

## Undermining Science

Reading Dr. Ewert's letter in the 7 March Daily Oklahoman ("Promoting critical thinking in the classroom"), I agree with his most basic premise while disagreeing utterly with his conclusion. He wrote, "Science lends credence to an agenda because it's revered as the bastion of objectivity and truth." This is indisputable; we entrust our very lives to the science that keeps planes aloft and our medical procedures effective. Neither realm is perfect, but in the past two centuries while modern science's rigorous standards have come into practice, travel has accelerated astonishingly, communication technology has been revolutionized, human life-spans has roughly tripled, etc. The overall methodology provides extraordinary benefits to society and shows no sign of faltering.

It follows that undermining those standards is unwise. Yet that is precisely what HB 1511 and SB 1742 aim to do. Wrapped in the deceptive language of promoting critical thinking, they aim to get the nose of a malodorous camel (pseudoscience) inside science's tent. This camel has tried before, many times, and been rebuffed for good reason. Critical thinking is already the centerpiece of science education, discussions of controversial issues abound. Despite being a human enterprise with associated foibles, science polices itself more effectively than any other educational area. Remember the big 1989 stir about how "cold fusion" was going to solve all our energy needs? That was weak science and it was purged...by scientists! Most of the time, shoddy scientific work is quietly expunged before the press plays it up. So please do not haul out Lysenko's garbage as a serious threat to education. Or the 1912 "Piltdown" hoax. Both of these errors were exposed and corrected by other scientists, not by politicians. And speaking of politicians, are we supposed to be impressed by the great job of self-policing they do?

Science has credibility precisely because its methods work. Hypocrisy is said to be the tribute that vice pays to virtue. Thanks for the gesture, but science doesn't need that tribute.

The low scientific literacy of our citizens is a serious concern that is not helped by adding fake controversies. These legislative bills are imported from outside groups (almost verbatim) to promote a non-science agenda that desperately seeks the *cred* of science by masquerading as such. Ewert vaguely quoted "a judge in the United Kingdom" to dramatize his call to arms: I close with a link that anyone can check. In 2005, a Bush-appointed US federal judge listened to 6 weeks of expert testimony from many of the same folks behind these bills. At issue was whether Intelligent Design belonged in the Dover, PA, biology classrooms to promote "critical thinking". His plain language decision is well worth reading ([http://www.pamd.uscourts.gov/kitzmiller/kitzmiller\\_342.pdf](http://www.pamd.uscourts.gov/kitzmiller/kitzmiller_342.pdf)).

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