

COMMENTS

AND THEN GOD CREATED KANSAS? THE EVOLUTION/CREATIONISM DEBATE IN AMERICA'S PUBLIC SCHOOLS

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“For most Kansans, there really is no conflict between science and religion. Our churches have helped us search for spiritual truth, and our schools have helped us understand the natural world.”

—Brad Williamson, biology teacher at Olathe East High School in Olathe, Kansas.¹

INTRODUCTION

Kansas has recently become embroiled in a fierce debate over the minds of the state's children, specifically regarding what those children will learn in their public school science classrooms. At first glance, a science curriculum does not seem like a subject of great controversy, but it continues to be one in Kansas and other communities across the country. The controversy hinges specifically on the role evolution should play in science classrooms, but also reflects the broader debate over what role schools should play in students' moral development.

Today many parents are worried about sending their children to

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¹ Brad Williamson, *I Teach, Therefore I Worry, in Kansas*, WASH. POST, Aug. 29, 1999, at B1.

public schools.² In addition to being concerned about their childrens' classroom education, parents are also concerned about violence, premarital sex, and drug use. Increasingly, a variety of people are suggesting that problems outside the classroom are due to a lack of morality among young people and communities are turning to religion to provide a solution.³

The Bill of Rights of the United States Constitution, however, begins: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof"⁴ The Supreme Court has made it clear that the Establishment Clause of the First Amendment of the Constitution erects a high "wall between church and state."⁵ The Court has also emphasized that the law itself need not "establish" religion in order to violate the Clause, but may "be one 'respecting' the forbidden objective while falling short of its total realization."⁶

The Court has created a large barrier preventing the inclusion of religion in government, in theory making the government entirely separate from religious institutions. In public schools, however, the two have coexisted in a variety of ways, including recitation of prayers before and after football games and graduation ceremonies, the

² See, e.g., Heather Hollingsworth, *District Tries to Reassure Parents*, TOPEKA CAP-J., Mar. 3, 2000, at C7 (reporting a school district's need to reassure parents after the shooting of a six-year-old in a public school); Dirk Johnson, *Many Cleveland Parents Frantic After Ruling Limits School Vouchers*, N.Y. TIMES, Aug. 26, 1999, at A11 (noting parents' anxiety concerning the necessity to send their children back to public schools if vouchers are unavailable); Richard Whitmire, *'Mood of America' Poll: Americans Worry About Public Schools*, GANNETT NEWS SERVICE, Oct. 29, 1999 (providing the results of a poll finding a high rate of dissatisfaction among parents toward public schools).

³ See, e.g., *Private School Enrollment Rises: More Parents Seek Alternatives to Public Education That Will Provide Safe Environment*, AUGUSTA CHRON., Mar. 22, 1999, at C6 (reporting parents' desire to "return to old-fashioned basic morals" in response to rising school violence); W.T. Quick, Letter to the Editor, S.F. EXAMINER, Feb. 17, 2000, at A22 (citing a "solid foundation of moral principles" as necessary to protect children from the dangers of public schools).

⁴ U.S. CONST. amend. I.

⁵ *Everson v. Bd. of Educ.*, 330 U.S. 1, 18 (1947). The Court continued by elaborating that the "wall must be kept high and impregnable. We could not approve the slightest breach." *Id.* In *Everson*, the Court found that New Jersey did not transgress this wall by bussing students to and from parochial schools. See *id.* at 3, 18 (holding valid a New Jersey statute that enabled a local Board of Education to reimburse parents for bussing their children to a parochial school). The Court had previously determined that the Establishment Clause was fundamental to the concept of ordered liberty and therefore was binding on the states. *Id.* at 8 (citing *Murdock v. Pennsylvania*, 319 U.S. 105 (1943), which held that the Fourteenth Amendment makes the First Amendment applicable to the states).

⁶ *Lemon v. Kurtzman*, 403 U.S. 602, 612 (1971).

posting of the Ten Commandments on school walls, the recital of the Lord's Prayer at the beginning of the day, and the teaching of creationism in science classes.

The inclusion or exclusion of religion from public education introduces unique difficulties and often calls for a delicate balancing of interests. This is due to the school's role as both educator and guardian during school hours, the involuntary nature of students' attendance at school, and the students' impressionability.⁷ The Court keeps these concerns in mind as it monitors compliance with the Establishment Clause in public elementary and secondary schools.⁸ Given that public schools are under the control of state and local governments, the Court cautions that "[c]ourts do not and cannot intervene in the resolution of conflicts which arise in the daily operation of school systems and which do not directly and sharply implicate basic constitutional values."⁹ At the same time, the Court reiterated that the protection of the fundamental rights guaranteed in the First Amendment within the confines of the public school is essential and that it will not hesitate to protect them when necessary.¹⁰ Schools must avoid not only being a source of indoctrination, but also destroying the students' private beliefs.¹¹

While religion in public schools has generally been the subject of public attention and legal action in the United States, the feud regarding creationism and evolution began when Charles Darwin published his theories of evolution in 1859.¹² The debate soon moved

⁷ See *Edwards v. Aguillard*, 482 U.S. 578, 583-94 (1987) (considering the constitutionality of a Louisiana statute requiring the balanced treatment of "creation science" and "evolution science").

⁸ See *id.* at 583-84 (noting that parents trust that the state will not purposely use the classroom to promote religious beliefs that conflict with those of the parents).

⁹ *Epperson v. Arkansas*, 393 U.S. 97, 104 (1968).

¹⁰ See *id.* ("Our courts, however, have not failed to apply the First Amendment's mandate in our educational system where essential to safeguard the fundamental values of freedom of speech and inquiry and of belief."); see also *Tinker v. Des Moines Indep. Cmty. Sch. Dist.*, 393 U.S. 503, 506 (1969) ("First Amendment rights, applied in light of the special characteristics of the school environment, are available to teachers and students.").

¹¹ See *Wisconsin v. Yoder*, 406 U.S. 205 (1972) (finding that Amish parents had a right to remove their child from public school after he completed the eighth grade).

¹² CHARLES DARWIN, *THE ORIGIN OF SPECIES: BY MEANS OF NATURAL SELECTION* (J.W. Burrow ed., Penguin Books 1968) (1859). Darwin, however, was not the first to discuss the principles and notions embedded in evolution. Even ancient Greek philosophers had inferred that similar species were descended from a common ancestor. See NATIONAL ACADEMY OF SCIENCES, *SCIENCE AND CREATIONISM* 9 (2d ed.

into the classroom and first caught the attention of the public in 1927 in the famous *Scopes* "Monkey Trial" in Tennessee.¹³ In the aftermath of the Monkey Trial, fourteen states considered anti-evolution statutes in 1927, but only two, Mississippi and Arkansas, enacted such statutes.¹⁴ Since that time, additional statutes attempting to limit the discussion of evolution in public school classrooms have been introduced and enacted.¹⁵ The two challenges to these laws that reached the Supreme Court were both successful, with the Court in each case finding a violation of the Establishment Clause because the statute at issue constituted a prohibited establishment of religion.¹⁶ As laws limiting the teaching of evolution in school or requiring the teaching of creationism in school have been struck down, proponents of creationism have looked for new and original ways to circumvent these decisions. Efforts to come up with new methods to fight the teaching of evolution in public schools are receiving additional attention since many school boards are now controlled by Christian conservatives who generally favor the teaching of creationism in public schools.¹⁷

This Comment focuses on the efforts of states to navigate Supreme Court decisions when defining the parameters for teaching evolution and creationism in public schools. Part I provides a brief

1999) [hereinafter SCIENCE AND CREATIONISM] (describing the history of the theory of evolution).

¹³ See *infra* Part I (providing a brief overview of the circumstances surrounding the famous "Monkey Trial"). See generally EDWARD J. LARSON, SUMMER FOR THE GODS: THE SCOPES TRIAL AND AMERICA'S CONTINUING DEBATE OVER SCIENCE AND RELIGION (1997) (developing an in-depth history and discussion of the trial).

¹⁴ See EDWARD J. LARSON, TRIAL AND ERROR: THE AMERICAN CONTROVERSY OVER CREATION AND EVOLUTION 75-79 (1985) (discussing state legislative efforts to outlaw the teaching of evolution in public schools in 1927).

¹⁵ See, e.g., ARK. STAT. ANN. §§ 80-1627 to -1628 (1960) (declaring the teaching of evolution theory in public schools to be unlawful and penalizing those who teach evolution theory with a monetary fine and vacation of the teaching position); Balanced Treatment for Creation-Science and Evolution-Science in Public School Instruction Act ("Creationism Act"), LA. REV. STAT. ANN. § 17:286.4 (West 1982) (authorizing "balanced treatment" of creation science and evolution science in public school classrooms, stating that "each shall be taught as a theory, rather than as proven scientific fact"); see also Hanna Rosin, *Creationism Evolves: Kansas Board Targets Darwin*, WASH. POST, Aug. 8, 1999, at A1 (discussing the various efforts by state legislatures to curtail the teaching of evolution in recent years).

¹⁶ See *infra* Part II (reviewing the Supreme Court's jurisprudence involving the Establishment Clause and public schools).

¹⁷ See Edward Helmore, *Right Stokes New Creationist Row*, INDEP. (London), July 30, 1995, at 15 (discussing a new science textbook adopted in some American public schools which pushes the theory of "intelligent design").

overview of the history of the evolution/creationism debate. Part II specifically addresses Supreme Court jurisprudence in this area. Part III shifts to discuss the various approaches to introducing creationism or limiting evolution within the confines of Supreme Court decisions. The final Part considers the 1999 Kansas Board of Education's announcement that it will change the state science curriculum, decreasing the reliance on evolution.¹⁸ This Comment concludes that Kansas has failed to satisfy the Establishment Clause requirements set forth by the Supreme Court.

I. HOW THE CREATIONISM DEBATE EVOLVED

The teaching of creationism is unique from most other issues involving religion in public schools because it combines the individual's religious beliefs with classroom education. Science teachers are often told to instruct students on subjects which conflict with either their scholarly understanding of evolution or their personal religious beliefs.

The debate to some extent is about the reliability of science itself. In many respects, science is the study of hypotheses and theories—trying to develop explanations for what is not understood.¹⁹ The theory of evolution explains changes in living things over time. The National Academy of Sciences explains that “[t]he concept of biological evolution is one of the most important ideas ever generated by the application of scientific methods to the natural world.”²⁰ Scientists rely on a wide range of scientific evidence, including the fossil record, common structures, the distribution of species, and similarities in development, to support the theory of evolution and

¹⁸ See generally KAN. STATE BD. OF EDUC., KANSAS CURRICULAR STANDARDS FOR SCIENCE EDUCATION (1999), http://www.ksbe.state.ks.us/outcomes/science_12799.html (outlining the standards for science teachers across the state and establishing the subjects for which students are responsible on standardized tests); CNN *the World Today: Kansas School Board Decision To Not Require the Teaching of Evolution Alarms Mainstream Science Community* (CNN television broadcast, Aug. 12, 1999) (discussing the science community's reaction to the Kansas School Board's decision).

¹⁹ See SCIENCE AND CREATIONISM, *supra* note 12, at 2 (“In science, theories do not turn into facts through the accumulation of evidence. Rather, theories are the end points of science. . . . They incorporate a large body of scientific facts, laws, tested hypotheses, and logical inferences.”).

²⁰ *Id.* at viii. For a critique of the theory of evolution, see generally MICHAEL DENTON, EVOLUTION: A THEORY IN CRISIS (1986).

simultaneously debunk the creationists' theory of the relatively short history of the earth.²¹

Creationists, on the other hand, believe that God created Earth and the living things on it, as explained in the Bible. Specific views vary—some creationists agree that the Earth is indeed very old, while others claim that the Earth and universe are relatively young and that a catastrophic event, such as a great flood, led to many of the changes on Earth.²² Many “old Earth” creationists believe that evolution may have played a role in the development of living things since their creation, whereas most “young Earth” creationists believe that God created living things basically in their current form.²³

In their ongoing battle against evolution, creationists argue that because there are no eyewitnesses regarding what occurred at the beginning of time and at every stage since, creationism is just as likely an explanation as evolution.²⁴ In fact, creationists argue that there is written evidence supporting their position—the Bible.²⁵ Scientists counter that failure to physically see a scientific phenomenon does not make it unfounded. Many generally accepted scientific theories cannot be witnessed, such as the existence of atoms and the Earth's movement around the sun, yet scientists infer their existence through the use of “extensive observation and experimentation.”²⁶

The public school debate regarding evolution and creationism did not begin in earnest until the early 1920s when Christian conservatives, led by William Jennings Bryan, began a crusade against the teaching of evolution.²⁷ As a result of their efforts, by 1930 twenty

²¹ See SCIENCE AND CREATIONISM, *supra* note 12, at 11-17 (setting forth the scientific support for evolution); Francis X. Clines, *Creationist Captain Sees Battle 'Hotting Up'*, N.Y. TIMES, Dec. 1, 1999, at A18 (“[T]he scientific consensus is that life began on earth around 3.9 billion years ago, with humans and other species evolving from a common ancestor.”).

²² See SCIENCE AND CREATIONISM, *supra* note 12, at 7 (discussing creationist views).

²³ For a detailed discussion of creationism and its critiques of evolution, see generally EVOLUTION VERSUS CREATIONISM: THE PUBLIC EDUCATION CONTROVERSY (J. Peter Zetterberg ed., 1983) and HENRY M. MORRIS & GARY E. PARKER, WHAT IS CREATION SCIENCE? (rev. ed. 1987).

²⁴ See Clines, *supra* note 21, at A18 (interviewing the Executive Director of Answers in Genesis regarding his efforts to “spread[] the literal word according to Genesis”).

²⁵ See Kate Beem, *Woman's Creationism Crusade Shakes Up Public Education*, KAN. CITY STAR, Nov. 27, 1999, at A1 (“[C]reationists say their theory has a witness: the Bible.”).

²⁶ SCIENCE AND CREATIONISM, *supra* note 12, at 21.

²⁷ See RONALD L. NUMBERS, THE CREATIONISTS 3-19 (1992) (providing a detailed account of William Jennings Bryan's crusade against evolution). This survey of the scientific and religious response to the theory of evolution suggests that although Bryan was successful in inspiring debate about these issues, states were not easily

state legislatures had debated anti-evolution laws, and three (Tennessee, Mississippi, and Arkansas) had passed laws prohibiting the teaching of evolution in public schools.²⁸

The establishment of anti-evolution laws quickly led to a battle for popular opinion between the American Civil Liberties Union, which was recruiting a volunteer teacher to test the Tennessee law, and the World's Christian Fundamentalist Association, whose goal was to restore traditional religious values.²⁹ John T. Scopes, a high school science teacher in Dayton, Tennessee, came forward to be the defendant in the case.³⁰ He was charged with violating the Tennessee Anti-Evolution Act of 1925, which made it unlawful to teach any scientific theory that denies the story of the divine creation of man taught in the Bible, and instead posits that man evolved from animals.³¹ In creating the legislation, the lawmakers attempted to counteract the increased emphasis on evolution that arose in the late nineteenth and early twentieth centuries as a result of scientists' increasing reliance on Darwin's theory of natural selection.³²

The stage was then set for the great debate that would ultimately be known as the Monkey Trial. Two of the greatest orators of the time were pitted against one another: Clarence Darrow on behalf of John T. Scopes and William Jennings Bryan on behalf of the prosecution. Due to the throngs of curious spectators, the trial was conducted outside; the very unusual proceeding even included Darrow calling opposing counsel Bryan as an expert witness on the Bible.³³

In the end, Scopes was convicted and fined \$100. The Tennessee Supreme Court reversed the conviction solely on technical grounds, carefully noting that the anti-evolution law was consistent with the

convinced to adopt anti-evolution laws. Perhaps the states were able to recognize the potential constitutional conflict these laws presented.

²⁸ *Id.* at 41.

²⁹ See LARSON, *supra* note 14, at 58-63 (detailing the origin of the Scopes trial).

³⁰ *Id.* at 60.

³¹ See Joyce F. Francis, Comment, *Creationism v. Evolution: The Legal History and Tennessee's Role in That History*, 63 TENN. L. REV. 753, 757-58 n.36 (1996) (citing and explaining the Tennessee Anti-Evolution Act of 1925, TENN. CODE ANN. ch. 27 (repealed 1967)).

³² See LARSON, *supra* note 14, at 20-23 (describing the increased emphasis on evolution in high school science textbooks and instruction).

³³ See LARSON, *supra* note 13, at 3-8 (providing a narrative of the spectacle of the trial). In 1960, the famous movie *Inherit the Wind* was released depicting a fictionalized account of the trial. For a portrayal of Scopes as a brave crusader and Bryan as a well respected man who allowed his crusade to blind him to reason, see *INHERIT THE WIND* (United Artists 1960).

Tennessee Constitution.³⁴ The Tennessee Law remained valid, and anti-evolutionists were able to solidify their position throughout the United States.³⁵

Following the *Scopes* decision, the controversy remained somewhat dormant until momentum began to shift against the creationists in the 1950s. First, the influence of scientists greatly increased as their numbers grew approximately tenfold from 1925 to 1960.³⁶ Second, scientists' funding levels jumped concomitantly with their numbers.³⁷ Finally, the major catalyst that refocused Americans' attentions on science was the Soviet Union's successful launching of the first satellite, Sputnik, in 1957.³⁸ This new attention to science returned evolution to the public consciousness.

II. THE SUPREME COURT SPEAKS UP

A. "Monkey Laws" Unconstitutional

In 1968, the U.S. Supreme Court had its first opportunity to consider an anti-evolution statute. In *Epperson v. Arkansas*, the Court held that an Arkansas state law prohibiting the teaching of evolution in public schools violated the Establishment Clause.³⁹ The Arkansas anti-evolution statute, which was passed in 1928, prohibited any public school teacher from "teach[ing] the doctrine or theory that mankind descended or ascended from a lower order of animals."⁴⁰ The Court found that the state lawmakers had an unconstitutional religious purpose in passing the law, as they acted as a result of an "upsurge of 'fundamentalist' religious fervor."⁴¹ By the time of the *Epperson*

³⁴ *Scopes v. State*, 289 S.W. 363, 364 (Tenn. 1927) ("He had no right or privilege to serve the state except upon such terms as the state prescribed. His liberty, his privilege, his immunity to teach and proclaim the theory of evolution, elsewhere than in the service of the state, was in no wise touched by this law.")

³⁵ LARSON, *supra* note 14, at 91-92 (discussing how the creationists were able to fortify their position from 1930 to 1960).

³⁶ *Id.* at 89-90 (noting the sharp increase in the number of scientists in America between 1925 and 1960).

³⁷ *Id.* (noting the increased financial support for scientific research during the same period).

³⁸ NUMBERS, *supra* note 27, at 238 (discussing the impact of the Sputnik launch on science in America).

³⁹ *Epperson v. Arkansas*, 393 U.S. 97, 107 (1968).

⁴⁰ ARK. STAT. ANN. § 80-1627 (Michie 1960) (repealed 1987).

⁴¹ *Epperson*, 393 U.S. at 98. The Arkansas statute at issue in *Epperson* was enacted during William Jennings Bryan's campaign in the 1920s and was an adaptation of the Tennessee law upheld in *Scopes*. At the time of this case in 1968, only Arkansas and

decision there had been a clear shift in public opinion since the *Scopes* decision and the national popular press openly greeted and embraced the Court's decision.⁴²

B. *Turning the Tables and Applying the Lemon Test*

After the Court held in *Epperson* that a state could not prevent teachers from discussing evolution in the classroom, partisans on both sides leapt at the remaining openings in the debate. The *Epperson* decision "did not address either restrictions on the nature of such discussion [about the theory of evolution] or the constitutionality of teaching creationism."⁴³ Not accepting rejection, the Arkansas legislature passed a new law in 1981 mandating that "[p]ublic schools within [the] State shall give balanced treatment to creation-science and to evolution-science."⁴⁴ The Western District of Arkansas stridently rejected this most recent attempt by the Arkansas legislature to limit the teaching of evolution in public schools.⁴⁵

The Supreme Court has subsequently considered a series of cases that address issues relating to religion in public schools and has held unconstitutional the use of religious school teachers in public schools;⁴⁶ a moment of silence for school prayer;⁴⁷ the display of a copy of the Ten Commandments on public classroom walls;⁴⁸ and the daily reading of the Bible.⁴⁹ In 1986, in *Edwards v. Aguillard*, the Court considered another state law that dealt with the teaching of evolution and creationism in the public schools.⁵⁰ Instead of simply outlawing

Mississippi still had anti-evolution statutes. MISS. CODE ANN. §§ 6798-6799 (1942). *But see* Smith v. State, 242 So. 2d 692, 698 (Miss. 1970) (holding the Mississippi law unconstitutional).

⁴² LARSON, *supra* note 14, at 119-20. The coverage that occurred at the time mocking the state of Arkansas and the monkey law looks quite similar to that which has recently appeared in response to the Kansas School Board's changes to the science curriculum.

⁴³ *Id.* at 127.

⁴⁴ ARK. CODE ANN. §80-1663 (Michie Supp. 1981).

⁴⁵ *See* McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1274 (W.D. Ark. 1982) (rejecting outright every defense made on behalf of Arkansas's Balanced Treatment for Creation-Science and Evolution-Science Act), *aff'd on other grounds*, 723 F.2d 45 (8th Cir. 1983).

⁴⁶ Sch. Dist. of Grand Rapids v. Ball, 473 U.S. 373, 397-98 (1985).

⁴⁷ Wallace v. Jaffree, 472 U.S. 38, 61 (1985).

⁴⁸ Stone v. Graham, 449 U.S. 39, 42-43 (1980).

⁴⁹ Abington Sch. Dist. v. Schempp, 374 U.S. 203, 224 (1963).

⁵⁰ 482 U.S. 578, 580-81 (1987) (considering the constitutionality of the Louisiana Creationism Act).

the teaching of evolution, however, the anti-evolutionists adopted a new approach. Much like the second Arkansas act, which was found unconstitutional by the district court, Louisiana's Creationism Act forbade the teaching of the theory of evolution in public schools unless accompanied by instruction in "creation-science."⁵¹ This approach was symbolic of a broader movement to recast creationism as scientific in order to obtain broader support and satisfy critics.⁵²

The Supreme Court held that the Louisiana Creationism Act violated the Establishment Clause.⁵³ In rejecting the statute, the Court utilized a three-prong test introduced in *Lemon v. Kurtzman* to determine whether legislation comports with the Establishment Clause.⁵⁴ Since the adoption of the *Lemon* test, the Supreme Court and lower courts have used it systematically.⁵⁵ *Lemon* provides that a statute is unconstitutional if any of the three prongs of the test are violated: first, the legislature must have adopted the law with a secular purpose; second, the statute's principal or primary effect must be one that neither advances nor inhibits religion; and third, the statute must not result in excessive government entanglement with religion.⁵⁶

⁵¹ Balanced Treatment for Creation-Science and Evolution-Science in Public School Instruction Act ("Creationism Act"), LA. REV. STAT. ANN. §§ 17:286.1-7 (West 1982).

⁵² See discussion *infra* Part III.B.1 (discussing the creationism-as-science approach).

⁵³ *Edwards*, 482 U.S. at 597 ("The [Louisiana Creationism] Act violates the Establishment Clause of the First Amendment because it seeks to employ the symbolic and financial support of government to achieve a religious purpose.").

⁵⁴ 403 U.S. 602, 612-13 (1971).

⁵⁵ See, e.g., *Lee v. Weisman*, 505 U.S. 577, 586-87 (1992) (applying the *Lemon* test in determining that prayer as part of an official public school graduation ceremony was unconstitutional); *Bd. of Educ. of Westside Cmty. Schs. v. Mergens*, 496 U.S. 226, 248-49 (1990) (finding that the Equal Access Act, requiring that public schools provide meeting places for religious groups when it provided them for other extracurricular organizations, satisfied the *Lemon* test); *Widmar v. Vincent*, 454 U.S. 263, 271-73 (1981) (using the *Lemon* test to find that a state university was unconstitutionally excluding student religious groups from university meeting places); *Freiler v. Tangipahoa Parish Bd. of Educ.*, 185 F.3d 337, 342-48 (5th Cir. 1999) (applying the *Lemon* test and holding the school board's requirement that a disclaimer be read immediately before the teaching of evolution in all elementary and secondary schools violated the second prong of the *Lemon* test and is thus unconstitutional). See generally Jeremy T. Bunnow, Note, *Reinventing the Lemon: Agostini v. Felton and the Changing Nature of Establishment Clause Jurisprudence*, 1998 WIS. L. REV. 1133 (discussing in detail the Court's recent interpretations of the *Lemon* test); Lisa Langendorfer, Comment, *Establishing a Pattern: An Analysis of the Supreme Court's Establishment Clause Jurisprudence*, 33 U. RICH. L. REV. 705 (1999) (providing a detailed overview of the Court's Establishment Clause jurisprudence and its varied use of the *Lemon* test).

⁵⁶ *Lemon*, 403 U.S. at 612-13 (putting forth a test to determine infringements of the Establishment Clause).

1. Clear Secular Purpose

When analyzing a statute in accordance with the *Lemon* test, the Court will first consider whether there is a clear secular purpose for enacting the law at issue. The Court will “normally [be] deferential to a State’s articulation of a secular purpose” so long as such statement of purpose is “sincere and not a sham.”⁵⁷ In determining whether this statement of purpose is sincere, the Court will consider the legislative or other history surrounding the proposal of such law.⁵⁸ In *Edwards*, the Court found the purported purpose of “academic freedom” for teachers to be a sham because the legislative history clearly demonstrated that the bill’s sponsor actually intended to narrow the science curriculum.⁵⁹ Additionally, the Court found that the statute did not further the supposed purpose—academic freedom.⁶⁰ The Court specifically considered its earlier decision in *Epperson* and concluded that “there can be no legitimate state interest in protecting particular religions from scientific views ‘distasteful to them,’ and . . . ‘that the First Amendment does not permit the State to require that teaching and learning must be tailored to the principles or prohibitions of any religious sect or dogma.’”⁶¹

The *Edwards* Court did not examine the Act at issue in that case under the remaining two prongs of the *Lemon* test because, where the law was clearly enacted for the purpose of endorsing religion, “no consideration of the second or third criteria . . . is necessary.”⁶² The Court has made clear that even if a law is motivated in part by religious purposes, the first part of the *Lemon* test may still be satisfied.⁶³

⁵⁷ *Edwards v. Aguillard*, 482 U.S. 578, 586-87 (1987).

⁵⁸ *See id.* at 587 (using statements from the legislative hearings to determine the purpose of legislation).

⁵⁹ *Id.* (relying on the legislative sponsor’s statement that he would prefer neither creationism nor evolution to be taught).

⁶⁰ *Id.* (stating that the legislation “undermines . . . the provision of a comprehensive scientific education”); *see Wallace v. Jaffree*, 472 U.S. 38, 59 (1985) (finding the suggested purpose of a statute authorizing a moment of silence for school prayer to be a sham because no “secular purpose [was identified] that was not fully served by [existing state law] before the enactment of [the statute in question]”).

⁶¹ *Edwards*, 482 U.S. at 590-91 (citations omitted) (quoting *Epperson v. Arkansas*, 393 U.S. 97, 106-07 (1968)).

⁶² *Id.* at 585 (quoting *Wallace*, 472 U.S. at 56).

⁶³ *See Wallace*, 472 U.S. at 56 (“For even though a statute that is motivated in part by a religious purpose may satisfy the first criterion, the First Amendment requires that a statute must be invalidated if it is entirely motivated by a purpose to advance religion.” (citation omitted)). In another case, the Court found that “Congress’

2. Primary Effect That Neither Advances nor Inhibits Religion

If the Court finds that there is a possible secular purpose for the law, the next requirement under the *Lemon* test is that the law's "principal or primary effect must be one that neither advances nor inhibits religion."⁶⁴ The Court has not reached this issue in its jurisprudence regarding the teaching of evolution and creationism in public schools.

When the Court has reached this factor in other cases interpreting the validity of laws relating to religion in public schools, it has applied it somewhat narrowly. The Court upheld a federally funded program that provides remedial instruction to disadvantaged children in religious schools,⁶⁵ as well as another federal program that requires public schools to provide meeting rooms for religious organizations when they provide rooms for other noncurriculum-related groups.⁶⁶ In finding the effect of these laws to be secular, the Court was influenced by the neutral basis of the allocation of funds⁶⁷ and its finding that a public school "does not endorse or support student speech that it merely permits on a nondiscriminatory basis."⁶⁸

3. No Excessive Entanglement with Religion

The third and final prong of the *Lemon* test demands that the law must not result in excessive government entanglement with religion.⁶⁹ The Court's considerations under the entanglement prong are very similar to those under the "effect" prong. As the Court has noted,

avowed purpose—to prevent discrimination against religious and other types of speech—[was] undeniably secular" in regard to the Equal Access Act, which required public schools to provide meeting rooms for religious groups when they did the same for other "noncurriculum related student groups." *Bd. of Educ. of Westside Cmty. Schs. v. Mergens*, 496 U.S. 226, 249 (1990). The Court was unconcerned that some members of Congress were individually motivated by religious concerns because the important issue was the purpose of the Act. *See id.* (differentiating between legislative purpose of the statute and motives of legislators).

⁶⁴ *Lemon v. Kurtzman*, 403 U.S. 602, 612 (1971). The *Lemon* Court lays out all three prongs, but does not reach the second and third prongs of the test because it finds no secular purpose for the law.

⁶⁵ *Agostini v. Felton*, 521 U.S. 203, 230-32 (1997).

⁶⁶ *Westside*, 496 U.S. at 249-50 (differentiating between government speech endorsing religion and private speech endorsing religion).

⁶⁷ *See Agostini*, 521 U.S. at 231 (finding that the remedial instruction provided via federal funds was "available to both religious and secular beneficiaries on a nondiscriminatory basis").

⁶⁸ *Westside*, 496 U.S. at 250.

⁶⁹ *Lemon*, 403 U.S. at 612-13.

however, “[n]ot all entanglements . . . have the effect of advancing or inhibiting religion,” and in fact some “[i]nteraction between church and state is inevitable. . . . Entanglement must be ‘excessive’ before it runs afoul of the Establishment Clause.”⁷⁰ In *Lemon*, the Court instructed that “[i]n order to determine whether the government entanglement with religion is excessive, we must examine the character and purposes of the institutions that are benefited, the nature of the aid that the State provides, and the resulting relationship between the government and the religious authority.”⁷¹ Just as under the “effect” prong, the Court concluded that the carefully constrained federal programs considered in *Agostini* and *Westside* did not constitute an excessive entanglement with religion.⁷²

Although these three factors make up the test for determining whether a law involving religion and public schools is within the limitations of the Establishment Clause, it is important to remember that the Court has never considered the final two factors in regards to a law limiting or requiring the teaching of evolution in public schools. Because a law is unconstitutional if it fails any of the three prongs of the *Lemon* test, the Court has been able to avoid consideration of the last two prongs by finding a violation of the first “purpose” prong.

C. Alternatives to Lemon

Although the *Lemon* test remains good law and has never been rejected by a majority of the Court, the Court does not always apply the three-prong test, and factions of the Court have rejected it outright.⁷³ In several instances, the Court has expressed that *Lemon* is

⁷⁰ *Agostini*, 521 U.S. at 233 (citation omitted). The Court admits that “the line of separation, far from being a ‘wall,’ is a blurred, indistinct, and variable barrier depending on all the circumstances of a particular relationship.” *Lemon*, 403 U.S. at 614. The Court specifically considers such acceptable forms of entanglement, such as safety regulations, inspections, and compulsory school attendance. *See id.* (discussing minimal, yet acceptable, influences of the state on religion).

⁷¹ *Lemon*, 403 U.S. at 615.

⁷² *See Agostini*, 521 U.S. at 234 (holding that providing remedial instruction for disadvantaged children at parochial schools does not constitute excessive entanglement); *Westside*, 496 U.S. at 253 (concluding that mere custodial oversight by teachers of religious group meetings does not violate the excessive entanglement prong).

⁷³ *See, e.g., Santa Fe Indep. Sch. Dist. v. Doe*, 120 S. Ct. 2266, 2283 (2000) (Rehnquist, C.J., dissenting). A number of legal scholars have considered the Court’s weakening and possible abandonment of the *Lemon* test. *See, e.g., Carole F. Kagan, Squeezing the Juice from Lemon: Toward a Consistent Test for the Establishment Clause*, 22 N. KY. L. REV. 621, 622 (1995) (recommending narrowing the scope of the *Lemon* test to

not a strict test, but one that provides “helpful signposts.”⁷¹ It is therefore important to consider the alternative approaches the Court could choose to apply.

Most recently, in *Santa Fe Independent School District v. Doe*, the Court held unconstitutional the school district’s policy permitting a prayer initiated and led by students at high school football games.⁷⁵ In reaching its decision, the Court utilized the *Lee v. Weisman* noncoercion test.⁷⁶ In *Lee*, the Court stated that “the Constitution guarantees that government may not coerce anyone to support or participate in religion or its exercise, or otherwise act in a way which ‘establishes a [state] religion or religious faith, or tends to do so.’”⁷⁷ The Court, however, applies this noncoercion test hand-in-hand with the *Lemon* test and cites the three-prong test as support for its consideration of the Santa Fe School District’s purpose in authorizing the student prayer.⁷⁸ In *Lee* itself, the Court discussed the concerns about coercion, but also went on to apply the three-prong test; either way, the Court found the graduation prayer to be invalid.⁷⁹ In considering the purpose of the Santa Fe policy, the Court stressed that “[e]ven if the plain language . . . were facially neutral, ‘the Establishment Clause forbids a State to hide behind the application of formally neutral criteria and remain studiously oblivious to the effects of its actions.’”⁸⁰

Similarly, in *Lynch v. Donnelly*, the Court expressed its refusal to be tied to one particular test, but nevertheless applied much the same standards as the *Lemon* test when looking to see whether the

achieve the goals of the majority of the Court and to find a consistent resolution to various Establishment Clause cases); Thomas C. Marks, Jr. & Michael Bertolini, *Lemon is a Lemon: Toward a Rational Interpretation of the Establishment Clause*, 12 *BYU J. PUB. L.* 1 (1997). *But see, e.g.*, Penny J. Meyers, Note, *Lemon is Alive and Kicking: Using the Lemon Test to Determine the Constitutionality of Prayer at High School Graduation Ceremonies*, 34 *VAL. U.L. REV.* 231, 233 (1999) (arguing that *Lemon* is currently the best test to analyze state action and protect individual freedom).

⁷⁵ *Hunt v. McNair*, 413 U.S. 734, 741 (1973); *see also Lynch v. Donnelly*, 465 U.S. 668, 679 (1984) (pointing to situations where the Court did not apply the *Lemon* test, and stating its “unwillingness to be confined to any single test or criterion in this sensitive area”).

⁷⁶ 120 S. Ct. at 2271.

⁷⁷ *Id.* at 2275.

⁷⁸ *Lee v. Weisman*, 505 U.S. 577, 587 (1992) (quoting *Lynch*, 465 U.S. at 678).

⁷⁹ *Santa Fe Indep. Sch. Dist.*, 120 S. Ct. at 2282.

⁸⁰ *Lee*, 505 U.S. at 602-04 (noting the significance of the government “stamps of approval” on religious prayer).

⁸⁰ *Santa Fe Indep. Sch. Dist.*, 120 S. Ct. at 2278 n.21 (quoting *Capitol Square Review and Advisory Bd. v. Pinette*, 515 U.S. 753, 777 (1995)).

government had a secular purpose for its action.⁸¹ The *Lynch* Court points out that following the *Lemon* test, it is not necessary that the government's objectives be "exclusively secular."⁸² Even in cases in which the Court has expressed its unwillingness to be bound by the *Lemon* test, therefore, it has continued to be guided by its rules.

Chief Justice Rehnquist has continually criticized the *Lemon* test and the insurmountable nature of the wall the Court has erected between church and state in public schools. In his *Santa Fe Independent School District* dissent, Chief Justice Rehnquist, joined by Justices Scalia and Thomas, attacks the majority's application of the "oft-criticized" *Lemon* test.⁸³ Even his dissent acknowledges the appropriate use of *Lemon* as a guide, but counters that "mere anticipation of unconstitutional applications does not warrant striking a policy on its face."⁸⁴ Rehnquist attacks what he says is the Court's "demand that a government policy be completely neutral as to content or be considered one that endorses religion."⁸⁵ He seems to follow Scalia's reasoning in his *Lee* dissent that there is a tradition of prayer in the United States and its institutions; religion's mere existence there does not necessarily mean that there is an unconstitutional government purpose or coercion.⁸⁶

D. A High Barrier to Creationism in Public Schools

Besides the use of the *Lemon* test, Justice Brennan's decision in *Edwards* is very clear about the unconstitutionality of Louisiana's Creationism Act. The Court established a strong precedent in this decision that states could not bypass its *Epperson* rule—that a statute outlawing the teaching of evolution was clearly a violation of the Establishment Clause—by enacting a statute that is different on its face.⁸⁷ A wolf in sheep's clothing is still a wolf.

In addition to finding that the purpose of the statute was not

⁸¹ 465 U.S. at 680 (concluding that the city did have a secular purpose for the display of a crèche celebrating and depicting the origins of the Christmas holiday).

⁸² *Id.* at 681 n.6.

⁸³ *See Santa Fe Indep. Sch. Dist.*, 120 S. Ct. at 2284 (Rehnquist, C.J., dissenting) (highlighting the "checkered career" of *Lemon* in Supreme Court decisions).

⁸⁴ *See id.* at 2284 n.1 (Rehnquist, C.J., dissenting).

⁸⁵ *Id.* at 2287 (Rehnquist, C.J., dissenting).

⁸⁶ *Lee v. Weisman*, 505 U.S. 577, 631-36 (1992) (Scalia, J., dissenting).

⁸⁷ *See Edwards v. Aguillard*, 482 U.S. 578, 586 (1987) (finding that the stated purpose of "protecting academic freedom" was not the actual purpose of the law).

secular and that the stated purpose of academic freedom was a sham,⁸⁸ the Court considered that “[t]here is a historic and contemporaneous link between the teachings of certain religious denominations and the teaching of evolution” and that it “need not be blind” to the real purpose of the legislature.⁸⁹ The Court is careful to note, however, that the decision does “not imply that a legislature could never require that scientific critiques of prevailing scientific theories be taught,” where it was actually done “with the clear secular intent of enhancing the effectiveness of science instruction.”⁹⁰ Again, the Court reemphasizes the importance of the actual purpose in determining whether the law would survive a constitutional challenge.

III. SKIRTING THE COURT’S RULINGS: TRYING TO BRING CREATIONISM BACK TO PUBLIC SCHOOLS

A. *Societal Concerns and a Turn Toward Religion*

Americans are increasingly concerned about the nation’s public schools. Given the recent well publicized violent incidents, parents are worried about their children’s safety.⁹¹ Parents worry not only about their children’s physical well-being, but also about their children’s behavioral and moral development. In response to these wide-ranging concerns, a great variety of approaches have been introduced, considered, and even implemented, including school vouchers,⁹² metal detectors,⁹³ morning prayer,⁹⁴ and charter schools.⁹⁵

⁸⁸ See *supra* notes 57-59, 68 and accompanying text.

⁸⁹ *Edwards*, 482 U.S. at 590-91.

⁹⁰ *Id.* at 593-94. The Court compared this with the difference between posting the Ten Commandments on a classroom wall and using it for legitimate educational reasons. *Id.* (finding that the law had no secular purpose).

⁹¹ Recent shootings in public schools have received vast amounts of media attention and have generated increased concern from parents about their children’s safety. For just a few examples of the expansive media coverage of the shootings at Columbine High School in Littleton, Colorado, see generally Dorren Klausnitzer & Jay Hamburg, *We Are Doing Everything We Can’; Principals Reassure Parents, Students About Precautions*, TENNESSEAN, Apr. 30, 1999, at 1A; Robert D. McFadden, *Violence, Real and Imagined, Sweeps Through the Schools*, N.Y. TIMES, Apr. 30, 1999, at A1; Janet Naylor et al., *Schools Crack Down on Kids: Parents, Teens Fear an Overreaction to Colo. as Metro Districts Treat Threats Seriously*, DETROIT NEWS, Apr. 30, 1999, at A1.

⁹² See Johnson, *supra* note 2 (describing parents’ concerns that without school vouchers, poor children without the opportunity to attend more desirable schools will not get the structure and discipline they need).

⁹³ See Kevin Sack, *Schools Look Hard at Lockers, Shirts, Bags and Manners*, N.Y. TIMES, May 24, 1999, at A1 (reporting on a Georgia community’s response to the Columbine shootings, including examining students’ bags and lockers and planning the

Many throughout the community argue that the problems in public schools result from a lack of values, and that therefore school reforms should focus on how to instill values in today's youth. If children had a better value system, the argument goes, they would respect themselves and each other enough not to engage in much of the violent and illegal activity that is currently plaguing public schools.⁹⁶ Many believe that religion will help.⁹⁷

This is not to suggest that religion in public schools has not been a constant issue in the United States. Given the First Amendment's directives that the government can make no law respecting religion, yet must simultaneously respect the exercise of it, public schools are presented with the difficult position of determining what activities cross this line. While the Constitution advocates the separation of church and state, Americans are very religious people—90% identify themselves as believing in some kind of God and 85% identify themselves as Christians.⁹⁸ Some communities, particularly in the so-called "Bible belt," contain an even higher percentage, and indeed may have no one who would object to religion being a component of

installation of metal detectors in the near future).

⁹⁴ See Stephen Dinan, *Lawmakers in Accord on Schooling in Virtues*, WASH. TIMES, Feb. 5, 1999, at C3 (discussing several bills introduced in the Virginia General Assembly addressing the importance of "[t]eaching good character to public-school students").

⁹⁵ See James Traub, *What No School Can Do*, N.Y. TIMES, Jan. 16, 2000, § 8 (Magazine), at 52 (addressing the approaches to improving education, including the establishment of charter schools and the provision of school vouchers to parents).

⁹⁶ Of course, many would argue that this is not where the problem lies, but that instead it results from the quality of public education—teachers, resources, physical plant, and the lack of funding to deal with these problems. Others would look to the problems of the family. Yet others worry about the accessibility of guns or illegal drugs. I only present the argument in this Comment which has resulted in the increased focus on religion in the public schools. I will not engage in a comparison of the strengths or weaknesses of the various arguments.

⁹⁷ In fact, some supporters of creationism argue that the teaching of evolution itself is causing harm to students. Ken Ham, the executive director of Answers in Genesis, an organization committed to "spreading the word" about God's creation of Earth, has stated: "[I]f our students are being taught that they are just animals in an evolutionary struggle for survival, are we surprised that they find no meaning or purpose in life?" Answers in Genesis, *Confusion in Kansas—Evolution Not Outlawed!*, at <http://www.answersingenesis.org/docs/4110.asp> (Aug. 18, 1999) (copy on file with the University of Pennsylvania Law Review).

⁹⁸ See Kenneth L. Woodward, *Finding God*, NEWSWEEK, Feb. 7, 2000, at 32 (discussing religion's role in the 2000 presidential primary campaign). Polls also show that religion is very important to teenagers. A Gallup poll of youths found that 79% of teens said they "regarded religious faith to be a significant influence on them." George Gallup & Alec Gallup, *Religious Faith Still Important to Teens*, ASHEVILLE CITIZEN-TIMES, Feb. 19, 2000, at B2.

public school education. The Supreme Court has interpreted the Establishment Clause to draw a “high and impregnable” wall,⁹⁹ however, and many public schools are left to determine where they can sneak in religion without breaching that wall.

The debate about teaching evolution and creationism in public schools has not diminished; in fact, it now seems stronger than ever. This comes as no surprise when considering a recent Gallup poll that indicates that 44% of Americans consider themselves creationists and believe that God created humans in their present form within the last 10,000 years.¹⁰⁰ Given these beliefs, some parents want their children to rely more on religion; they also may not want their children taught lessons that run counter to their religious teachings.¹⁰¹

In its simplest terms, the Bible recounts how God created the Earth in seven days and put all creatures on Earth as they now exist.¹⁰² The theory of evolution, on the other hand, asserts that all life is a product of complex change, which ferrets out weak and reinforces strong characteristics.¹⁰³ These explanations in their basic forms run directly counter to one another. Biblical literalists—those who believe that the Bible is a literal telling of creation in seven days—claim that evolution is an unproven theory that is simply wrong and should not be taught in the public schools. Most scientists, on the other hand, state that evolution is a foundational part of a science education, whereas creationism is a solely religious notion that should not be

⁹⁹ *Everson v. Bd. of Educ.*, 330 U.S. 1, 18 (1947); see also *supra* Part II (reviewing Supreme Court Establishment Clause jurisprudence).

¹⁰⁰ See Colleen Carroll, *Evolution of a Creationist Victory*, NAT'L CATH. REP., Oct. 8, 1999, at 3 (discussing a recent Gallup poll that, in addition to finding the above statistic, also found that 39% of people describe themselves as “theistic evolutionists,” meaning that they believe in a less than literal translation of Genesis—that God guided creation over millions of years, not actually seven days—and that 7% are true Darwinists who believe that God played no role in evolution).

¹⁰¹ This is not to suggest that children themselves do not often feel strongly about this subject; indeed they do. A recent article in *The Kansas City Star* provided a story of a high school freshman who expressed to her biology teacher, “I don’t agree with evolution.” She is certainly not alone in her feelings. In that instance, the teacher was able to convince the student that they should “agree to disagree.” Kate Beem, *Debate over Evolution Plays out in Classrooms*, KAN. CITY STAR, May 20, 1999, at A1.

¹⁰² Genesis 1.

¹⁰³ See generally DARWIN, *supra* note 12 (explaining evolution in terms of “survival of the fittest”). One high school biology textbook explains that evolution teaches “how and why living things have changed.” LEONARD BERNSTEIN, *GLOBE BIOLOGY* 552 (1999).

taught in the public schools.¹⁰⁴ While supporters of evolution have won important battles,¹⁰⁵ the war is far from over.

B. *New Approaches and Variations on Old Themes*

Supporters of creationism have chosen various approaches in their attempts either to bring creationism into the classroom or remove evolution. One basic philosophy that arises under all four approaches discussed below is that evolution is speculative and unfounded. For example, both Alabama and Oklahoma require a disclaimer in biology textbooks stating that evolution is a controversial theory.¹⁰⁶ A similar law in Tangipahoa, Louisiana mandated that teachers read a disclaimer immediately before teaching evolution in public school science classes. The Fifth Circuit held that law unconstitutional in August 1999.¹⁰⁷

1. Creationism as Science

One relatively new approach to introducing creationism into public school science curricula is to argue that the scientific basis for

¹⁰⁴ See SCIENCE AND CREATIONISM, *supra* note 12, at 2 (“[T]he teaching of evolution should be an integral part of science instruction, and creation science is in fact not science and should not be presented as such in science classes.”).

¹⁰⁵ See *supra* Part II.B (discussing the Supreme Court’s decisions that the anti-evolution laws at issue in *Epperson* and *Edwards* were both unconstitutional).

¹⁰⁶ See *Okla. Textbooks to Have Evolution Disclaimer*, PHILA. INQUIRER, Nov. 11, 1999, at A13 (reporting the Oklahoma Textbook Committee’s decision to require that all biology textbooks carry a disclaimer characterizing evolution as a “controversial theory”); Rosin, *supra* note 15 (discussing the Alabama law requiring that stickers describing evolution as a “controversial theory” be placed in all public school books).

¹⁰⁷ The Tangipahoa Parish Board of Education adopted a resolution that required teachers to read the following disclaimer before presenting the scientific theory of evolution to their students:

It is hereby recognized by the Tangipahoa Board of Education, that the lesson to be presented, regarding the origin of life and matter, is known as the Scientific Theory of Evolution and should not be presented to inform students of the scientific concept and not intended to influence or dissuade the Biblical version of Creation or any other concept.

It is further recognized by the Board of Education that it is the basic right and privilege of each student to form his/her own opinion and maintain beliefs taught by parents on this very important matter of the origin of life and matter. Students are urged to exercise critical thinking and gather all information possible and closely examine each alternative toward forming an opinion.

Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337, 341 (5th Cir. 1999). The Court concluded that the purported purpose of encouraging critical thinking was a sham and that the disclaimer “impermissibly advances religion.” *Id.* at 348.

creationism is just as strong as that for evolution. Creationists have developed their own scientific evidence to bolster their claims and dispute those of the evolutionists.¹⁰⁸ In fact, a number of organizations exist solely to further this approach. One such group, Answers in Genesis, contends: "The account of origins presented in Genesis is a simple but factual presentation of actual events and therefore provides a reliable framework for scientific research into the question of the origin and history of life, mankind, the Earth, and the universe."¹⁰⁹

The most successful attempt to introduce creationism as science in public schools is based on the "theory of intelligent design."¹¹⁰ This theory is not based on one specific religious philosophy or a particular religious story, but on the general notion "that the world and its creatures are far too complex to have arisen through random patterns of evolution and must be the product of some intelligent designer."¹¹¹ The intelligent design theory was recently thrust into the public spotlight by *Of Pandas and People*, a science textbook incorporating this approach.¹¹² Many communities across the country have publicly debated the adoption of this textbook, once again stirring the evolution versus creationism debate.¹¹³

¹⁰⁸ See MORRIS & PARKER, *supra* note 23, at 187-222 (1987) (asserting biological and paleontological evidence for creationism); Carroll, *supra* note 100, at 3 (stating the argument that evolution is no more credible than creationism because no one has "seen evolution take place").

¹⁰⁹ Answers in Genesis, *About AiG: Statement of Faith*, at <http://www.answersingenesis.org/home/area/about/faith.asp> (last visited Oct. 20, 2000) (on file with the University of Pennsylvania Law Review). Other organizations interpret the Book of Genesis less literally and explain that seven days could actually encompass millions of years. They often believe that facts about evolution and beliefs about creationism can coexist.

¹¹⁰ See Jay D. Wexler, Note, *Of Pandas, People, and the First Amendment: The Constitutionality of Teaching Intelligent Design in the Public Schools*, 49 STAN. L. REV. 439, 441-42 (1997) (discussing the "intelligent design" approach and the high school biology textbook *Of Pandas and People*).

¹¹¹ *Id.* at 442.

¹¹² PERCIVAL DAVIS & DEAN H. KENYON, *OF PANDAS AND PEOPLE: THE CENTRAL QUESTION OF BIOLOGICAL ORIGINS* (2d ed. 1993). Although this textbook has been adopted by some communities, it has not gained widespread acceptance and was most recently considered but rejected by the Idaho textbook committee. See Andrea Tortora, *Teachers Tiptoe Around Evolution*, CINCINNATI ENQUIRER, Dec. 13, 1999, at B1 (discussing Idaho's and various other states' approaches to evolution).

¹¹³ See Wexler, *supra* note 110, at 443 (discussing the debates and subsequent adoption or rejection of the science textbook *Of Pandas and People*).

2. Evolution as Religion

The flipside to the approach that defends creationism by claiming it is a valid scientific theory is to attack evolution as a form of religion itself—"secular humanism."¹¹⁴ The general argument is that although creationism is based on religious beliefs, evolution is as well.¹¹⁵ Just as teachers cannot be compelled to teach creationism because it violates the Establishment Clause, teachers similarly could not be compelled to teach evolution if it were classified as a religion.

Little chance exists, however, that the Supreme Court will view evolution as a form of religion. In *Edwards v. Aguillard*, the Court was confronted with a claim by the sponsor of the Louisiana Creationism Act that creationism should be taught in public schools to "redress the fact that the theory of evolution incidentally coincided with what he characterized as religious beliefs antithetical to his own."¹¹⁶ The Court did not specifically respond to the suggestion that evolution is a religion, instead simply explaining that the Senator's support of the Act for the purpose of furthering his own religious beliefs was an unconstitutional purpose.¹¹⁷ The Court of Appeals for the Ninth Circuit has relied on this decision in its more detailed consideration of claims that evolution is a religious belief and has firmly rejected such claims.¹¹⁸

¹¹⁴ See *Pelozo v. Capistrano Unified Sch. Dist.*, 37 F.3d 517, 519 (9th Cir. 1994) (rejecting the appellant's argument that the school district's limitation on the teaching of creationism in public schools violated the Establishment Clause); Nadine Strossen, "Secular Humanism" and "Scientific Creationism": Proposed Standards for Reviewing Curricular Decisions Affecting Students' Religious Freedom, 47 OHIO ST. L.J. 333, 333-34 (1986) (describing the belief of some students and parents that evolution is the "primary tenet of secular humanism" and that its instruction in public schools is therefore a violation of the Establishment Clause).

¹¹⁵ See *Pelozo*, 37 F.3d at 519 (setting forth the appellant's argument that "secular humanism" is really a religion for Establishment Clause purposes).

¹¹⁶ *Edwards v. Aguillard*, 482 U.S. 578, 592 (1987).

¹¹⁷ See *id.* at 593 ("Because the primary purpose of the Creationism Act is to advance a particular religious belief, the Act endorses religion in violation of the First Amendment.").

¹¹⁸ The U.S. Court of Appeals for the Ninth Circuit summarized the claim that evolution should be regarded as a religious belief: "Evolutionism is one of 'two world views on the subject of the origins of life and of the universe.' The other is 'creationism' which also is a 'religious belief system.'" *Pelozo*, 37 F.3d at 519. Even considering all the facts in the light most favorable to the plaintiff (the court was reviewing a motion to dismiss), the court quickly rejected this claim stating that "both the dictionary definition of religion and the clear weight of the caselaw are to the contrary." *Id.* at 521 (citations omitted).

3. Competing Theories as Source for Debate

The third approach, which has gained momentum recently, provides that children should be taught both evolution and creationism so that they may determine for themselves which is more accurate. This argument is actually incorporated in both approaches discussed above: creationism as science and evolution as religion. These two approaches contend that creationism stands on the same ground as evolution and should therefore receive equal treatment in public school science curricula. One need not adopt either of the approaches, however, to believe that both evolution and creationism should be presented to children. Nevertheless, many of the arguments for teaching both evolution and creationism hinge on some of the fundamental positions presented above.

Legally, this approach is promising to supporters of creationism because the Supreme Court specifically left the door open for this type of science education. In *Edwards*, the Court limited its holding: "We do not imply that a legislature could never require that scientific critiques of prevailing scientific theories be taught."¹¹⁹ First, the Court would have to believe that the critiques were scientific and not religious. Second, any such law would still have to satisfy the three prongs of the *Lemon* test, and the Court's rulings concerning the religious nature of creationism would establish a difficult burden for the state to overcome.

4. Discourage or Prohibit the Teaching of Evolution

Closely related to encouraging debate is a final approach that, in theory, does not involve creationism at all—discouraging the introduction of evolution. As will be further discussed in the examination of Kansas's actions below,¹²⁰ states have accomplished this end by removing the requirement from their state curriculum that evolution be taught.¹²¹ In the last four years, six other states—Arizona, Alabama, Illinois, New Mexico, Texas, and Nebraska—"have tried to

¹¹⁹ *Edwards*, 482 U.S. at 593.

¹²⁰ *Infra* Part III.C (discussing Kansas's new science curriculum).

¹²¹ See Kate Beem, *Evolution Debate Persists in Schools: States Struggle to Establish Policies*, KAN. CITY STAR, June 14, 1999, at A1 (summarizing the two-year battle in New Mexico resulting in a state science curriculum that did not outlaw, but did not require, the teaching of evolution); Tortora, *supra* note 112 (reporting the removal of the word "evolution" from Kentucky science standards).

remove evolution from state science standards or water down the concepts, with varying degrees of success.”¹²²

This approach avoids a weakness in the three other possibilities. In theory, it avoids the Supreme Court holding that creationism is a religious doctrine. If creationism is not introduced in any way, then the proponents can argue religion is not being “established;” therefore the *Lemon* test will not even come into play.

C. *Evolution and Creationism in Kansas*

The Kansas science curriculum became the focus of international media attention in August 1999 when the Kansas State Board of Education voted to adopt newly drafted standards.¹²³ The controversy arose because of the Board’s earlier rejection of standards drafted by the state’s science curriculum committee—a committee comprised of scientists, educators, and citizens created for this specific purpose.¹²⁴ The original set of standards was based on the National Science Education Standards (“NSES”), a general framework drafted by the National Academy of Sciences.¹²⁵ The NSES include evolution as a “unifying concept” in science, linking cosmology, geology, physics, and biology.¹²⁶

¹²² Rosin, *supra* note 15, at 22.

¹²³ *See* KAN. STATE BD. OF EDUC., *supra* note 18 (outlining the new Kansas science requirements); *see, e.g., CNN the World Today* (CNN television broadcast, Aug. 12, 1999) (reporting on the recent science curriculum changes in Kansas); *Kansas Board Strikes Evolution from Classrooms: The Board Wants to Embrace New Standards for Teaching Science That Eliminates Evolution as an Underlying Principle*, ORLANDO SENTINEL, Aug. 12, 1999 at A4 (same); Ben Macintyre, *Kansas Schools Delete Darwin from Curriculum*, TIMES (London), Aug. 12, 1999, at 16 (same). The actual implementation of these standards seems highly unlikely after the August 1, 2000 school board primary election in Kansas. Five members of the school board were up for re-election, and three of the conservative members who supported the new science standards, including the school board chair at the time, were defeated. The three moderate Republicans elected in their places have promised to return evolution to the standards. Therefore, a majority of the new board will now support the reinstatement of evolution. *See* Pam Belluck, *Evolution Fors Dealt a Defeat in Kansas Vote*, N.Y. TIMES, Aug. 3, 2000, at A1 (reporting the election results and their likely ramifications).

¹²⁴ Brad Williamson, *supra* note 1.

¹²⁵ NAT’L RESEARCH COUNCIL, NATIONAL SCIENCE EDUCATION STANDARDS 2 (1996) (“[The Standards] outline what students need to know, understand, and be able to do to be scientifically literate at different grade levels.”). For criticism of the NSES and their promotion of evolution, *see* generally Michael J. Behe, *Darwin’s Hostages: A Decision in Kansas to Question Evolution Dogma Has Given Rise to Hysteria and Intolerance*, AM. SPECTATOR, Dec. 1999/Jan. 2000, at 32.

¹²⁶ NAT’L RESEARCH COUNCIL, *supra* note 125, at 119.

Evolution opponents immediately addressed the Board to voice their outrage at the standards.¹²⁷ In response to these objections, board member Steve Abrams presented a new set of standards.¹²⁸ These standards were the result of the efforts of Celtie Johnson, an avid opponent of evolution. Ms. Johnson organized a group of creationists from Kansas and Missouri and together they drafted the standards.¹²⁹ The standards approved in August 1999 were primarily based on the work of Johnson's group:

[T]he board approved science standards that contained references to microevolution, or adaptation, but no mention of macroevolution, or change from one species to another. The revised version no longer lists evolution as one of science's unifying concepts. The revised standards also omit many references to the age of Earth. There is no longer any mention of the big-bang theory.¹³⁰

The standards also contain other, more subtle references to the underlying ideas and arguments made by proponents of creationist science. For example, as a general principle for "teaching with tolerance and respect," they wrote that "[n]o evidence or analysis of evidence that contradicts a current science theory should be censored."¹³¹ The standards also include "examples anyone familiar with the debate would recognize as favorites of creationists, such as the volcanic explosion of Mount St. Helens in 1980, a catastrophe they say proves Earth can undergo monumental changes in short periods of time."¹³²

Of course, these standards do not outlaw the teaching of macroevolution in public schools; macroevolution simply is not a "required" concept and will not be included on state-wide standardized tests. Some teachers are worried that the uncertain status of evolution will only bring more controversy and challenges both to the classroom and to a subject already wrought with tension. Now when a teacher chooses to teach evolution, which many science teachers assure they will continue to do, they will face criticisms and questions about their choice. These criticisms will not just come from students, which is natural and expected in classroom discussions, but

¹²⁷ Beem, *supra* note 25 (noting the objections of Celtie Johnson to the standards).

¹²⁸ *Id.* (discussing conservative Kansas Board of Education member Steve Abrams's willingness to work with Celtie Johnson on new standards).

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ KAN. STATE BD. OF EDUC., *supra* note 18.

¹³² Rosin, *supra* note 15.

also from other teachers and the community at large.¹³³ Many science teachers strongly believe that teaching evolution is not optional, and one high school biology teacher said, "If I teach biology without evolution I'd be doing an injustice to students, and to myself."¹³⁴

D. *Do Kansas's Standards Violate the Constitution?*

The Kansas School Board's effort to reduce the prominence of evolution in its science curriculum standards rests on shaky legal ground. The school board's action is consistent with other efforts to limit or prevent the teaching of evolution in public schools without coming in direct conflict with the Supreme Court's Establishment Clause jurisprudence. The Court, however, has always interpreted the Establishment Clause to prevent not only the favoring of one religion over another, but also the favoring of religion generally over irreligion.¹³⁵ The Court has been particularly vigilant in Establishment Clause cases involving compulsory public education.

1. Applying the *Lemon* Test

The constitutionality of the new Kansas science standards turns on satisfaction of the three prongs of the *Lemon* test.¹³⁶ If the standards fail even one of the three prongs, then they would be found to violate the Establishment Clause.

¹³³ Brad Williamson, a high school science teacher in Olathe, Kansas, and a member of the committee that drafted the original science standards proposal, wrote in an editorial: "The board's action creates an entirely different educational environment, though, by legitimizing the notion that science and religion cannot coexist. . . . They would erect a wall between 'creationists' and 'evolutionists' and demand that each citizen choose one or the other side." Williamson, *supra* note 1.

¹³⁴ Rosin, *supra* note 15.

¹³⁵ See *Wallace v. Jaffree*, 472 U.S. 38, 52-53 (1985) ("[T]he Court has unambiguously concluded that the individual freedom of conscience protected by the First Amendment embraces the right to select any religious faith or none at all."); *Epperson v. Arkansas*, 393 U.S. 97, 106 (1968) ("There is and can be no doubt that the First Amendment does not permit the State to require that teaching and learning must be tailored to principles or prohibitions of any religious sect or dogma."); *Everson v. Bd. of Educ.*, 330 U.S. 1, 15 (1947) ("Neither [a state nor the Federal Government] can pass laws which aid one religion, aid all religions, or prefer one religion over another.").

¹³⁶ See *supra* Part II.B for a full discussion of the Court's application of the *Lemon* test in Establishment Clause cases.

a. *No Secular Purpose*

Under the *Lemon* test, the first consideration is whether the school board adopted the standards with a secular purpose. The Court has said that a “governmental intention to promote religion is clear when the State enacts a law to serve a religious purpose.”¹³⁷ Although this is a close case, it is unlikely that Kansas would be able to overcome the very high bar set by the Court. The school board members’ stated purpose is to ensure that their students were being taught “good science.”¹³⁸ The Court would likely find this purpose to be a sham, just as it found “academic freedom” in *Edwards*,¹³⁹ “promotion of moral values” in *Schempp*,¹⁴⁰ and “education[] function” in *Stone* all to be shams.¹⁴¹

The Court has made clear in its previous decisions that the historical context of the debate about evolution is relevant when determining whether the decisionmakers acted with a religious purpose.¹⁴² The Court has acknowledged the obvious reason for limiting the teaching of evolution. In *Epperson*, where the state law forbade the teaching of evolution in public schools, the Court expressed its concern that the law “was confined to an attempt to blot out a particular theory because of its supposed conflict with the Biblical account, literally read.”¹⁴³ Defenders of the Kansas School Board’s science standards would certainly argue that the situation in Kansas is substantially different from the state law at issue in *Epperson* because the standards simply de-emphasize the reliance on evolution. Thus, unlike the state law in *Epperson*, the Kansas standards do not

¹³⁷ *Edwards v. Aguillard*, 482 U.S. 578, 585 (1987).

¹³⁸ *NewsHour with Jim Lehrer: Evolution Revolution* (PBS television broadcast, Nov. 9, 1999) (reporting on the new science curriculum standards adopted in Kansas); *see generally* Kan. State Bd. of Educ., *Kansas State Board of Education Meeting Minutes, August 11, 1999*, <http://www.ksbe.state.ks.us/commiss/bdmin/0899boardmin.htm> (last visited Dec. 29, 2000) (describing how the Board perceived the science curriculum standards).

¹³⁹ *Edwards*, 482 U.S. at 586-87.

¹⁴⁰ *Sch. Dist. v. Schempp*, 374 U.S. 203, 223-24 (1963) (finding the state’s alleged secular purpose for requiring students to read Bible verses and the Lord’s Prayer to be a sham).

¹⁴¹ *Stone v. Graham*, 449 U.S. 39, 42 (1980) (concluding that the legislature’s purpose in having the Ten Commandments posted in public schools was not educational in a secular sense).

¹⁴² *Epperson v. Arkansas*, 393 U.S. 97, 107-09 (1968) (considering the origins of the evolution debate in American jurisprudence).

¹⁴³ *Id.* at 109.

attempt “to blot out a particular theory.”¹⁴⁴ However, the concern is the same: that the board is acting to restrict the teaching of a certain “body of knowledge . . . for the sole reason that it is deemed to conflict with a particular religious doctrine.”¹⁴⁵

The de-emphasis of evolution in the Kansas curriculum certainly appears to be due to its conflict with religious beliefs, particularly those of Bible literalists. First, if the concerns were really for “good science,” why would the standards drafted by the state’s science curriculum committee—a committee composed of scientists, educators, and citizens—be rejected without any explanation?¹⁴⁶ The committee was created precisely for the purpose of drafting these standards because these individuals were believed to have the necessary knowledge and skills. Second, a striking similarity exists between the Creation Science Association draft standards and the exact wording in the modified standards proposed by school board members Harold Voth, Steve Abrams, and Scott Hill.¹⁴⁷ Kansas Citizens for Science compared the adopted standards with those of the creationist group and found “that excluding the introduction, 40 of 42 changes to the standards written by Abrams, Voth and Hill were contained verbatim in one or both of the creationist documents.”¹⁴⁸ Third, Celtie Johnson, the woman who first presented board member Abrams with the alternative Creation Science Association standards, was primarily motivated by religious reasons. Johnson also claims that she “was motivated by a search for truth,” but her conception of truth is that evolution is a completely unfounded theory, and she “firmly believes in the biblical account of creation.”¹⁴⁹ Fourth, although the final version of the standards did not contain any discussion about creationism, it does contain components of the arguments in favor of

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 103.

¹⁴⁶ *See supra* text accompanying notes 123-26 (discussing the Kansas State Board of Education’s rejection of the curriculum committee’s proposed standards).

¹⁴⁷ *See* Kate Beem, *Pro-Evolutionists Raise More Issues in Science Debate*, KAN. CITY STAR, Jan. 12, 2000, at B1 (describing allegations that the new science standards are based on standards composed by the Creation Science Association). For the draft standards of the Christian Science Association, see The Creation Science Ass’n for Mid-Am., *Truth About the Kansas Science Standards Tornado*, at <http://www.csama.org/ksscistd.htm> (last visited Dec. 29, 2000).

¹⁴⁸ Beem, *supra* note 147.

¹⁴⁹ Beem, *supra* note 25.

creationism.¹⁵⁰ Finally, Abrams admits that creationist scholars influenced those elements he included in the standards.¹⁵¹

b. *Primary Effect That Advances or Inhibits Religion*

As discussed above, the Court will only consider the remaining two prongs of the test, primary effect and excessive entanglement, if it finds a secular purpose for the law.¹⁵² In this case, therefore, the consideration would need to go no further. If the Court finds a secular purpose, such as good science, and does not regard it as a sham, the Court would next need to find the Kansas science standards' "principal or primary effect [as] one that neither advances nor inhibits religion."¹⁵³ The Court has never before reached these prongs in a case involving the teaching of evolution and creationism in the public schools and often does not reach these prongs in other cases involving the Establishment Clause and public schools.

In *Wallace v. Jaffree*, although the Court found the purpose of the statute to be religious and therefore violative of the Establishment Clause, Justice Powell, in his concurring opinion, did note "that the 'effect' of a straightforward moment-of-silence statute is unlikely to 'advanc[e] or inhibi[t] religion."¹⁵⁴ The Court's main consideration with regard to this prong of the *Lemon* test would be "the effect on the minds and feelings of immature pupils."¹⁵⁵ Justice Powell concluded that the likelihood of children thinking about religion in such a circumstance was very small.¹⁵⁶ In *Board of Education v. Mergens*, the Court noted again the significance of the students' age in determining the effect of a requirement that meeting space be provided to religious student organizations.¹⁵⁷ In that case the Court concluded

¹⁵⁰ See *supra* text accompanying notes 147-48 (pointing out the portions of the standards which are borrowed directly from creationist rhetoric).

¹⁵¹ James Glanz, *Science vs. the Bible: Debate Moves to the Cosmos*, N.Y. TIMES, Oct. 10, 1999, at A1 (discussing the removal of key scientific subjects, particularly those related to the big bang theory).

¹⁵² See *supra* Part II.B.1 (acknowledging that when a law is enacted for the purpose of endorsing religion the second and third criteria will not be considered).

¹⁵³ *Lemon v. Kurtzman*, 403 U.S. 602, 612 (1971).

¹⁵⁴ *Wallace v. Jaffree*, 472 U.S. 38, 66 (1985) (Powell, J., concurring) (alterations in original).

¹⁵⁵ *Id.* at 66 n.9.

¹⁵⁶ See *id.* ("Given the types of subjects youthful minds are primarily concerned with, it is unlikely that many children would use a simple 'moment of silence' as a time for religious prayer.").

¹⁵⁷ 496 U.S. 226, 250 (1990) (determining that secondary school students were mature enough to appreciate the distinction between permitting and endorsing

that the students would understand that while permitting student speech on campus, the school was not endorsing it.¹⁵⁸

The situation in Kansas is arguably different from those discussed above in several ways. First, the science standards apply to all students, not only those who may be deemed mature enough to understand the state's role. Second, the teachers are directly involved in the teaching of the science curriculum, unlike both of the situations above, where the school merely allows a moment of silence and where teachers are not at all involved in the meetings. Finally, the state's involvement in limiting the teaching of certain subjects contrary to some citizens' religious beliefs "threatens to convey a message of state support for religion to students and to the general public."¹⁵⁹

c. *Excessive Entanglement with Religion*

The Court's considerations under the third and final prong are very similar to those under the "effect" prong. The Court will consider the "character and purposes of the institutions that are benefited, the nature of the aid that the State provides, and the resulting relationship between the government and the religious authority."¹⁶⁰ The Court has held laws relating to religion in public schools to pass these two prongs only when they were very narrowly focused and when they necessitated very limited teacher involvement.¹⁶¹

If the Kansas science standards reached the third prong, they would likely survive. If the purpose and effects are both found to be secular, then the entanglement will likely be slight. Furthermore, the Court is usually concerned about entanglement—demonstrated in the

religious speech).

¹⁵⁸ *Id.* at 249-50 ("We think that secondary school students are mature enough and are likely to understand that a school does not endorse or support student speech that it merely permits on a nondiscriminatory basis.")

¹⁵⁹ *Sch. Dist. v. Ball*, 473 U.S. 373, 397 (1985), *overruled by* *Agostini v. Felton*, 521 U.S. 203 (1997).

¹⁶⁰ *Lemon v. Kurtzman*, 403 U.S. 602, 615 (1971).

¹⁶¹ *Agostini*, 521 U.S. at 233-35 (concluding that when federally funded instruction is given by government employees on the premises of sectarian schools, the Court will not presume that the public employees will inculcate religion in violation of the excessive entanglement prong); *Mergens*, 496 U.S. at 248-53 (finding the Equal Access Act, requiring that public schools require meeting places for religious groups when it provided them for other noncurriculum related organizations, satisfied the *Lemon* test).

factors listed above—with regard to direct financial or other benefits to religious institutions, typically religious schools.¹⁶²

CONCLUSION

The Court has made clear that creationism does not have a place in public classrooms. In concluding that the Louisiana Creationism Act was unconstitutional, the Court disparagingly noted:

[I]t is not happenstance that the legislature required the teaching of a theory that coincided with this religious view [that God was responsible for the creation of humankind]. . . . The legislation therefore sought to alter the science curriculum to reflect endorsement of a religious view that is antagonistic to the theory of evolution.¹⁶³

Nonetheless, the debate continues. While states may no longer pass laws forbidding the teaching of evolution or demanding equal treatment for creationist theories, they may attack the issue in other ways. The approaches are varied and sometimes creative, but they continue to arise.

The wall preventing such entanglement between religion and public education must remain high with regard to the science curriculum, in part because concerns surrounding the teaching of science are closely related to other public school curriculum issues. If science classes in high schools can be tailored not to offend certain people's religious beliefs, then other courses may be next: history (no Holocaust?), English (no Mark Twain's *Huckleberry Finn*?), health (no sex education?). In order to protect independent thinking, religious beliefs must not be allowed to determine the curriculum of public school courses.

The real concern here is the education of school children. "[N]o law [shall be made] respecting an establishment of religion,"¹⁶⁴ including laws affecting public schools. While religion on the periphery may not offend the Supreme Court's requirements for separation, it can play no role in the classroom.

¹⁶² See *Mergens*, 496 U.S. at 253 (finding no excessive entanglement where public schools are required to provide meeting places for student religious groups).

¹⁶³ *Edwards v. Aguillard*, 482 U.S. 578, 592-93 (1987).

¹⁶⁴ U.S. CONST. amend. I.