

# FREEDOM FROM RELIGION *foundation*

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To: District Superintendent

From: Annie Laurie Gaylor and Dan Barker  
FFRF Co-Presidents

Re: Memo on Illegality of Creationist Teaching at Pennsylvania Public Schools

We are writing to you to outline the current state of the law regarding teaching creationism in public schools. The Freedom From Religion Foundation (FFRF) is a nationwide nonprofit organization, which works to protect the constitutional principle of separation of state and church. FFRF represents more than 19,000 members across the country including more than 650 members in Pennsylvania.

A recent story in the *Pittsburgh-Post Gazette* surveyed 106 science teachers regarding the teaching of evolution in Pennsylvania public schools. This article revealed shocking statistics about the state of science education in public schools. A third of the science teachers surveyed identified themselves as believers in creationism or intelligent design.<sup>1</sup> Of that number, teachers who identify themselves as creationists—nearly 20% of those surveyed—“spend at least an hour of classroom time on creationism in a way suggesting it to be a valid scientific alternative” to evolution. *Id.*

FFRF was alarmed to learn that public school teachers in Pennsylvania have admitted to professing creationist beliefs to their students during instructional time. As a result of this enlightening piece, FFRF is concerned such violations may be occurring in your district. Thus, we write to remind your district about the law and urge your district to take affirmative steps to ensure teachers in your district are following constitutional dictates.

### **Injecting creationism into science classes is unconstitutional**

It is well settled that public schools may not advance or promote religion. *See generally, Lee v. Weisman*, 505 U.S. 577 (1992); *Wallace v. Jaffree*, 472 U.S. 38 (1985); *Epperson v. Arkansas*, 393 U.S. 97 (1967); *Sch. Dist. of Abington Twshp. v. Schempp*, 374 U.S. 203 (1963); *Engel v. Vitale*, 370 U.S. 421 (1962). Moreover, “the preservation and transmission of religious beliefs and worship is a responsibility and a choice committed to the private sphere.” *Santa Fe Indep. Sch. Dist. v. Doe*, 530 U.S. 290, 310 (2001)(quoting *Lee v. Weisman*, 505 U.S. at 589).

Promoting creationism or any of its offshoots, such as intelligent design, in a public school violates the Establishment Clause of the First Amendment. Courts have routinely found that such teachings are religious, despite many new and imaginative labels and techniques used by

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<sup>1</sup> David Templeton, *Is evolution missing link in some Pennsylvania high schools?* April 28, 2013.

religious supporters. The Supreme Court has struck down teaching of “scientific creationism” in public schools. *Edwards v. Aguillard*, 482 U.S. 578, (1987).

In Pennsylvania particularly, a school district policy describing intelligent design as an alternative to Darwin’s theory of evolution was held to have violated the Establishment Clause for improperly advancing religious beliefs. See *Kitzmiller v. Dover Area Sch. Dist.*, 400 F.Supp. 2d 707 (M.D. Pa 2005). When a science teacher suggest to students that the theory of evolution is not valid because it conflicts with his or her own religious beliefs, much as with the disclaimer ruled unconstitutional in *Kitzmiller*, the effect is “misleading and creates misconceptions in students... by telling students that they should regard it as singularly unreliable, or on shaky ground.” *Id.* at 725.

Federal courts consistently reject creationism and its ilk in the public schools:

- *Epperson v. Arkansas*, 393 U.S. 97 (1968)(School officials may not prohibit the teaching of evolution);
- *Freiler v. Tangipahoa Parish Bd. of Educ.*, 201 F.3d 602 (5th Cir. 2000)(reading a disclaimer before teaching evolution violates the Establishment Clause);
- *Pelozo v. Capistrano Unified School District*, 37 F.3d 517 (9th Cir. 1994)(School’s prohibition on teaching creationism is valid because permitting a teacher “to discuss his religious beliefs with students during school time on school grounds would violate the Establishment Clause.”);
- *Webster v. New Lenox Sch. Dist. No. 122*, 917 F.2d 1004 (7th Cir. 1990)(School board’s prohibition on teaching “creation science” is valid because the board has a responsibility to ensure that the teacher was not “injecting religious advocacy into the classroom.”)
- *McLean v. Arkansas Bd. of Ed.*, 529 F.Supp. 1255 (D.C.Ark., 1982)(the Arkansas Board of Education was permanently enjoined from taking actions pursuant to a state statute mandating “balanced treatment for creation science and evolution science” because the statute violated the Establishment Clause).

### **There is no serious scientific debate about the validity of evolutionary theory**

Evolution is not a “theory” in the layperson’s sense of the word. Evolution is a “scientific theory.” This difference is crucial. A misunderstanding of these terms often leads to a misunderstanding of evolution, the vast weight of evidence supporting evolution, and of its overwhelming acceptance in the scientific community. The American Association for the Advancement of Science, the world’s largest scientific society and publisher of the prestigious journal *Science*, explains the “theory/scientific theory” difference:

Is evolution “just a theory?” In detective novels, a “theory” is little more than an educated guess, often based on a few circumstantial facts. In science, the word “theory” means much more. A scientific theory is a well-substantiated explanation of some aspect of the natural world, based on a body of facts that have been repeatedly confirmed through observation and experiment. Such fact-supported theories are not “guesses” but reliable accounts of the real world. The theory of biological evolution is more than “just a theory.” It is as factual an explanation of the universe as the atomic theory of matter or the germ theory of

disease. Our understanding of gravity is still a work in progress. But the phenomenon of gravity, like evolution, is an accepted fact.  
[http://www.aaas.org/news/press\\_room/evolution/qanda.shtml](http://www.aaas.org/news/press_room/evolution/qanda.shtml)

Every attempt to smuggle religion into science classrooms by means of “alternative theories” has failed. Any theory that “depends upon ‘supernatural intervention,’ which cannot be explained by natural causes, or be proven through empirical investigation, and is therefore neither testable nor falsifiable” is “simply not science.” *Dover*, 400 F.Supp. 2d at 717 (quoting *McClellan* at 1267).

Creationism, intelligent design, and other claims of supernatural intervention in the origin of life or of species are not science because they are not testable by the methods of science. These claims subordinate observed data to statements based on authority, revelation, or religious belief. Documentation offered in support of these claims is typically limited to the special publications of their advocates. These publications do not offer hypotheses subject to change in light of new data, new interpretations, or demonstration of error. This contrasts with science, where any hypothesis or theory always remains subject to the possibility of rejection or modification in the light of new knowledge. *Dover*, 400 F.Supp 2d at 737 (quoting the National Academy of Sciences).

In *Edwards*, the Supreme Court overturned a statute meant to encourage “academic freedom” and make the science curriculum more “comprehensive” by “teaching all of the evidence regarding origins of life.” These purposes were not served because existing laws already allowed schools to “[teach] any scientific theory.” *Edwards*, 482 U.S. at 587. A science class is permitted to teach bona fide scientific theories, but is prohibited from teaching falsely labeled “theories” that are based on religious text. Time and again courts have exposed creationism instruction as an attempt to foist religious beliefs onto vulnerable schoolchildren, often after a costly legal battle.

### **Instructors should not undermine their students’ science education**

Inserting any creationist instruction in the public school science curriculum is unconstitutional, unscientific and inappropriate. It is confusing to students when a teacher claims that the lesson plan is false. Such statements undermine the school district and the lesson. Public school districts have the authority and responsibility to ensure that teachers are not “injecting religious advocacy into the classroom.” *Webster*, 917 F.2d at 1007.

However, Penn State University political science professor Michael Berkman has discovered that science teachers don’t have to conspicuously introduce religious concepts into their classes to undercut students’ education. As quoted in the *Pittsburgh-Post Gazette* article, Mr. Berkman found, “You just have to throw doubt and downplay evolution...teachers are doing a really weak job—many a really weak job—of introducing evolution.” Science is too important to be sabotaged. Such deceptive instruction can negatively impact students’ critical thinking skills and ability to succeed in future coursework. It is disgraceful that the United States ranked 33 out of 34 countries assessed on the acceptance of evolution, finishing only ahead of Turkey.<sup>2</sup>

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<sup>2</sup> Jon Miller et al. (2006) Public Acceptance of Evolution. *Science*, 313, 765-766.

Finally, even if a science teacher believes in creationism, he or she represents the interests of a much more diverse population within your district. It is wildly inappropriate for the beliefs of one school of religious thought to be pushed on a captive audience of public school students. Such a practice alienates those who practice other religious faiths, those who are nonreligious, and those who believe that science and religion are compatible. Any teacher who feels passionately about the merits of creationism is free to teach that viewpoint to his/her own children or to ask that it be taught in his/her church. The public at large need not be involved.

As the Superintendent, you have an obligation to ensure that students in your district are receiving a complete and accurate education. It is also your responsibility to ensure that District teachers are not violating Supreme Court jurisprudence by inappropriately injecting religion into the classroom.

We urge you to ensure that science instructors in your district understand and will comply with both their legal duty keep their classrooms free of religious instruction, and their professional responsibility not to mislead or lie to the students in their care regarding the validity of evolutionary theory. Additionally, we ask that you take appropriate disciplinary and corrective action against any teacher found to be encouraging or taking part in these unconstitutional and pernicious practices.

We trust that you will take all necessary steps to guarantee your students are not being robbed of a comprehensive education. Thank you for your time and attention to this matter.