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"The latest round in a long-running battle over how evolution should be taught in Texas schools began in earnest Wednesday as the State Board of Education heard impassioned testimony from scientists and social conservatives on revising the science curriculum," as *The New York Times* (January 22, 2009) [reports](#) [4]. The stakes are high: the standards will determine what is taught in Texas's public school science classrooms and the content of the biology textbooks approved for use in the state for the next ten years. And the threat is real: seven members of the fifteen-member board, including its chair, avowed creationist Don McLeroy, are regarded as in favor of attempts to undermine the teaching of evolution in Texas schools. Moreover, as the *Times* observes, "The debate here has far-reaching consequences; Texas is one of the nation's biggest buyers of textbooks, and publishers are reluctant to produce different versions of the same material."

The [old standards](#) [5] (PDF) for high school biology include a requirement that reads, "The student is expected to analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information." In 2003, the "strengths and weaknesses" language was selectively applied by members of the board attempting to dilute the treatment of evolution in the biology textbooks then under consideration, and so it was clear that the "strengths and weaknesses" language would be a matter of contention when the standards were next revised. The [revised standards](#) [6] (PDF) currently under consideration replace the "strengths and weaknesses" language with "The student is expected to analyze and evaluate scientific explanations using empirical evidence, logical reasoning, and experimental and observational testing" — a revision

that was widely praised by scientific, education, and religious freedom groups.

On January 21, 2009, the first day of the board's January meeting, the board heard testimony about the science standards from dozens of witnesses, including NCSE's executive director Eugenie C. Scott, who urged the board to heed the advice of the scientific and educational experts who revised the standards and omitted the "strengths and weaknesses" language. The *Times* quoted her as explaining, "The phrase 'strengths and weaknesses' has been spread nationally as a slogan to bring creationism in through the back door." And the *Dallas Morning News* (January 21, 2009) [added](#) [7], "Scott warned the board that if it adopts the requirement, it will lead to textbooks that contain pseudoscience and inaccuracies as publishers try to appease the state and get their books sold in Texas. 'If you require textbook publishers to include bad science, you're going to have problems,' she said, asserting that Texas students will suffer as a result."

Kevin Fisher, a past president of the Science Teachers Association of Texas, told the *Times* that the attempt to retain the "strengths and weaknesses" language is "an attempt to bring false weaknesses into the classroom in an attempt to get students to reject evolution." And David M. Hillis, a distinguished professor of biology at the University of Texas, Austin, concurred, adding, "Every single thing they are representing as a weakness is a misrepresentation of science ... These are science skeptics. These are people with religious and political agendas." Ryan Valentine of the Texas Freedom Network worried about the consequence for Texas's image: "A misguided crusade to include phony weaknesses in the theory of evolution in our science curriculum will send a message to the rest of the nation that science takes a back seat to politics in Texas," the *Morning News* reported him as saying.

Also testifying were people, including a representative of the Discovery Institute, who supported the "strengths and weaknesses" language, often betraying the connection between the language and creationism. A teacher quoted by the *Morning News*, for example, said, "As a creationist, I don't want creationism taught in science classes, but this proposal [to drop the strengths and weaknesses rule] smacks of censorship." A mechanical engineer quoted by the *Times* said, echoing a rhetorical theme prominent in creationist circles since the Scopes era, "Textbooks today treat it as more than a theory, even though its evidence has been found to be stained with half-truths, deception and hoaxes." (As NCSE's Glenn Branch and Louise S. Mead recently [wrote](#) [8] (PDF), "[William Jennings Bryan's] position — that it is okay to teach about evolution but only as something conjectural or speculative, as 'just a theory' and not as a fact — continues to resonate.")

On the second day of the board's meeting, there is expected to be a first vote on whether to adopt the standards, followed by a second vote on the third day, January 23, 2009. After a period for further public comment, a final vote are expected, but not guaranteed, to occur at the board's March 26-27, 2009, meeting. There may not be any changes in the positions of the board members, however; the *Morning News* observed in its report on the first day of the hearing, "Most State Board of Education members appeared to have their minds made up." But groups supporting the integrity of science education in Texas — including [Teach Them Science](#) [9], [Texas Citizens for Science](#) [10], the [Texas Freedom Network](#) [11], the [21st Century Science Coalition](#) [12], the [Texas Academy of Science](#) [13], the [Academy of Medicine, Engineering and Science of Texas](#) [14], the [Texas Science Education Leadership Association](#) [15] (PDF), and the [Science Teachers Association of Texas](#) [16] (PDF) — are sure to continue to fight.

In addition to the newspaper reports cited above, a variety of on-line sources provided detailed, candid, and often uninhibited running commentary on the proceedings: [Texas Citizens for Science](#) [10]'s Steven Schafersman is blogging, and posting photographs, on the *Houston Chronicle's* [Evo.Sphere blog](#) [17], the

[Texas Freedom Network](#) [11] is blogging on its [TFN Insider blog](#) [18], NCSE's Joshua Rosenau is blogging on his personal blog, [Thoughts from Kansas](#) [19] (hosted by [ScienceBlogs](#) [20]), and the *Houston Press* [blogged](#) [21] the first day of the meeting. For those wanting to get their information from the horse's mouth, [minutes](#) [22] and [audio recordings](#) [23] of the board meeting will be available on the Texas Education Agency's website. And NCSE will, of course, have a report on the proceedings of the second and third days of the board's meeting as soon as possible.

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[7] <http://www.dallasnews.com/sharedcontent/dws/dn/latestnews/stories/012109dntexsciencecurriculum.192e26c.html>

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