

## KANSAS BOARD OF EDUCATION

# DEBATING HOW TO TEACH SCIENCE

## Let fact and faith coexist outside schools

By ALAN I. LESHNER  
Special to The Star

Once again, Topeka is the scene for cultural upheaval, as the Kansas Board of Education reviews faith-based alternatives to evolution.

Pressures are mounting to introduce nonscientific, anti-evolution rhetoric into science classrooms, alongside well-supported facts about life's origins.

The board's science subcommittee has heard testimony from nearly two dozen evolution critics, including some intelligent design advocates who believe that life's complexity can be explained only by a master plan. The goal, according to the board, is to determine whether the state's science curriculum is preparing students "to distinguish the data and testable theories of science from religious and philosophical claims."

Defenders of evolution did not line up to testify at the hearings. That's not surprising since it's a debate that can't be won. After all, interpretations of Genesis are a matter of faith, not facts.

Thoughtful scientists and religious leaders alike say that fact and faith should not be pitted against each other. But extremist fringe views ring louder. In today's America, sadly, creationism, intelligent design and evolution now form three sides of an endless triangular debate.

Anti-evolution sentiment is now so strong that it's permeating other aspects of society. Consider the case of the weird deep-sea worms. Featured in the big-screen movie, "Volcanoes of the Deep," the worms

prompted charges of blasphemy when some previewers were offended by a reference to evolution, *The New York Times* reported. Understandably fearful, staff at the Fort Worth Museum of Science and History rejected the film, but then courageously reversed the decision.

Incidents like these, and the Board of Education hearings, raise serious questions about scientific freedom, as well as our obligations as scientist-citizens to accurately educate students and the public.

In a survey of National Science Teachers Association members, nearly one-third of all 1,050 respondents said they feel pressured to include creationism, intelligent design or other nonscientific alternatives to evolution in their science classrooms.

The United States is not alone in these struggles. In Brazil, where the country's Protestant evangelical population has undergone a fivefold increase since 1940, creationists have ramped up efforts to combat the teaching of evolution. And, in Belfast, Northern Ireland, Australian evangelist Ken Ham said at a recent town hall meeting that "evolution is a religion, not a science," the *Irish Times* reported.

His words echoed a Dover, Pa., school board ruling and the disclaimer stickers on science textbooks in Cobb County, Ga. Students there are taught that Darwin's theory of evolution is "a disputed view."

Make no mistake – within the scientific community, the updated version of Darwin's original proposal that plants and animals evolve and adapt gradually over time is well-supported by thousands of studies and well-accepted by virtually every scientist. And the theory of evolution does not, in fact, conflict with the religious views of most Jewish, Christian,

Muslim, Buddhist or Hindu followers.

Conflicts arise only among those who believe that the universe and all its inhabitants, in their current form, were literally created within the past 10,000 years – not billions of years ago, as demonstrated by extensive scientific evidence. The spin-off view, intelligent design, proposes that the complexity of DNA and the diversity of life can be explained only by an intelligent agent.

As it gains momentum, the anti-evolution movement is also moving into theme parks. These new types of facilities offer an alternate, religious view, and that's fine, so long as they avoid distorting scientific facts. But visitors to Florida's Dinosaur Adventure Land are invited to "learn about God's Creation through science and the Bible" as they hear that "the evolution theory is useless."

Let's be clear – the scientific community is not anti-religion. Many individual scientists are deeply religious. They see scientific investigation and faith as complementary components of a well-rounded life. As far back as the fifth century, Pythagoras envisioned a divine, original harmony at the crossroads of physical events and their mathematical foundations.

Yet today's students, and now, even moviegoers are being forced to choose between science and religion, as if the two domains are somehow in competition. The censorship, suppression or distortion of scientific information is wholly unacceptable, no matter where it occurs.

The time has come to move beyond polarizing debate. The Kansas Board of Education science subcommittee should remember that fact and faith are different, but both have the power to improve people's lives, and they can coexist – just not in science classrooms.

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