

It is Illegal for Public Schools to Suppress the Controversy.

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at

***Darwin, Design & Democracy V
Science Converges on Design***

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Introduction

A couple of years ago we made a presentation to an Iowa School board about teaching intelligent design. During the Q & A the Principal said he didn't see how ID could be brought into the class room because it would bring in a religious discussion. So he thought it necessary to stick to an "Evolution Only" policy.

My response to the Principle was that he and his Evolution Only policy had already brought a religious discussion into the classroom. By choosing to discuss with children the origin of life and its diversity he had started a discussion that is directly responsive to questions fundamental to religion - **Where do we come from? Are we designs or merely occurrences? Are we the product of a purposeful or purposeless process? Is there an objective and rational basis for belief in a creator?**

The problem is that an "Evolution Only," policy is not really scientific or constitutional. It is not scientific because it is officially biased rather than scientifically objective. Because it is biased, it is not religiously neutral. Evolution Only effectively requires our children to "know"² that we come from a natural rather than an intelligent cause, that we are occurrences and not designs, and that we naturally arise without purpose from a purposeless process. It effectively teaches that no rational evidentiary basis exists for theistic beliefs. Evolution Only converts these scientific claims into dogmas that are the fundamental tenets of non-theistic religions and that directly contradict the fundamental tenets of theistic religions. Accordingly, in my opinion, Evolution Only is not "secular" or neutral. Rather it is an ideology that directly conflicts with the First Amendment rights of parents and students.

The religious problem is created by teaching only one side of a scientific controversy that unavoidably impacts religion. The solution is to allow teachers to cover both sides of the debate. That secular approach can be accomplished without opening the class room to explicit religious issues.³

The critical impediment to resolution of the controversy is a profound misunderstanding of the meaning of key terms and concepts. These include:

1. EVOLUTION
2. INTELLIGENT DESIGN
3. METHODOLOGICAL NATURALISM
4. RELIGION
5. RESPECTING
6. SECULAR

Definition of Evolution

The confusion starts with a lack of understanding of the core claim of evolution. In *The Blind Watchmaker: Why the evidence of evolution reveals a universe without design* Richard Dawkins observes that “biology is the study of complicated things that give the appearance of having been designed for a purpose.”⁴ This reflects the core claim of evolution that apparent design is just an illusion. The idea is reiterated by philosopher of science James Barham where he explains this mechanistic consensus:

“According to the mechanistic consensus design is not objectively real but merely an optical illusion, like the rising and setting of the sun. On this view, living matter is nothing special. It is just chemistry shaped by natural selection.”⁵

The National Academy agrees. They propose that we teach fourth graders that living systems lack the attribute of design. Kansas and West Virginia currently have science standards that do just that.⁶ The American Association for the Advancement of Science recently adopted something akin to a decree against teaching that living systems may be designed.⁷ They obviously contend that apparent design is an illusion.

Definition of Intelligent Design

The next confusion is over the definition of “intelligent design.” It is argued that it is religion in disguise. Actually, ID is simply a scientific disagreement with the core claim of evolution that design is an illusion. So long as that disagreement remains theoretical, then it is scientific. From this it should be clear that ID is science and not religion.⁸

Methodological Naturalism

Now that we understand the claims of Evolution and Design, we can look at an associated construct called Methodological Naturalism. Naturalism is “the doctrine that cause-and-effect laws (as of physics and chemistry) are adequate to account for all phenomena and that teleological [design] conceptions of nature are invalid.”⁹ Methodological Naturalism (MN) holds that when scientists investigate and seek to explain the natural world they must irrefutably assume that Naturalism is true. We must assume that only natural causes have operated throughout the relevant history of life without the aid of any intelligent cause. Those who break this Rule are not scientists and therefore are not qualified to speak or be heard. MN is sort of like a rule that would require arson investigators to provide only natural explanations for all fires. If an investigator disagrees with the Rule, he is not deemed a qualified investigator, so his reports cannot be considered. The result would be massive increases in insurance premiums and profound misunderstanding about the true cause of fires.

Methodological naturalism is not really a “method.” It is actually an irrefutable assumption that is usually unstated. The effect of its use is to treat its assumption as true. It is similar to the huge off-balance sheet liability that Enron failed to show in its financial statements. The effect of that assumption caused people to buy Enron stock for much more than it was really worth. The effect of methodological naturalism is to allow evolution to explain things it really can not explain on its own merits. It allows imagination rather than evidence to control the

explanation.

The problem with this is that most advocates of any cause usually become believers in their cause, even if the basis for their belief is lacking. In time they seek to convince others of the belief they have embraced. One worries about the results of a highly regarded poll published by Edward Larson and Larry Witham in the *Journal Nature*. Larson and Witham found that 93% of members of the National Academy respondents disbelieved or doubted the existence of a “personal god” versus 7% who professed belief in a personal God. The numbers are reversed when the poll is taken of the public in general. The National Academy is the author of our National Science Education Standards. The article closes with these remarks:

“As we compiled our findings, the NAS issued a booklet encouraging the teaching of evolution in public schools.... The booklet assures readers, 'Whether God exists or not is a question about which science is neutral'. NAS president Bruce Alberts said: 'There are many very outstanding members of this academy who are very religious people, people who believe in evolution, many of them biologists.' *Our survey suggests otherwise.*"¹⁰

Of course the Methodological Naturalism used by the Academy does take a position on the existence of God. As I will discuss in a minute, it suppresses evidence that would support rational arguments for the existence of a God. It also takes a position on whether any God or other intelligent cause has intervened in the natural world since the beginning of time and it takes a position on whether natural objects and systems have inherent purpose. All of these positions are critical to theistic and non-theistic religious beliefs.

The effect of Methodological Naturalism in origins science is to declare the argument of design - the counter argument to evolution to be *per se* invalid.¹¹ It essentially requires acceptance of the core claim of evolution that design is an illusion. This robs evolution of its theoretical nature and converts it into a subtle unwritten dogma or ideology that children are effectively required to believe.

What is so fascinating is that the inclusion of design in science is actually necessary to make evolution scientific. If the claim of design is not allowed then the core claim of evolution, that life is not designed, can not be science because all scientific claims must be subject to refutation or falsification. So the competition between design and evolution is actually necessary for either to be scientific.

Methodological Naturalism is also called scientific materialism.¹² It is also called “Evolution Only.” Whether the school principle knows it or not, when she is persuaded by the scientific community or the AAAS to suppress the counter argument to evolution, she is actually being asked to have the state embrace and implement methodological naturalism.

The State Enters a Religious Sphere when it Chooses to talk about Evolution - that Life is not Designed.

Now that we have defined the key scientific terms we can move to a discussion of the legal issues.

Even the most hard core Darwinist concedes that discussions about origins impact religion. This is important because the state has chosen to engage in that discussion.¹³ In making that choice it unavoidable enters into a religious sphere or arena. Having entered that sphere, the state must then ask itself: “*Are we conducting this discussion consistent with the religious rights of parents and students?*”

The Religious Rights of Parents derive from the First Amendment

Religious rights of parents and students arise out of the First Amendment to the US Constitution and State Constitutions.¹⁴ The First Amendment contains two clauses that expressly protect those rights: the Establishment Clause and the Free Exercise Clause.¹⁵ The question I will discuss is whether an “Evolution Only” policy that officially withholds information about scientific criticisms and disagreements with evolution infringe the religious rights of parents to instill in their children a belief that they have been designed and made for a purpose.

The Establishment and Free Exercise Clauses provide that:

“Congress [Government, including any public school] shall make no law [or policy] *respecting* an establishment of *religion*, or prohibiting the free exercise thereof...”

The parenthetical additions reflect currently effective judicial interpretations. The key phrase in the Establishment Clause is “respecting an establishment of religion.” Although some have argued that the word “establishment” narrows the scope of the clause, for the most part the courts seem to ignore that word. Instead, the key words that have defined the scope of our religious rights are “religion” and “respecting.” In short the Establishment Clause states that a school may not adopt a policy “respecting...religion.” So what does “religion” and what does “respecting” mean?

Issues of Religion key to the Origins Debate

There are two key aspects of religion critical to the origins debate. First, religion is dogmatic while science is theoretical. Religious explanations never change, while those of science must be open to change. Religion commands belief, while science is supposed to invite further investigation and analysis.

This is important because so long as both ID and evolution are theoretical competitors and scientifically tentative they both remain in the realm of science. However, when one uses methodological naturalism to suppress design theory or uses religious assumptions to suppress evolution, then the protected claim ceases to be scientific and becomes an ideology.

Second, and critically important, is that religion includes not only theistic religion, but also non-theistic religions and belief systems. This issue is important because a good part of our culture has been led to believe that religion is confined to a belief in God. In fact that is not the case.

In 1961 the Supreme Court noted that

“Among religions in this country which do not teach what would generally be considered a belief in the existence of God are Buddhism, Taoism, Ethical Culture, *Secular Humanism and others.*”¹⁶

During the Vietnam war the Court held that an exemption from combat designed to apply only to religious belief in God was also applicable to those holding non-theistic religious beliefs and convictions. In so doing it held that a belief that does not derive from a God or a “supreme being” is religious if it is “sincere and meaningful [and] occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God”¹⁷

In 1989, the Court in *Smith v. Board of School Commissioners of Mobile County*, 655 F. Supp, 939, (SD Ala 1987), held that Secular Humanism is a religion. Although the case was reversed on appeal the Court of Appeals did not reverse the lower Court’s conclusion that Secular Humanism is a religion. It clearly is. Secular Humanists meet in houses of worship, just like Christians.

In the recent Pledge case, the atheistic beliefs of the Plaintiff were characterized by both the Ninth Circuit and the Supreme Court as “religious.” In a concurring opinion, Justice O’Connor noted that “[E]ven if the Religion Clauses were originally meant only to forestall intolerance between Christian sects, they now encompass *all forms of religious Conscience.*”[“*Elk Grove Unified School District et Al. V. Newdow et al.* (June 14, 2004)]

So religion includes both theistic and non-theistic belief systems.

Tenets that Distinguish Theistic from Non-theistic Religion

There are two fundamental tenets that distinguish traditional theistic from non-theistic religions. First traditional theists hold that belief in the existence of God is a rational and reasonable inference from an observation of nature:

“..¹⁹since what may be known about God is plain to them, because God has made it plain to them. ²⁰For since the creation of the world God’s invisible qualities – his eternal power and divine nature – have been clearly seen, **being understood from what has been made, so that men are without excuse.**”[Romans 1:19-20] [The commentary for this verse states: “Atheists have no excuse. **Open minded attention to the nature of creation** makes the existence of God evident.”]¹⁸

Contrast this with the observation of Richard Dawkins:

“But what Hume did was criticize the logic of using apparent design in nature as positive evidence for the existence of God. He did not offer any alternative explanation for apparent design, but left the question open. An atheist before Darwin could have said, following Hume: ‘I have no explanation for complex biological design. All I know is that God isn’t a good explanation, so we must wait and hope somebody comes up with a better one.’ *I can’t help feeling that*

such a position, though logically sound, would have left one feeling pretty unsatisfied, and that although atheism might have been logically tenable before Darwin, Darwin made it possible to be an intellectually fulfilled atheist.”

[Richard Dawkins, *The Blind Watchmaker: Why The Evidence of Evolution Reveals A Universe Without Design*” p. 6, (W.W. Norton & Company, 1996).]

While traditional theistic religion is predicated on an intuitive design inference as a rational basis for belief in a God, the Secular Humanist and the atheist hold that St. Paul, St. Thomas Aquinas and William Paley are all wrong. They claim design is just an illusion that can actually be explained very well by natural rather than intelligent causes. Accordingly, the Secular Humanist finds no rational reason to believe in a God that intervenes to order events in the natural world. This was explained by one of the founders of Secular Humanism in a case holding that Secular Humanism is a religion:

“Dr. Kirk defines Secular Humanism as “.....a *creed* or world view which holds that **we have no reason to believe in a creator**, that the world is self existing, that there is no transcendent power at work in the world, that *we should not turn to traditional religion for wisdom; rather that we should develop a new ethics* and a new method of moral order *founded upon the teachings of modern naturalism and physical science.*”¹⁹

The conclusion that we are just occurrences rather than designs leads to the other principle differences between theistic and non-theistic religions. **“Only an intelligent mind, one with the capacity for forethought, can have purpose..... For evolutionary biologists, the flower of a violet has a function, but not a purpose.”**²⁰ Accordingly, evolutionary occurrences that result from no intelligent cause are just happenings that lack purpose. Because human life has no inherent purpose, the Secular Humanist relies on human reason rather than traditional theism to provide life with purpose.

The consequence of this is explained by Kenneth Miller:

“As Wise makes clear, he believes that the real danger of evolutionary biology to Christianity is not at all what most scientists might suspect. It is not that evolution’s version of natural history threatens to unseat the central Biblical myths of unitary creation and the Flood. Rather, *it is the chilling prospect that evolution might succeed in convincing humanity of the fundamental purposelessness of life. Without purpose* to the universe, *there is no [inherent] meaning, there are no [inherent] absolutes, and there is no [inherent] reason for existence.*” (emphasis and commentary added) [Kenneth R. Miller, *Finding Darwin’s God: A Scientist’s Search for Common Ground Between God and Evolution*, 187 (Harper Collins, 1999)]

One might think this is really just academic. However, I would commend to your reading National Science Education standards which contemplate that children will know by the time they finish the fourth grade that living systems are just occurrences that have not been designed and made for a purpose. That standard has been adopted in both West Virginia and Kansas.²¹

We have now defined religion to include both theistic and non-theistic beliefs and we have shown the important differences between the two. The differences identify the reason for the profound controversy over design and evolution and why they are important in the competition between theistic and non-theistic religions.

As pointed out, the “*claims*” of evolution and ID as tentative scientific claims are not religious. This is because, as scientific claims, they must be theoretical. Their theoretical nature is also necessitated by the fact that they are historical claims about the cause of singular unobserved past events that can never be absolutely confirmed by observation and experiment. All we can ever do is assess which is the best current explanation based on the evidence collected to date about those past events. For this reason their explanatory power will vary as new discoveries are made. Presently the new discoveries are pushing the scales to the design side of the equation. Maybe in the future the scales will swing the other way. Neither claim becomes a religion or ideology until it is required to be accepted.

Secular Humanism is predicated on the idea that we have “no reason to believe in a creator.” This is because evolution shows that the Apostle Paul is wrong. Apparent design really is just an illusion. As explained by the National Academy of Science and the AAAS, natural phenomena lack the attribute of design. We are just occurrences and not designs. Because evolution is a “purposeless” process not guided toward any particular goal, human life has no inherent purpose. For the Secular Humanist, Rick Warren’s book *The Purpose Driven Life* is an absurdity.

On the other hand, design theory is powerful support for theistic beliefs. It provides a rational basis for belief in the idea that we were designed and made for a purpose. Scientific evidence that supports design supports theism, while scientific evidence that supports the competing evolutionary claim of no-design supports non-theistic beliefs.

Meaning of the Word “Respecting” in the Establishment Clause.

Now that we have defined terms we are ready to return to the Establishment Clause and look at the word “respecting.” The clause effectively reads that no public school “shall” adopt a policy “*respecting... religion.*”

Respecting is a very broad term. It means “regarding” or “concerning.” Concern means “to relate to; be connected with; be of interest or importance to; affect: *The water shortage concerns us all.*” A very literal interpretation of *respecting* would cause the Establishment clause to proscribe any governmental activity that affects religion. Thus, literally, a school could not teach evolutionary theory because it clearly affects the fundamental tenets of both theistic and non-theistic religions and belief systems.

To ensure that the term is not too prophylactic, the Court has chosen to restrict the meaning of “respecting” in the Establishment Clause by allowing government actions that touch religion if (a) the activity has a “secular purpose” and if (b) the primary effect of the activity on religion is neutral. [*Gillette v. United States*, 401 U.S. 437, 449-50 (1971)]:

“[T]he Establishment Clause stands at least for the proposition that when government activities **touch on the religious sphere**, they must be secular in purpose, evenhanded in operation, and neutral in primary impact.” [*Allegheny County v. Greater Pittsburgh ACLU*, 492 U.S. 573, 592 (1989); ruling against a nativity scene at the entrance of a government office.]

The question then becomes: Is it permissible under the Establishment Clause for the state to officially embrace methodological naturalism so that “all” children in the state will come to “know”²² that they are occurrences that have not been designed and made for a purpose? Is this OK, even though many parents would find this offensive to theistic beliefs they seek to instill in those children? Is it permissible for the State to officially suppress design and criticisms of evolution? Because the two competing claims dramatically affect both theistic and non-theistic belief, the answer would seem to be “**NO**” unless the state can show that the use of methodological naturalism in the discussion of origins has both a secular purpose and is neutral as between theistic and non-theistic religion.

What is the purpose of methodological naturalism? It is pretty clear that its purpose is to keep God or “supernatural” explanations out of science.

“...We take the side of science *in spite* of the **patent absurdity of some of its constructs**, *in spite* of its failure to fulfil many of its extravagant promises of health and life, *in spite* of the tolerance of the scientific community for just-so stories, because ***we 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, no matter how counterintuitive, no matter how mystifying to the uninitiated. **Moreover, that materialism is absolute, for we cannot allow a Divine Foot in the door.**” (emphasis added – the “*a priori adherence to material causes*” excludes design or intelligent causes for natural phenomena)²³

Its purpose is to keep science non-theistic. It essentially requires that scientific explanations of our origins, which so dramatically affect our religious beliefs, favor religious beliefs held by Secular Humanists, atheists, and theistic evolutionists who do not hold to traditional theistic views of creation.

Meaning of Secular - Does MN have a Secular Purpose?

So now we get down to a very critical question. What does “secular” mean?

Many would read secular to mean non-Christian. If that is the case, then methodological naturalism certainly meets that definition of secular. However, the dictionary definition means “non-religious:” “of or pertaining to worldly things or to things that are not regarded as religious..” The National Assessment Governing Board that administers the National Assessment of Educational Progress defines secular as an activity that neither “advocates or opposes any particular religious views or beliefs.”²⁴ This essentially reflects the “endorsement” test of religion

espoused by Justice O'Connor. A secular purpose is one that does not favor one particular religious view over another.²⁵

Thus in the context of this discussion a secular purpose is one that does not favor non-theistic beliefs and religions over theistic or vice versa. But methodological naturalism does exactly that. It not only favors, but actually promotes non-theistic beliefs and religions.

Mano Singham, a science educator and theoretical physicist who teaches at Case Western in Ohio explains it this way in an unpublished article:

“Are scientists, in fact, *dedicated materialists* who *are obliged by the nature of science itself to reject any outside agency* such as a God *who can influence the course of events*? The simplest response is to say 'yes' and move on, and many scientists who are also atheists have no trouble doing just that. For them, the whole ID/natural selection debate is meaningless, since *if you are a scientist you must necessarily be a materialist and thus must reject any role for ID*. [Mano Singham, *Are Scientists Materialists?* p. 2, (Unpublished essay, 12/4/01)]

Since Secular Humanism, Atheism, Agnosticism and Scientism can be classified as particular religious views or beliefs, then it seems pretty clear that the advocacy of Naturalism or scientific materialism would not be a secular purpose. It prejudices the all important questions: where do we come from? Are we designs or occurrences? Do we have an inherent purpose? When the state embraces Methodological Naturalism it requires itself to cause students to “know” that they come from purposeless natural rather than supernatural causes, that they are occurrences rather than designs and that they lack any inherent purpose. Accordingly, they are necessarily steered toward the idea that they should use human reason to answer all their questions in life, not traditional religion.

Science argues that MN is necessary to do good science, and is therefore secular even if it does discriminate against God. How can it be good science if it robs evolution of its theoretical status as a scientific theory and puts off limits entire areas of scientific inquiry. Design theory is needed because biochemistry can not be done without thinking of the genome as designed. This is explained by Michael Ruse, a highly regard Darwinian philosopher of science:

“Both history and present Darwinian evolutionary practice have shown us that this kind of design-type thinking is involved in the adaptationist paradigm. We treat organisms – *the parts at least* -- as if they were manufactured, as if they were designed, and then we try to work out their functions. End-directed thinking – teleological thinking – is appropriate in biology because, and only because, *organisms seem as if they were manufactured*, as if they had been created by an intelligence and put to work.”²⁶

If scientists cannot examine the evidence of design, then the patrons of science will never know anything about the validity of the claim of illusion. Presently the AAAS says there is no evidence of design. Is that true? Methodological Naturalism precludes an answer to that question. What is the secular pay-off for that? What is the secular benefit of not being able to contest that claim? You see, the construct actually destroys the credibility of science.

Clearly, the purpose of Methodological Naturalism is to keep a particular religious view out of science and out of the minds of the public and public school children. That is not a “secular” purpose.²⁷ Hence, under the establishment clause the state can not embrace it.

MN is not Religiously Neutral

The second prong of the Lemon test requires that the primary effect of the government practice in question be one that “neither **advances nor inhibits religion.**” This “effect” prong has been interpreted by the Court as requiring government to be “neutral” as to religion – that it not discriminate for or against religion.

“An attack founded on disparate treatment of "religious" claims invokes what is perhaps **the central purpose** of the Establishment Clause - **the purpose of ensuring governmental neutrality in matters of religion.....Necessarily the constitutional value at issue is "neutrality."** [Gillette v. United States, 401 U.S. 437, 449-50 (1971).]

Unlike the secular purpose prong, the neutral effect prong is not concerned with motive. It asks, regardless of the motive of the state, whether the *effect* of using Methodological Naturalism will be religiously neutral? It clearly is not. The doctrine will ensure that the listener is informed of only one side of a scientific controversy that has a major impact on theistic and non-theistic religion. That is not a neutral effect. That is a biased effect. That construct causes the state to prejudge one of the most important questions one may ask.

The Supreme Court cases dealing with origins science support the conclusion that government may not officially gerrymander this religiously charged debate to exclude a legitimate scientific disagreement with the core claim of evolution.²⁸

In both *Epperson v. Arkansas* and *Edwards v. Aguillard*²⁹ the state sought to suppress the scientific claim that natural phenomena are not designed. In *Epperson* the court said that if the state had sought to suppress all discussions of origins it might have made a case.³⁰ But when it sought to suppress only one side of the origins debate it crossed the line. In explaining the need for neutrality in matters touching religion the Court said at 103-106:

“Government in our democracy, state and nation, must be neutral in matters of religious theory, doctrine, and practice. ***It may not be hostile to any religion*** or to the advocacy of no-religion; and it may not aid, or foster or promote one religion or religious theory against another or even against the militant opposite. ***The First Amendment mandates government neutrality*** between religion and religion, and ***between religion and nonreligion.***

The State may not adopt programs or practices in its public schools or colleges which ‘aid or oppose’ any religion. Id. at 225. This prohibition is absolute. ***It forbids*** alike the preference of a religious doctrine or ***the prohibition of theory which is deemed antagonistic to a particular dogma.***” (emphasis added)

Similarly in *Edwards v. Aguillard*, the court said: “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.*”⁸ But under the Act's requirements, teachers *who were once free to teach any and all facets of this subject* are now unable to do so.”³¹

An official state policy that embraces methodological naturalism does exactly what the court in *Epperson* and *Edwards* were ruling against. Both deal with instances where the state has sought to suppress one side of the origins debate. In both *Epperson* and *Edwards* the official suppression of one of two views was deemed a violation of the establishment clause. If the state cannot officially suppress the claim of illusion, then it necessarily follows that it may not suppress the scientific disagreement.

Even if the religious issues are ignored, the Court has held that general First Amendment principles preclude the State from promoting an ideology. *West Virginia v. Barnette* and *Planned Parenthood v. Casey*³² hold that the state cannot promote an official ideology. In the recent Pledge case³³ Justice O'Connor, the swing vote on the court explained:

“Our cardinal freedom is one of *belief*; leaders in this Nation cannot force us to proclaim our allegiance to any creed, whether it be religious, *philosophic*, or political. That principle found eloquent expression in a case involving the Pledge itself, even before it contained the words to which respondent now objects. See *West Virginia Bd. of Ed. v. Barnette*, 319 U. S. 624, 642 (1943) (Jackson, J.)”

No Child Left Behind Requires Non-ideological Education.

A very interesting issue occurs when public schools fail in their task. This problem was specifically addressed in No Child Left Behind. The statute entitles the parents of children who have been left behind to receive supplemental educational services from providers of their choice. However there is a stipulation. Because the funds for providing the services are to be paid by the State, the Statue requires the provider to ensure that the educational services and materials that it delivers be (a) consistent with state educational standards adopted pursuant to No Child Left Behind, and (b) “secular, neutral and non-ideological.”³⁴

Although the statute does not explicitly so state, the implicit effect of this two pronged requirement is that the state standards themselves be secular, neutral and non-ideological. So, what does that phrase mean?

When I first came across this provision in the Act it hit me square that in four short words the phrase summarizes the holdings of the Supreme Court on First Amendment rights of students and parents. Unless public education is secular, neutral and non-ideological it will not be satisfying the purpose prong or neutral effect prong of the Lemon test. Neither will it satisfy the idea that the First Amendment guarantees each individual the right to be free from state sponsored ideologies. What is so fascinating is that the requirement appears to provide the statutory predicate for the advice of Congress that is contained in the report that accompanied the enactment of No Child Left Behind Act that Dave DeWolf just discussed.³⁵

In defining “neutral and non-ideological” the NAGB states:

“Neutral and Non-ideological — Items will not advocate for a single perspective on a controversial issue. An item may ask students to explain both sides of a debate, or it may ask them to analyze an issue, or to explain the arguments of proponents or opponents, without requiring students to endorse personally the position they are describing.”³⁶

State sponsored methodological naturalism flies in the face of this advice. It guarantees that only one side of the origins question will be presented. It is no different than *Epperson v. Arkansas* reversed. State sponsored naturalism is not secular, it is not neutral and it effectively promotes the ideology that is the foundation for non-theistic religions and religious beliefs at the expense of theistic beliefs.

For these reasons states should abandon Evolution Only policies not only because good science dictates that result, but because it violates the First Amendment rights of parents and students.

In the conclusion of the *Origin of the Species*, Darwin expressed a hope that is now being renewed by a growing number of scientists around the world. He said that he looked “with confidence to the future – to young and rising naturalists, who will be able to view both sides of the question with impartiality.”³⁷ Thankfully, good science and our Constitution actually necessitate fulfillment of that desire.

Whenever I do a talk I end with a question and a quote that has been attributed to Thomas Huxley: “*Science commits suicide when it adopts a creed.*” Has science adopted a creed when it will not allow disagreement with Darwin’s core claim?

Notes

1. For a recent fairly comprehensive discussion of the scientific, cultural, religious and legal issues see John H. Calvert, *Are we designs or occurrences? Should science and the state prejudge the question?* (IDnet, 2003, www.IntelligentDesignNetwork.org/Designsoroccurrences111003.pdf). See also William S. Harris, PhD and John H. Calvert, JD, *Intelligent Design, the Scientific Alternative to Evolution*, p. 542-549 (*The National Catholic Bioethics Quarterly*,” Autumn, 2003).
2. Section 1111(b)(1)(D)(i)(I) of the No Child Left Behind Act requires that State educational standards required under the Act “specify what children are expected to know and be able to do.”
3. ID is simply the scientific disagreement with the Darwinian claim of no-design. See Note 8. It is a logical inference derived from an observation and analysis of the data and not from any religious text. Any discussion of design is focused on the constraints of the laws of physics and chemistry, concepts of chance, probability theory and statistics, information theory, biochemistry, geology, paleontology and patterns of change found in the fossil record. ID asks questions that Darwinism should be able to explain and uses end-directed or teleological thinking and reverse engineering to solve biochemical problems. There is always a worry that ID will give rise to a discussion of the identity of the designer. However, the very straight forward response is that the data simply does not answer that question, if indeed the claim of design is correct. That is a question properly reserved for religion.

4. Before Darwin “there was no alternative explanation for apparent design.” “Natural Selection is the blind watchmaker, blind because it does not see ahead, does not plan consequences, *has no purpose in view*. Yet the living results of natural selection *overwhelmingly impress us with the appearance of design* as if by a master watchmaker, impress us with the *illusion of design* and planning. The purpose of this book is to resolve this paradox to the satisfaction of the reader, and the purpose of this chapter is further to impress the reader with the power of the *illusion of design*.” Richard Dawkins, *The Blind Watchmaker: Why The Evidence of Evolution Reveals A Universe Without Design*” p. 6, 21, (W.W. Norton & Company, 1996).
5. James Barham, explains the “mechanistic consensus” held by many in science. That consensus “holds that (1) the known laws of physics and chemistry, together with special disciplines such as molecular biology, fully explain how living things work, and (2) the theory of natural selection explains how these laws have come to cooperate with one another to produce the appearance of design in organisms. According to the Mechanistic Consensus, design is not objectively real but merely an optical illusion, like the rising and setting of the sun. On this view, living matter is nothing special. It is just chemistry shaped by natural selection.” James Barham, *The Emergence of Biological Value* (Chapter 11 of *Debating Design*, Ed. Dembski & Ruse, Cambridge University Press 2004)
6. See Kansas Science Education Standards, adopted February 14, 2001, Fourth Grade, Life Sciences, Standard 5, Benchmark 3 and the National Science Education Standards benchmark from which the Kansas Standard was derived. They teach that there are two kinds of objects in the world - natural and designed. The former just “occur,” while the latter have been designed and made for a purpose. This dichotomy teaches that natural objects lack the attribute of design.
7. See Memorandum: Response to the Resolution of the American Association for the Advancement of Science that seeks to censor intelligent design, dated December 19, 2002 <http://www.intelligentdesignnetwork.org/ResponseToAAAS.htm> and the attached AAAS resolution.
8. See Note 3. The claim is based on the inadequacy of known physical and chemical laws and chance to explain specified complex information that provides for biological function in living systems. The work of William Dembski, Michael Behe and others reflect the truly scientific nature of the counter argument. It is not based on speculation or faith, but rather on the logical analysis of observed data and experiment. A recent paper by Stephen Meyer explains mutagenesis experiments that provide powerful support for the argument. Stephen C. Meyer, *The Origin of Biological information and the higher taxonomic categories*, *Proceedings of the Biological Society of Washington*, Vol 117(2), p. 213-239 (August 4, 2004).
9. *Webster's Third New International Dictionary of the English Language, Unabridged*, 1993). This authoritative dictionary is a good source for this definition because it is the dictionary used by the Supreme Court in deciding the meaning of controversial terms.
10. Edward J. Larson and Larry Witham: *Leading Scientists Still Reject God* (Nature, July 23, 1998 issue). Science does take a position on the existence of God. It suppresses evidence that would support rational arguments for the existence of a God. It also takes a position on whether any God has intervened in the natural world since coming into being and it takes a position on whether natural objects and systems have inherent purpose.
11. The argument is frequently made that methodological naturalism accounts for all of the extraordinary progress of science in the past two centuries. This loses sight of the fact that it is the scientific method and its promotion of thinking out of the box, not irrefutable assumptions used in origins science that has promoted that progress. The argument ignores the historical nature of origins science and how that assumption actually undercuts the credibility of historical explanations where competition among alternative hypotheses is critical. One need not abandon methodological naturalism in areas where that assumption may be helpful. In origins science it is actually counterproductive because it exempts evolutionary theory from true critical analysis. Furthermore, it is an assumption that is not actually used in current bioengineering. As explained by Michael Ruse biochemists use an assumption of design in seeking to understand the “function” of living systems. “Teleological” thinking is not only used but

- “necessary.” [Michael Ruse, *Darwin and Design: Does evolution have a purpose?*, p. 268 (Harvard, 2003).]
12. Kenneth R. Miller refers to Naturalism as “scientific materialism:” *Finding Darwin’s God: A Scientist’s Search for Common Ground Between God and Evolution*, 27 (Harper Collins, 1999). He tries to explain why the materialism that undergirds evolutionary biology need not conflict with theism. He fails, because he never explains how any materialistic process driven only by law and chance can produce purpose and why a materialistic explanation does not destroy the evidentiary basis for theistic belief. If the observed appearance of design is merely an illusion because it can be explained fully without resort to a mind or any form of intelligence, then the inference that supports theistic belief crumbles. Although Miller recognizes both of these problems as the central issues, he never reconciles them.
 13. All standard high school biology textbooks have a section on the origin of life. The books then explain how it’s diversity arose via only natural causes. Methodological Naturalism and these books assume irrefutably that life arose via a natural cause. This is a critical assumption that is not supported by the available evidence. Given the lack of evidentiary basis for the assumption, design does become the best current explanation for the origin of life. If design best explains the origin of life, Occam’s Razor would seem to cut off natural causes as the sole source of subsequent modifications.
 14. My talk only covers certain aspects of the First Amendment of the US Constitution, particularly the Establishment Clause.
 15. The Free Exercise clause provides a powerful basis for an attack on state sponsored Naturalism. See “*Are we designs or occurrences? Should science and the state prejudge the question?*” (IDnet, 2003, www.IntelligentDesignNetwork.org/Designsoroccurrences111003.pdf)
 16. *Torcaso v. Watkins*, 367 U.S. 488, 495 n. 11, (1961)
 17. *United States v. Seeger*, 380 U.S. 163, 166 (1965). *Welsh v. United States*, 398 U.S. 333, 357-8 (1970) (J. Harlan, concurring): “However, having chosen to exempt, it cannot draw the line between theistic or non-theistic religious beliefs on the one hand and secular beliefs on the other. Any such distinctions are not, in my view, compatible with the Establishment Clause of the First Amendment. See my separate opinion in *Walz v. Tax Comm’n*, 397 U.S. 664, 694 (1970); *Epperson v. Arkansas*, 393 U.S. 97 (1968); *School District of Abington Township v. Schempp*, 374 U.S. 203, 305 (1963) (Goldberg, J., concurring); *Engel v. Vitale*, 370 U.S. 421 (1962); *Torcaso v. Watkins*, 367 U.S. 488, 495 (1961); *Fowler v. Rhode Island*, 345 U.S. 67 (1953).
 18. New International Version, Disciples Study Bible, p. 1,417 (Holoman Bible Publishers, 1988). A recent article in *Discover* shows how anthropologists use the same evidence used by the Apostle Paul to infer the existence and nature of a Divine mind, to infer the prior existence and nature of human minds:

“Scientists don’t yet know how that modern mind came into existence. The question is particular hard to answer because they can’t get into the brain of *H. ergaster* or any of our ancestors. Instead they have to infer what those ancient minds were like **by looking at the things they made** Klein . . . has offered a **controversial theory**: The modern mind is the result of a rapid genetic change.” Carl Zimmer, *Great Mysteries of Human Evolution*, p. 40 (*Discover*, September 2003) The theory of rapid change is “controversial” because it allows little time for a gradual evolutionary process to operate. Sudden change is the kind of evidence that supports design theory because it tends to rule out chance as a likely explanation for the change.
 19. *Smith v. Board of School Commissioners of Mobile County*, 655 F. Supp, 939, (SD Ala 1987, holding that Secular Humanism is a religion) *rev’d* on other grounds 827 F2d 684(11th Cir 1987).
 20. “It cannot be sufficiently emphasized that before Darwin, both philosophers and people in general answered “Why?” questions by citing purpose. **Only an intelligent mind, one with the capacity for forethought, can have purpose.**

The entire tradition of philosophical explanation by the purposes of things, with its theological foundation, was made completely superfluous by Darwin's theory of natural selection. The adaptations of organisms—long cited as the most conspicuous evidence of intelligent design in the universe—could now be explained by purely mechanistic causes. **For evolutionary biologists, the flower of a violet has a function, but not a purpose. ... The profound, and deeply unsettling, implication of this purely mechanical, material explanation for the existence and characteristics of diverse organisms is that we need not invoke, nor can we find any evidence for, any design, goal, or purpose anywhere in the natural world, except in human behavior.** Douglas J. Futuyma, *Evolutionary Biology, Third Edition*, p. 10 (Sinauer Associates, Inc. 1998)

21. The issue is discussed in letters issued to the Kansas and West Virginia State Boards of education that are posted at www.IntelligentDesignNetwork.org in the following documents: 6thdraftrevisions.htm (Letter to Kansas State Board dated January 5, 2001); Feb8letterKSBE.htm (Letter to Kansas State Board Dated February 8, 2001); wvletter.htm (Letter dated January 6, 2003 to the West Virginia Department of Education) and Feptytolerner.pdf (Letter to West Virginia Board of Education dated February 17, 2004).
22. The goal of No Child Left Behind and public education today is to define what children are to “know and be able to do” after their training. See Note 2.
23. Richard Lewontin, *Billions and Billions of Demons*, (*The New York Review*, January 9, 1997, p. 31)
24. See Attached policy of the National Assessment Governing Board.
25. “When a court confronts a challenge to government-sponsored speech or displays, I continue to believe that the endorsement test ‘captures’ the essential command of the Establishment Clause, namely, that government must not make a person's religious beliefs relevant to his or her standing in the political community by conveying a message ‘that religion or a particular religious belief is favored or preferred.’” *Elk Grove Unified School District et Al. V. Newdow et al.*. Concurring opinion by Justice O’Connor (June 14, 2004).
26. Michael Ruse, *Darwin and Design: Does evolution have a purpose?*, p. 268 (Harvard, 2003).
27. It might be if Methodological Naturalism was confined to the sciences that do not deal with the question of origins. However, when it is applied to origins it effectively answers the question *Where do we come from?* before it is even asked. It prejudges the answer to that question. A huge Constitutional problem arises when science seeks to cause the state to embrace that prejudice.
28. *Welsh v. United States*, 398 U.S. 333, 356-7 (1970), See note 15 of Justice Harlan’s concurring opinion: “The Establishment Clause case that comes most readily to mind as involving ‘underinclusion’ is *Epperson v. Arkansas*, 393 U.S. 97 (1968); There the State prohibited the teaching of evolutionist theory but ‘did not seek to excise from the curricula of its schools and universities all discussion of the origin of man.’” The conscientious objector cases show that government may not gerrymander classes based on particular tenets of religious beliefs so that certain religious beliefs are favored while those holding other beliefs are not. Thus, government may not gerrymander exemptions from the draft based on whether a belief system is one which adheres to a God, no God or simply a moral conviction. *United States v. Seeger*, 380 U.S. 163 (1965), (conscientious objection on non-theistic religious grounds sustained) and *Welsh v. United States*, 398 U.S. 333 (1970), (conscientious objection on moral rather than any theistic or non-theistic religious ground sustained). *Church of Lukumi Babalu Aye v. City of Hialeah*, 508 U.S. 520 (1993); declaring invalid city ordinances narrowly tailored to proscribe ritual sacrifices of animals for religious purposes but not proscribing other nonreligious forms of animal sacrifice, such as fishing. The Court said at 536: “The Free Exercise Clause, like the Establishment Clause, extends beyond facial discrimination. The Clause ‘forbids subtle departures from neutrality,’ ... and ‘covert suppression of particular religious beliefs’... Official action that targets religious conduct for distinctive treatment cannot be shielded by mere compliance with the requirement of facial neutrality. **The Free Exercise Clause protects against governmental hostility which is masked as well as overt.** ‘The Court must survey

meticulously the circumstances of governmental categories to eliminate, as it were, religious gerrymanders.’”

29. *Epperson v. Arkansas*, 393 U.S. 97, 116 (1968); *Edwards v. Aguillard*, 482 U.S. 578, 107 S.Ct. 2573 (1987)
30. *Welsh v. United States*, 398 U.S. 333, 356-7 (1970), See note 15 of Justice Harlan’s concurring opinion: “The Establishment Clause case that comes most readily to mind as involving ‘underinclusion’ is *Epperson v. Arkansas*, 393 U.S. 97 (1968); There the State prohibited the teaching of evolutionist theory but “did not seek to excise from the curricula of its schools and universities all discussion of the origin of man.”
31. *Edwards v. Aguillard*, 482 U.S. 578, 588-9; 107 S.Ct. 2573 (1987)
32. In *Planned Parenthood v. Casey*, 505 U.S. 833, 851 (1992) Justice O’Connor stated that “[a]t the heart of liberty is the right to define one’s own concept of existence, of meaning, of the universe, and of the mystery of human life. Beliefs about these matters could not define the attributes of personhood were they formed under compulsion of the State.” Similarly, in *West Virginia v. Barnette* the court held that the state may not require students to recite the pledge of allegiance (before the insertion of the “under God” phrase) and a salute to the US Flag: “If there is any fixed star in our constitutional constellation, it is that **no official**, high or petty, **can prescribe what shall be orthodox** in politics, nationalism, religion, or other matters of opinion or force citizens to confess by word or act their faith therein.” *West Virginia Board of Education v. Barnette*, 319 U.S. 624, 642 (1943). See also *Board of Education v. Pico*, 457 U.S. 853, 879 (1982); and *Keyishian v. Board of Regents*, 385 U.S. 589, 603 (1967).
33. *Elk Grove Unified School District et Al. V. Newdow et al.*. (June 14, 2004)
34. A number of provisions in NCLB indicate that it is inappropriate for States to adopt or implement educational standards that fail to be secular, neutral and nonideological. Sections 1116(b) and 1116(e)(5)(D), relating to School Improvement, require schools which have failed to make adequate yearly progress to provide supplemental educational services from outside providers. The instructional content of the services and materials provided must be consistent with state standards and also be “secular, neutral and nonideological.” Similarly, services and materials provided by the State to private school students and teachers and certain immigrants under the Act are required to be “secular, neutral and nonideological.” (See sections 1120(a)(1), 3245 (a)(7)(A), 9501 (a)(2); Section 5142(a)(1). This would seem to effectively require that State standards themselves be “secular, neutral and nonideological. The Act also requires that all items selected for use in the National Assessment of Educational Progress “are **free from racial, cultural, gender, or regional bias and are secular, neutral and nonideological.**” (See amended Section 412 (e)(4) of the National Education Statistics Act of 1994). These requirements merely reflect the holdings of the Supreme Court in a number of cases. See John H. Calvert, *Are we designs or occurrences? Should science and government prejudge the question?* pp 24 -32 (Intelligent Design network, inc. 2003) at www.IntelligentDesignNetwork.org/Designsoroccurrences111003.pdf. The concept of neutrality effectively proscribes government from taking an official position on any form of **orthodoxy** affecting a variety of beliefs. “If there is any fixed star in our constitutional constellation, it is that **no official**, high or petty, **can prescribe what shall be orthodox** in politics, nationalism, religion, or other matters of opinion or force citizens to confess by word or act their faith therein.” *West Virginia Board of Education v. Barnette*, 319 U.S. 624, 642 (1943); *Board of Education v. Pico*, 457 U.S. 853, 879 (1982); *Keyishian v. Board of Regents*, 385 U.S. 589, 603 (1967)
35. “The Conferees recognize that a quality science education should prepare students to distinguish the data and testable theories of science from religious or philosophical claims that are made in the name of science. Where topics are taught that may generate controversy (such as biological evolution), the curriculum should help students to understand the full range of scientific views that exist, why such topics may generate controversy, and how scientific discoveries can profoundly affect society.” [No Child Left Behind Act of 2001, Conference Report to Accompany H.R. 1, page 703, (December 13, 2001, House

Report No. 107-334)]

36. National Assessment Governing Board, *Collection and Reporting of Background Data by the National Assessment of Educational Progress Policy Statement, Appendix A, Definitions of Secular, Neutral, and Non-ideological: Item Review Criteria* (NAGB, May 18, 2003). The full definition adopted by the NAGB is attached.
37. Charles Darwin, *The origin of the Species by Means of Natural Selection or the Preservation of Favored Races in the Struggle for Life*, p. 639 in the “Conclusion” (The Modern Library 1998).

APPENDIX A

Definitions of Secular, Neutral, and Non-ideological Item Review Criteria

From Governing Board Policy on NAEP Item Development and Review—5/18/02

Items shall be secular, neutral, and non-ideological. Neither NAEP nor its questions shall advocate a particular religious belief or political stance. Where appropriate, NAEP questions may deal with religious and political issues in a fair and objective way. The following definitions shall apply to the review of all NAEP test questions, reading passages, and supplementary materials used in the assessment:

Secular — NAEP questions will not contain language that advocates or opposes any particular religious views or beliefs, nor will items compare one religion unfavorably to another. However, items may contain references to religions, religious symbolism, or members of religious groups where appropriate.

Examples: The following phrases would be acceptable: “shaped like a Christmas tree,” “religious tolerance is one of the key aspects of a free society,” “Dr. Martin Luther King, Jr. was a Baptist minister,” or “Hinduism is the predominant religion in India.”

Neutral and Non-ideological — **Items will not advocate for** a particular political party or partisan issue, for any specific legislative or electoral result, or for **a single perspective on a controversial issue. An item may ask students to explain both sides of a debate, or it may ask them to analyze an issue, or to explain the arguments of proponents or opponents, without requiring students to endorse personally the position they are describing.** Item writers should have the flexibility to develop questions that measure important knowledge and skills without requiring both pro and con responses to every item. (Emphasis not contained in Appendix issued by NAGB)

Examples: Students may be asked to compare and contrast positions on states rights, based on excerpts from speeches by X and Y; to analyze the themes of Franklin D. Roosevelt’s first and second inaugural addresses; to identify the purpose of the Monroe Doctrine; or to select a position on the issue of suburban growth and cite evidence to support this position. Or, students may be asked to provide arguments either for or against Woodrow Wilson’s decision to enter World War I. A NAEP question could ask students to summarize the dissenting opinion in a landmark Supreme Court case.

The criteria of neutral and non-ideological also pertain to decisions about the pool of test questions in a subject area, taken as a whole. **The Board shall review the entire item pool for a subject area to ensure that it is balanced in terms of the perspectives and issues presented.** (emphasis added)