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speed, and direction. Speed and velocity are not the same. Speed does not indicate direction. If you are going to use the terms, I suggest you know their meanings." That pretty much ended the interrogation and the case was settled.

Maybe that lawyer got his science education from one of the poorer textbooks. Would that mean he could sue the teacher, school system, textbook publisher, or author? Let's hope that the statute of limitations has expired.

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In his article, John Hubisz commented on "error-filled physical science textbooks." In particular, he wrote: "Many of the errors involved sloppy use of language . . . as in 'an acceleration is a change in velocity. . . .' Note the use of 'change in velocity' instead of the correct 'change in velocity with respect to time.' That imprecision was a common error." Apparently, this error is found worldwide and in areas other than textbooks.

For example, there was a German court case reported last year in the influential German weekly magazine *Der Spiegel* (issue 16, p. 196, 2002). The article carried the title "Schraube im Nacken," that is, "A Screw in the Nape of the Neck." A whiplash victim had suffered such serious damage to his neck (cervical spine) that he required a few screws to immobilize it permanently. But in the trial, the court expert, a "human biologist and professional engineer (*Diplomingenieur*)," testified that the victim's head had sustained only a change in velocity from "12.4 to 15 kilometers per hour," which was, he said, insufficient to cause such a serious injury. The judge in the case evidently knew his physics better than the court expert. The victim, as I later learned, was awarded €35 000 (about \$40 000) for pain and suffering.

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I endorse John Hubisz's quest to improve textbooks for middle-school science courses and to stress the accuracy of the material. But perhaps emphasizing the good parts of the existing books would provide more immediate progress.

We scientists who have been working with publishers to write middle-school texts have managed to provide