

Science Wars: Should Schools Teach Intelligent Design?

Friday, October 21, 2005, 8:45 a.m.–3:30 p.m.
Wohlstetter Conference Center, Twelfth Floor, AEI
1150 Seventeenth Street, N.W., Washington, D.C. 20036

What should public schools teach about life's origins? This debate erupted anew over the summer after President George W. Bush and Senator Bill Frist (R-Tenn.) endorsed the teaching of intelligent design (ID)—the theory that intelligent causes are responsible for the origin of the universe and of life in all its diversity. Proponents of teaching alternatives to evolution are now lobbying state legislatures and pressing school districts to incorporate ID into science curricula. Alarmed scientists and educators see ID as a disguised form of creationism and a direct attack on the scientific method and critical thinking. Is intelligent design religion or science? What should we teach in schools? Would the teaching of intelligent design violate the First Amendment's Establishment Clause? Panelists at this day-long AEI conference will discuss these and other questions.

8:30 a.m. Registration

8:45 Breakfast

9:00 Welcome: SALLY SATEL, AEI

9:10 **Panel I: Science, Religion, and Intelligent Design**

PAUL NELSON, Discovery Institute

If Darwin Explained Design . . . What's Design?

"Biology is the study of complicated things," Richard Dawkins famously wrote, "that give the appearance of having been designed for a purpose." Biology begins with what Jacques Monod called "strange objects," living things and their astonishing complexities which seem to have been contrived by a purposeful intelligence. Evolutionary theory claims to have explained the design of organisms via the process of natural selection. Thus, the design of life is only apparent, not real. But is this true? One cannot weigh the claims of evolution without understanding the effect that natural selection supposedly explains (biological design or teleology) and the opposing explanation that natural selection supposedly refutes (intelligent design). To paraphrase Voltaire, if intelligent design did not exist, evolutionary biologists would need to invent it.

KENNETH MILLER, Brown University

Life's Grand Design

By choosing "design" as the unifying theme for its arguments, the anti-evolution movement has often obscured its own ideas regarding the origin of species and biochemical complexity. In reality, each of the organisms, structures, and biological pathways cited as evidence of design must also be products of special creation. Intelligent design is therefore nothing more than a form of progressive creationism, however obscured by the language of its proponents. When biologists and biochemists speak of the "design" of molecules and organisms, they actually make reference to a correlation of structure and function that is the well-understood product of evolutionary adaptation. Today's anti-evolutionism is not a scientific movement, but an argument from personal incredulity that lacks positive evidence and is profoundly contradicted by data from paleontology, biochemistry, and genetics.

Moderator: SALLY SATEL, AEI

10:15 Break

10:30 *Morning Keynote*

Father **GEORGE COYNE**, Vatican Observatory
Science Does Not Need God. Or Does It?

The murky waters of the rapport between the Church and science never seem to clear. Despite the best efforts of John Paul II and of Benedict XVI when he was Cardinal Ratzinger, the struggle still goes on to clear the pond. Under the presidency of Cardinal Ratzinger, and less than a year before he was elected to the Papacy, the International Theological Commission issued a lengthy statement in which it saw no incompatibility between God's providential plan for creation and the results of a truly contingent evolutionary process in nature. Now the waters have again been darkened by the publication in the New York Times on July 7, 2005 of an article by Cardinal Christoph Schönborn of Vienna, a one-time student of Benedict XVI and a high-profile and influential figure in the Church, in which he essentially claims that neo-Darwinian evolution is not compatible with the Church's belief in God's purpose and design in creation.

Why does there seem to be a persistent retreat in the Church from all attempts to establish a dialogue with the community of scientists, religious believers or otherwise? There appears to exist a nagging fear in the Church that a universe which science has established as evolving for 13.7×10^9 years since the Big Bang and in which life, beginning in its most primitive forms at about 12×10^9 years from the Big Bang, evolved through a process of random genetic mutations and natural selection, escapes God's dominion. That fear is groundless. Science is completely neutral with respect to philosophical or theological implications that may be drawn from its conclusions. Those conclusions are always subject to improvement. That is why science is such an interesting adventure and scientists curiously interesting creatures. But for one to deny the best of today's science on religious grounds is to live in that groundless fear just mentioned.

11:00 *Discussant:* MICHAEL NOVAK, AEI

11:30 **Panel II: Should We "Teach the Controversy"**

JOHN CALVERT, Intelligent Design Network
Should Schools "Teach the Controversy"?

Teaching key scientific controversies regarding origins is necessary for scientific, educational, and legal reasons. Evolution's status as a scientific theory rather than an ideology depends on its willingness to accept substantive scientific challenges. Suppressing those challenges breeds an unhealthy environment in the science classroom and will accelerate the erosion of public confidence in public education. State suppression of legitimate scientific criticisms of chemical and Darwinian evolution promotes naturalism/materialism, a key tenet of non-theistic religions and belief systems and is not secular, neutral, and non-ideological.

BARBARA FORREST, Southeastern Louisiana University
Why "Teach the Controversy" Is a Recipe for "Teach Creationism"

The slogan "Teach the Controversy" (and its variants, "Strengths and Weaknesses of Evolution", "Evidence Against Evolution," and others), though appearing fair and unobjectionable on the surface, did not emerge without a history. That history, embedded in the long-standing creationism/evolution controversy, reveals that the "Teach the Controversy" strategy emerged after the failure of "creation science" to survive judicial review. What is

sought is not to teach students the legitimate controversies that take place within evolutionary biology, but to pretend to them that scientists are actively disputing whether evolution has occurred – a formula for miseducation if there ever was one. "Teach the Controversy" and its variants are actually code for bringing creationism into the public school curriculum under the guise of fairness. Creationism's new avatar, intelligent design, carries on this tradition, not only as a strategy, but as a necessity: ID itself is virtually content-free and, having no science to propose, must rely on teaching alleged weaknesses of evolution.

Moderator: FREDERICK M. HESS, AEI

12:30 p.m. *Luncheon Keynote*

LAWRENCE KRAUSS, Case Western Reserve University

Facing Reality: Public Policy, Science Education, and the Emperor's New Clothes

The popular debate about the teaching of intelligent design in public schools presents a perplexing quandary for scientists and policymakers. How do scientists take part in a national debate that has been essentially manufactured by a marketing campaign to appear to be a scientific controversy, but which bears little or no contact with the scientific enterprise?

Behind much of this campaign is the notion that by leaving out the explicit consideration of a deity in scientific explorations the scientific enterprise is itself somehow either inconsistent or immoral. Neither is true. However, how should educators and policymakers respond to public misconceptions when those misconceptions are held by a majority of the public? I will argue that when it comes to public education as it relates to the process and progress of science, popular opinion is an inappropriate guide for policy and pedagogy.

2:00 **Panel III: The Dover, Pa., Case and Beyond: Legal and Public Policy Implications of the ID Controversy**

STEVEN GEY, Florida State University

Dover, Pennsylvania, and the Constitutional Problems with Intelligent Design

On two separate occasions the Supreme Court has held that the inclusion of creationism in a public school science curriculum would violate the Establishment Clause of the First Amendment. Proponents of intelligent design theory argue that the precedents *Epperson v. Arkansas* and *Edwards v. Aguillard* do not apply to the latest version of creationism. Intelligent design proponents argue, among other things, that changes in Establishment Clause doctrine since *Epperson* and *Edwards* have undermined those decisions, that the free speech protections of the First Amendment require public schools to permit discussions of intelligent design, and that the exclusion of specific references to God in intelligent design theory eliminates the constitutional problem created by the expressly religious underpinnings of earlier versions of creationism. This talk will review the constitutional basis for the Court's creationism decisions and respond to the argument that intelligent design's religious nature has been sufficiently muted that its inclusion in public school science curriculum is constitutionally acceptable. A pending case in Dover, Pennsylvania, will be a focal point of this discussion. In *Kitzmiller et al. v. Dover Area School Board*, several parents have sued the school board for requiring biology teachers to present intelligent design as an alternative to the scientific theory of evolution and for including ID texts in the curriculum. The details of this case will be used to highlight the impossibility of legally distinguishing between intelligent design and earlier versions of creationism.

RICHARD THOMPSON, Thomas More Law Center

The Constitutional Case for Teaching Intelligent Design

It is not unconstitutional for school boards to make students aware of the weaknesses of Darwin's theory of evolution and of scientific alternatives such as intelligent design. The U.S. Supreme Court has long recognized the broad discretion of school boards to set curriculum and it will not intervene in their decisions unless a direct and sharp constitutional violation exists. Furthermore, the fact that a scientific theory may have religious implications, which both evolution and intelligent design have, does not make presentation of the theory to public school students unconstitutional. The purpose of the curriculum change in Dover, PA, must be determined by looking at the official actions of the collective body and not by statements or motivations of individual board members.

MARK RYLAND, Discovery Institute

But Is It Science? Public Schools and the Problem of Unconstitutional Motives

If it is constitutional to teach in public schools an anti-teleological scientific theory, neo-Darwinism, a theory whose purpose is to explain away the appearance of design in nature, then clearly it must be constitutional to teach teleological scientific notions as well. Indeed, Darwin's theory is impossible to understand except by contrast to the hypothesis that the apparent design in living things is real. The problem in Dover, PA and elsewhere is that school boards do not appear to be actually motivated by the desire to expose school children to whether Aristotle's arguments for immanent design in living things has indeed been superseded by the evidence for the mechanist-reductionist theory of Darwinian evolution. As a result, the motives of legislators becomes the central issue, obscuring the key constitutional question of whether direct or indirect "endorsement" of teleological thinking in science by a governmental authority is an unconstitutional establishment of religion.

Moderator: JON ENTINE, AEI

3:30

Adjournment