

Thinking about Information

One of the most profound characteristics of the 21st century is the access that ordinary people have to infinite amounts of information. In the past, we could depend on publishing companies and libraries to filter information, but the Internet, while convenient and rich with data, requires a more critical eye.

Critical thinking involves analyzing and evaluating information and is composed of six traits: interpretation, analysis, making inferences, evaluation, commitment, and generalizing. Critical thinking is an especially important skill in research projects, particularly those that require persuasion. In the *Designing Effective Projects* Web resource, several Unit Plans, such as *Healthy Oceans*, *Healthy Planet*, *Don't Trash the Earth*, *Virtual Ambassador*, *What Happened to Robin*, and *Famine*, offer examples of the effective use of critical-thinking skills.

In one unit, Year 5 students in Ms. Silvers' class research different waste management systems in *Don't Trash the Earth*. The teacher begins the research part of the unit by giving some explicit instruction on determining the credibility of sources, using the items in the Critical Thinking Evaluation Checklist from *Assessing Projects* as a guide. She then provides students with a guide to use with questions to think about as they use the Internet and other sources to gather information. At the end of the first day of research, she asks students to reflect on how they decide whether the information they find is credible or not. After reading through the reflections, she thinks about which students seem to understand and which do not and plans instruction to meet those needs.

In a later research project, Ms. Silvers observes students using a checklist to see if they are using the strategies for determining the credibility of sources without being directed to do so. When she discovers that many of her students seem to be accepting whatever they find as the truth, she sets up a demonstration where credible-looking information found on the Internet is false and emphasizes again the importance of asking the right questions about sources.

Ms. Silvers knows that an important skill such as this must be reinforced throughout the year and makes a point to assess it periodically through anecdotal observations. She also frequently asks students during different projects to write in their learning logs about how they know the information they are using in their research is credible.