Storytelling in Science

Dale Easley's blog

11 Aug 2012

I am currently reading a book and several articles about storytelling. The main point seems to be that as humans have evolved, an important part of their survival skills has been the ability to create stories. The stories serve the purpose of increasing group unity, providing purpose and motivation, and giving the group a sense of being special and worth preserving, even to the point of self-sacrifice.

Storytelling in the teaching of science is a bit trickier. Scientists tend to be skeptical of stories, wanting to see the data and make their own interpretations. Stories, as they see it, are not *true*. Stories are sales-pitches, propaganda, or pure entertainment. Fortunately, such attitudes are changing. For example, Niles Eldridge of punctuated equilibrium fame says,

> Our narratives—our stories—should give kids a sense of the intellectual (and sometimes derring-do!) adventures of actually doing science. If we let storytelling like this into the science curriculum, we instantly humanize science, make it relevant to the random child, and automatically make it seem more inviting, less hard. We can do this without watering down scientific rigor, with its canons of evidence that are justly the hallmark of scientific research, innovation, and progress.

Certainly, at a high enough level with enough background, generating one's own story is the goal. But even then, scientists publish their findings, interpretation included, go to conference to tell others about what they've accomplished, and sit over beers swapping stories. Humans use stories to make sense of the data they collect. End of story.

An example story used to help students understand partial melting is here.