

Using the SciGirls Resources

I. How to use this guide

This educator's guide contains 14 sets of activities, useful for teaching children how to engage in science inquiry. Each set begins with an Icebreaker, a simple activity which introduces one skill that is part of the full inquiry process. The icebreaker activities are intentionally short, lasting perhaps 30 minutes to one hour.

The second component of each set is a main Investigation, a more rigorous activity that includes all the elements of a full science inquiry. This activity is often a replication of the video investigation seen on *DragonflyTV*. Allow an hour or two to complete a main Investigation, perhaps even letting it spill over across several days. You'll have to adjust the time duration according to the constraints of your SciGirls event schedule.

II. How to use the video

The SciGirls Volume 2 video series includes 14 inquiry stories, each of which illustrates the principles of inquiry in action. Unlike other forms of science video or film, *DragonflyTV* video stories are not intended to be viewed as science infomercials. In other words, you would not play *DFTV* video for an audience like you would an IMAX film, or an hour-long science documentary. Here are two examples of how we recommend you use SciGirls videos in your setting.



- A) Each story in the SciGirls video collection models the elements of science inquiry. As such, we encourage you to use one video story at a time as a catalyst or motivator to get students enthused about doing science investigations. For example, perhaps you have a group of students for a day-long summer class on paleontology and dinosaurs. Use the 7-minute Dinosaur story from the SciGirls collection as a discussion starter at the beginning of the session, then lead your students through the rest of your planned activities for the event. The energy and enthusiasm of the young scientists in the *DFTV* video will certainly rub off on your students!
- B) Conduct the Icebreaker activity. Then kick off a discussion by asking a question relating to a full inquiry activity. Ask the girls to think about how they would investigate the question. Play the accompanying video for that topic. Discuss how the girls in the video conducted their investigation, and compare that to the ideas your girls suggested.

III. Scientist Profiles

Girls love to see other strong girls and women in powerful roles, and such positive modeling often encourages girls to pursue their own dreams. Included in the video library is a set of Scientist Profiles featuring smart, energetic female scientists who are currently researching, exploring, and breaking barriers. Play any of the Profiles as an inspirational stand-alone piece of video, or use the accompanying Scientist Profile Worksheet to spark group discussion.

