



Educational Technology in Science Education: Teaching Climate Change through Citizen Science

During our next two class sessions, we will focus on educational technology in science education. We will model the use of *citizen science* as way to integrate technology into elementary science instruction in ways that support science teaching and learning goals, particularly in relation to teaching climate change. **In preparation, please complete the activities below.**



Activity 1

Building on our examination of informal science education resources, please **view the full episode of the PBS Kids show, *SciGirls*, entitled *Feathered Friends* (26:41)**. Episode link:
<http://pbskids.org/video/?guid=ac3b0e0e-2361-44c2-8a08-9b77bb599977>



Activity 2

In the episode, the girls engaged with Cornell Lab of Ornithology's citizen science initiative, *Celebrate Urban Birds*. Please **explore the *Celebrate Urban Birds* website** at: <http://celebrateurbanbirds.org>

In preparation for our in-class activity, **preview the data sheet** in the *Celebrate Urban Birds* kit:
<http://celebrateurbanbirds.org/getting-started/get-your-kit/>

Come to class prepared to discuss the questions below. You are not required to write down your responses in advance.

1. In the *SciGirls* episode, the girls collected and reported observational data about local bird populations that would be used by professional research scientists.
 - a. What do you think your students could gain from this kind of science learning experience?
 - b. What makes this approach to science engagement unique?

2. Based on what you understand about the *Celebrate Urban Birds* project:
 - a. What would your students need to know how to do in order to collect and report accurate data?
 - b. What advance preparation would you, as a teacher of science, need to do to get students ready?