

A 360° Sense of Place



Topics

Sense of Place,
Conservation

Grades

K-12

Site

Outdoors

Duration

30-60 minutes

Materials

- Mobile device with a camera
- Science notebooks
- Google Cardboard (optional)

Vocabulary

sense of place

Next Generation Science Standards

Practices

Obtaining, evaluating,
and communicating in-
formation

Core Ideas

ESS3.C Human impacts
on Earth systems

Crosscutting Concepts

Patterns

Common Core State Standards

See page 4

Focus Question

Why is this place special?

Overview

Students investigate an ecosystem and communicate their developing sense of place by creating and sharing a narrated 360° photo.

Objectives

Students will be able to:

- Articulate why this place is special for them.
- Create a 360° narrated photo.
- Identify patterns in why people like particular places.
- Commit to doing one thing to keep their place safe and clean.

Background

Students develop a sense of place in a field site that they visit regularly throughout the school year. When students develop a sense of place (an affinity and appreciation for a particular place) they are more likely to engage in environmental behaviors that positively impact it.

Research on developing a sense of place highlights two components: place meaning and place attachment. Developing a sense of place entails ascribing symbolic meaning and articulating a bond to that place. For students to develop place meaning and place attachment, direct experience in nature should be safe, positive, and frequent. These spaces may also be sites of important moments or unique experiences in students' lives (Kudryavtsev, 2012).

In this activity, students are asked to think about why they appreciate a particular place and share the positive, important, or unique experiences they've had there. Developing awareness of these details strengthens students' sense of place and, particularly, their attachment to their local ecology. Sharing their ideas with peers magnifies the overall feelings of attachment to their place. Student narratives should focus on the positive qualities of their favorite spot, rather than negative attributes such as litter that may be there.



VOCABULARY

Sense of place:

The connection to, feelings about, and experience of a particular place.

Students can use any application you have experience with to create 360° narrated images. The free app, Cardboard Camera, is available for both iOS and Android devices. This app allows students to record both image and voice as they rotate with the camera button pressed. Low-cost Google Cardboard headsets can be used to view the 360° images.

Creating and narrating a 360° image is a meaningful way to use technology in the field to immerse another person in how you see your place. However, virtual reality (VR) technologies should be implemented with caution especially with younger students. Be sure students view 360° images while sitting down or standing and rotating without moving forward or backward.

Teacher Preparation

1. Allow students to have multiple experiences at a field site before you invite students to create 360° images there.
2. Download a free 360° image-taking app, such as Cardboard Camera, on the mobile devices you have access to.
3. Determine the boundaries of where you will allow students to film.

Procedure

Part One: Your Favorite Place

1. INTRODUCE THE FOCUS QUESTION TO THE CLASS.

Allow students to find their own spot at the field site you've used a few times in the past. In their notebooks students should respond to the focus question: *Why is this place special?* Give students some quiet reflection time to answer this question.

2. INTRODUCE A 360° IMAGE.

Explain that students will be using an app that takes a series of photos and stitches them together to make a 360° image as they rotate their device. Model taking an image and narrating as you rotate. Open the app with the students and make sure everyone understands how to film the image and narrate at the same time.

3. STUDENTS PLAN WHAT THEY'LL SAY.

Some students will be able to narrate from what they wrote in their notebook during the reflection time. Others may need a sentence frame such as:

"This is (name of place). The parts I like about it are ... This place is special to me because ..."

Explain that the slower students rotate when taking the photo, the more time they will have to narrate. The total narration time will be less than one minute when taking the photo. Allow students to plan out how they want to explain why their place is so special.

4. CREATE 360° NARRATED IMAGES

Students should return to their own spots at the field site and record their 360° images while narrating. Allow students to film a few versions, if needed.

Part Two: Students Share Their Stories

5. USE GOOGLE CARDBOARD TO SHARE.

Allow students to choose the best 360° image that they created. Put each mobile device into a Google Cardboard headset and play the image. Allow students to view their own creation in the VR headset and then put them into groups to share with their peers. If you are not using phones or iPods to create the images, using tablets to share the videos also works well.

6. STUDENTS FIND PATTERNS IN THE STORIES.

After students have viewed a few of the images, ask them what patterns they noticed. What did people like about their spot? Was it a particular plant or animal, was it a particular experience, was it because they found it particularly beautiful? Record and help consolidate their ideas.

Part Three: Protecting Our Favorite Places

7. MAKE A CONSERVATION PLAN.

In small groups, allow students to discuss and write down ideas they have to keep their place safe and clean. Do a gallery walk and see what different groups come up with. As a class, pick one thing they can do to help keep their place safe and clean.

8. RETURN TO THE FOCUS QUESTION.

After students have created 360° images, shared them, and found patterns in what their classmates said, have them revisit the question: *Why is this place special?* Students may think on their own or discuss with a partner. Then in their science notebook, you may have them draw a line of learning and under it add to their original thoughts about the question.

Resources

Articles

Kudryavtsev, Alex, Richard C. Stedman, and Marianne E. Krasny. "Sense of place in environmental education." *Environmental Education Research* 18.2 (2012): 229-250.

Apps

Cardboard Camera

<https://itunes.apple.com/us/app/cardboard-camera/id1095487294?mt=8>

<https://play.google.com/store/apps/details?id=com.google.vr.cyclops&hl=en>

Materials

Google Cardboard

<https://vr.google.com/cardboard/>



TEACHER TIP

It is important for all students to verbalize their learning. English language learners especially benefit from recording and re-recording their narration because it offers them multiple opportunities to practice language and ensures that the voice they present to the class is a practiced, curated one. This can help with any students who are uncomfortable speaking in front of large groups.

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IS TO INSPIRE
CONSERVATION OF THE
OCEANS.**

Standards

Common Core State Standards www.corestandards.org

Supports ELA-LITERACY.CCRA.SL.5

Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Relates to ELA-LITERACY.CCRA.SL.4

Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to talks, purpose, and audience.