Monkey Business
Confronting Political Opposition to the Teaching of Evolution in a New Century

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Presidential Address
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Political Challenges to Teaching Evolution

Washington
Wyoming
Minnesota
Michigan
Ohio
Pennsylvania
U.S. Congress
S. Carolina
Georgia
New Mexico
Colorado
Louisiana
Oklahoma
Arkansas
Texas
Tapestry Map courtesy of USGS
State/Local Issues: Teaching of Evolution


From Good Science, Bad Science: Teaching Evolution in the States by Lawrence Lerner (Thomas B. Fordham Foundation)
“Science has reached great heights of sophistication and productivity,” but scientists’ influence in public debates is actually shrinking. As a result, “the gap between science and public life has grown ever larger and more dangerous, to an extent that now poses a serious threat to our future.”

Journalists can help narrow that gap. But only if scientists raise their voices in the nation’s public debates.

The Creation/Evolution Continuum

Creation
- Flat Earthers
- Geocentrist
- Young Earth Creationists
- Old Earth Creationists
- Gap Creationism
- Day-Age Creationism
- Progressive Creationism
- Intelligent Design Creationism
- Evolutionary Creationists
- Theistic Evolutionists
- Materialist Evolutionists

Evolution

Source: National Center for Science Education
Two Kinds of Antievolutionism

• Bible-based
  Young earth creationism; Creation “science”; Genesis literalist creationism

• Design-based
  Not biblically based; attributes complexity of design to God’s direct action rather than natural cause

Source: National Center for Science Education
“Everything’s up to date in Kansas City. They’ve gone about as far as they can go....”
Now on sale in the science section at Grand Canyon National Park bookstores...
“For years, Colorado River guide Tom Vail told people how the Grand Canyon had formed over the evolutionary time scale of millions of years. Then he met Jesus. Now, Tom has a different view of the Grand Canyon. **According to a biblical time scale, the Grand Canyon can't possibly [sic] be more than a few thousand years old, and that is what Tom now believes.** Come and tour the Grand Canyon with Tom Vail as your guide. Filled with stunning photos that will take your breath away and stimulate your imagination, this book also has many facts about the Grand Canyon presented in a biblical light. A beautiful gift book as well as an intellectual pleaser, this compilation is sure to be a family favorite.”

from CBN.com
“I like to keep an open mind, but not so open my brains fall out.”

-- Arthur Ochs Sulzberger
Significant Court Decisions

The Scopes “Monkey” Trial (1925)

- Science teacher Scopes found guilty of violating Tennessee’s Butler Act (“It shall be unlawful for any teacher in any of the Universities, Normals and all other public schools of the State...to teach any theory that denies the story of the Divine Creation of man as taught in the Bible, and to teach instead that man has descended from a lower order of animals.”)
- Subsequently thrown out on technicality, thus avoiding a U.S. Supreme Court challenge

Source: National Center for Science Education
Significant Court Decisions

• **Epperson v. Arkansas (1968)**
  - U.S. Supreme Court invalidated Arkansas statute prohibiting the teaching of evolution.

• **McLean v. Arkansas Board of Education (1982)**
  - Federal court held that “balanced treatment” statute violates the establishment clause of Constitution. Law required equal time to creation science and evolution science. Court declared that creation science is not science but religion.

Source: National Center for Science Education

- U.S. Supreme Court held unconstitutional Louisiana’s Creationism Act, which prohibited the teaching of evolution in public schools, except when it was accompanied by instruction in creation science. Court found that act impermissibly endorses religion.

“already possess” a “flexibility...to supplant the present science curriculum with the presentation of theories, besides evolution, about the origin of life”

Open Door #1: “Scientific alternatives to evolution”

Source: National Center for Science Education
The people of Louisiana, including those who are Christian fundamentalists, are quite entitled, as a secular matter, to have whatever scientific evidence there may be against evolution presented in their schools, just as Mr. Scopes was entitled to present whatever scientific evidence there was for it.

Open Door #2: “Evidence against evolution”

Source: National Center for Science Education
Welcome to Kansas…
State/Local Issues: Teaching of Evolution


From Good Science, Bad Science: Teaching Evolution in the States by Lawrence Lerner (Thomas B. Fordham Foundation)
A Different Sort of Evolutionary Progression

From school…

To State House…

To Supreme Court.

(But not to….)
Creationists Open a New Front

• May 10, 2000 congressional briefing and reception sponsored by Seattle-based Discovery Institute Center for the Renewal of Science and Culture
• Hosted by House Subcommittee on the Constitution chairman
• Three-hour ID primer by leading lights
  – Stephen Meyer, Whitworth College
  – Michael Behe, Lehigh University
  – Phillip Johnson, UC Berkeley Law School
  – Nancy Pearsey, CRSC (as are the other three)
• Presented scientific evidence for the origin and development of life and the universe as the work of an intelligent designer.
• Addressed the social, moral, and political consequences of Darwinism.

Why here? Why now?
“The naturalistic biochemical evolution of the first cell and naturalistic macroevolution are creation myths-atheistic creation stories. The myths eliminate the need for God and promote atheism. The myths permit any and every form of behavior without eternal ethical consequences…Having provided a false scientific basis for believing that God does not exist, the consequences have destroyed individuals, families, educational systems, judicial systems, social systems, and nations.”

-- Fredric P. Nelson, MD
The Santorum Resolution

- Amendment to Senate version of H.R.1 singles out evolution as controversial theory
- Non-binding, billed as “innocuous”, passed 91-8
- Removed from final enacted version of H.R.1
  - version remained in non-statutory “explanatory statement”

Geo community response
- letter signed by 96 scientific & educational organizations
- e-mail alerts(updates
- media interviews
- articles & letters
H.R. 1 Signed into Law on January 8, 2002
reauthorizes the Elementary & Secondary Education Act
How Santorum is being used

• Hailed as major victory by groups opposed to evolution led by Discovery Institute
• Santorum Op/Ed in Washington Times on relevance of resolution to Ohio situation
  – quotes supportive Sen. Kennedy, who wrote rebuttal
• Letter from House Education & the Workforce Committee Chairman John Boehner (R-OH) and Constitution Subcommittee Chair Steve Chabot (R-OH) to Ohio Board claiming “Santorum language is now part of the law”

Innocuous?
A Different Sort of Evolutionary Progression

From Congress…

To State House…

To schools.
The Situation Last Year in Ohio

- State Board re-evaluated science education standards, considered inclusion of Intelligent Design “theory”
- Over 1,500 people attended hearing, which featured speakers supporting and opposing the teaching of ID.
- Alerts from AGU and AGI, letter to Board, op/eds

- December board vote hinged on
  - Ohio Citizens for Science
  - Individual Ohio geoscientists and educators
  - Local societies
Political Challenges to Teaching Evolution

Washington  Minnesota
Wyoming    Michigan
Pennsylvania

S. Carolina  Georgia
U.S. Congress

New Mexico  Colorado
Louisiana

Arkansas  Oklahoma  Texas

(last 2 years)

Don’t mess with Textbooks

Tapestry Map courtesy of USGS
The Larger Challenge

November 1997 Gallup Poll results
Given the polls, why are we winning?

- Constitution and the courts
- Economics
- Appeal to the murky middle
  - What the polls don’t tell you
A Different Sort of Evolutionary Progression

From school…

To State House…

(But not to…)

To Supreme Court.
Given the polls, why are we winning?

- Constitution and the courts
- Economics
- Appeal to the murky middle
  - What the polls don’t tell you
Given the polls, why are we winning?

• Constitution and the courts
• Economics
• Appeal to the murky middle
  – What the polls don’t tell you
“The real clash today is actually not between civilizations... but within them -- between those Muslims, Christians, Hindus, Buddhists and Jews with a modern and progressive outlook and those with a medieval one.”

-- September 14, 2001
State Challenges to the Teaching of Evolution (11-10-03)

The 1999 Kansas Board on Education decision brought the evolution debate back into the national spotlight, stimulating a growing number of challenges to the teaching of evolution in state legislatures and school boards around the country. The challenges come in many forms. Despite being rebuffed in the courts, some seek to give equal time in classrooms to alternative theories of earth and life history, including the Biblical account of creation. An increasingly popular approach is to seek inclusion of Intelligent Design (ID), a brand of creationism that emphasizes the role of a creator in establishing order in the natural world. Numerous attempts have been made through legislation to remove the teaching of evolution and earth history from classrooms, or to require that textbooks include prefacing statements that question the soundness of scientific theories contained therein. These efforts fly in the face of science, and it is essential for scientists -- and geoscientists especially -- to continue to inform the public of the scientific method and the importance of the theory of evolution and deep time to our understanding of the Earth as a whole. This update provides information on recent evolution challenges in the states, as well as links to additional resources on this topic. A separate update covers congressional challenges to evolution.

Around the Nation

Click on any state in red to read the details of how evolution is being challenged in classrooms, school districts and state legislatures across the country.
Science is my passion; politics my duty.

-- Thomas Jefferson