

WHO'S AN EXPERT?

I haven't tried to count the times I've heard the phrase "so-called experts". But it's a lot and never complimentary. Who are these so-called experts? Here's a working definition: "A so-called expert is someone who claims to know more than I do, and whose opinion I strongly disagree with." But seriously folks...

Who should we trust for reliable information? Where do we find it? I'm trying to learn woodworking but I'm a real novice. Up the road though, is a real expert whose creations are things of beauty. But I don't ask him how to treat throat infections. I ask my doctor. And as a professional astronomer, I think I understand astronomy better than they do. We live in a complex world and nobody's an expert in everything. But it's tempting for internet bloggers, talk show hosts (or column writers!) to pretend to be experts about everything.

I have an interest in science education, especially climate change. When I want to know more about climate change, I consult experts in that field for reliable information. They report their results in professional journals, checked and criticized by colleagues. These journals are the basic sources I use. I understand most of the papers in those journals, and when I don't, I get clarification from these experts.. This process of examining a variety of *reliable, unbiased* sources produces a solid basis for forming an opinion, whether about climate change, genetic engineering, nuclear energy, fracking, vaccinations or other controversial issues.

So where should those without a science background go to find reliable information about an issue like climate change? Professional groups, such as the American Meteorological Society, the American Geophysical Union, or the National Academy of Sciences publish non-technical summaries. I have links to these summaries on my website:

<http://www.centralcoastclimatescience.org/expert-summaries.htm>

Today's discussion about climate change reminds me of the 1960's when evidence was piling up about health risks from cigarettes. Tobacco companies funded disinformation campaigns and created the impression that there was serious disagreement among scientists about the health risks from smoking. But warnings from the American Cancer Society, the American Heart Association and the Surgeon General alerted the public to the health risks associated with smoking. Gradually, people began to realize who the real the experts were, and smoking declined. When it comes to our health and the health of the planet, we need to rely on the best information available.