

Opponents of Evolution Adopting a New Strategy

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DALLAS — Opponents of teaching evolution, in a natural selection of sorts, have gradually shed those strategies that have not survived the courts. Over the last decade, creationism has given rise to “creation science,” which became “intelligent design,” which in 2005 was banned from the public school curriculum in Pennsylvania by a federal judge.

Now a battle looms in Texas over science textbooks that teach evolution, and the wrestle for control seizes on three words. None of them are “creationism” or “intelligent design” or even “creator.”

The words are “strengths and weaknesses.”

Starting this summer, the state education board will determine the curriculum for the next decade and decide whether the “strengths and weaknesses” of evolution should be taught. The benign-sounding phrase, some argue, is a reasonable effort at balance. But critics say it is a new strategy taking shape across the nation to undermine the teaching of evolution, a way for students to hear religious objections under the heading of scientific discourse.

Already, legislators in a half-dozen states — Alabama, Florida, Louisiana, Michigan, Missouri and South Carolina — have tried to require that classrooms be open to “views about the scientific strengths and weaknesses of Darwinian theory,” according to a petition from the Discovery Institute, the Seattle-based strategic center of the intelligent design movement.

“Very often over the last 10 years, we’ve seen antievolution policies in sheep’s clothing,” said Glenn Branch of the National Center for Science Education, a group based in Oakland, Calif., that is against teaching creationism.

The “strengths and weaknesses” language was slipped into the curriculum standards in Texas to appease creationists when the State Board of Education first mandated the teaching of evolution in the late 1980s. It has had little effect because evolution skeptics have not had enough power on the education board to win the argument that textbooks do not adequately cover the weaknesses of evolution.

Yet even as courts steadily prohibited the outright teaching of creationism and intelligent design, creationists on the Texas board grew to a near majority. Seven of 15 members subscribe to the notion of intelligent design, and they have the blessings of Gov. Rick Perry, a Republican.

What happens in Texas does not stay in Texas: the state is one of the country’s biggest buyers of textbooks, and publishers are loath to produce different versions of the same material. The ideas that work their way into education here will surface in classrooms throughout the country.

“‘Strengths and weaknesses’ are regular words that have now been drafted into the rhetorical arsenal of creationists,” said Kathy Miller, director of the Texas Freedom Network, a group that promotes religious freedom.

The chairman of the state education board, Dr. Don McLeroy, a dentist in Central Texas, denies that the phrase “is subterfuge for bringing in creationism.”

"Why in the world would anybody not want to include weaknesses?" Dr. McLeroy said.

The word itself is open to broad interpretation. If the teaching of weaknesses is mandated, a textbook might be forced to say that evolution has an "inability to explain the Cambrian Explosion," according to the group Texans for Better Science Education, which questions evolution.

The Cambrian Explosion was a period of rapid diversification that evidence suggests began around 550 million years ago and gave rise to most groups of complex organisms and animal forms. Scientists are studying how it unfolded.

Evolution as a principle is not disputed in the scientific mainstream, where the term "theory" does not mean a hunch, but an explanation backed by abundant observation, and where gaps in knowledge are not seen as grounds for doubt but points for future understanding. Over time, research has strengthened the basic tenets of evolution, especially as advances in molecular genetics have allowed biologists to read the history recorded in the DNA of animals and plants.

Yet playing to the American sense of fairness, lawmakers across the country have tried to require that classrooms be open to all views. The Discovery Institute has provided a template for legislators to file "academic freedom" bills, and they have been popping up with increasing frequency in statehouses across the country. In Florida, the session ended last month before legislators could take action, while in Louisiana, an academic-freedom bill was sent to the House of Representatives after passing the House education committee and the State Senate.

In Texas, evolution foes do not have to win over the entire Legislature, only a majority of the education board; they are one vote away.

Dr. McLeroy, the board chairman, sees the debate as being between "two systems of science."

"You've got a creationist system and a naturalist system," he said.

Dr. McLeroy believes that Earth's appearance is a recent geologic event — thousands of years old, not 4.5 billion. "I believe a lot of incredible things," he said, "The most incredible thing I believe is the Christmas story. That little baby born in the manger was the god that created the universe."

But Dr. McLeroy says his rejection of evolution — "I just don't think it's true or it's ever happened" — is not based on religious grounds. Courts have clearly ruled that teachings of faith are not allowed in a science classroom, but when he considers the case for evolution, Dr. McLeroy said, "it's just not there."

"My personal religious beliefs are going to make no difference in how well our students are going to learn science," he said.

Views like these not only make biology teachers nervous, they also alarm those who have a stake in the state's reputation for scientific exploration. "Serious students will not come to study in our universities if Texas is labeled scientifically backward," said Dr. Dan Foster, former chairman of the department of medicine at the University of Texas Southwestern Medical Center at Dallas.

"I'm an orthodox Christian," Dr. Foster said, "and I don't want to say that Christianity is crazy." But science, not scripture, belongs in a classroom, he said. To allow views that undermine evolution, he said, "puts belief on the same level as scientific evidence."

Dr. Foster is a veteran of the evolution wars. He met with Mr. Perry in 2003 when the "strengths and weaknesses" argument last appeared, and more recently he worked to oppose an application by the

Institute for Creation Research, which supports the teaching of creationism, to award graduate degrees in the state. (It was rejected on April 23, but the institute has said it will appeal.)

This time around, however, scientists like Dr. Foster see more reason for worry. Although the process might drag on till next spring, a state-appointed committee of science educators has already begun to review the curriculum requirements. Although the state education board is free to set aside or modify their proposals, committee members will recommend that the "strengths and weaknesses" phrase be removed, said Kevin Fisher, a committee member who is against the teaching of creationism.

"When you consider evolution, there are certainly questions that have yet to be answered," said Mr. Fisher, science coordinator for the Lewisville Independent School District in North Texas.

But, he added, "a question that has yet to be answered is certainly different from an alleged weakness."

Mr. Fisher points to the flaws in Darwinian theory that are listed on an anti-evolution Web site, strengthsandweaknesses.org, which is run by Texans for Better Science Education.

"Many of them are decades old," Mr. Fisher said of the flaws listed. "They've all been thoroughly refuted."