

don't take up much space and don't detract from sentence flow or meaning, but do give the reader a frisson of distinction—that physics words and names are interesting and different! How better to convey the international scope of the physics enterprise than to teach students that “Planck” is pronounced differently from the experimental apparatus for determining mechanical advantage? Pronouncing words and names as if they were English sets students up for embarrassment.

I experienced such discomfort the first time I said “heterodyne” out loud in front of people who were experienced enough to know which syllable got the accent, but were insufficiently genteel to correct me privately. If students are embarrassed whenever they talk physics, they may be driven to philosophy and spend their days pondering *So-crâtes*.

Richard Factor

(rcf@eventide.com)

Eventide Inc

Little Ferry, New Jersey

John Hubisz presents an excellent and important review article. The involvement of physicists as volunteers in K–12 classrooms is only briefly mentioned as a solution to science education problems, but is critical in ensuring that all students receive a quality science education.

Textbook and teacher-training reform are necessary, but such slow processes will only show results in the long term. By volunteering in classrooms, physicists can help children learn science today. In close, continuing collaborations with teachers, physicists can help improve teacher self-confidence and easily dispel misconceptions raised by textbook errors. I've had the experience of visiting the same class for several years; the teacher, students, and I have all benefited enormously.

Douglas L. Ratay

(doug@astro.ufl.edu)

University of Florida

Gainesville

The article by John Hubisz caught my eye. I found the examples of textbook errors and misstatements amazing and frustrating. The example he gave of a textbook's confusing the terms speed, velocity, and acceleration tells me the textbook writer doesn't come close to knowing the subject. Someone might ask if it really even matters outside of science. I'll illustrate with a quick, real-world example.

Several years ago, I was an expert

witness in a very lengthy lawsuit about a worker who was severely injured when a truck at a paving site backed over him. I was involved because of my background as an acoustical engineer. I dealt with the audibility of the backup alarm and how the sound field was distorted by the manner in which the alarm was installed.

Toward the end of the many depositions (there were five teams of lawyers), an attorney who was working hard to discredit my conclusions asked if I'd measured the wind speed

when I did my testing at the site. I answered yes. He perked up and dug out an old transcript. He asked if I remembered testifying on a particular date, when he had asked me if I had measured the wind velocity and I had said no. He obviously thought he had me on something.

I asked to read the testimony page in question. “What's the problem?” I asked. “Both answers are correct.” None of the lawyers understood, so I explained: “Speed is a scalar quantity. Velocity is a vector; it has two parts—magnitude or