Intelligent Design and Evolution Awareness Center

FAQ:
Doesn't ID suggest Eliminating Evolution or "Watering Down" the Curriculum?

The Short Answer: No. Members of the ID movement want to teach evolution--and teach it better! We want all the evidence surrounding the origins issue to be taught, and we want students to understand evolution better, and learn the full range of scientific evidence on the important subject of "origins." Many people think ID wants to "eliminate evolution" only because they mistakenly think that ID advocates eliminated evolution from Kansas state science standards in 1999. This is a misconception because in reality evolution was still taught, and what happened was badly misreported by the press. Ironically, evolution's public defenders want evidence against evolution eliminated, taking us right back to the day of censorship at the time of the Scopes Trial in 1925. The ID movement wants to increase the effectiveness and comprehensiveness of a science curriculum by helping students to learn the full range of views and evidence over this crucial subject of origins.

The Long Answer:
Good changes for science education:
Firstly, to dispel any notions that the ID movement wants to eliminate evolution from the curriculum, consider these two quotes by leaders in the ID movement--Michael Behe and Phillip Johnson--which summarize the position of many in the ID movement quite well:

> "Teach Darwin's elegant theory. But also discuss where it has real problems accounting for the data, where data are severely limited, where scientists might be engaged in wishful thinking and where alternative even "heretical" explanations are possible." (Michael Behe, "Teach Evolution and Ask Hard Questions;"New York Times, August 13, 1999, Friday, Page A21, Editorial Desk)

> "What educators in Kansas and elsewhere should be doing is to "teach the controversy." Of course students should learn the orthodox Darwinian theory and the evidence that supports it, but they should also learn why so many are skeptical, and they should hear the skeptical arguments in their strongest form rather than in a caricature intended to make them look as silly as possible." (Phillip Johnson, The Wedge of Truth, pg. 82)

When dealing with an issue like our origins, an issue which touches on deeply held beliefs held by those on "all sides" of this issue, it is important that we be ultra-careful in our presentation of the scientific evidence. Currently most school districts teach evolution "one-sidedely," meaning they teach students only about scientific evidence that supports evolution. This is bad science education. It does not encourage the ideals of liberal education, democracy, critical thinking, scientific skepticism, nor does it turn students into good scientists or serve their needs in personal growth and intellectual and spiritual development as individuals. The IDEA Center does not recommend "eliminating evolution," teaching any "less" evolution--but to teach more evolution--to teach both evidence that supports and evidence that does not support evolution.

Good scientists are spawned when they learn to think critically about evidence--to question, to dig deeper and ask "why do you claim that?" and to understand other scientific possibilities, and the difference between science and non-science. We believe that a policy most consistent with these ideals is found in the "Santorum Amendment," a resolution passed by the United States Senate while debating the No Child Left Behind Act of 2001:

> "It is the sense of the Senate that
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> "(1) good science education should prepare students to distinguish the data or testable theories of science from philosophical or religious claims that are made in the name of science;
> (2) where biological evolution is taught, the curriculum should help students to understand why this subject generates so much continuing controversy, and should prepare the students to be informed participants in public discussions regarding the subject."

This "Santorum Amendment" passed 91-8, and its language was adopted into the Conference Report of the No Child Left Behind Act, signed by President Bush in January of 2001 (the conference report is a proceeding which documents the legislative intent of a law passed by Congress, which courts rely heavily upon when interpreting the meaning of a law.) The U.S. Department of Education has stated that it "embraces the general principles -- reflected in the Senate [Santorum] Resolution -- of academic freedom and inquiry into scientific views or theories." (Letter from Gene Hickock, Acting Deputy Secretary, U.S. Dept. of Education, March 8, 2004). UC Berkeley Law Professor Phillip Johnson writes regarding the Santorum Amendment:

> "When citizens tell me that they want to present a proposal to administrators or school boards asking for more unbiased teaching of evolution, I advise them to use the precise language of the Santorum amendment and not add anything to it. Well-meaning citizens sometimes think that this language does not go far enough, and so they insist on petitioning the authorities to give classroom time to some theory other than evolution. This is a mistake, because whatever they say just gives biased journalists something to ridicule and distort. " (Phillip Johnson, "Intelligent Design, Freedom, and Education" at http://www.arn.org/docs2/news/designfreedomeducation050903.htm)

Professor Johnson's words can be well taken in this situation here. Unfortunately, many good-intentioned people have sought to implement positive changes in their science curriculums but in the end made bad changes. It is possible to teach criticisms of evolution if it is done in the right manner. But censoring the "e-word" (evolution) or banning evolution is not the right way to do it. The right way to change a curriculum is to help students to learn more about evolution. As long as the critique is scientific and adds to their education, it should be implemented!

This is exactly the policy the U.S. Supreme Court wants to see implemented In the case *Edwards. v. Aguillard,* the Supreme Court majority provided a framework under which a legislature might pass an acceptable bill regarding the teaching of science:

> "If the Louisiana Legislature's purpose was solely to maximize the comprehensiveness and effectiveness of science instruction, it would have encouraged the teaching of all scientific theories about the origins of humankind.' (Edwards at 588).

Furthermore, the Court stated that it was not unconstitutional for a legislature to pass a bill which "require[d] that scientific critiques of prevailing scientific theories be taught," because "teaching a variety of scientific theories about the origins of humankind to schoolchildren might be validly done with the clear secular intent of enhancing the effectiveness of science instruction." (Edwards at 593 - 594). Thus, if the purpose is to increase the "comprehensiveness" and "effectiveness" of science

education, and they are teaching bona fide scientific theories and evidence, then such an act would be constitutional. This is good policy, and this is all we desire as well.

In schools, we should teach science, and we need to teach all the scientific evidence that exists surrounding this crucial question of origins. For now, this at least includes both evidence for AND against evolution.

What is the current state of policy?
Ironically, evolutionists who (rightly) criticize those who want to remove evolution from the classroom often do not realize that today, many (if not most) school districts teach evolution "one-sidedly" and eliminate bona fide scientific evidence that doesn't support or questions evolutionary theory. This is equally bad science education. Today's public defenders of the teaching of evolution seek to insulate evolution from legitimate scientific critique. As seen, this goes against the ruling of the Supreme Court:

> "We do not imply that a legislature could never require that scientific critiques of prevailing scientific theories be taught. … [T]eaching a variety of scientific theories about the origins of humankind to schoolchildren might be validly done with the clear secular intent of enhancing the effectiveness of science instruction." (Edwards at 593-594)

In 1925, anti-evolutionists made it a criminal offense to teach the theory of evolution in Tennessee. Yet today the tables have turned almost exactly upon their heads. It was very bad for the Tennessee legislators to criminalize the teaching of evolution, but today, the public ridicule heaped upon those who today simply want a fair and balanced presentation of the scientific evidence in favor of evolution is an equally horrendous crime against freedom of inquiry.

Much of the way evolution is taught one-sidedly is reviewed in the book *Icons of Evolution*. In the book, various lines of which supposedly support evolution are often contradicted by solid evidence from the could be easily presented with a one-paragraph blurb. This is the type of presentation of evolution that the IDEA Center would like to see in many textbooks and classrooms today--so that students learn the full range of evidence surrounding the teaching of evolution. Thus, the position of the IDEA Center (and most people in the ID movement) is not to teach less evolution -- like how Georgia removed the word 'evolution' from its curriculum, or how Kansas allegedly removed evolution from the curriculum -- but to teach more about evolution so that students can understand it better. Students need to learn the evidence both for and against evolution, but currently those who seek to ask for such a fair presentation are ridiculed and censored.

The IDEA Center believes that any legitimate scientific theory could be taught in a science classroom. Intelligent design is a legitimate scientific theory, but it is very new. Some aspects of intelligent design might be appropriate to teach now, but it would not hurt to wait to have intelligent design taught. Nonetheless, criticisms of evolution should be taught.

At the time of Scopes, very little evolution was taught, and scientists were advocating for something good--for more science (i.e. evolution) to be taught. Today, scientists are advocating for less science to be taught--that only the evidence that supports evolution can be taught. This is worse than before Scopes.

The best policy is that which the Senate adopted in the Santorum amendment where it implicitly decried censorship of evidence on these controversial issues and spoke in favor of educating--not indoctrinating students. That's why Senator Kennedy of Massachusetts said of the Santorum Amendment:

"the language itself, is completely consistent with what represents the central values of this body. We want children to be able to speak and examine various scientific theories on the basis of all of the information that is available to them so they can talk about different concepts and do it intelligently with the best information that is before them."

Why is there a popular notion that the ID movement wants to "ban evolution?"
Unfortunately, many people mistakenly think that the ID movement seeks to ban evolution. This is probably because the press misreported that ID movement supporters banned the teaching of evolution in the State of Kansas in 1999. To be sure, some (not all) of the Board of Education members in Kansas who sought to change the curriculum were supporters of the ID movement. The mistake is that in reality, Kansas did not "ban" the teaching of evolution from schools nor did it argue that evolution "was no more 'provable than creationism." This is an unfortunately common misperception about what happened in Kansas that has been promulgated in the press. Many who believe this are not to blame, for the press almost universally mis-reported what really happened in Kansas. Phillip Johnson's well-documented account of the press's coverage of the Kansas controversy reveals what really happened:

> What reporters thought was about to happen [in the 1999 Kansas vote on science standards] had been explained the Sunday before the vote in a front-page story in the Washington Post by reporter Hanna Rosin, which was reprinted in newspapers around the country. Apparently relying on reports from members of the original drafting committee who were bitterly at odds with the new majority on the board, Rosin wrote that the Kansas board appeared about to "pass a new statewide science curriculum for kindergarten through 12th grade that wipes out virtually all mention of evolution and related concepts: natural selection, common ancestors, and the origins of the universe." ... According to Rosin, the pending expulsion of evolution from the curriculum reflected a change in tactics by a persistently aggressive national creationist movement. ... Most of Rosin's story gave the impression that the creationists were the aggressors in a programmed campaign in which Kansas was merely the latest target. One paragraph acknowledged, however, that in reality it was the science educators who were pushing for change on the basis of an organized national campaign:
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> > The century-old debate erupted again, ironically, in part out of a push to improve science standards. About five years ago, a craze for national standards and accountability in every subject swept American classrooms. In response, national groups of science educators wrote benchmarks for scientific literacy to serve as models for states. The idea was to replace blind memorization of facts and figures with broad central concepts. With evolution, the results were not what the scientists had predicted. Religious conservatives tapped into skepticism from inside and outside the scientific community to discredit evolution, seizing on routine disagreements among scientists to disparage it as nothing more than a theory.
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> We can flesh out this picture of local creationists reacting to an initiative from science educators with some facts. What was specifically at issue in Kansas was a proposal from scientists and educators to replace the existing standards, last revised in 1995, with the new standards based on a model from national science organizations. The 1995 standards contained only sixty-nine words directly about evolution. The draft proposed by the twenty-seven member committee devoted almost ten times as many words to the subject and added evolution to the list of basic "unifying concepts and

> processes" which underlie all areas of science. So evolution was promoted from the status of a theory of biology to that of a fundamental concept of science (ranking it with other concepts as measurement and evidence). The committee defined science as "the human activity of seeking natural explanations for what we observe in the world around us," thus linking scientific investigation explicitly with philosophical naturalism. What the science educators described as "replacing blind memorization of facts and figures with broad central concepts" looked to critics like a campaign to extend scientific authority to questions of religion and worldview about which the public schools are supposed to be neutral. (Phillip Johnson, The Wedge of Truth, 1999, pg. 64-77)

What happened in Kansas was actually initially a reaction to a movement of scientists to push evolution in the curriculum so as to have it take on an aura of a naturalistic philosophical/religious theory of origins. In the end, the Kansas board did not ban evolution at all, but merely emphasized some weaknesses of evolutionary theory. Unfortunately, the Board did ban specific references to the big bang theory, which is unfortunate because no scientific evidence should be banned. But one thing the Board did NOT do was ban evolution. The following excerpts from the standards adopted on December 7, 1999 show that the board left many references to evolution in and added some important criticisms of evolution:

Concerning evolution, the standards state (taken from http://www.intelligentdesignnetwork.org/kansas99stds.htm:

> "Students will understand the history of science. ... Some concepts have long-lasting effects and include: ... theory of biological evolution"
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> "Evolution: A scientific theory that accounts for present day similarity and diversity among living organisms and changes in non-living entities over time. With respect to living organisms, evolution has two major perspectives: The long-term perspective (macro-evolution) focuses on the branching of lineages; the short-term perspective (micro-evolution) centers on changes within lineages."
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> "Millions of species of microorganisms, animals, and plants are alive today. Animals and plants vary in body plans and internal structures. Over time, genetic variation acted upon by natural selection has brought variations in populations. This is termed microevolution. A structural characteristic or behavior that helps an organism survive and reproduce in its environment is called an adaptation. When the environment changes and the adaptive characteristics or behaviors are insufficient, the species becomes extinct."
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> "Instruction needs to be designed to uncover and prevent misconceptions about natural selection. Natural selection can maintain or deplete genetic variation but does not add new information to the existing genetic code. Using examples of microevolution, such as Darwin’s finches or the peppered moths of Manchester, helps develop understanding of natural selection. Examining fossil evidence assists the student’s understanding of extinction as a natural process that has affected Earth’s species."
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> "Understand that microevolution, the adaptation of organisms - by changes in structure, function, or behavior - favors beneficial genetic variations and contributes to biological diversity." "Understand that natural selection acts only on the existing genetic code and adds no new genetic information."

> "Biologists recognize that the primary mechanisms of genotypic change are natural selection and random genetic drift. Example: Natural selection includes the following concepts: 1) heritable variation exists in every species; 2) some heritable traits are more advantageous to reproduction and/or survival than are others; 3) there is a finite supply of resources required for life; not all progeny survive; 4) individuals with advantageous traits generally survive; 5) the advantageous traits increase in the population through time. "

Finally, the standards stated that by the end of 12th grade, students are to have learned about the following:

> "Experiences in grades 9-12 will allow all students to develop an understanding of the structure and function of the cell, the molecular basis of inheritance, biological evolution, interdependence and behavior of living things; and organization of living systems and uses of matter."

Thus it can be seen that the Kansas board in no way banned the teaching of evolution. It did, however, clarify evolution by allowing for some pro and some con-evidence to be introduced, and it softened the dogmatic manner in which the other proposed science standards would have infected the curriculum.

Getting Religion Philosophy out of the Science Classroom:
The IDEA Center also wants to see ONLY science in the science classroom. Unfortunately, much of evolution is based upon philosophically naturalistic assumptions--it assumes there were no intelligent causes involved in shaping life. Naturalism is the idea that there is nothing other than matter or energy, and the laws of nature, which has any bearing upon the workings of the natural world. It is well substantiated that science is based upon naturalism. Here are quotes from evolutionists discussing this fact:

> “[I]f a living cell were to be made in the laboratory, it would not prove that nature followed the same pathway billions of years ago. But it is the job of science to provide plausible natural explanations for natural phenomena.”
> (Science and Creationism, A View from the National Academy of Sciences, 2nd Edition (1999), emphasis added)

> “The statements of science must invoke only natural things and processes. ... The theory of evolution is one of these explanations.”
> (Teaching About Evolution and the Nature of Science, National Academy Press, 1998, pg. 42, emphasis added)

> “It was Darwin’s greatest accomplishment to show that the directive organization of living beings can be explained as the result of a natural process, natural selection, without any need to resort to a Creator or other external agent...[Darwin’s] mechanism, natural selection, excluded God as the explanation...”
> (Francisco Ayala [evolutionist scientist], “Darwin’s Revolution,” in Creative Evolution?!, eds. J. Campbell and J. Schopf (Boston, Mass.: Jones and Bartlett Publishers, 1994), pp. 4-5, emphasis added)

"Science, fundamentally, is a game. It is a game with one overriding and defining rule. Rule No. 1: Let us see how far and to what extent we can explain the behavior of the physical and material universe in terms of purely physical and material causes, without invoking the supernatural."
(Richard E. Dickerson [evolutionist scientist]: "The Game of Science." Perspectives on Science and Faith (Volume 44, June 1992), p. 137, emphasis added)

"Darwinism rejects all supernatural phenomena and causations. The theory of evolution by natural selection explains the adaptedness and diversity of the world solely materialistically."
("Darwin's Influence on Modern Thought" E. Mayr [evolutionist scientist], Scientific American, pg. 82-83, (July 2000), emphasis added)

"[F]or many evolutionists, evolution has functioned as something with elements which are, let us say, akin to being a secular religion ... [A]t some very basic level, evolution as a scientific theory makes a commitment to a kind of naturalism, namely, that at some level one is going to exclude miracles and these sorts of things come what may."
("Nonliteralist Antievolution," Ruse, Michael [evolutionist philosopher of science], AAAS Symposium: "The New Antievolutionism," February, 1993, Boston, MA., emphasis added)

"[W]e have a prior commitment, a commitment to materialism. It is not that the methods and institutions of science somehow compel us to accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our a priori adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations…that materialism is absolute, for we cannot allow a Divine Foot in the door."
(Lewontin, Richard [evolutionist scientist], "Billions and Billions of Demons", New York Review of Books, January 9, 1997, p. 28., emphasis added)

"If there is one rule, one criterion that makes an idea scientific, it is that it must invoke naturalistic explanations for phenomena … it's simply a matter of definition—of what is science, and what is not."
(Eldredge, Niles, 1982, The Monkey Business: A Scientist Looks at Creationism, Washington Square Press)

"…any statement concerning the existence, nonexistence, or nature of a creator or creators is not science by definition and has no place in scientific discussion."
(Pine, R.H., 1984, "But Some of Them Are Scientists, Aren't They?" Creation/Evolution, Issue XIV, pp. 6-18)

The Santorum Amendment noted that, "good science education should prepare students to distinguish the data or testable theories of science from philosophical or religious claims that are made in the name of science." But if there is a naturalistic philosophy underlying some scientific theories, then students ought to know about them. We want science only to be in the science classroom. And we don't want science excluded on these important topics.