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Kansas State Board of Education
Kansas Department of Education
120 S.E. 10th Ave.
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To the Members of the Kansas State Board of Education:

I support, generally, the revisions to the draft Kansas Science Education Standards, Draft Two, dated March 9, 2005 (called the "Draft Standards" herein) proposed by the committee's minority in its "Proposed Revisions to Kansas Science Standards Draft 2, With Explanations," dated March 29, 2005 (called the "Second Committee Minority Report" herein), but for reasons separate from and in addition to the reasons stated in either the December 10, 2004 or the March 29, 2005, committee minority report. I note that the March 9 Draft Standards represent a significant improvement over the prior draft. However, I fully agree with the committee minority that the strictly naturalistic approach advocated by the committee draft of the science education standards (and by the current standards) is bad for education, in that it encourages students to simply dismiss religious explanations of the world rather than to think critically about them. Moreover, as I will show in this letter, the insistence on naturalism as the only road to truth leads to the unconstitutional establishment of a pantheistic religious worldview. I will demonstrate from legal and Constitutional history sources that, just as the Constitution forbids the public schools to teach that traditional Christianity is true, so also it forbids them to teach that pantheism is true. Both are religions, and deceptively mis-labeling pantheism as "science" does not change its true religious character. I will also show that First Amendment freedom of speech is implicated when the teaching of only one religious philosophy to the exclusion of others is mandated by a governmental standard. I will also deal with the insistence on "testability" expressed by the peer reviewers of the first minority report by showing that neither the evolutionary assumption nor the assumption of an intelligent designer is inherently testable. Thus, the Board has no basis, either in logic or in the Constitution, to affront those parents and taxpayers who believe that a God created the universe by decreeing that His non-involvement in our origins is an established "scientific fact" while simultaneously excluding their beliefs from the classroom as a "religious myth."

I am both a public school parent and a taxpayer, and thus have undeniable standing to raise this issue.

EVOLUTIONISM AS PANTHEISM

*Webster's Third New International Dictionary of the English Language*¹ defines "pantheism" as:

1: a doctrine that the universe conceived of as a whole is God: the doctrine that there is no God but the combined forces and laws that are manifested in the existing universe.

Pantheism is a religious system, and the terms "pantheism" or "pantheistic" describe a group of religions or religious concepts that go back to ancient times. Three notable but widely differing examples of this are the fundamental Hindu concept of *brahman*², Lao Tzu's concept of the *tao*³, and the *wakan* concept in Lakota spirituality⁴. I will demonstrate below that, when the concept of evolution is carried beyond being simply the underlying assumption of a group of scientific "theories" to incorporate an insistence that the assumption underlying them is absolutely true, the result is a pantheistic religion rather than science.

One of the best short summaries of biological evolution ever written was written by a physicist as part of a discussion of cosmology. In his popular book *A Brief History of Time*, Nobel laureate Stephen Hawking, after spending a page and a half summarizing the presumed history of the universe from one second after the big bang to the formation of the Earth, included the following simplified description of biological evolution:

The earth was initially very hot and without an atmosphere. In the course of time it cooled and acquired an atmosphere from the emission of gases from the rocks. The early atmosphere was not one in which we could have survived. It contained no oxygen, but a lot of other gases that are poisonous to us, such as hydrogen sulfide (the gas that gives rotten eggs their smell). There are, however, other primitive forms of life that can flourish under such conditions. It is thought that they developed in the oceans, possibly as a result of chance combinations of atoms into large structures, called macromolecules, which were capable of assembling other atoms in the ocean into similar structures. They would thus have reproduced themselves and multiplied. In some cases there would be errors in the reproduction. Most of these errors would have

¹ (Springfield, MA: Merriam-Webster, Inc. 1961).

² See, Simon Weightman, "Hinduism," in Hinells, John R., Ed., *The New Penguin Handbook of Living Religions* (NY: Penguin 1997), p. 282. This fundamental concept takes many forms, most of which are not obviously pantheistic.

³ See, Liu Xiaogan, "Taoism," in Sharma, Arvind, Ed., *Our Religions* (NY: Harper-Collins 1993), pp.231-232, 240-244. Indeed, the early Taoist concept of *tzu-jan*, the natural development of the universe, corresponds closely to the modern "naturalistic" assumption underlying evolutionary theories. Later Taoist philosophers put the individual adherent in the center of the universe (or, perhaps more correctly, the process), resulting in a system, or ultimately a group of competing philosophical systems, which were less clearly pantheistic

⁴ See Armin W. Geertz, "Native North American Religions" in Sharma, *op. cit.*, 533; Powers, William K., *Sacred Language: The Nature of Supernatural Discourse in Lakota* (Norman: Univ. of Oklahoma Press 1992).

been such that the new macromolecule could not reproduce itself and eventually would have been destroyed. However, a few of the errors would have produced new macromolecules that were even better at reproducing themselves. They would have therefore had an advantage and would have tended to replace the original macromolecules. In this way a process called evolution was started that led to the development of more and more complicated, self-reproducing organisms. The first primitive forms of life consumed various materials, including hydrogen sulfide, and released oxygen. This gradually changed the atmosphere to the composition that it has today, and allowed the development of higher forms of life such as fish, reptiles, mammals, and ultimately the human race⁵.

Hawking included this description of biological evolution in his summary of the origin of the universe for the express purpose of demonstrating that the questions of the origin of the universe and the origin of life really cannot be separated. They are part of the same big picture. This is exactly the point made on page 13 of the Draft Standards, in the section of the “Introduction” entitled “Patterns of Cumulative Change,” which states, as one of the five “Unifying Standards and Processes” without which science would not be science, the following summary of the evolutionary assumption:

Accumulated changes through time, some gradual and some sporadic, account for the present form and function of objects, organisms, and natural systems. The general idea is that the present arises from materials and forms of the past. An example of cumulative change is the formation of galaxies, explained by cosmological theories involving (among other theories) gravitation and the behavior of gasses, and the present diversity of living organisms, explained by the biological theory of evolution, or descent with modification of organisms from common ancestors. The present position of the continents is explained by the theories of continental drift, which involves plate tectonic theory, fossilization, uplift and erosion. Patterns of cumulative change also help to describe the current structure of the universe.⁶

The committee’s draft standards in a number of places present this naturalistic, evolutionary explanation as something which is to be taught as true, not as a controversial concept. See, for instance, the section “Nature of Science” on page 11 of the Introduction; 5th-7th Grade, Standard 3, Benchmark 5, Teachers’ Notes; 8th-12th Grade, Standard 3, Benchmark 3; 8th-12th Grade, Standard 4, Benchmark 2, Item 1; 8th-12th Grade, Standard 4, Benchmark 4; 8th-12th Grade, Standard 7, Benchmark 1, Items 4 and 5; and 8th-12th Grade, Standard 7, Benchmark 3, Item 1. Indeed, the “Nature of Science” section is careful to specify that “science” includes only *natural* causes, thereby guaranteeing that the possibility of causes outside of nature will be ignored:

Science is a human activity of systematically seeking *natural explanations* for what we observe in the world around us. Throughout history people from many

⁵ Hawking, Stephen, *A Brief History of Time* (New York: Bantam 1996), pp. 124-125.

⁶ Draft Standards, p. 13.

cultures have used the methods of science to contribute to scientific knowledge and technological innovations, making science a worldwide enterprise. Scientists test explanations against the natural world, logically integrating observations and tested hypotheses with accepted explanations to gradually build more reliable and accurate understandings of nature. Scientific explanations must be testable and repeatable, and findings must be confirmed through additional observation and experimentation. As it is practiced in the late 20th and early 21st century, *science is restricted to explaining only the natural world, using only natural cause*. This is because science currently has no tools to test explanations using non-natural (such as supernatural) causes.

Draft Standards, p. 11 (emphasis added).

The logical conclusion of this insistence is pantheism, by the dictionary definition, as Hawking explains:

On the other hand, the quantum theory of gravity has opened up a new possibility, in which there would be no boundary to space-time and so there would be no need to specify the behavior at the boundary. There would be no singularities at which the laws of science broke down, and no edge of space-time at which one would have to appeal to God or to some new law to set the boundary conditions for space-time. One could say: "The boundary condition of the universe is that it has no boundary." The universe would be entirely self-contained and not affected by anything outside itself. It would be neither created nor destroyed. It would just BE⁷...

The idea that space and time may form a closed surface without boundary also has profound implications for the role of God in the affairs of the universe. With the success of scientific theories in describing events, most people have come to believe that God allows the universe to evolve according to a set of laws and does not intervene in the universe to break these laws. However, the laws do not tell us what the universe should have looked like when it started--it would still be up to God to wind up the clockwork and choose how to start it off. So long as the universe had a beginning, we could suppose it had a creator. But if the universe is really completely self-contained, having no boundary or edge, it would have no beginning or end: it would simply be. What place, then, for a creator⁸?

All of the world's great monotheistic religions ascribe to God three classes of attributes, namely "metaphysical" attributes, "personal" attributes and "moral" attributes. The "metaphysical" attributes are those that give Him the right to be called a "god," and include His self-existence, eternity, creatorhood, omnipresence and transcendence. The "personal" attributes are those which identify God as a distinct person rather than an impersonal force of nature, and include personality and intelligence. The "moral"

⁷ Hawking, *op. cit.*, p. 141

⁸ Hawking, *op. cit.*, p. 145-146

attributes are those which allow Him to be called “good,” and include such things as His justice, love, holiness and truth. As the above-quoted portions of the Draft Standards show, and the quotation from Stephen Hawking brings out quite clearly, when evolution is declared the only allowed explanation for how the universe and life in it came to be, the logical result is to ascribe to the universe itself all of the metaphysical attributes of God. That is, instead of a self-existent and eternal God creating the universe, the universe itself is self-existent (“it would just BE”), eternal (unbounded in time) and created itself. Similarly, while God is not omnipresent or transcendent (because He is not needed and therefore does not exist), the laws of nature are omnipresent and immanent⁹. Thus, the universe itself, and its laws, become an impersonal, non-intelligent god--the only god allowed by this system of thought. This is pantheism by the dictionary definition of that term. It is a religion.

NOTE ABOUT THE TESTABILITY OF THE EVOLUTIONARY VERSUS INTELLIGENT DESIGN UNDERLYING ASSUMPTIONS

Some of the peer reviewers of the committee’s first minority report insisted that the proponents of the concept of intelligent design must show it to be “testable,” and must present data confirming it, before it may be accepted as science. In response, the committee’s minority removed the words “intelligent design” from the proposed standards in the second minority report. While this decision to remove the term “intelligent design” from the proposed standards may have been justified for the purpose of avoiding overt endorsement of one particular organization’s theistic view of our origins, the fact remains that, once one agrees that the universe around us is real¹⁰, there are only two possible choices of underlying assumption about its origins: either 1) it simply exists and came to its present state entirely by the operation of mindless processes or 2) some outside intelligence was involved in its creation. The peer reviewers of the committee’s first minority report faulted the proponents of intelligent design because their position is not testable. However, there are two problems with this insistence on testability.

First, neither random evolution nor intelligent design, *as an underlying concept*¹¹, is theoretically testable. No human was present to see whether life on Earth evolved

⁹ Of course, by denying God’s metaphysical existence in any form other than as the collected, impersonal forces of nature, this naturalistic religious philosophy necessarily denies His personality and intelligence. Moreover, since the impersonal forces of nature lack intelligence, they are also necessarily amoral. Thus, this system also denies God’s possession of the moral attributes traditionally ascribed to him. These moral attributes are either ignored as irrelevant to science or are ascribed to individual humans, to human society at large, to social or governmental institutions, or to social conditioning, in sciences like psychology and sociology which cannot regard them as completely irrelevant.

¹⁰ I recognize that certain religions and some secular philosophers deny the reality of the physical universe, rendering the question of its origins moot. However, in the discussion that follows, I assume the reality of the universe

¹¹ I am speaking here of the underlying concepts only, not about any particular theory based on them. I am not here arguing the merits of any particular body of evolutionary theory or any particular theories espoused by the proponents of intelligent design who have appeared before the committee or by the written materials considered by the committee.

randomly or was created by an outside intelligence. I cannot say from my own observation that life, or the universe, was created, and I do not know of any other human who can. By the same token, however, I am not aware of anyone who can report being present to watch the universe or life on earth evolve. No one was there to watch it happen. Moreover, no test that can be done today can replicate the evolution of the universe or of life, thereby directly showing that it *could have* happened. Further, even assuming *arguendo* a test could be done which would directly show the *possibility* of evolution, or of creation by an outside intelligence, showing the possibility would not show that what we see actually originated in that way. No one was there to see it. This distinguishes the controversy between the underlying concepts of evolution and intelligent design from most other scientific controversies. The underlying concepts behind *both* positions are inherently untestable in the present time. While this, by itself, might be a good reason to label *both* positions as inherently *religious*, it certainly does not justify embracing one position as “science” while dismissing the other one as “religion.”

Second, as the testimony before the Board’s science education standards committee certainly shows and will continue to show, neither evolution nor intelligent design comes as a single body of theory on which all of its proponents agree. Instead, each broad position comprises within itself a range of competing theories. As the committee’s draft science standards themselves recognize, science is “open-ended,” and theories within it are inherently flexible, continuously subject to revision to conform to new observations. See, e.g., Draft Standards, Introduction, “Nature of Science;” 8th-12th Grade Standard, Standard 7, Benchmark 2, Item 1(c). Moreover, where more than one theory explains the existing body of observations, no single theory among them can generally be concluded to be correct, or more correct than the others¹². In the case of biological evolution and intelligent design, at least some of the theories in each camp are flexible enough to adequately explain all of the presently known data about present and past forms of life. Thus, the present data do not tell us unambiguously whether life is the result of a random process or an intelligently-caused or -directed process. The same can be said of cosmological and geologic evolution. Moreover, unless and until someone actually sees God, or conclusively proves that there is no God, it will always be possible to explain all of the existing data either with reference to deity or without it. Thus, this fundamental question of random process versus intelligent process will remain unanswered and unanswerable by scientific observation alone. It will remain a matter of philosophical speculation or religious belief, not pure science.

It is sometimes asserted that the logical principle of parsimony known as “Occam’s Razor” resolves this question in favor of a purely random process. However, it should be noted that the test originally proposed by William of Ockham stated “Plurality should not be posited without necessity”¹³. As applied to the question of whether an intelligence was involved in the origin of the universe, or of life, it is a double-edged razor. To be sure, positing the involvement of a deity adds a level of complexity (“plurality”), by adding an extra cause. On the other hand, adding immense periods of

¹² Indeed, they may all be simultaneously correct, alternative views of the same subject.

¹³ Wikipedia, “Occam’s Razor.”

unobservable time to explain how a long series of extremely improbable events might have randomly occurred in the required sequence also adds complexity. Moreover, given that the Second Law of Thermodynamics is recognized in principle to govern everything we observe (see 8th-12th Grade Standard, Standard 2B, Benchmark 2, Item 3), adding to an explanatory theory the idea that regions of space-time can spontaneously, without outside intelligent ordering, generate a high degree of order and maintain that order for the billions of years required for something as complex as life to evolve, also adds a level of complexity to the explanation. Deciding which alternative adds more complexity is a matter of individual philosophical preference--or of religious conviction. Ockham himself was a Franciscan friar, and would not have proposed his razor as a means of excluding God from the universe!

DOES THE COMMITTEE DRAFT ESTABLISH EVOLUTION AS THE OFFICIAL DOCTRINE OF THE STATE OF KANSAS?

As the portions of the Draft Standards discussed in the previous section show, the standards positively prescribe a purely naturalistic approach that explicitly places the universe and its laws in the place of God. The question asked in this section is whether the Draft Standards would, if adopted, establish this form of naturalistic pantheism as the official doctrine of the State of Kansas. The answer is clearly that they would do so. All of the historical elements of a religious “establishment” are satisfied.

Establishment of a state religion, as it had been practiced in Europe, as well as in England and most of the American Colonies prior to the American Revolution, had six basic elements: 1) declaration that a single¹⁴ church organization was the official state church¹⁵; 2) levying of tithes or lesser taxes for the support of that organization¹⁶; 3) maintenance of an officially-sanctioned body of doctrine or confession of faith¹⁷; 4) requirements of membership in the established church or public profession of the official statement of faith as a condition on the exercise of civil and political rights¹⁸; 5) requirements of attendance at services of the established group¹⁹; and 6) suppression of other religious groups and religious opinions by law²⁰. Which of these elements was

¹⁴ I recognize that some of the American Colonies had “multiple” establishments by the time of the Revolution--that is, they allowed individual parishes to choose what denomination was to be established in their territory and allowed individual parishioners to exempt themselves by proving that they actually attended church in a different parish. See, Levy, L.W., *The Establishment Clause: Religion and the First Amendment* (NY: Macmillan 1986), ch. 1 & 2. However, this amounts only to establishment of a single denomination on the local option plan.

¹⁵ See, for instance, the Acts of Supremacy of 1534 and 1559 and Oliver Cromwell’s *Instrument of Government* (1653), Art. XXXV. I reference English precedents in this section because they are the precedents with which the Founding Fathers were most familiar

¹⁶ See, for instance, Thomas Jefferson’s discussion of the

¹⁷ See, e.g., Cromwell’s *Instrument of Government*, Arts. XXXV-XXXVII.

¹⁸ See, e.g., Cromwell’s *Instrument of Government*, Arts. XIV-XVIII and the English Corporation Act of 1661 and Test Act of 1673.

¹⁹ See, for instance, England’s four Acts of Uniformity, dated 1548, 1552, 1559 and 1662.

²⁰ See, e.g., the statute *De heretico comburnendo* (1401), the Conventicle Act of 1664 and the Five Mile Act of 1665.

most emphasized varied from nation to nation and also varied with time. While state action incorporating any one of these elements would offend the First Amendment under modern judicial interpretations of its prohibitions, I will show below that the Draft Standards, if fully implemented according to their terms, would incorporate all six of these elements.

I will deal with the simplest of these elements first. Taxes are levied for the support of the public school system, including science education conducted in accordance with the Board's curriculum standards. Thus, to whatever extent the Board's standards prescribe religious content, the result will be that taxes are levied to support the teaching of that religious content, satisfying the second historic element of an establishment.

Moreover, all children of compulsory school age²¹ are required by law to attend some public or private school. K.S.A. 72-1111(a), 72-1113. Furthermore, the State Board of Education has constitutional jurisdiction over "all the educational interests of the state, except educational functions delegated by law to the state board of regents." K.S.A. Const., Art. 6, §2. While private schools are permitted to operate, a large majority of the state's children attend public schools by economic necessity. Moreover, the Board has a statutory mandate to "adopt and maintain standards" for "courses of study and curriculum" and "accreditation of schools including elementary and secondary, public *and nonpublic*." K.S.A. 72-7513(a)(2) and (a)(3). Thus, curriculum standards adopted by the Board govern all Kansas schools, public and private. See, also, K.S.A. 72-1101. Therefore, all children of compulsory age are required to attend some school which teaches science in compliance with the Board's standards--including any religious content included in those standards. This satisfies the first and fifth elements.

This leads to the question whether the Draft Standards, as presently stated, constitute an officially-sanctioned body of doctrine or confession of faith. The "Vision Statement" of the Draft Standards states quite clearly that:

With this in mind, the intent for the *Kansas Science Education Standards* can be expressed in a single phrase: Science standards for all students... These standards apply to all students, regardless of age, gender, cultural or ethnic background, disabilities, aspirations, or interest and motivation in science²².

Thus, from the very beginning of the document, the intention is expressed that *all* students should be governed by these standards, regardless of "cultural background." In this context, the term "cultural background" must include religious background: otherwise, the standards could properly be said to govern only students whose religious backgrounds are not offended by them. However, the plain language of the standards says twice that it applies to "*all*" students, even those who dissent from its religious

²¹ There is a limited exception for Amish and conservative Mennonite students of high school age whose churches provide approved vocational training programs in keeping with their religion. K.S.A. 75-1111(f). This appears to be the only exception. This exception is required by *Wisconsin v. Yoder*, 406 U.S. 205 (1972).

²² Draft Standards, p. 5 (emphasis added).

content and those who opt out of the public school system. These standards by which *all* students are to be governed include the repeatedly- and strongly-expressed preference for natural explanations, both of origins and of our present existence, that deliberately ignore any possibility of a divine role in the process, as discussed above.

Similarly, a later section of the Introduction, entitled “Purpose of this document,” sets forth the following as declared purposes for the document:

These standards, benchmarks, indicators, and examples are designed to assist Kansas educators in selecting and developing local curricula, carrying out instruction, and assessing students' progress. They will also serve as the foundation for the development of *state assessments* in science. Finally, these standards, benchmarks, indicators, and examples represent high, yet reasonable, expectations for *all* students...

Provide criteria Kansas educators and stakeholders can use to judge whether particular actions will serve the vision of a scientifically literate society²³.

This purpose is further amplified in the section on “Implementation,” which provides that actions taken by school districts to implement the standards should include, *inter alia*:

1. Use of the Kansas Science Education Standards as a framework for local curriculum... KSES provides a framework for building local curriculum. Local curriculum, developed from these standards, *determines what is taught/learned* in science...

2. Distribute complete sets of Kansas Science Education Standards to all K-12 science teachers and K-12 administrators. Make all grade levels aware of the assessed indicators, and include *all* the KSES standards in local district K-12 science curriculum. Local district are advised to *insure* that *all* of the KSES are included in local curriculum...

5. Classroom teachers select developmentally appropriate instructional strategies to develop the *understandings* and abilities described in KSES...

9. Focus on K-12 student learning in science, while meeting the science learning requirements of federal “No Child Left Behind” legislation (NCLB) and Quality Performance Accreditation (QPA). Inform all science teachers of Kansas State Department of Education (KSDE) assessment schedules and procedures... Quality Performance Accreditation is the process for accrediting Kansas schools. Each school should include science student achievement targets in the School Improvement Plan²⁴.

Thus, the draft standards clearly provide that “all” of the standards, including the committee’s definition of the “Nature of Science” and its affirmation of “Patterns of Cumulative Change,” are to be included in local science curricula developed from the

²³ Draft Standards, Introduction, p. 6.

²⁴ Draft Standards, Introduction, “Implementation”

standards. It further clearly prescribes that the local curricula thus developed from “all” of the committee’s standards are to determine what is “*learned*” in science. Finally, it explicitly states that teacher and school district performance will be assessed in the QPA process based on whether students develop, and express on assessment exams, all of the “understandings” and abilities prescribed in the standards. The 8th-12th Grade Standard also makes the assumptions of the orthodox position on both cosmological and geological evolution “Recommended Sr. High Assessed Indicators.”²⁵ In the QPA process students’ collective scores on the assessment tests are a factor in accreditation of teachers, schools and school districts. See, K.S.A. 72-6439(a) and 72-7513(a)(3) and (a)(4). The content of the assessment tests is, in turn, determined by the curriculum standards promulgated by the Board. K.S.A. 72-6439(b). Thus, school district accreditation and funding are made explicitly to depend, in part, on whether students at the appropriate grade levels collectively “understand” that only natural explanations of origins are allowed in science and unequivocally express that understanding on assessment exams. Therefore, it directly ties accreditation and funding to students’ collective expression of the officially-declared orthodox naturalistic view of origins. It thereby plainly establishes that view as the official doctrine of the state.

With regard to the fourth historical element of a religious establishment, the Draft Standards do appear to limit at least one of the civil rights of nonconforming students--namely, their right to publicly hold and express at school their heterodox belief that God created nature. Moreover, the sixth element is satisfied, in that the draft standards prescribe suppression of the expression in school of all theistic explanations of nature. To be sure, the section of the Introduction entitled “Teaching With Tolerance and Respect” reflects an improvement over the previous draft in that it states that teachers should not “ridicule, belittle or embarrass” a student for expressing a heterodox opinion. However, at the same time, it does not state that dissent is welcome. Indeed, even in the current revision of the Draft Standards, this section of the standard starts with a sentence declaring the orthodox position that “science studies natural phenomena by formulating explanations that can be tested against the natural world.” It goes on to say that individual students whose cultural or religious backgrounds contain teachings which differ from orthodox positions should be tolerated, and should not be compelled to *believe* the orthodox position. However, the language of this standard prescribes only that the *individual student* who has learned a heterodox belief should be tolerated. It merely prescribes *tolerance*, not *acceptance*, of individual students whose views differ from the orthodox view. It does not prescribe toleration of, or respect towards, the heterodox belief itself. The strong implication of the language used is that, while any student who blurts out a statement declaring a heterodox belief in the existence of a Creator must be treated with respect, precautions should be taken to avoid creating any occasion for this to occur. Moreover, while this standard now prescribes that a student may not be shamed or openly belittled for speaking heresy, nothing anywhere in the Draft Standards indicates that a teacher may not privately correct or discipline a student for expressing an “inappropriate” opinion. Indeed, the fact that the Draft Standards govern what is to be “learned” in science implies that students who express “wrong” opinions,

²⁵ Draft Standards, 8th-12th Grade Standard, Standard 4, Benchmark 2, Item 1 & Standard 4, Benchmark 4, Items 1 & 2.

i.e., opinions contrary to the Standards' declaration of what should be "learned," should be privately corrected in order to minimize the possibility that other students will inadvertently learn those "wrong" opinions by hearing them expressed in class.

Thus, while students who believe God created would have to be tolerated under the Draft Standards, and could not be compelled to *believe* that things randomly evolved, they *could* be compelled to either tell other students that they believe in evolution or hold their peace.

Moreover, each school district would clearly be expected to take precautions to be sure that *only* material contained in that district's officially-prescribed science curriculum, formulated according to the state standards, is "taught" and "learned" in its classrooms. Furthermore, both the school districts and their teachers would be expected to endeavor to convince nonconforming students of the truth of the orthodox position, since school accreditation and funding depend in part on the students' collective willingness to state orthodox beliefs in this area on assessment exams. The regime proposed for the schools is, in this respect, reminiscent of that which existed in England under Oliver Cromwell's 1653 *Instrument of Government*. Under Article XXXVII of that document, all Protestants, even those who did not belong to the established state church, were guaranteed freedom of worship--as long as they kept that worship confined to their own meeting houses and did not teach the practice of "licentiousness." However, Article XXXVI declared: "that to the public profession held forth none shall be compelled by penalties or otherwise; but that endeavors be used to win them by sound doctrine and the example of a good conversation." In other words, nonconformists in Cromwell's England were formally allowed in theory (though not in practice) to believe what they pleased, and teach it in their own private meetings. But in public only the expression of the orthodox view was allowed, and "endeavors" were to be made by the public authorities to win them to the orthodox profession. It should be noted that the Puritan church in Cromwell's Protectorate is a textbook example of an established church. The Protectorate was *not* an example of religious freedom.

From the above, it is obvious that, under the draft standards, it would be the declared purpose of the State of Kansas to "teach" all students that the naturalistic position is the truth and to insure that they "learn" that this is the truth. Thus, it would become the established religion of the state's public schools.

THE FIRST AMENDMENT PROHIBITS THE OFFICIAL ESTABLISHMENT OF ANY RELIGION BY GOVERNMENTAL ACT

Modern judicial interpretations of the Constitution also condemn the position taken by the Draft Standards as a prohibited establishment of religion. The most general test employed by the courts under the establishment clause--though not the only test--inquires "whether the challenged law or conduct has a secular purpose, whether its principal or primary effect is to advance *or inhibit* religion, and whether it creates an excessive entanglement of government with religion." *Lynch v. Donnelly*, 465 U.S. 668,

679 (1983) (emphasis added). For the reasons set forth in the preceding sections of this letter, the Draft Standards, as presently framed, fail all of these tests. First, the adoption of a worldview in which nature and its laws replace God--a pantheistic worldview--as the official position of the State of Kansas, cannot have a secular purpose. It declares a non-theistic but nevertheless *religious* worldview to be the official doctrine of the state. Second, the requirement that the state's schools teach this world view as established scientific truth plainly has the primary effect of *advancing* this religious philosophy. Third, the requirement that everything taught or *learned* in the state's science classrooms must be governed by the Board's standards, when combined with the clear adoption of a pantheistic religious philosophy in the standards, plainly has a primary effect of *inhibiting* all theistic religions. Finally, the incentives for teachers, schools and school districts to make efforts to insure that their students actually believe in evolution, or at least express a belief in it on state assessment exams, fosters an excessive entanglement with each student's religion.

To be sure, in *Epperson v. Arkansas*, 393 U.S. 97 (1968), the Court decided that a state may not *prohibit* its public school teachers from teaching about the theory of evolution. Similarly, in *Edwards v. Aguillard*, 482 U.S. 578 (1982), the Court held that a state may not require the teaching of Bible-based "creation science." However, neither *Epperson*, nor *Edwards*, nor any subsequent Supreme Court opinion has held either that public schools *must* teach evolution or that public schools must teach evolution *only, as established "truth."* Neither has any Supreme Court opinion held that the Constitution requires that God be excluded from the universe, or that either evolution or the strict naturalistic approach to knowledge is "the truth" as a matter of law. Indeed, *Epperson* struck down the Arkansas law against teaching biological evolution because, on its face, it attempted to preferentially protect the Biblical account of Creation from all criticism, and therefore could not "be defended as an act of religious neutrality." *Epperson*, 393 U.S. at 109. The current Draft Standards on their face attempt to preferentially protect their naturalistic pantheistic assumptions from criticism, and, therefore, appear to be condemned by *Epperson*. The remainder of this section will show this analysis is supported by the history of the Constitution's religion provisions.

The Constitution, as originally proposed and ratified, contained no Bill of Rights. This omission reflected the conviction of most of the Federalists in the Constitutional Convention that the Federal government they were creating was a government of such limited powers that no Bill of Rights was necessary to protect specific rights against it. Indeed, Alexander Hamilton argued that a Bill of Rights might be dangerous, since it could be viewed as permission for the national government to exercise any powers not specifically prohibited:

I go further, and affirm that bills of rights, in the sense and to the extent in which they are contended for, are not only unnecessary in the proposed Constitution, but would even be dangerous. They would contain various exceptions to powers not granted; and, on this very account, would afford a colorable pretext to claim more than were granted. For why declare that things

shall not be done which there is no power to do²⁶?

Similarly, James Madison initially believed constitutional protection of religious liberty, specifically, to be unnecessary. Instead, he believed that the best protection for religious liberty was the multiplicity of independent sects that existed in the United States, no one of which was ever likely to control a stable majority in the national government:

If a majority be united by a common interest, the rights of the minority will be insecure. There are but two methods of providing against this evil: the one by creating a will in the community independent of the majority, that is, of the society itself; the other, by comprehending in the society so many separate descriptions of citizens as will render an unjust combination of a majority of the whole very improbable, if not impracticable. The first method prevails in all governments possessing an hereditary or self-appointed authority. This, at best, is but a precarious security; because a power independent of the society may as well espouse the unjust views of the major, as the rightful interests of the minor party, and may possibly be turned against both parties. The second method will be exemplified in the federal republic of the United States. Whilst all authority in it will be derived from and dependent on the society, the society itself will be broken into so many parts, interests, and classes of citizens, that the rights of individuals, or of the minority, will be in little danger from interested combinations of the majority. In a free government the security for civil rights must be the same as that for religious rights. It consists in the one case in the multiplicity of interests, and in the other in the multiplicity of sects. The degree of security in both cases will depend on the number of interests and sects; and this may be presumed to depend on the extent of country and number of people comprehended under the same government²⁷.

Because of this reluctance on the part of the leaders of the Convention to include a Bill of Rights, and because the Convention did not wish to interfere with those states that still maintained established state churches, the original Constitution contained only a single provision dealing with religion. This was the provision in Article VI, cl. 3, which states that “no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.” This provision, designed to prevent powerful sects from excluding their weaker competitors from the government, is directly in line with Madison’s view that safety for religious minorities is to be accomplished by preventing any sect from forming a stable majority in the government. This “religious test” clause was understood to apply to state governments as well as the federal government long before any court thought the Fourteenth Amendment rendered the protections of the First Amendment applicable to the states²⁸. The “religious test” clause, in and of itself, would certainly also appear to preclude any attempt to make willingness to profess a belief in either creationism or evolutionism a qualification for the office of public school teacher.

²⁶ Alexander Hamilton, *The Federalist*, No. 84

²⁷ *The Federalist*, No. 51.

²⁸ See, *Cummings v. Missouri*, 71 U.S. 277 (1866); *Torcaso v. Watkins*, 367 U.S. 488 (1961).

However, if the “religious test” clause had remained the only constitutional provision dealing with religion, each state would have remained free to declare evolutionism or Biblical creationism (or Greek mythology, for that matter) the official doctrine of the state, and to actively promote that doctrine, so long as it refrained from making individual profession of that doctrine a qualification for public office.

However, many Federalists and most Anti-Federalists criticized the Constitution for its lack of a Bill of Rights. Thomas Jefferson supported the ratification of the Constitution, but repeatedly expressed in his correspondence²⁹ the opinion that the document should be amended immediately after its ratification to include a declaration of bill of rights, securing specifically freedom of religion, freedom of the press, freedom from monopolies, trial by jury in all cases, freedom from unlawful imprisonment with no suspensions of the right of habeas corpus, and freedom from a permanent military³⁰. The declaration of rights Jefferson proposed in these letters was very similar to the list of rights secured by the English Bill of Rights (1689).

The English Bill of Rights had been promulgated in 1689 in response to 150 years of often-violent instability in the English government that was caused primarily by changes in the religious affiliations of successive monarchs. This process had started with the departure of Henry VIII from the Roman Catholic fold in 1534. England became officially Catholic again on the accession of Mary in 1553, only to become Anglican again when her sister Elizabeth became queen five years later. Elizabeth’s reign was moderate, relatively tolerant and quite stable. However, the persecution of non-Anglicans under Elizabeth’s successors, James I and Charles I, had led to the voluntary exile of many English Puritans, first in the Netherlands and then in New England. Another era of religious instability in England occurred ninety years after Queen Mary, when, in 1642, Presbyterian and Puritan revolutionaries overthrew (and subsequently executed) Charles I. This led to seven years of civil war, followed by an unstable mostly-Presbyterian Commonwealth. Order was restored in 1653, when the army, under the command of the Puritan Oliver Cromwell, established a religious single-party dictatorship (the “Protectorate”). After Cromwell’s death, and a short interregnum, the establishment of the Anglican church was restored with the accession of King Charles II in 1660. Then, in 1685, England once again became officially Catholic on the accession of James II--though by this time only a small minority of Englishmen called themselves Catholic.

Each of these changes in the religion of the English government except the last had lead to persecution of the leaders and adherents of the “old” established church. The violence surrounding these changes in the identity of the “established” church had claimed the lives of numerous ordinary people and humble ministers, two renowned archbishops of Canterbury, and one king. When James II had a son in 1688, in order to avoid the possibility of future persecution at the hands of a Catholic king, the largely

²⁹ Jefferson was in Paris serving as ambassador to France at the time of the Constitutional Convention and the ratification debates.

³⁰ See the letters of Thomas Jefferson to Alexander Donald, February 7, 1788; to Francis Hopkinson, March 13, 1789; and to James Madison, December 20, 1787 and March 15, 1789.

Anglican Parliament invited the Protestant William of Orange, Stadtholder of the Netherlands, the husband of James' daughter Mary, to take the throne, and deposed James in an almost bloodless revolution. This Parliament also required William to accede to a Bill of Rights. The English Bill of Rights (1689) served as a partial model for later colonial bills of rights and the Bill of Rights in our current federal Constitution. Two of the twelve complaints that document makes concerning the recently deposed King James II were that he had disarmed his Protestant subjects while arming his Catholic subjects and employing them preferentially in his government (preamble, ¶6) and that he had commissioned a "Court of commissioners for ecclesiastical causes" (preamble, ¶3). Therefore, the effective provisions of the document dissolved the new court for ecclesiastical causes, declared all such courts "illegal and pernicious" (¶3) and declared, at least formally, the right of all Protestants to arm and defend themselves (¶7). Though this document stopped far short of declaring all Protestants, even, to have equal rights³¹, the English Bill of Rights took an important step in this direction. Most relevant to the present discussion, it recognized that the creation of a government tribunal with a commission to decide what citizens ought to believe is "illegal and pernicious."

After the Declaration of Independence, many of the new states adopted bills of rights, either as a part of their new constitutions or as separate documents. Virginia, the home of Jefferson and Madison, was a leader in this matter, adopting its Bill of Rights on June 12, 1776, three weeks *before* the First Continental Congress declared national independence. The Virginia Bill of Rights spoke to the subject of religious liberty by affirming the following proposition:

That religion, or the duty which we owe to our CREATOR, and the manner of discharging it, can be directed only by reason and conviction, not by force or violence; and therefore all men are equally entitled to the free exercise of religion, according to the dictates of conscience; and that it is the mutual duty of all to practice Christian forbearance, love, and charity, towards each other.

The Virginia Bill of Rights guaranteed individual freedom of worship, implicitly repealing colonial statutes which had required Virginians to attend Anglican churches and had stated criminal penalties for associating with other denominations³², but stopped short of disestablishing the Church of England in Virginia. However, it was generally felt that the Declaration of Independence adopted three weeks later disestablished the Anglican church, as an arm of the English state. This left the new state of Virginia, and the several other original states which had also formerly established the Anglican church, the question of whether and how to officially support the teaching of religion within their borders.

A party within the Virginia legislature soon proposed to replace the old Anglican establishment with a multiple establishment scheme in which each Virginia citizen would

³¹ In fact, Catholics and some more radical Protestants did not achieve equal standing in England until 1829; Jews and other non-Christian religious minorities achieved equal rights even later than this.

³² See Jefferson's descriptions of the history of the Anglican establishment in Virginia in his *Notes on Virginia* (1786), Ford Ed., Vol. 3 at p. 261, and his *Autobiography* (1821), Ford Ed., Vol. 1 at p. 52.

pay a small (three pence) annual tax for the support of the clergy, and would be permitted to designate the denomination or church to which his tax would be remitted. This scheme drew a swift reaction from Madison, who drafted a petition in opposition to the scheme. Madison's "Memorial and Remonstrance" declared its signers' opposition to the three penny tax on the following grounds, among others:

3. Because it is proper to take alarm at the first experiment on our liberties We hold this prudent jealousy to be the first duty of Citizens, and one of the noblest characteristics of the late Revolution. The free men of America did not wait till usurped power had strengthened itself by exercise, and entagled the question in precedents. They saw all the consequences in the principle, and they avoided the consequences by denying the principle. We revere this lesson too much soon to forget it. Who does not see that the same authority which can establish Christianity, in exclusion of all other Religions, may establish with the same ease any particular sect of Christians, in exclusion of all other Sects? that the same authority which can force a citizen to contribute three pence only of his property for the support of any one establishment, may force him to conform to any other establishment in all cases whatsoever?...

5. Because the Bill implies either that the Civil Magistrate is a competent Judge of Religious Truth; or that he may employ Religion as an engine of Civil policy The first is an arrogant pretension falsified by the contradictory opinions of Rulers in all ages, and throughout the world: the second an unhallowed perversion of the means of salvation...

15. Because finally, "the equal right of every citizen to the free exercise of his Religion according to the dictates of conscience" is held by the same tenure with all our other rights³³...

Jefferson also joined in opposition to the multiple religious establishment bill with its three-penny tax. His view of the matter is well summarized in the *Virginia Statute for Religious Freedom*, which Jefferson authored and introduced in 1779 and which was finally enacted by the Virginia Legislature under Madison's sponsorship in 1786. Among other things, Jefferson's statute affirmed that:

Whereas Almighty God hath created the mind free; that all attempts to influence it by temporal punishments or burthens, or by civil incapacitations, tend only to beget habits of hypocrisy and meanness...

that the impious presumption of legislators and rulers, civil as well as ecclesiastical, who being themselves but fallible and uninspired men, have assumed dominion over the faith of others, setting up their own opinions and modes of thinking as the only true and infallible, and as such endeavouring to impose them on others, hath established and maintained false religions over the greatest part of the world, and through all time;

³³ James Madison, *A Memorial and Remonstrance* (1776).

that to compel a man to furnish contributions of money for the propagation of opinions which he disbelieves, is sinful and tyrannical;...

that our civil rights have no dependence on our religious opinions, any more than our opinions in physics or geometry; that therefore the proscribing any citizen as unworthy the public confidence by laying upon him an incapacity of being called to offices of trust and emolument, unless he profess or renounce this or that religious opinion, is depriving him injuriously of those privileges and advantages to which in common with his fellow-citizens he has a natural right; that it tends only to corrupt the principles of that religion it is meant to encourage, by bribing with a monopoly of worldly honours and emoluments, those who will externally profess and conform to it;...

that to suffer the civil magistrate to intrude his powers into the field of opinion, and to restrain the profession or propagation of principles on supposition of their ill tendency, is a dangerous fallacy, which at once destroys all religious liberty, **because he being of course judge of that tendency will make his opinions the rule of judgment**, and approve or condemn the sentiments of others only as they shall square with or differ from his own;...

and finally, **that truth is great and will prevail if left to herself, that she is the proper and sufficient antagonist to error, and has nothing to fear from the conflict**, unless by human interposition disarmed of **her natural weapons, free argument and debate**, errors ceasing to be dangerous when it is permitted freely to contradict them...

Be it enacted by the General Assembly, That no man shall be compelled to frequent or support any religious worship, place, or ministry whatsoever, nor shall be enforced, restrained, molested, or burthened in his body or goods, nor shall otherwise suffer on account of his religious opinions or belief; but that all men shall be free to profess, and by argument to maintain, their opinion in matters of religion, and that the same shall in no wise diminish enlarge, or affect their civil capacities³⁴.

Thus, both Madison and Jefferson believed that truth would prevail in free debate without government sponsorship³⁵, and that it was therefore simply wrong to make the government--the "civil magistrate"--a judge of the people's beliefs, or for the government to attempt to impose the beliefs of its leaders on the people. Furthermore both Jefferson and Madison plainly held the position that compelling individuals to pay taxes to support the teaching of "opinions" (religious or secular) which they disbelieve constitutes tyranny.

³⁴ *Virginia Statute for Religious Freedom* (1786), emphasis added.

³⁵ Indeed, in his *Notes on Religion* (1776?), Jefferson expressed the opinion that "If the magistracy had vouchsafed to interpose in other sciences, we should have as bad logic, mathematics, and philosophy as we have divinity in countries where the law settles orthodoxy."

The Constitution required ratification by nine states before it would become effective. However, five of the state ratifying conventions, while ratifying the Constitution, proposed the immediate addition of a Bill of Rights to it. The North Carolina convention proposed a Bill of Rights and then declined to ratify the Constitution until after a Bill of Rights was proposed. The Virginia ratifying convention proposed the addition of the following language dealing with religion:

That religion or the duty which we owe to our Creator, and the manner of discharging it can be directed only by reason and conviction, not by force or violence, and therefore all men have an equal, natural and unalienable right to the free exercise of religion according to the dictates of conscience, and that no particular religious sect or society ought to be favored or established by Law in preference to others.

The influence of Jefferson on the ratification process can be clearly discerned from the fact that five of the seven state ratifying conventions which proposed amendments proposed language similar to that proposed by Virginia³⁶.

Jefferson's correspondence, and the outpouring of support for a Bill of Rights from the ratifying conventions, convinced Madison of the expediency of adding a Bill of Rights to the Constitution. Therefore, on June 8, 1789, Madison introduced a resolution proposing a Bill of Rights in the House of Representatives. Jefferson's original draft of the Bill of Rights would have added two provisions dealing with religion to the original text of the Constitution. The first would have stated that "the civil rights of none shall be abridged on account of religious belief or worship, nor shall any national religion be established, nor shall the full and equal rights of conscience be in any manner, or on any pretext, infringed." The second would have prohibited the States to "violate the equal rights of conscience." The restriction on the States was eliminated on the House floor, obviously because a number of the states still had established churches, and Madison's proposal on the subject of religious freedom was reduced to "Congress shall make no law establishing religion or prohibiting the free exercise thereof, nor shall the rights of Conscience be infringed." The Senate again amended the religion clauses, which took their final form in a House-Senate conference committee. The religion clauses of the First Amendment, as written by that conference committee in 1789 and ultimately proposed and ratified, read as follows:

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof...

The First Amendment has since been made applicable to state governments and public school systems by the ratification of the Fourteenth Amendment. *West Virginia State Board of Education v. Barnette*, 319 U.S. 624, 639-640 (1943).

³⁶ See the resolutions of the Maryland, New Hampshire, New York, North Carolina and Virginia constitutional ratifying conventions.

Nothing in the language of the First Amendment grants any arm of government, including the public school system, the power to declare that a private opinion which has clear religious implications is, nonetheless, “secular” scientific truth, and to therefore decree that it must be taught as truth and “learned” by all children, including the children of dissenters. Neither does it appear to grant the power to levy taxes to support the teaching of such an opinion. Indeed, the history of the First Amendment, as set forth above, appears to clearly negative the existence of any such powers. Yet these are exactly the powers the Draft Standards appear to claim for their strictly naturalistic approach to origins. The Draft Standards attempt to establish pantheism by re-labeling it as “secular” truth.

PRESCRIBING THE TEACHING OF PANTHEISTIC RELIGION AS TRUTH ALSO VIOLATES FREEDOM OF SPEECH

The Draft Standards would also violate the rights of both dissenting teachers and dissenting students to freedom of speech. It would violate the free speech rights of dissenting teachers, and their right to not be subjected to a religious test as a qualification for their offices, by forcing them to teach evolution not as a theory but as established truth. It would violate the free speech rights of students by requiring them to either express agreement with the official evolutionary position or hold their peace³⁷. The aspect of freedom of speech which is implicated by the Draft standards is the freedom not to speak. This right was clearly explained by the United States Supreme Court more than sixty years ago in *West Virginia State Board of Education v. Barnette*, 319 U.S. 624 (1943), in which, in the middle of the Second World War, the Court held that the state of West Virginia could not require students to salute the flag. While the objecting students were Jehovah’s Witnesses who objected on religious grounds to being made to “worship” the flag, the Court rested its decision on secular freedom of speech grounds rather than the free exercise clause, as this passage from the Court’s opinion shows:

It is also to be noted that the compulsory flag salute and pledge requires affirmation of a belief and an attitude of mind. It is not clear whether the regulation contemplates that pupils forego any contrary convictions of their own and become unwilling converts to the prescribed ceremony, or whether it will be acceptable if they simulate assent by words without belief, and by a gesture barren of meaning. It is now a commonplace that censorship or suppression of expression of opinion is tolerated by our Constitution only when the expression presents a clear and present danger of action of a kind the State is empowered to prevent and punish. It would seem that involuntary affirmation could be commanded only on even more immediate and urgent grounds than silence. But here, the power of compulsion is invoked without any allegation that remaining passive during a flag salute ritual creates a clear and present danger that would justify an effort even to muffle expression. To sustain the compulsory flag salute, we are required to say that a Bill of Rights

³⁷ While students who state a contrary opinion will have to be treated with respect before other students, they will still be subject to private correction for their inappropriate expressions of belief, as previously argued.

which guards the individual's right to speak his own mind left it open to public authorities to compel him to utter what is not in his mind...

The Fourteenth Amendment, as now applied to the States, protects the citizen against the State itself and all of its creatures -- Boards of Education not excepted. These have, of course, important, delicate, and highly discretionary functions, but none that they may not perform within the limits of the Bill of Rights. That they are educating the young for citizenship is reason for scrupulous protection of Constitutional freedoms of the individual, if we are not to strangle the free mind at its source and teach youth to discount important principles of our government as mere platitudes...

We can have intellectual individualism and the rich cultural diversities that we owe to exceptional minds only at the price of occasional eccentricity and abnormal attitudes. When they are so harmless to others or to the State as those we deal with here, the price is not too great. But freedom to differ is not limited to things that do not matter much. That would be a mere shadow of freedom. The test of its substance is the right to differ as to things that touch the heart of the existing order.

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. If there are any circumstances which permit an exception, they do not now occur to us³⁸.

This same concept of the right to refrain from declaring opinions one does not believe, from speaking what is not on one's mind, has been subsequently applied in settings in which no religious freedom issues were involved. See, for instance, *Wooley v. Maynard*, 430 U.S. 705 (1976), in which a state law prohibiting citizens from obscuring the state motto on their automobile license plates was invalidated, citing *Barnette*. See also *Meyer v. Nebraska*, 262 U.S. 390 (1923), foreshadowing *Barnette*, in which a state law prohibiting the teaching of living foreign languages was invalidated. All of the concerns discussed by the Court in the *Barnette* opinion would appear also to apply to the implementation of the Draft Standards.

CONCLUSION

God's participation in the origins of the universe and of life cannot be scientifically proven. God's absence from these events also cannot be scientifically proven. Therefore, those who insist on "intelligent design" are taking a religious position. However, as this letter has shown, those who insist that any acceptable explanation of the universe must exclude God are also taking a religious position. The Board, as an instrumentality of the State of Kansas, should not establish one of these religious positions as official truth while excluding the other one from the state's schools.

³⁸ *West Virginia State Board of Education v. Barnette*, 319 U.S. at 633-634, 637, 641-642.

Moreover, the Board should not require the state's schools to infringe the Constitutional rights of their students and employees to freedom of speech by requiring them, when in school, to either profess their faith that no god was involved in the origin of the universe or to hold their peace. Therefore, I support the science curriculum standards committee's Second Minority Report, which takes a more balanced approach and avoids some of the Constitutional problems involved in the committee's Draft Standards.

Respectfully Submitted,

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cc: Board members
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