Argumentation

Clear Reasoning
As students mature, they can learn more formal and structured types of argumentation. Younger students can prepare for this kind of reasoning by thinking carefully about the reasons for their opinions. Teachers of primary students can encourage children to identify the sources of their opinions and evaluate how credible they are. Once students reach middle-school, they can begin to understand the terminology and structure of formal argumentation. Defined by the philosopher, Stephen Toulmin, persuasive arguments consist of at least three components: a claim, evidence, and warrants.

Claims
A claim is a statement of a position that you want to persuade others to believe. Examples of claims are:
* Abraham Lincoln was more interested in saving the union than in freeing the slaves.
* Logging should be banned in all old-growth forests.
* Laws should forbid the cloning of human beings.
* Willy Lowman, from Arthur Miller's play, *Death of a Salesman*, is the greatest tragic character in 20th century American literature.

Claims have different names in different contexts. They can also be called hypotheses, conjectures, predictions, theses, positions, propositions, and premises.

Evidence
Also called examples, facts, observation, or data, evidence consists of the reasons a person should believe your claim. The quality of evidence can be judged by asking questions about its sufficiency, credibility, and accuracy.
* Is there enough evidence to support the claim?
* Does the evidence come from an unbiased authority?
* Is the evidence truthful and can it be verified from a variety of sources?

Evidence can be quantitative, numbers and statistics, or qualitative, descriptions and events. Whether the evidence is numerical or anecdotal, it should reflect a systematic analysis of a number of cases, not an isolated statistic or example.

Warrants
The warrants answer the question: "Why does this evidence mean that someone should accept my claim?" The warrant of an argument is often assumed and implicit and may depend on the culture and experiences of the audience. For example, if a person argues that logging should be banned in old-growth forests, evidence for this claim might be that we are losing millions of acres of forest each year. The warrant for this evidence is that if old trees are beneficial and logging is removing so many old-growth trees, it should not be allowed.

Clear and effective reasoning is an important skill for students to acquire. The *Showing Evidence Tool* gives students practice at forming and defending arguments.