheet second. They are in the $150 range.

**Lighting**

Important points about lighting the performance area:

1. **Good lighting is key, but bad lighting is not fatal.** I have used everything from professional lighting kits to uneven ambient lighting on a day during which the clouds came and went, providing lighting that faded in and out during the performances! It all works, it is just a question of how well.
2. **Consistent lighting is more important than bright lighting; consistent low lighting is better than brighter, uneven lighting.** In a perfect world you would have bright, even lighting. But given the choice between bright and even, take even. Consistent light, even if it is low level, makes chroma key replacement more effective because it produces a more consistent color. The more consistent the color, the more effective the chroma editing.

3. **Use what you have to control light.** I use the window blinds a good deal. If there are no blinds, hanging some sheets to control lighting also works. There are lots of low budget options.

**Miking**
Miking performances is key. Here are a few rules:

1. **Don’t rely on the microphone built into the video camera.** It produces bad audio. Use a wireless mike plugged into the external mike port of your camera. I use the Azden Wireless Pro. It cost about $150 and is a real trooper. If you use the mike built into the camera, you will often be disappointed. The audio becomes a very weak link in an otherwise strong project.

2. **Make sure you are using a video camera that has an external mike port and headphones input.** In order to use a wireless mike you need a video camera with an external mike input, and a headphones input, to check sound. A few years ago most video cameras had these, but now they are harder to find. Consumers weren’t using them (to record soccer games and birthday parties) so some manufacturers discontinued them. I find tape-based video recorders are more prone to have them.

3. **Always check your mike level before recording.** Just plug a set of standard iPod or CD player headphones into the phones input on your video camera to make sure everything is coming through. If you get to the end of your project and you find out you don’t have audio, you will be sorely disappointed.
Video Recording
Tips for successful video recording:

1. **Don’t move the camera.** I learned this the hard way. The tendency when video recording a performer is “to lead with the talent,” that is, try to anticipate where storytellers are going to move and move there just before they do. Not so with green screen storytelling recording. Because the background artwork remains static, some of the things on the stage appear to move in an out of view, creating a very strange and distracting effect. Bottom line: set up the camera so that it captures the basic performance area and leave it.

2. **Define the performance area.** Sometimes, especially with kids, I will set up physical barriers (like desks, chairs, or tape lines on the floor) to define the area they need to move within. Nothing worse than having a storyteller constantly off-camera (except a storyteller who isn’t wearing a wireless mike– did I mention this?)

Clothing
Here are some tips about what storytellers should wear:

1. **Storytellers should not wear clothes that are the same color as the chroma background!** Otherwise their artwork will end up on their clothes. This is an interesting effect, if this is what you are after. But it is a devastating effect if unintended.

2. **Send a note home with parents about clothing color.** I take a “yuck” green stickie and fix it to a handout that goes home to parents with the note “make sure your kids don’t wear anything this color!”

Involving students
With a little training students of most ages can do everything involved in the green screen storytelling and media development process. Have students clip the wireless mikes to each other and test sound, set up the camera, scan the artwork, and then sit with them to do the chroma editing. I tend to train a few people who then train their peers. Then I hang around in case I am needed.