

# technology integration

*Historically, students could share their scientific thinking with their teacher, their classmates, and perhaps a few science fair judges. But technology allows students to communicate their discoveries with the world. That both motivates children and tells them that their voice is important.*

## video lab reports

**Equipment:** video recording devices (cameras or cell phones) and video editing software (iMovie, MovieMaker, or PiTiVi)

Have you ever watched *Mr. Science*, *Bill Nye the Science Guy*, or *Mythbusters*? These shows do a great job of two things: they make science fun, and they explain complex concepts to a lay audience. Using basic video creation tools – cameras or cell phones to record and free editing software (iMovie, MovieMaker, or PiTiVi) – students can create their own videos that do the same thing. Video lab reports can be graded with the same rubric used to score written lab reports (take a look at any *Mythbusters* episode, rubric in hand, and you'll realize how easy it is). As science teachers, we know that science is amazingly fun, but our students don't always feel the same way. If we give them opportunities to become *Mythbusters*, though, chances are that they'll realize the cool factor. On top of this, if students make video lab reports, they'll be able to communicate their findings to more than just their teacher. Other students and even people across the world will learn from their videos. Communicating science to lay people is a skill that most professional scientists seriously struggle with. Yes, students need to learn to write lab reports as well. But video reports can accompany the written ones or replace some of them, without compromising students' non-fiction writing skills.

## location-based digital storytelling

**Equipment:** cameras, computers, or cell phones for recording video or sound; video or podcast editing software (Audacity or Garageband for podcasts, iMovie, MovieMaker, or PiTiVi for video)

**url:** <http://dsi.kqed.org/index.php/workshops/about/C17/>

Great science teachers do a wonderful job of using local ecosystems to teach concepts – woods near the school, a pond in the yard, local wetlands, or a schoolyard garden. No matter where you teach, there's a natural ecosystem nearby. Location-based digital storytelling gives students a chance to tell a story about how they're connected to that ecosystem. Take your kids out into the schoolyard and allow them to observe for a while. They'll all find something different that interests them – an ant hill, a bird's nest, a fallen leaf. Let students research their findings and then produce a short podcast or video about what they find. Their story can include their own connection – why they chose that bird's nest, how the nest affects them, and how they affect the nest. When science becomes personal, it becomes interesting for onlookers and students see themselves as part of it. Once all the stories are finished, you can publish them on an interactive Google map, with each story appearing as a pin in a certain location.