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Frequently Asked Questions: Intelligent Design and Evolution *Kitzmiller v. Dover Area School Board*

What is the concept of "intelligent design?" Intelligent design ("ID") purports to be a scientific hypothesis that "life owes its origins to a master intellect"—an intelligent, supernatural designer. In reality, it is an inherently religious argument made in opposition to the scientific theory of evolution. It is a variant of so-called "creation science," which maintains that species originated through abrupt appearance in complex form. Like creation science, the concept of intelligent design was advanced to provide support for the religious view known as creationism—that man and other species were specially created by God and did not evolve from lower life forms.

What does the theory of evolution say? The theory of evolution states that all organisms on Earth are descended from a common ancestor or ancestral gene pool. It states that current species developed primarily through a process of natural selection whereby genetic, heritable traits that enhance survival and reproduction become more common. Evolution does not state that "man evolved from monkeys," but that man and monkeys, and all other living organisms on Earth, share common ancestors.

How is intelligent design like and unlike traditional creationism? Like creationism, intelligent design consists of both scientifically unwarranted criticisms of evolution and assertions that it is necessary to invoke the actions of a supernatural being to explain the origin and history of life. Unlike traditional creationism, intelligent design is not committed to a literal reading of the Bible, although it is intentionally non-committal about the age of the earth and other scientific issues in order not to alienate traditional creationists. While creationists said the creator was God, ID supporters steadfastly refuse to identify the designer, saying it could be a space alien, a time-traveling biologist, or God.

Where did intelligent design come from? The term intelligent design was popularized in *Of Pandas and People*, the very textbook that was adopted for use in the Dover Area schools. ID and *Of Pandas* emerged in the wake of the Supreme Court's 1987 decision in *Edwards v. Aguillard*, which ruled that it was unconstitutional to teach so-called "creation science" in the public schools.

Is evolution "just" a theory? No. Calling evolution "just" a theory exploits the common (as opposed to scientific) definition of "theory" as a hunch or a guess. In science, a theory is a systematic explanation of phenomena. The National Academy of Sciences has said that "evolution is one of the strongest and most useful scientific theories we have." And National Geographic wrote in November 2004 that "the evidence for evolution is overwhelming." There is no more room to doubt evolution than there is to doubt gravity.

Is intelligent design a credible scientific theory? No. ID does not meet the ground rules of science. It does not provide observable or testable hypotheses or explanations, and allows for non-natural causation. There has been no original research published in scientific journals supporting intelligent design. No scientific academy or society has recognized ID as science. Indeed, the largest scientific society, the American Association for the Advancement of Science, and the most prestigious, the National Academy of Sciences, have both described intelligent design as scientifically unwarranted.

Is evolution anti-religious? No. Many mainstream religions and denominations - including the Catholic Church and the Presbyterian Church USA - accept the scientific theory of evolution as consistent with belief in God as the ultimate creator. Many evolutionary biologists are themselves religious. Standard high school biology textbooks explain the science of evolution without taking positions on the existence of God.

Is evolution education important? Yes. The National Association of Biology Teachers and the National Science Teachers Association agree that evolution is crucial to science education. Efforts to undermine evolution education are not only unconstitutional, but also educationally irresponsible.

Kitzmiller et al. v. Dover Area School District

In December 2004, the ACLU-PA sued the Dover Area School District on behalf of eleven parents who objected to the recent policy that required mentioning intelligent design in biology classes as an alternative to evolution. The parents said that presenting intelligent design in public school science classrooms violated their religious liberty by promoting particular religious beliefs to their children under the guise of science education.

Dover Area School District Policy That Prompted the Trial

The school district policy mandated that Dover public schools treat "intelligent design" as a bona fide scientific theory competing with the scientific theory of evolution in order to develop a balanced science curriculum. Teachers were also required to read a statement to students in ninth grade biology classes that included the following language:

"Because Darwin's Theory is a theory, it is still being tested as new evidence is discovered. The Theory is not a fact. Gaps in the Theory exist for which there is no evidence. A theory is defined as a well-tested explanation that unifies a broad range of observations.

Intelligent design is an explanation of the origin of life that differs from Darwin's view. The reference book, *Of Pandas and People*, is available for students to see if they would like to explore this view in an effort to gain an understanding of what intelligent design actually involves. As is true with any theory, students are encouraged to keep an open mind."

Objections to the Policy

The lawsuit argued that teaching students about intelligent design in public school science classes endorses and promotes a religious view and, thus, violates the separation of church and state. *Of Pandas and People*, the alternative book available for students, was authored by advocates of so-called creation science and published by a Christian think-tank that aims to preach "the Christian Gospel and understanding of the Bible."

The lawsuit also stated that teaching students that there are "gaps" in the scientific theory of evolution while not presenting any such gaps with intelligent design would lead students to believe that the theory of evolution is false and that the truth lies in the religious beliefs advocated through intelligent design.

Results of the Trial

U.S. District Judge John E. Jones III ruled that "Intelligent Design" is a religious view, not a scientific theory. The decision was a victory not only for the ACLU, who led the legal challenge, but for all who believe it is inappropriate, and unconstitutional, to advance a particular religious belief at taxpayer expense and at the expense of our children's scientific education.

For More Information:

ACLU of PA materials on Dover trial: www.aclupa.org/dover

National ACLU materials on Intelligent Design: www.aclu.org/religion/intelligentdesign/