

Rachel Taylor
Art Integration

Art can be used to elicit student investment not only in a particular topic, but also in an assignment. Why not take advantage of a technological and artistic tool that students can't put down? – their phones! I can't fathom why I've never before considered using photography in my class. Perhaps because of uncertainty about how photos saved to phones could be submitted or accessibly shared. Now that I'm accustomed to using sharing platforms like Padlet, I could see photography playing a regular role in my classroom.

As part of my first Endeavor course, I designed a 5E unit about the “value of a tree.” Part of the unit focuses on exploring street tree biodiversity in New York City (where I am located). There is an amazing NYC street tree identification guide (https://www.nycgovparks.org/pagefiles/144/Street-Tree-ID-Guide-2019_5dbb0cf5d6925.pdf). I originally imagined students scavenger-hunting around our block, sketching and recording as many trees as they can. But now I see an even greater opportunity where students could take photographs of leaves and post the images to Padlet along with some written notes. For their homework, I could ask them to take pictures of leaves from trees in their own neighborhood. Using the ID guide, students could work together to identify species. They could use the “like” or “comment” function on Padlet to agree or disagree with identifications. This could facilitate student negotiation across the entire class. As a class, how many tree species did we find? What were the most common? The least common? Does this align with the street tree data on the NYC Parks website? While this assignment would ask students to use photography as more of a learning tool than a creative outlet, I see the opportunity for artistic expression as well. As we learn about ecological concepts, I could say to students, “On your way home, take a picture of a producer,” or,

“Take a picture of a biotic factor interacting with an abiotic factor,” or, “Take a picture of two species competing.” We could start an Instagram page, or once again, showcase photography work through Padlet or even a Google Site. I image that students might take some interesting photos that I could actually use to anchor lessons.

Photography is an excellent way to facilitate discussion in the classroom. For my Endeavor capstone class, I actually just completed my professional development session about phenomena. A great quote I’ve heard several times that really resonates is that “phenomena doesn’t have to be phenomenal.” It could be as simple as a photograph- and a picture is worth a thousand words! I’ve snapped several photos myself, and of course taken photos from the internet to use as engagement pieces for lessons. But, as I described earlier, if students are generating the photos, what an even better way to gain student buy-in. A single photograph can bring multiple biological concepts together. Likewise, photographs can connect multiple content areas- especially history and science (and, the history OF science!). For example, through photographs, we can see industrialization, population changes, and environmental impact over time. NASA’s Images of Change is an amazing resource for this. Although I chose to focus on photography, I see it going hand-in-hand with sketch noting. In fact, I might elicit greater student investment if I give the choice of photographing observations vs. sketching them. Recently, I discovered the sketches of Robert Hooke and I was blown away. I will absolutely be incorporating his work into my class next year. The attention to detail is awe-inspiring. Art as a way to communicate findings has been crucial in the history of science. Today, through the advent of photography and now instant access to cameras (i.e., cell phones), we have the opportunity to document phenomena at any given moment.

Nasa. Images of Change. (n.d.). Retrieved March 13, 2021, from <https://climate.nasa.gov/images-of-change/>