Vanderbilt Law Review

Volume 54 Issue 6 Issue 6 - November 2001

Article 7

11-2001

The New Face of Creationism: The Establishment Clause and the Latest Efforts to Suppress Evolution in Public Schools

Deborah A. Reule

Follow this and additional works at: https://scholarship.law.vanderbilt.edu/vlr



Part of the Religion Law Commons

Recommended Citation

Deborah A. Reule, The New Face of Creationism: The Establishment Clause and the Latest Efforts to Suppress Evolution in Public Schools, 54 Vanderbilt Law Review 2555 (2001) Available at: https://scholarship.law.vanderbilt.edu/vlr/vol54/iss6/7

This Note is brought to you for free and open access by Scholarship@Vanderbilt Law. It has been accepted for inclusion in Vanderbilt Law Review by an authorized editor of Scholarship@Vanderbilt Law. For more information, please contact mark.j.williams@vanderbilt.edu.

The New Face of Creationism: The Establishment Clause and the Latest Efforts to Suppress Evolution in Public Schools

I.	INTE	RODUCTION	2556
II.	HISTORY OF THE ESTABLISHMENT CLAUSE		2563
	A.	The Three Tests	2565
		1. The Lemon Test	2565
		2. The Endorsement Test	2567
		3. The Coercion Test	2568
	B.	Anti-evolution Legislation	2569
	<i>C</i> .	Balanced-Treatment Legislation	2572
	D.	Recent Legislative Action	
III.	CREATIONIST TACTICS OF THE 1990S		2580
	A.	The Removal of Evolution from State Science	
		Curricula and Standardized Tests	2581
	B.	"Disclaimers" or "Warning Labels"	2585
	C.	The "Theory" of Evolution and Intelligent Design	
IV.	CRIT	PICAL FACTORS FOR ESTABLISHMENT CLAUSE	
	SCRI	UTINY	2588
	A.	Purpose and Primary Effect Through an Histor-	•
		ical Perspective	2593
		 Unmasking the Kansas Science Stan- 	
		dards	2595
		2. Exploring Efforts to Disclaim	2599
		3. Testing the Validity of "Theory" Legisla-	
		tion and Intelligent Design	2600
	B.	Purpose and Primary Effect Under a Textual	
		Analysis	2604
V.	Con	CLUSION	2608

There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that . . . from so simple a beginning endless forms most beautiful and most wonderful have been and are being evolved.

I. INTRODUCTION

Over seventy-five years after the impassioned debate between William Jennings Bryan and Clarence Darrow echoed through a hot Tennessee courtroom,² the controversial confrontation over science, religion, law, and education can still be heard in legislative halls, courtrooms, schools, and homes across the nation. The now infamous "Scopes Monkey Trial" of 1925³ brought the debate between religious fundamentalism and modern day scientific theory to the forefront and sparked twenty state legislatures to consider measures to prohibit the teaching of evolution in public schools.⁴ Nearly a century later, the dispute rages on. Twenty states considered anti-evolution measures in both the 1920s and the 1990s.⁵ Whether the incorporation of certain religiously motivated theories of the earth's origin into public schools violates the fundamental separation between church and state is a question that continues to plague this country today.⁶

Since Charles Darwin first introduced the concept of evolution⁷ in his 1859 book *The Origin of Species*, ⁸ Christian fundamentalists have rejected this scientific theory, contending that it con-

^{1.} DOROTHY NELKIN, THE CREATION CONTROVERSY: SCIENCE OR SCRIPTURE IN THE SCHOOLS 28, 35 & n.12 (1982) (citing Charles Darwin, The Origin of Species, II 316 (1902)).

^{2.} A Tennessee teacher, John Scopes, was arrested for teaching evolution in a public high school contrary to a state statute, and although the court did not find the law unconstitutional, the trial sparked the debate over the teaching of evolution and creationism in public schools that still rages today. See Scopes v. State, 278 S.W. 57 (Tenn. 1925), rev'd on other grounds, 289 S.W. 363 (Tenn. 1927).

^{3.} Id.

^{4.} See Steve Benen, Science Test: Seventy-Five Years After the Scopes Trial, Religious Right Activists Are Trying New Tactics to Expel Evolution from the Public Schools, 53 CHURCH & STATE 152, 152 (2000), at http://www.au.org/cs/church state/7002.htm.

^{5.} See id.

^{6.} This separation is defined in the First Amendment of the Constitution, which states, "Congress shall make no lawrespecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press, or the right of the people to peaceably assemble, and to petition the Government for a redress of grievances." U.S. CONST. amend. I.

^{7.} Evolution is defined as "a theory that the various types of animals and plants have their origins in other preexisting types and that the distinguishable differences are due to modifications in successive generations." WEBSTER'S NEW COLLEGIATE DICTIONARY 431 (9th ed. 1987).

^{8.} See Charles Darwin, On the Origin of Species (1859).

flicts with a literal reading of the Bible and its teachings that all living species were created by divine power.⁹ This Biblical-based tenet regarding the earth's origin is commonly known as "creationism," and its followers, "creationists," have developed various strategies that endeavor to remove the teaching of evolution from public schools and incorporate creationism into science curricula.¹¹ Despite Supreme Court jurisprudence that laws banning and criminalizing the teaching of evolution, ¹² and laws mandating the teaching of creationism, ¹³ violate the Establishment Clause, ¹⁴ creationists continue to develop new tactics to voice their opinions and beliefs.

Currently, Christian fundamentalists are using three strategies designed to remove evolution and, in certain instances, incorporate creationist theory into public school curricula. One strategy is to attempt to remove evolution from state science curricula, and correspondingly, from state-mandated tests. ¹⁵ Another strategy that

^{9.} See Michael Martinez & Jennifer Peltz, State Skirts Evolution Dispute: Illinois Standards Dodged Issue Long Before Kansas Flop, CHI. TRIB., Oct. 24, 1999, at C1.

^{10.} Creationism has two principal movements: "Young-Earth" creationism and the "Intelligent Design" theory. Benen, supra note 4, at 153. "Young-Earth" creationists promote a literal interpretation of the Book of Genesis and believe that the earth is only six thousand to ten thousand years old. This fundamentalist group boasts support from the biggest and most influential creationist group in the United States, the Institute for Creation Research, as well as from other prominent creationist organizations. Id. "Intelligent Design" theorists center their study and beliefs on the complexity of life and believe that this complexity requires an intelligent designer, i.e., God. Id. Supporters of this theory claim that Intelligent Design should not be associated with the religious "baggage" of creationism because it does not make conclusions about who the designer is, just that there is one. See John Gibeaut, Evolution of a Controversy, 85 A.B.A. J. SEC. CHURCH/STATE SEPARATION 50, 51 (1999). Creationist opponents believe that Intelligent Design is simply a reworking of an old theme and contend that the religious message is unmistakable. Id.; see also Derek H. Davis, Kansas Versus Darwin: Examining the History and Future of the Creationism-Evolution Controversy in American Public Schools, 9 KAN. J.L. & PUB. POLY 205, 205 (1999) (asserting that creationism, sometimes referred to as "creation science" or "scientific creationism," is a belief, generally taken from the Bible, that the universe and all living things were created by a higher power); N. Patrick Murray & Neal D. Buffaloe, Creationism and Evolution: The Real Issues, in Evolution Versus Creationism: The Public Education CONTROVERSY 454 (J. Peter Zetterberg ed., 1983) (defining creationism as "the viewpoint that the literal Biblical account of creation is the correct explanation for the origin of the earth and its living forms").

^{11.} A brief history of the teaching of evolution and creationism in public schools will follow in Part II of this Note.

^{12.} See Epperson v. Arkansas, 393 U.S. 97, 107 (1968).

^{13.} See Edwards v. Aguillard, 482 U.S. 578, 593 (1987).

^{14.} The Establishment Clause is a phrase contained in the First Amendment that reads: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof. . . " U.S. CONST. amend. I.

^{15.} The most aggressive example of this tactic occurred in August of 1999 when the Kansas Board of Education adopted new science curriculum standards that entirely removed evolution and other scientific theories relating to the origin of the earth, and likewise, removed evolution

creationists have employed is the use of a "disclaimer," ¹⁶ read before teaching evolution, to caution students that evolutionary theory is not to be taken as fact and is not intended to discount other beliefs that they may have regarding the earth's origin. ¹⁷ Thirdly, legislatures across the nation have enacted statutes requiring that evolution be taught as a theory, not a fact. ¹⁸ The success of this legislation has fomented a new response to evolution known as Intelligent Design. ¹⁹ This latest movement encourages teachers to present the controversy between Darwinism and creationism, and then point to evolution's inability to provide all scientific answers. ²⁰

The proponents of these three recent strategies have justified their actions as legal by relying on certain language in Supreme Court precedent suggesting that states and local school

from state-mandated tests. See Larry Whitham, Evolution Takes a Hit in Kansas Schools 'Creation' View to Get Classroom Request, WASH. TIMES, Aug. 12, 1999, at A1. Although this action permitted teachers to omit the theory of evolution from their lesson plans, it did not prevent them from teaching it. Id. Removing evolutionary theory from state-mandated tests, however, could have a severe impact on the emphasis that teachers place on students' need for this information. Id.

On February 14, 2001, the Kansas Board of Education restored evolutionary theory to the standards. See infra note 173 and accompanying text. Kansas's action, however, was not isolated and "at least six other states make no reference to . . . evolution . . . includ[ing] Illinois, Florida, Mississippi, Ohio, Oklahoma, and Tennessee." See Kansas Puts Evolution Back into the School Timetable, AGENCE FRANCE PRESSE, Feb. 15, 2001 [hereinafter Kansas Puts Evolution Back]. For further explanation on these similar, but less extreme approaches, see infra notes 178-80 and accompanying text.

- 16. As an example, a disclaimer might state the following: "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 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." Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337, 341 (5th Cir. 1999), cert. denied, 530 U.S. 1251 (2000).
- 17. Thus far, disclaimers have proved successful in Alabama, but the Fifth Circuit Court of Appeals recently found a similar disclaimer adopted in Louisiana to violate the Establishment Clause. See id. at 343.
- 18. See Benen, supra note 4, at 155 (asserting that this "just a theory" approach, as introduced by Rep. Ron Hood to the Ohio House of Representatives, confuses the scientific meaning of the word theory and the common meaning as utilized in the bill); Robert Greene, Panel Affirms Importance of Teaching Evolution, at http://www.onlineathens.com/1998/041098/0410.a3evolution.html (Apr. 10, 1998) (noting that the North Carolina House passed a bill in 1997 requiring that evolution be taught as theory as opposed to fact).

Similarly, Texas, Nebraska, and Alabama all teach evolution as only one possibility for the earth's origin. See Environmental News Network, Science Report: A Third of U.S. Schools Don't Teach Evolution, at http://www.cnn.com/2000/NATURE/09/21/evolution.enn/index/html (Sept. 21, 2000).

See supra note 10.

^{20.} See Jon A. Buell, Foreword to DAVID K. DEWOLF ET. AL., INTELLIGENT DESIGN IN PUBLIC SCHOOL SCIENCE CURRICULA: A LEGAL GUIDEBOOK, at iii, iv (1999).

boards are constitutionally permitted to control their own curriculum as long as they do not require that the curriculum conform to one religious viewpoint.²¹ Many creationist supporters claim that because there are significant gaps in the theory of evolution, allowing the presentation of alternative theories merely provides students with an "even-handed look at the legitimate scientific controversy."²² While this assertion is correct, the implicit religious message behind the latest creationist tactics directly controverts basic First Amendment ideals.²³ Thus, despite any purported secular purpose of promoting academic freedom, the Court must consider carefully the constitutional implications of permitting these strategies to continue.

Current tactics to combat evolution are unique from earlier efforts, and the Court must treat these latest actions under a different Establishment Clause scrutiny than it has in the past for three principal reasons. First, the creationist leaders that have developed the strategies wield substantial political power and are generally well-educated and well-versed in the legal implications involved in this controversial issue.²⁴ Thus, the new strategies are cleverly worded and formulated purposefully to avoid those methods that the Court has already explicitly struck down.²⁵

Secondly, the current legal analysis that the Court uses in Establishment Clause cases is confused and disjointed and does not appropriately address the current creationist strategies.²⁶ Lower

^{21.} See Sherri Schaeffer, Edwards v. Aguillard: Creation Science and Evolution—The Fall of Balanced Treatment Acts in Public Schools, 25 SAN DIEGO L. REV. 829, 842-43 (1988).

^{22.} Gibeaut, supra note 10, at 50.

^{23.} See Epperson v. Arkansas, 393 U.S. 97, 106-07 (1968) (holding that anti-evolution legislation breached the "wall of separation that the First Amendment was intended to erect between church and state" and that the First Amendment prevents states from "adopt[ing] programs or practices... which 'aid or oppose' any religion").

^{24.} See, e.g., Benen, supra note 4, at 154 (noting that the groups, such as the highly influential Institute for Creation Research in San Diego, had a budget in 1999 of nearly six million dollars and Religious Right allies such as Pat Robertson and Phyllis Schlafly have played a significant role in advancing creationists' efforts); Martinez & Peltz, supra note 9 (noting that Illinois Family Institute, affiliated with 2000 presidential candidate Gary Bauer, is taking credit for the Illinois Board of Education's recent adoption of science standards that replaced explicit references to evolution with the phrase "change over time").

^{25.} See Jerry White, Kansas Board of Education Removes Evolution from Science Curriculum, at http://www.wsws.org/articles/1999/aug1999/kan-a13.shtml (Aug. 13, 1999) (finding that the success of creationist actions, such as the one taken in Kansas, is not based on broad public support, but rather on the "rightward shift of the political establishment" in which fundamentalists have "mobilized their followers to vote for school board members and legislators").

^{26.} See Martha McCarthy, Religion and Education: Whither the Establishment Clause?, 75 IND. L.J. 123, 128-30 (2000) (noting that a majority of the current Justices have expressed displeasure about use of the Lemon test and that lower courts remained confused as to whether to apply one or all of the current tests that the Court had employed).

courts seem unable to ascertain which analysis to properly employ.²⁷ Thus, the manner in which the tests are applied varies greatly depending on the scope of a court's interpretation and the evidence that a court examines in rendering its decision.²⁸ The new strategies raise issues for which prior law has not accounted.²⁹

Finally, current creationist strategies not only endanger basic constitutional principles, but also could have a severe impact on the future of the American educational system and its progress in science-related studies.³⁰ Although the heart of this debate is a battle between religious principles and scientific theories, the National Academy of Sciences and other scientists are concerned that creationists' actions will produce students who are unable to understand the vital processes that underlie the field of science.³¹ If America wants to stay at the forefront of scientific study and remain competitive with other nations, its students must be taught scientific principles that are generally applied in the global scientific community.³² Thus, the implications involved in the latest bat-

^{27.} See, e.g., Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337, 343 (5th Cir. 1999) (applying all three of the current tests utilized by the Supreme Court and finding the "Establishment Clause jurisprudence rife with confusion"), cert. denied, 530 U.S. 1251 (2000); Doe ex rel. Doe, v. Beaumont Indep. Sch. Dist., 173 F.3d 274, 295 (5th Cir. 1999) (utilizing the Lemon, endorsement, and coercion tests), on reh'g en banc, 1999 U.S. App. LEXIS 14810 (5th Cir.); Ingebretsen v. Jackson Pub. Sch. Dist., 88 F.3d 274, 280 (5th Cir. 1996) (analyzing the constitutionality of school prayer using the Lemon, endorsement, and coercion tests); Jones v. Clear Creek Indep. Sch. Dist., 977 F.2d 963, 966-69, 972 (5th Cir. 1992) (upholding nonsectarian student invocations by employing the Lemon, endorsement, and coercion tests).

^{28.} See Freiler, 530 U.S. at 1254 (Scalia, J., dissenting) (expressing disapproval of the use of the Lemon test, but nevertheless basing his analysis on the lower court's use of the test to find that its conclusion "lack[ed] any support in the text of the invalidated document").

^{29.} See, e.g., id.; Santa Fe Ind. Sch. Dist., 530 U.S. 290, (2000). Both of these cases present instances that required a court to look beyond the applicable law and instead look to what the actions were actually attempting to accomplish.

^{30.} According to a recent study conducted by Lawrence Lerner, a professor of natural sciences and mathematics at California State University at Long Beach, one-third of all children attending public school are receiving an insufficient science education because of how certain states apply the teaching of evolution. See Environmental News Network, supra note 18.

^{31.} See id. ("Nothing in biology makes sense except in light of evolution. . . . Without the insight of evolution, students inevitably come to see science as a heap of disconnected facts. The present state of scientific literacy among U.S. adults bears witness to the ubiquity of this kind of learning experience."); Greene, supra note 18 ("There is no debate within the scientific community over whether evolution has occurred, and there is no evidence that evolution has not occurred. . . .' [U]nderstanding the evolutionary change is essential to understanding vital processes" (quoting a National Academy of Sciences guidebook)).

^{32.} See Stephen Jay Gould, Dorothy, It's Really Oz: A Pro-Creationist Decision in Kansas is More Than a Blow Against Darwin, TIME, Aug. 23, 1999, at 59, available at http://www.time.com/time/magazine/articles/0,3266,29479,00.html (last visited Nov. 1, 2000) (stating that "no other Western nation has endured any similar movement, with any political

tles over God and science extend beyond whether to teach controversial subjects, and could have a significant effect on the future of American schools.³³ The combination of these three problems warrants the development of a new test, or new legal analysis, that will enable the Court to deal with this latest chapter in the heated evolution and creationism debate. This Note examines the evidentiary factors that will be necessary to preserve First Amendment ideals and the consequences that may follow from adopting a more narrow, textualist approach when analyzing the Establishment Clause.³⁴

In developing a new analysis, the Court should consider the inquiry that has remained constant throughout Establishment Clause jurisprudence, namely, a search for the purpose and primary effect of an act.35 The crux of any Establishment Clause analysis hinges on how expansively or narrowly a court defines the terms "purpose" and "primary effect."36 A strictly textual examination of governmental actions does not often reveal the implicit religious nature of certain laws that may attempt to incorporate religious ideology into public schools.³⁷ Like some previous creationist strategies, however, the purposes of the latest creationist tactics are religiously motivated.38 and could threaten the separation between church and state that the Framers intended to establish in drafting the First Amendment.³⁹ Creationist theory presupposes and necessitates belief in Christianity based on its use of and reliance on the Bible.40 Therefore, creationism extends beyond the scope of a scientific explanation for the origins of the earth because it incorporates specific Christian monotheistic themes, which are contrary to the tenets of other religions, and ignores the religious freedom that the Establishment Clause serves to protect. For this

clout, against evolution—a subject taught as fundamental, and without dispute, in all other countries that share our sociocultural traditions").

^{33.} Whether Darwinian evolution should be taught in public schools is probably outside the scope of a court's determination because this curriculum choice is one generally left to school boards. When making a decision about its removal, however, the Court should note the arguments in favor of teaching evolution, in order to realize the effects of creationist actions.

^{34.} This Note does not propose a new test for the Court to adopt, but simply expands on the various factors that the Court should consider when applying any current or new test.

^{35.} See Epperson v. Arkansas, 393 U.S. 97, 107 (1968).

^{36.} For further explanation, see infra Part IV.

^{37.} See id.

^{38.} See generally Gould supra note 32 and accompanying text.

^{39.} See Everson v. Bd. of Educ., 230 U.S. 1, 12 (1947) (citing JAMES MADISON, Memorial and Remonstrance, II, in WRITINGS OF JAMES MADISON 183 (1900)).

^{40.} See Davis, supra note 10 (citing George Marsden, Understanding Fundamentalist Views of Science, in SCIENCE AND CREATIONISM 103 (Ashley Montagu ed., 1984)).

reason, it is essential to recognize the religious motivation of these tactics, independent of the text, in order to preserve the meaning of the Establishment Clause.

The three most recent anti-evolution strategies must be considered in light of the history of the fundamentalist movement, knowledge of creationist theory, and insight into the public school debate that has been raging since the "Scopes Monkey Trial." It is difficult to condemn or attack these aspects of anti-evolution strategies because they appear to be facially neutral. Nevertheless, the strategists' motivation and the actual effect that these tactics will have on science curricula call into question the religious neutrality of the new strategies and raise doubts about whether they conform to the strictures of the Establishment Clause. 41

This Note considers the purpose and primary effect of each of the three current strategies and their possible ramifications on the First Amendment guarantee of separation of church and state. Furthermore, this Note suggests that the Court should fashion a test that transcends textualism to examine the history of creationism and the fundamentalist movement, and consider the context in which the action was undertaken. Part II examines the historical underpinnings of the Establishment Clause, the tests that the Court has developed to determine whether a state's action violates this clause, and the Court's response to three strategies that creationists have employed thus far to effect change in scientific teaching in public schools. Part III examines more closely the three approaches that creationists have adopted in the 1990s and analyzes the possible constitutional and educational consequences if these tactics are ultimately successful. Part IV then studies the factors that the Court will likely consider in determining the purpose and primary effect of the tactics under a broader interpretation, recognizing the historical basis of the evolution debate. Part IV also undertakes comparisons between this broad analysis and those factors that are analyzed under a narrower textualist approach. 42 Finally, Part V concludes that if the Court intends to effectuate the objective of the First Amendment and combat creationists' latest efforts to incorporate Christian ideology into public schools, it must de-

^{41.} See supra notes 10-14 and accompanying text.

^{42.} See Tangipahoa Parish Bd. of Educ. v. Freiler, 530 U.S. 1251, 1251 (2000) (Scalia, J., dissenting) (using the narrow, textualist analysis in contending that the purpose of the disclaimer, as articulated, satisfied constitutional analysis even with specific reference to one possible alternative theory being Biblical creation).

velop a broad-based test that looks beyond mere language to the true motivation and intent of the act.

II. HISTORY OF THE ESTABLISHMENT CLAUSE

The rationale for the First Amendment's Establishment Clause can be traced back to the beginning of American history, when a large proportion of the early settlers came from Europe to escape certain laws that forced them to support a government-sponsored church.⁴³ Although the settlers had attempted to escape this religious persecution by coming to America, "the practices of the old world were transplanted and began to thrive in the soil of the new America."⁴⁴ Men and women who happened to be religious minorities in certain communities were discriminated against because of their different religious beliefs.⁴⁵ These religious minorities were forced to pay taxes to support churches whose clergy preached inflammatory sermons designed to strengthen and consolidate the established faith by generating a burning hatred against religious dissenters.⁴⁶

In the mid-1700s, sentiment arose in a number of areas that the best way to achieve individual religious liberty was to establish a government stripped of the power to tax, support, assist, or interfere with the religious beliefs of a specific group.⁴⁷ Leaders such as Thomas Jefferson and James Madison asserted that a true religion did not need the support of law, that neither believers nor nonbelievers should be taxed to support any religious institution, and that religious persecution was the result of government-established religions.⁴⁸ Following the dictates of these leaders, the drafters of the Bill of Rights provided in the First Amendment that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof"⁴⁹ In Everson v. Board of Education, the Supreme Court attempted to amalgamate the ideas of Jefferson, Madison, and the other Framers when it held that the

^{43.} See Everson, 330 U.S. at 8.

^{44.} Id. at 9.

^{45.} See id. at 10.

^{46.} See id.

^{47.} Virginia is generally considered to have been the leader in the movement among different areas in the country encouraging a separation of church and state to ensure religious freedom. *Id.* at 11.

^{48.} See Everson, 330 U.S. at 12 (noting that Madison's writings regarding this issue received strong support from a number of religious sects throughout Virginia).

^{49.} U.S. CONST. amend. I. This clause within the First Amendment is known as the Establishment Clause.

Establishment Clause, at a minimum, stands for the following proposition:

Neither a state nor the Federal Government can set up a church. Neither can pass laws that aid one religion, aid all religions, or prefer one religion over another. Neither can force nor influence a person to go to or to remain away from church against his will or force him to profess a belief or disbelief in any religion. No person can be punished for entertaining or professing religious beliefs or disbeliefs, for church-attendance or non-attendance. No tax, large or small, can be levied to support any religious activities or institutions, whatever they may be called, or whatever form they may adopt to teach or practice religion. Neither a state nor the Federal Government can, openly or secretly, participate in the affairs of any religious organizations or groups and vice versa. In the words of Jefferson, the clause . . . was intended to erect "a wall of separation between church and state." ⁵⁰

Over the years, this "wall of separation" has applied to all government practices that involve an unlawful commingling with religion, but the Court has recognized that "the vigilant protection of constitutional freedoms is nowhere more vital than in the community of American schools." The Court has consistently held that public schools are designed to serve as a powerful agency for promoting cohesion among all citizens, and therefore, must be kept "scrupulously free" from entanglement between church and state. Following this model, the Court has prohibited states from a number of actions that intertwine education and religion. Some of these actions include: public school students receiving religious instruction on public school premises; religious school students receiving state-sponsored education in religious schools; tate-sponsored prayer in public schools; and the posting of the Ten Commandments on the wall of a public school classroom.

One of the most vehemently debated issues concerning religion and education has been the constitutionality of prohibiting the teaching of evolution;⁵⁷ or in the alternative, requiring the teaching of creationism whenever evolution is taught.⁵⁸ Since the 1920s, states have developed certain strategies aimed at banning evolution

^{50.} Everson, 330 U.S. at 15-16 (citing Reynolds v. United States, 98 U.S. 145, 164 (1878)).

^{51.} Shelton v. Tucker, 364 U.S. 479, 487 (1960).

^{52.} McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1258 (E.D. Ark. 1982).

^{53.} See McCollum v. Bd. of Educ., 333 U.S. 203, 211-12 (1948).

^{54.} See Sch. Dist. v. Ball, 473 U.S. 373, 397-98 (1985).

^{55.} See Santa Fe Ind. Sch. Dist. v. Doe, 530 U.S. 290, 320 (2000); Abington Sch. Dist. v. Schempp, 374 U.S. 203, 224-26 (1963).

^{56.} See Stone v. Graham, 449 U.S. 39, 42-43 (1980).

^{57.} See Epperson v. Arkansas, 393 U.S. 97, 103 (1968); Scopes v. State, 278 S.W. 57, 58 (Tenn. 1925), rev'd on other grounds, 289 S.W. 363, 364 (Tenn. 1927).

^{58.} See, e.g., Edwards v. Aguillard, 482 U.S. 578, 596-97 (1987); McLean v. Arkansas Bd. of Educ., 529 F. Supp. 1255, 1258 (E.D. Ark. 1982).

from school curricula. These strategies can best be categorized into two types of action: "anti-evolution" legislation⁵⁹ and "balanced-treatment" legislation.⁶⁰ As yet, neither of these strategies has proved successful in allowing a state to fully eliminate evolution or promote creationism.⁶¹ Although the Court's Establishment Clause analysis has adequately addressed past legislation, the three tests it currently applies are misunderstood, confused, and misapplied by lower courts.⁶²

A. The Three Tests

In evaluating claims arising under the Establishment Clause, the Supreme Court has introduced three tests for examining a state's action: (1) the *Lemon* test, (2) the endorsement test, and (3) the coercion test.⁶³

1. The Lemon Test

The test with the longest lineage, and the one that is primarily used in claims involving the teaching of evolution, was developed in 1971 in Lemon v. Kurtz.⁶⁴ The Lemon Court created a three-part test designed to address those evils "against which the Establishment Clause was intended to afford protection: 'sponsorship, financial support, and active involvement of the sovereign in religious activity.' "65 The Lemon test holds that: (1) the statute must

^{59.} Anti-evolution legislation prohibits teachers or other instructors from presenting any "theory or doctrine that [hu]mankind ascended or descended from a lower order of animals" because of its conflicts with a belief in divine creation. Gregory G. Sarno & Alan Stephens, Constitutionality of Teaching or Suppressing Teaching of Biblical Creationism or Darwinian Evolution Theory in Public Schools, 102 A.L.R. FED. 537, 543-47 (1991). See infra Part II.B.

^{60.} Balanced-treatment legislation arose after a group of Christian fundamentalists in the 1960s spawned the theory of creation science, which was a reinterpretation of organic evolution according to Biblical authority, and in response, many states created statutes in which teachers and schools were required to either devote equal teaching time to creation science and evolution, or teach neither theory. See Sarno & Stephens, supra note 59, at 547-53; see also Nelkin, supra note 1, at 71 (discussing the Creation Science movement that prompted proposals for balanced treatment legislation); infra Part II.C.

^{61.} Anti-evolution strategies were finally put to rest with Epperson, 393 U.S. at 97, and the balanced-treatment legislation faced a similar fate following Edwards, 482 U.S. at 578.

^{62.} The most recent examples are Freiler v. Tangipahoa Parish Board of Education, 185 F.3d 337, 343 (5th Cir. 1999), cert. denied, 530 U.S. 1251 (2000), and McLean v. Arkansas Board of Education, 529 F. Supp. 1255, 1258 (E.D. Ark. 1982).

^{63.} For a fairly comprehensive historical analysis of these tests, see Freiler, 185 F.3d at 343.

^{64. 403} U.S. 602, 615-625 (1971). While this test has faced repeated criticism, "[t]he Supreme Court applies the three part *Lemon* test... in virtually all establishment clause cases." 4 RONALD D. ROTUNDA & JOHN E. NOWAK, TREATISE ON CONSTITUTIONAL LAW: SUBSTANCE AND PROCEDURE § 21.3, at 453-54 (2d ed. 1992) (footnote omitted).

^{65.} Lemon, 403 U.S. at 612 (citing Walz v. Comm'n, 397 U.S. 664, 668 (1970)).

have a secular legislative purpose, (2) its principal or primary effect must neither advance nor inhibit religion, 66 and (3) the statute must not foster "an excessive governmental entanglement with religion." While the *Lemon* test has been both criticized, 68 and occasionally ignored, 69 the Court continues to apply it and has expressly reaffirmed it in two recent cases. Nevertheless, many commentators believe that the use of *Lemon* is waning and doubt its continued use in the future.

Looking more closely at Lemon's three prongs, the first prong—"secular legislative purpose"—does not require that a challenged statute or regulation be wholly or predominantly enacted with a secular objective, 72 but it must be found that the purpose is sincere and not merely a "sham." Because this prong applies the broadest inquiry, which generally examines a number of factors to determine an action's true intent and purpose, the purpose prong most often determines whether a statute involving the teaching of evolution or creationism in public schools is constitutional. The second prong, known as the "effects test," forces a court to determine whether implementation of a state's policy has a neutral effect on its citizens. More specifically, this prong asks whether the actual practice of the government action conveys a message to the

^{66.} Id. (citing Bd. of Educ. v. Allen, 392 U.S. 236, 243 (1968)).

^{67.} Id. at 613 (citing Walz, 397 U.S. at 674).

^{68.} See, e.g., Lamb's Chapel v. Ctr. Moriches Union Free Sch. Dist., 508 U.S. 384, 398-400 (1993) (Scalia, J., concurring) (holding that the Lemon test has been "repeatedly killed and buried," but "stalks our Establishment Clause jurisprudence"); County of Allegheny v. ACLU, 492 U.S. 573, 655-57 (1989) (Kennedy, J., concurring in judgment in part and dissenting in part) (questioning the validity of the application of the Lemon test); Edwards v. Aguillard, 482 U.S. 578, 612-13 (1987) (Scalia, J., dissenting) (asserting doubt whether the "purpose" requirement of the Lemon test is a "proper interpretation of the Constitution"); Wallace v. Jaffree, 472 U.S. 38, 110 (1985) (Rehnquist, J., dissenting) ("The three-part test has simply not provided adequate standards for deciding Establishment Clause cases, as this Court has slowly come to realize.").

^{69.} See, e.g., Lee v. Weisman, 505 U.S. 577, 621 (1992) (holding that the Lemon analysis would not be applied in favor of the coercion test); March v. Chambers, 463 U.S. 783, 791 (1983) (applying historical practice instead of the Lemon test).

^{70.} See Santa Fe Indep. Sch. Dist. v. Doe, 530 U.S. 290, 314 (2000); Mitchell v. Helms, 530 U.S. 793, 807-08 (2000).

^{71.} See McCarthy, supra note 26, at 128-30.

^{72.} According to the Wallace Court, Lemon's purpose prong does not invalidate a statute merely because it is "motivated in part by a religious purpose," if there is a prevailing secular purpose that the statute also appropriately addresses. 472 U.S. at 56.

^{73.} See Robert Vaught, The Debate over Evolution: A Constitutional Analysis of the Kansas State Board of Education, 48 KAN. L. REV. 1013, 1026 (2000) (citing Edwards, 482 U.S. at 591-92).

^{74.} See supra notes 59-60 and accompanying text.

^{75.} Lemon v. Kurtz, 403 U.S. 602, 612 (1971).

reasonable observer of endorsement or disapproval of one religion.⁷⁶ The least-applied third prong requires that the state action not cause excessive governmental entanglement between church and state, which is "a question of kind and degree."⁷⁷ For instance, if a statute involves significant, ongoing, or day-to-day contact between state officials and church authorities, this could be struck down via the third prong.⁷⁸

2. The Endorsement Test

The Supreme Court has also applied the "endorsement test" to determine whether a statute or action promotes or supports one religious ideology over any other. This test was first introduced in Lynch v. Donnelly to reject a challenge to a city's display of a nativity scene during the Christmas season. In Lynch, Justice O'Connor asserted that each government action must be judged by the facts specific to that case, and that courts, in determining the constitutionality of such actions, must keep in mind both the fundamental nature of the Establishment Clause and the ways in which it can be eroded. This test, which tends to overlap with the second prong of the Lemon test, examines whether state action endorses a particular religion or religious belief. Courts must measure both what the state intended to communicate when it adopted the specific legislative act, as well as the message actually conveyed by the state.

^{76.} See Vaught, supra note 73, at 1031.

^{77.} See Lynch v. Donnelly, 465 U.S. 668, 684 (1983).

^{78.} See id.

^{79.} See id. at 668-93 (O'Connor, J., concurring) (collapsing the first and second prongs of the Lemon test by determining first whether the government's actual purpose is to endorse religion and second whether the practice actually conveys a message of endorsement).

^{80.} Id. at 668.

^{81.} Vaught, supra note 73, at 1030 (citing Lynch, 465 U.S. at 694 (O'Connor, J., concurring)).

^{82.} Id. at 1031.

^{83.} Id. (citing Lynch, 465 U.S. at 690 (O'Connor, J., concurring)). It is somewhat unclear whether the endorsement test is intended to replace the first and second prongs of the Lemon test or is a separate test, but it seems that according to O'Connor's own words that the test is essentially an inquiry into Lemon's purpose and effect to determine whether either endorses or disapproves one religion. See id. at 1031 & n.128 (citing Lynch, 465 U.S. at 690 (O'Connor, J., concurring)).

3. The Coercion Test

The final test sometimes employed by the Court is the "coercion test." According to this test, a school-sponsored activity violates the First Amendment if "(1) the government directs (2) a formal religious exercise (3) in such a way as to oblige the participation of objectors." This analysis is limited to those causes of action that include activities so religious in nature that they constitute state-sponsored and state-directed religious exercise in public schools. Because the nature of a claim against legislation regulating school curricula is not considered to be an instance in which the government sponsors a religious exercise, this test has not thus far been used in evaluating claims regarding evolution in public schools. The state of the second seco

Using both early constitutional jurisprudence and the Lemon test, the Supreme Court has struck down both anti-evolution and balanced-treatment legislation in a line of cases that began in the wake of the controversy generated by Scopes. The newest approaches, however, carefully skirt around what has been explicitly declared unconstitutional in these past decisions in order to evade future scrutiny. Thus, it is imperative that the Court use the historical underpinnings and origins of the evolution/creationism debate, as established in past decisions, to resolve whether these new strategies truly violate the Establishment Clause. The knowledge of past strategies illuminates the purpose and effect of current actions because it shows the similarities in tactics and intentions. 89

^{84.} See, e.g., Lee v. Weisman, 505 U.S. 577 (1992) (using the coercion test to hold that a school district's policy allowing clergy to give "nonsectarian" invocations at graduation ceremonies violates the Establishment Clause).

^{85.} Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337, 343 (5th Cir. 1999), cert. denied, 530 U.S. 1251 (2000) (quoting Jones v. Clear Creek Indep. Sch. Dist., 977 F.2d 963, 970 (5th Cir. 1992)).

^{86.} See Vaught, supra note 73, at 1034.

^{87.} See id. at 1035. These tests are often used in conjunction with one another, taking parts of each test to analyze the facts of a particular case. This has led to a great deal of confusion because lower courts have no clear guide about which test to apply in cases before them, and thus, lower courts end up using various and confused combinations of all three to decide the issue before them. See Martha M. McCarthy, The Road to Agostini and Beyond, 124 EDUC. LAW REP. 771, 783 (1998) (suggesting that "the Lemon test (or parts of it) can be used when deemed helpful, but Lemon can easily be disregarded if other criteria seem more appropriate").

^{88.} See Scopes v. State, 278 S.W. 57 (Tenn. 1925); see also Sarno & Stephens, supra note 59, at 537 (noting the history of the anti-evolution and balanced-treatment legislation).

^{89.} The Court in Edwards v. Aguillard relied heavily on the history of the evolution/creationism debate and on the McLean Court's analysis of the fundamentalist movement. See 482 U.S. 578, 578-82 (1987).

B. Anti-evolution Legislation

The debate between evolution and creationism began in the nineteenth century, and gained national attention when the religious movement known as fundamentalism⁹⁰ clashed with the rising acceptance of Darwinism. 91 Since the central premises of fundamentalism are a literal interpretation of the Bible and an inerrancy of Scripture, 92 fundamentalists viewed these scientific developments as direct attacks on the Bible and its teachings regarding the origin of humans. Fundamentalists further feared that acceptance of Darwinism would cause a decline in traditional values, and this concern had a pervasive effect on the teaching of biology in public schools.93 Three states went so far as to enact laws prohibiting the teaching of evolution in public schools, and local school boards and teachers across the nation used textbooks that avoided the topic entirely.94 For at the time, this practice was largely accepted, and it almost appeared that the evolution/creationism debate had been quieted.

In 1925, John Scopes was arrested for teaching evolution in a public high school in Dayton, Tennessee, in violation of a Tennessee statute making the teaching of evolution in schools a criminal offense.⁹⁵ More specifically, the statute prohibited public school teachers from presenting any theory that denied the story of the

^{90.} Fundamentalism is defined as "a movement in 20th Century Protestantism emphasizing the literally interpreted Bible as fundamental to Christian life and teaching." WEBSTER'S NEW COLLEGIATE DICTIONARY 498 (9th ed. 1987). As continuing emphasis was placed on science and technology, fundamentalists reacted with new fervor against evolutionary theories. See Davis supra note 10, at 207-09.

^{91.} See McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1258 (E.D. Ark. 1982). Darwinism is a term used to refer to the scientific theory that Charles Darwin proposed in his text, On the Origin of Species, in which he theorized that natural selection, a process by which some genetic variants within a species have a greater reproduction and survival rate, is the primary mechanism for evolutionary changes. Kansas Citizens For Science, National Association of Biology Teachers Statement on Teaching Evolution, at http://www.kcfs.org/why/ (last visited Nov. 11, 2001).

^{92.} This is the belief that "[a]ll basic types of living things, including [humans], were made by direct creative act of God during the creation week described in Genesis." NELKIN, supra note 1, at 71.

^{93.} See McLean, 529 F. Supp. at 1258-59.

^{94.} Tennessee, Mississippi, and Arkansas all enacted statutes specifically banning the teaching of evolution, and creationists also successfully petitioned local communities to engage in "the emasculation of textbooks, the 'purging' of libraries, and . . . the continued hounding of teachers." See Davis, supra note 10, at 213 (citing Ronald L. Numbers, The Creationists, in God and Nature: Historical Essays on the Encounter Between Christianity and Science 391, 403 (David C. Lindberg & Ronald L. Numbers eds., 1986)).

^{95.} See Jeanne Anderson, CHALK TALK: The Revolution Against Evolution, or "Well, Darwin, We're not in Kansas Anymore," 29 J.L. & EDUC. 398, 398 (2000).

divine creation of humans as taught in the Bible and, instead, maintained that humans have descended from a lower order of animals. 96 The Tennessee Supreme Court, relying on the U.S. Supreme Court's holding in Heim v. McCall, 97 held that Tennessee had the power as an employer, speaking through legislation, to determine the action of its teacher employees. 98 Thus, the Tennessee Supreme Court found that because Tennessee has the power to authorize and enforce contracts for public services, it may require that those services be rendered in a manner consistent with the public policy of the state—i.e., certain curricula in schools. 99

Although Scopes appeared to be a victory for the fundamentalists, it seems to have been the last clear ruling in favor of the religious movement. 100 Enactment of anti-evolution legislation ceased in 1928; however, creationists shifted their concentration to local communities and successfully exerted pressure on school boards, publishers, and teachers alike to omit evolution from the curriculum for over thirty years. 101 As fundamentalists began to place less emphasis on the battle against evolution and became preoccupied with combating new evils that arose after World War II, the federal government began clamoring for increased emphasis on evolutionary theory in schools. 102 Advancements in technology, new scientific discoveries in the 1960s, such as the launching of Sputnik, 103 and greater government interest in improving the United States's strength and achievement in scientific fields created a new demand for the development of biology texts that incorporated the theory of evolution. 104 This new emphasis on science produced a re-

^{96.} See Scopes v. State, 289 S.W. 363, 364 (Tenn. 1927).

^{97. 239} U.S. 175, 188 (1915) (discussing People v. Crane, 214 N.Y. 154 (1915) for the proposition that the statute was simply a declaration of a master as the character of work his servant shall perform, and the State was simply playing the role of the employer).

^{98.} Scopes, 289 S.W. at 365.

^{99.} Id. at 366.

^{100.} Scopes was reversed due to a procedural error regarding the court's ability to impose a \$100 fine, and on remand, the attorney general heeded the advice of many to dismiss the "bizarro case." Sarno & Stephens, supra note 59, at 547.

^{101.} See NELKIN, supra note 1, at 33 (noting that in 1942 fewer than fifty percent of high-school science teachers were teaching evolution, and by 1957, most biology courses were still not teaching paleontology or evolution).

^{102.} See Davis, supra note 10, at 213.

^{103.} Sputnik 1 was the first artificial earth satellite launched by the Soviet Union on October 4, 1957, and is considered to have inaugurated the Space Age. See 11 ENCYCLOPEDIA BRITANNICA 184 (1999).

^{104.} See Benen, supra note 4, at 153; see also Davis, supra note 10, at 213 (noting that fundamentalist anger arose when the government funded Biological Science Curriculum Study Texts, which featured evolution).

surgence of fundamentalist concern that the teaching of evolution would create a loss of traditional societal values. ¹⁰⁵ Any hope, however, that creationists entertained for relying on the tactics followed in *Scopes* were dashed when the Supreme Court declared anti-evolution legislation to be unconstitutional in the 1968 case of *Epperson v. Arkansas*. ¹⁰⁶

In Epperson, an Arkansas statute made it unlawful for a teacher in any state-supported school or university "to teach the theory or doctrine that mankind ascended or descended from a lower order of animals [or] to adopt or use in any such institution a textbook that teaches" that theory. 107 Although conceding that the control of public schools is generally delegated to state and local authorities and not subject to judicial scrutiny, the Court stated that because the statute implicated basic constitutional values "fundamental to our freedom," it was subject to judicial review. 108 The Epperson Court looked beyond the plain language of the statute to recognize unequivocally that the purpose of passing an antievolutionary statute was to protect "the belief of some that the Book of Genesis must be the exclusive source of doctrine as to the origin of man."109 Thus, relying on the purpose of similar laws, such as Tennessee's "monkey law," 110 and on other evidence that illuminated the lawmakers' true intentions, the Court struck down the law as a violation of the Establishment Clause.111

The Court's willingness to rely on the history of similar actions, rather than on the stated legislative purpose, exemplifies the expansive evidentiary scope of a broad interpretation. 112 Indeed, the second sentence of the opinion acknowledges that the law "was a product of the upsurge of 'fundamentalist' religious fervor of the twenties." 113 Thus, the Court used the act's history to determine its

^{105.} See McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1259 (E.D. Ark. 1982).

^{106. 393} U.S. 97 (1968).

^{107.} Id. at 98 (citing Initiated Act No. 1, ARK. ACTS 1929; ARK. STAT. ANN. §§ 80-1627, 80-1628 (1960 Repl. Vol.)).

^{108.} Id. at 103.

^{109.} Id. at 107.

^{110.} Id. at 108 (referring to the statute involved in the Scopes case as the "monkey law").

^{111.} One example of "other evidence" that the Court examined was an advertisement used in the campaign to secure adoption of the statute stating, "'All atheists favor evolution. If you agree with atheism vote against Act No. 1. If you agree with the Bible vote for Act No. 1...'" Id. at

^{112.} See id. at 107 (providing that in determining the purpose and primary effect of the enactment, precedent such as, Scopes v. State, 289 S.W. 363, 369 (Tenn. 1927), Illinois ex rel. McCollum v. Board of Education, 333 U.S. 203 (1948), and Engel v. Vitale, 370 U.S. 421 (1962), "inevitably determine the result in the present case").

^{113.} Id. at 98.

true purpose and effect, rather than depending strictly on legislative assertions as to why the statute was enacted. The *Epperson* opinion is replete with historical references establishing the religious intent and nature of the law, which reveal the motivations and objectives of the law itself. 115

The Court's emphasis on the statute's criminal penalty left open the question of whether this type of law could be allowed if it did not specifically *prohibit* the teaching of evolution. ¹¹⁶ Justice Black's concurrence only seemed to add to the confusion when he stated:

[A] state law prohibiting all teaching of . . . biology is constitutionally quite different from a law that compels a teacher to teach . . . a given doctrine. It would be difficult to make a First Amendment case out of a state law eliminating the subject of . . . biology from its curriculum. [T]here is no reason I can imagine why a State is without power to withdraw from its curriculum any subject deemed too emotional and controversial for its public schools. 117

Thus, although *Epperson* was unmistakable in its holding that antievolution legislation *prohibiting* the teaching of evolution and issuing a criminal penalty was a constitutional violation, it did not address whether states are likewise prevented from simply withdrawing certain subjects from their curricula altogether.

C. Balanced-Treatment Legislation

As government efforts to incorporate evolution into public school curricula increased, creationists developed a new response to combat evolutionary teaching known as "scientific creationism," which claimed that the Book of Genesis was supported by scientific data. In John C. Whitcomb, Jr. and Henry M. Morris coined the term "scientific creationism" in their 1961 book, The Genesis Flood, to describe the Biblical creation story as a scientific theory. In Leaders of the movement, who claimed that their goal was to reach millions of children with the scientific teaching of creationism and cure the ills brought about by the teaching of evolution, 20 also consid-

^{114.} Id.

^{115.} Id. at 97.

^{116.} See id. at 107 (stating that the State's "right to prescribe the curriculum for its public schools does not carry with it the right to prohibit, on pain of criminal penalty, the teaching of a scientific theory . . .") (emphasis added).

^{117.} Id. at 111, 113 (Black, J., concurring).

^{118.} See McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1259 (E.D. Ark. 1982).

^{119.} See id.

^{120.} This same sentiment remains one of the creationists' primary motivations today. For example, House Majority Whip Tom DeLay (a Republican from Texas) stated to members of

ered it part of their ministry to introduce creation science into public schools. ¹²¹ In 1977, one creation scientist, Paul Ellwanger, ¹²² collected several proposed legislative acts with the idea of preparing a model state act that would require the teaching of creationism as a science in conjunction with evolution. ¹²³ Although *Epperson* had prevented states from barring the teaching of evolution, legislators instead proposed bills that would require a teacher to give balanced treatment to both evolution and scientific creationism. ¹²⁴ Known as "balanced-treatment" legislation, many states based their new bills on Ellwanger's model act. ¹²⁵

The state of Arkansas attempted to implement this new balanced-treatment strategy in 1981. 126 Although never reaching the Supreme Court, McLean v. Arkansas Board of Education is a good example of balanced-treatment legislation in action, and demonstrated the fate that similar legislation would suffer. 127 The District Court for the Eastern District of Arkansas recognized the actions of the Arkansas legislature as religiously motivated, rather than scientifically based, 128 and issued a permanent injunction against enforcement of the Arkansas Balanced Treatment for Creation Science and Evolution-Science Act. 129 The court's analysis extended beyond looking merely to the language of the statute, by also examining "the specific sequence of events leading up to passage of the Act, departures from normal procedural sequences and substantive

Congress that the Columbine murders in Colorado occurred "because our school systems teach the children that they are nothing but glorified apes who have evolutionized [sic] out of some primordial soup of mud." Benen, supra note 4, at 158.

^{121.} McLean, 529 F. Supp. at 1260. Creationist writers Henry M. Morris and Martin E. Clark wrote, "Evolution is thus not only anti-Biblical and anti-Christian, but it is utterly unscientific and impossible as well. But it has served effectively as the pseudo-scientific basis of atheism, agnosticism, socialism, fascism, and numerous other false and dangerous philosophies over the past century." Id. at 1260 (citing MORRIS & CLARK, THE BIBLE HAS THE ANSWER).

^{122.} Paul Ellwanger is the founder of Citizens for Fairness in Education, an organization based in Anderson, South Carolina. *McLean*, 529 F. Supp. at 1261. He is trained in neither law nor science. *Id*.

^{123.} Id. at 1259.

^{124.} See NELKIN, supra note 1, at 100, 139 (noting that Ellwanger's bill was "specifically designed to avoid conflict with the First Amendment" and although he felt that neither creation nor evolution was scientific, the bill he proposed specifically prohibited religious instruction while claiming creationism to be a "science").

^{125.} See McLean, 529 F. Supp. at 1261.

^{126.} Id. at 1255.

^{127.} See Edwards v. Aguillard, 482 U.S. 578, 601 (1987) (striking down a Louisiana law based on the same model Act as the statute at issue in McLean).

^{198 74}

^{129.} ARK. STAT. ANN. §§ 80-1663 (1981 Supp.).

departures from the normal."¹³⁰ More specifically, by undertaking a complete analysis of the history of the fundamentalist movement, the rise of creationism through the guise of "creation science," and the unusual circumstances surrounding the passage of the Act, the court unearthed the Act's true purpose. ¹³¹

Applying the Lemon test, the McLean court held that the statement of the Act's purpose lacked any type of legislative investigation, debate, or consultation with educators or scientists and was clearly not motivated by the secular purpose that the legislators claimed. 132 In its decision, the court relied on the public announcement made by the bill's sponsor, who stated that the legislation was compatible with his literal interpretation of the Bible and that his religious convictions were a factor in his sponsorship of the Act. 133 The court then went on to decide that both the purpose and effect of the Act advanced religious beliefs because the Act's definition of creation science was insufficient to explain what creation science truly encompasses. 134 The court determined that the necessary secular purpose was lacking because creation scientists, contrary to their assertions, did not take data and weigh it against the opposing scientific data to reach their conclusions, but instead accepted the literal wording of Genesis. 135 Although the defense argued that the teaching of evolution was likewise a religion, the court dismissed this argument, asserting that if this were true, it was difficult to see how teaching creationism "could 'neutralize' the religious nature of evolution." 136 In refuting this further, the court stated:

Evolution is the cornerstone of modern biology, and . . . [a]ny student who is deprived of instruction as to the prevailing scientific thought on these topics will be

^{130.} McLean, 529 F. Supp. at 1263 (citing Village of Arlington Heights v. Metro. Hous. Dev. Corp., 429 U.S. 252 (1977)).

^{131.} Id. at 1272.

^{132.} Id. at 1263.

^{133.} Sarno & Stephens, supra note 59, at 550.

^{134. &}quot;Creation science" was defined in the Act as including the scientific evidence that indicates: "(1) sudden creation of the universe, energy, and life from nothing; (2) the insufficiency of mutation and natural selection in bringing about development of all living kinds from a single organism; (3) changes only within fixed limits of originally created kinds of plants and animals; (4) separate ancestry for man and apes; (5) explanation of the earth's geology by catastrophism, including the occurrence of a worldwide flood; and (6) a relatively recent inception of the earth and living kinds." *McLean*, 529 F. Supp. at 1264.

^{135.} Sarno & Stephens, supra note 59, at 550.

^{136.} McLean, 529 F. Supp. at 1274.

denied a significant part of science education . . . [which] would undoubtedly have an impact upon the quality of education in the State's colleges and universities. 137

While this finding did not speak directly to a determination that balanced-treatment legislation violated the separation of church and state, the fact that evolution was widely accepted in the scientific community tended to refute the validity of the legislature's stated purpose.

The Supreme Court had occasion to address balancedtreatment legislation in the 1987 case, Edwards v. Aguillard, in which the Court struck down a nearly identical Louisiana act requiring the teaching of both creation science and evolution. 138 The majority opinion, delivered by Justice Brennan, was quick to recognize that the Act's stated purpose of protecting academic freedom lacked merit. Promoting "academic freedom," as it was commonly understood, would mean that the state was "teaching all of the evidence" with respect to human origins, and yet the Act did not succeed in furthering this goal. 139 Analyzing this action under the Lemon test, the Court concluded that the legislative history revealed that the actual intent of the Act was to narrow the science curriculum. 140 Additionally, the history of the relationship between evolution and creationism, and of anti-evolution legislation, alerted the Court to the true nature and purpose of this action. 141 Noting that the bill's creators had based the Louisiana statute on the Arkansas statute struck down in McLean, the Court determined that the Act did not grant teachers any greater flexibility than they already had in presenting theories about life's origins. 142 Rather, it had the distinctly "different purpose of discrediting evolution by

^{137.} Id. at 1273.

^{138.} The "Balanced Treatment for Creation-Science and Evolution-Science in Public School Instruction" Act required public schools to give balanced treatment to the "sciences" of creation and evolution in classroom lectures, textbooks, library materials, or other programs to the extent that they dealt in any way with the origin of man, life, the earth, or the universe and decreed that when creation or evolution is taught, each shall be taught as a theory rather than proven scientific fact. 482 U.S. 578, 580 (1987).

^{139.} Id. at 586.

^{140.} The Court noted that Senator Bill Keith stated during the legislative hearings, "My preference would be that neither creationism nor evolution be taught." *Id.* at 587. The Court also remarked that academic freedom is not protected because the Act failed to ensure that either theory would even be taught at all. *Id.* at 589.

^{141.} Specifically, the Court examined the statute in light of the anti-evolution statutes adopted by state legislatures dating back to *Scopes* and *Epperson* to determine that balanced-treatment legislation gave preference to religious establishments that have the creation of humans as one of their tenets. *Id.* at 591 n.10.

^{142.} Id. at 578.

'counterbalancing its teaching at every turn with the teaching of creationism.' "143

The legislative history and anti-evolution precedent were instrumental in the Edwards holding because they established the true goals and intentions of such a measure and enabled the Court to recognize that the measure could not truly achieve its stated objectives in practice. 144 For example, the Court questioned the specific attack on the teaching of the one scientific theory that had been historically opposed by certain religious sects, and recognized that this Act was an attempt to restructure the science curriculum to conform to a particular religious viewpoint. 145 The Court also gave considerable mention to certain comments made by the Act's sponsor. Senator Bill Keith, confirming his belief that "scientific evidence supporting his religious views should be included in the public school curriculum to redress the fact that the theory of evolution incidentally coincided with . . . religious beliefs antithetical to his own."146 The Court considered "the historical context of the statute . . . and the specific sequence of events leading to passage of the statute." as well as evidence of historical attitudes towards creationism's validity as a scientific theory, to determine the statute's legislative purpose. 147 Thus, the Court did not feel compelled to base its own determination of the Act's religious purpose and effect on the stated purpose that the legislators had provided.

Despite this clear rejection of the Louisiana statute, the *Edwards* Court had not forgotten Justice Black's warning in *Epperson*. The Court acknowledged that the "academic freedom" that lawmakers alleged to be promoting did not provide teachers with "a flexibility that they did not already possess to supplant the present science curriculum with the presentation of theories, besides evolution, about the origin of life." Thus, it seems that the Court's primary concern was the specific requirement of teaching creation science rather than a teacher presenting theories that may run contrary to evolution. In addition to leaving open this possibility of teaching alternative scientific theories, Justice Powell noted that, generally, "States and locally elected school boards should

^{143.} Id. at 589 (citing Aguillard v. Edwards, 765 F.2d 1251, 1257 (5th Cir. 1985)).

^{144.} See id. at 586-96.

^{145.} Id. at 593.

^{146.} Id. at 592-93 & n.14.

^{147.} Id. at 595 (citing Epperson v. Arkansas, 393 U.S. 97, 107 (1968), and Arlington Heights v. Metro. Hous. Dev. Corp., 429 U.S. 252 (1977) in support of the use of historical context).

^{148.} See supra note 109 and accompanying text.

^{149.} Edwards, 482 U.S. at 587.

have the responsibility for determining the educational policy of public schools." ¹⁵⁰

Justice Scalia, joined by Chief Justice Rehnquist, dissented, finding no justification for invalidating the Act, considering that the legislators were "well aware of the potential Establishment Clause problems," and in overwhelmingly approving the Act, specifically stated its secular purpose. Examining the face of the statute alone, Scalia stated that the Court could and should rely only on those definitions of creation science and evolution that were provided in the Act, which indicated that creation science had a scientific rather than religious basis. Conceding that some weight should be given to the seven committee hearings at which the bill was considered, Scalia relied solely on legislators' assurances of secular purpose during the sessions to conclude that the Act did not intend to promote religion. Thus, this textual analysis rested on the asserted purposes of the Act, rather than undertaking an outside evidentiary inquiry.

Although not endorsing the Lemon test, Scalia questioned the majority's determination regarding the purpose prong of the test because the statute was not wholly motivated by a religious purpose. ¹⁵⁴ The dissent further emphasized that the purpose of a law should not be determined by the religion or faith system of those who seek to enact it, ¹⁵⁵ and he refused to acknowledge any suspicion due to the long-standing evolution/creationism debate and the historically religious purpose of similar laws. Scalia maintained that the language and explicitly stated purpose in the Act exemplified the balanced presentation of scientific evidence that it was intended to promote. ¹⁵⁶ Thus, absent a reliance on historical motivations for such acts, the dissent argued that the mere promotion of academic freedom was not a violation of the Establishment Clause. ¹⁵⁷

^{150.} Id. at 605 (Powell, J., concurring) (quoting Bd. of Educ. v. Pico, 457 U.S. 853, 893 (1982)).

^{151.} Id. at 610 (Scalia, J., dissenting).

^{152.} Id. at 611-12.

^{153.} Id. at 610, 621 (stating that it was sufficient that the legislators, who had all taken an oath to uphold the Constitution, had "considered [Establishment Clause problems]... with great care... [and]... specifically articulated the secular purpose they meant it to serve," and "specifically designated the protection of 'academic freedom' as the purpose").

^{154.} Id. at 613-14 (stating that, according to past cases, the secular purpose prong requires invalidation only if it is *entirely* motivated by a religious purpose).

^{155.} See id. at 615.

^{156.} See id. at 628-35.

^{157.} Id.

D. Recent Legislative Action

Although the majority opinion seemed fairly exacting in its determination that creation science was a religious tenet, fundamentalists were not deterred in their efforts to combat the teaching of evolution in public schools. One recent strategy towards furthering this goal has faced judicial review. 158 The Board of Education in Tangipahoa Parish, Louisiana implemented a new policy requiring teachers to read a disclaimer to their students prior to beginning the instruction of evolution in their classrooms. 159 This disclaimer stated that the theory of evolution was not a scientific fact and that creationism could be a valid alternative. 160 Seven months after the Board's resolution was passed, three parents brought a facial challenge claiming that the disclaimer violated the Establishment Clause. 161

In rendering its decision, the Fifth Circuit, somewhat reluctantly, began its analysis with the three-part *Lemon* test. ¹⁶² With respect to the first prong, the court determined that of the three stated purposes for the disclaimer, only the second and third articulated purposes were sincere objectives. ¹⁶³ The court found, however,

^{158.} See Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337, 344 (5th Cir. 1999) (noting that the *Lemon* test has been widely criticized and its applicability is in question), cert. denied, 530 U.S. 1251 (2000).

^{159.} Id. at 341-42.

^{160.} The disclaimer provided as follows:

Whenever, in classes of elementary or high school, the scientific theory of evolution is to be presented, whether from textbook, workbook, pamphlet, other written material, or oral presentation, the following statement shall be quoted immediately before the unit of study begins as a disclaimer from endorsement of such theory.

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 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.

Id. at 341.

^{161.} See id. at 342.

^{162.} Id. at 344 (noting that the Court's jurisprudence in this area is confusing and the use of Lemon has been widely criticized).

^{163.} The three stated purposes of the disclaimer were as follows: "(1) to encourage informed freedom of belief, (2) to disclaim any orthodoxy of belief that could be inferred from the exclusive

that the disclaimer violated the Establishment Clause, noting that the disclaimer failed the "effect" prong of the *Lemon* test, because its primary effect was to promote and maintain a particular religious viewpoint—creationism.¹⁶⁴ The court based its decision on three factors relating to the disclaimer: (1) it both questioned evolution and urged teachers to consider alternatives theories, (2) it reminded students that they may maintain their own beliefs about the origins of human life as taught in the home, and (3) it mentioned only the "Biblical version of Creation" as an alternative theory.¹⁶⁵ Thus, the court held that the disclaimer was not sufficiently neutral and violated the Establishment Clause.¹⁶⁶

Like Edwards and Epperson before it, the Fifth Circuit used an historical perspective to examine events preceding the adoption of the resolution. The court noted that the board members involved were concerned with not endorsing evolution primarily because of its inconsistency with the Biblical version of creation. ¹⁶⁷ The court made specific reference to an earlier board motion to allow the teaching of alternative theories of human origin, including creation science, ¹⁶⁸ and acknowledged that its examination would include both an analysis of the language of the disclaimer and the context of its adoption. ¹⁶⁹

Although the Supreme Court denied the Board's petition for writ of certiorari, the dissenting opinion issued by Justice Scalia, and joined by Justice Thomas and Chief Justice Rehnquist, illustrated the potential challenges a claimant could face in attempting to contest similar fundamentalist-backed state actions. ¹⁷⁰ Justice Scalia began his opinion by expressing his disapproval of the *Lemon* test, due to frequent inconsistencies and its erroneous application in lower courts. ¹⁷¹ His dissent, however, was not based strictly on a desire to clarify appropriate Establishment Clause judicial standards, but rather on his conclusion that the Fifth Circuit's holding

placement of evolution in the curriculum, and (3) to reduce offense to the sensibilities and sensitivities of any student or parent caused by the teaching of evolution." Id.

^{164.} Id. at 346.

^{165.} Id.

^{166.} Id.

^{167.} Id. at 341-42.

^{168.} Id. at 341 & n.1 (noting that in 1993, a member of the board had proposed a "Policy on the Inclusion of Material and Discussions on Religion in the Curriculum and in Students Activities," which would have allowed teaching creation science, but it was rejected in 1994 along with two other policies regarding graduation ceremony prayer).

^{169.} *Id*. at 342

^{170.} Tangipahoa Parish Bd. of Educ. v. Freiler, 530 U.S. 1251, 1251 (2000) (Scalia, J., dissenting).

^{171.} Id.

was erroneous and lacked necessary textual support for its invalidation. 172 Examining the text of the disclaimer, Scalia asserted that the disclaimer's mere "allusion to religion" does not imply that its real purpose is not simply to remind students of their right to form their own religious beliefs. 173 Scalia accused the lower court of substituting judicial reasoning for "[r]eference to unnamed 'facts and circumstances...'" and stated, "To think that this reference to... a reality of religious literature—and this use of an example that is not a contrived one, but to the contrary the example most likely to come into play—somehow converts the otherwise innocuous disclaimer into an establishment of religion is quite simply absurd." 174

The Court's denial of certiorari may indicate that a majority agreed with the Fifth Circuit's result and found that the board's latest strategy was yet another attempt to promote creationism and religious beliefs in the public school system. 175 The dissenting opinion, however, reveals a clear split in the Court regarding the scope of the Establishment Clause on such issues. The dissent also illustrates the extent to which a particular legal analysis will affect the outcome of similar issues. A strictly facial, text-based analysis has a very different vision of what the Framers intended by the "wall of separation" than does a broader interpretation that will examine a number of factors. This latest word from the Supreme Court on the evolution/creationism debate reveals that the outcome of future. similar claims will depend entirely on the extent to which the Court looks to both the history surrounding this long-standing conflict and the true intentions and motivations behind those who are promoting the new strategies.

III. CREATIONIST TACTICS OF THE 1990S

Although the Supreme Court has consistently rejected any attempt to prohibit the teaching of evolution, or to incorporate creationist ideology into the classroom, creationists continue to use the specific language of the Court's opinions to attempt to create constitutional ways to achieve their goals. ¹⁷⁶ Despite what appears to be a

^{172.} Id.

^{173.} Id. at 1254-55.

^{174.} Id.

^{175.} Id. at 1251.

^{176.} See generally DAVID K. DEWOLF ET AL., INTELLIGENT DESIGN IN PUBLIC SCHOOL SCIENCE CURRICULA: A LEGAL GUIDEBOOK 1 (1999) (providing specific guidance to Intelligent Design theorists regarding what is prohibited and what is permitted under Supreme Court precedent).

clear message regarding the true purpose and effect of prohibiting evolution and teaching creation science's religious message, the Court has left states with the ability to control their own curriculua, and creationists have utilized this "freedom" as a means of continuing their efforts. To Some states have taken subtle approaches that enable individual teachers to effect the most change in the classroom, while other states seem to be testing the limits of the Court's precedent, and its current conservative trend, with more overt attacks on evolutionary theory.

A. The Removal of Evolution from State Science Curricula and Standardized Tests

The newest and most aggressive tactic that creationists have employed is to remove mention of evolution from state science curricula and state-mandated tests. Although similar to antievolution legislation of the past, curriculum standards do not ban the teaching of evolution, but "leave explicit mention of it to the discretion of local schools." On August 11, 1999, the Kansas State Board of Education (the "Board") drew nationwide attention when it voted six to four to approve new State Science Education Standards that did not contain evolutionary theory. The new standards minimized the role of evolution by deleting areas that referred to macroevolution and deleting any reference to theories that ex-

^{177.} See supra Part II.

^{178.} The more subtle approaches are legislative actions regarding how evolution is to be taught because these laws are essentially just a reaffirmation that evolution is in fact a theory, whereas the action taken in Kansas was a more aggressive and overt action, truly testing the limits of how far the Court will allow schools to control their own curricula. See supra Part II.

^{179.} The action in Kansas was more overt in that it actually altered the science standards, incorporating creationist theory, as opposed to altering the words used in science standards. See generally Benen, supra note 4 (discussing recent actions by creationists to alter education standards).

^{180.} See id. at 154.

^{181.} Martinez & Peltz, supra note 9.

^{182.} The Kansas State Board of Education, a constitutionally created entity, is composed of ten members elected from different districts, and has broad authority to set educational policy without legislative approval. The Board is very independent and sometimes referred to as "the state's fourth branch of government." Part of the Board's function is to create "standards," which are a framework to help local districts establish their curricula. Publisher's Resource Group, Inc., New Kansas Science Standards Pass Amid Protest (Aug. 17, 1999), at www.prgaustin.com/ednews/nated/081799.html; see Kansas Citizens for Science, Knowledge Under Siege: How the Kansas Board of Education's Decision on the Science Standards Threatens Our Children's Education, at http://www.kcfs.org/under_siege.html (last visited Nov. 16, 2001) [hereinafter Knowledge Under Siege].

^{183.} Macroevolution is defined as "evolution that cumulates in relatively large and complex changes (as in species formation)." WEBSTER'S NEW COLLEGIATE DICTIONARY 714 (9th ed. 1987);

plained the beginning of the universe, such as the "Big Bang" theory. 184 Although an external committee of science educators submitted the first draft, 185 conservative Board members enlisted the help of Tom Willis, president of a fundamentalist Christian group known as the Creation Science Association of Mid-America, to author the Board's final adopted version. 186 This final version not only removed any concept of evolutionary science that conflicted with fundamentalist Christian views, but also added certain material that promoted creationism and other nonscientific agendas. 187

Although the changes did not go so far as to mandate explicitly the teaching of theories of a divine creator, the revisions did contain recurring themes considered to be standard creationist arguments intended to "lead[] the student away from mainstream

see also Vaught, supra note 73, at 1019 nn.32-33 (asserting that macroevolution is a term used to describe the process of change from one species to another, such as the study of the origin and evolution of flight in birds as an entire species, whereas microevolution is the process of change within a species, such as the study of small-scale changes in the anatomy of particular species of bird, for example, the change in wing-span or beak length); Publisher's Resource Group, Inc., supra note 182 (explaining the significance of removal of macroevolution as opposed to microevolution).

184. The "Big Bang" theory is a scientific theory holding that "the universe originated billions of years ago in an explosion from a single point of nearly infinite energy destiny." WEBSTER'S NEW COLLEGIATE DICTIONARY 149 (9th ed. 1987).

185. Knowledge Under Siege, supra note 182 (noting that the original version was prepared by a twenty-seven member external writing committee composed of professional educators and scientists and included evolutionary theory).

On February 14, 2001, the Board voted to reinstate evolutionary theory in the science curriculum and replaced the August 1999 standards with the version prepared by the external writing committee mentioned above. This change came about after the November 2000 election in which two of the six board members that voted in favor of the "evolution-free" standards lost their bids for re-election and one member chose not to run again, leaving the anti-evolution supporters in the minority. See Kansas Votes to Restore Evolution in School Standards, at http://www.cnn.com/2001/US/02/14/kansas.evolution.01/index.html (Feb. 14, 2001).

While the anti-evolution standards were still in place, the Pratt County Board of Education had approved a curriculum in line with the new standards that demanded tenth graders to understand that there are different views regarding the earth's origin and encouraged comparison of evidence to support that premise. See Kate Beem, New Theory Enters Evolution Debate, KAN. CITY STAR, Jan. 12, 2001, at B1. Although evolutionary theory once again appears in Kansas's science standards, this will probably not quiet the debate and creationists will continue their efforts. See Kansas Votes to Restore Evolution in School Standards, supra (noting that one of the board members who had voted in favor of the August 1999 standards reiterated his desires to have Kansas schools present both evolution and creation science).

186. See Benen, supra note 4, at 154.

187. See Brian Poindexter, A Concise Summary of the Major Changes, at http://www.welcome.to/KansasScienceStandards.html (last visited Nov. 16, 2001); Knowledge Under Siege, supra note 182.

scientific thought." 188 For example, section 10-4 of the 1999 standards stated: "Suggest alternative scientific hypotheses or theories to current scientific hypotheses or theories. Example: At least some stratified rocks may have been laid down quickly, such as Mount Etna in Italy or Mount St. Helens in Washington state."189 One of the tenets of creationist ideology is that the earth only dates back six to ten thousand years; therefore, creationists often reference mountains and stratified rocks to claim that these could have been laid down quickly to fit within time frames consistent with Biblical accounts of creation. 190 Another example is Benchmark Four, which read in the committee draft, "Students should develop an understanding of the universe, its origin, and evolution. The origin of the universe remains one of the greatest questions in science . . . [and] [t]he 'big bang' theory places the origin between ten and twenty billion years ago "191 The 1999 standards made the following changes: "Students should develop an understanding of the universe. The origin of the universe remains one of the greatest questions in science. Studies of data regarding fossils, geological tables, and cosmological information are encouraged . . . [b]ut . . . not mandated."192 The de-emphasis on the earth's age is also apparent because the standards deleted any indication of how and in what manner those fossil records should be discussed. 193 The many changes made to the original draft indicate that the Board not only effectively removed evolution, but also incorporated a creationist agenda into the new standards. 194

While Kansas's 1999 standards have received perhaps the greatest publicity, other states have adopted similar measures—with less fanfare—that effectively accomplish the same goal. 195 Ala-

^{188.} Id. (asserting that "statements... fall just short of 'explicitly teaching creationism' but instead... lead the student... into slanted, non-scientific ways of thinking about the natural world").

^{189.} Id.

^{190.} Since creationists believe that earth is only about six to ten thousand years old, one way they explain certain rock and fossil layers that appear to date back millions of years is the belief in quick occurrences such as volcanoes and the Biblical flood. *Id*.

^{191.} Vaught, supra note 73, at 1020.

^{192.} Id.

^{193.} See Poindexter, supra note 187.

^{194.} See id. The creationist language is very subtle, however, and does not make any explicit reference to the Bible, Christianity, or the existence of God. Thus, recognizing the changes as truly violating the separation of church and state is facially quite difficult.

^{195.} See generally Lisa D. Kirkpatrick, Note, Forgetting the Lessons of History: The Evolution of Creationism and Current Trends to Restrict the Teaching of Evolution in Public Schools, 49 DRAKE L. REV. 125, 137 (2000) (noting that Kansas is not the only state to remove the word "evolution" from its standards and/or state tests).

bama, Kentucky, Illinois, and Colorado have all enacted measures to remove the word "evolution" from science curricula standards and replace it with less controversial phraseology, such as "change over time."196 The Illinois State Board of Education claimed that its 1997 action to remove the word "evolution" from its standards was expressly due to the controversial nature of certain subjects and felt that it was not "appropriate that the state government put in a controversial topic . . . that people are disagreeing [about] . . . [and it is not] something that the government should be testing."197 Colorado did not redraft its science standards, but its action of deleting all questions related to evolution from state standardized tests achieved the same result as those states that redrafted their standards by simply deleting all questions related to evolution from state standardized tests. 198 As a public policy concern, removing evolution from state-mandated tests creates a strong possibility that teachers will be less willing to dedicate class time to subjects upon which students will not ultimately be tested. 199 Thus, even if a teacher is not religiously motivated to exclude evolution, standardized tests that do not include evolution may create the effect of promoting the religious alternative.200 Therefore, while Kansas's action seems to have been the most aggressive, other states have made similar changes stemming from the same religious motivation. What remains unclear, however, is whether these actions violate the Establishment Clause due to their underlying religious intentions and motivations or whether their apparent facial neutrality will withstand legal scrutiny.

^{196.} Id. Other sources point to states beyond these that also have similar legislation. See Kansas Puts Evolution Back, supra note 15 and accompanying text.

^{197.} Martinez & Peltz, supra note 9 (quoting Karen Hayes, state director of Concerned Women for America, supporter of Illinois Board action). The Illinois Board not only removed the controversial topic of evolution from the science standards, but removed "human sexuality" and "health products and services" from the physical development/health standards, and "multicultural studies" from the social sciences standards. Id.

^{198.} Kirkpatrick, supra note 195, at 137.

^{199.} Lisa Kirkpatrick remarks that the new standards could force some teachers to rethink their teaching approach because of the increased pressure on teachers to make sure that their students excel on standardized tests, due to the fact that "scores have become 'the only exchangeable currency . . . to judge whether schools are bad or good.' " Id. at 127 (citing When Teachers Are Cheaters, NEWSWEEK, June 19, 2000, at 48 (quoting Joseph Ranzulli, director of the National Center on the Gifted and Talented at the University of Connecticut)).

^{200.} See Greene, supra note 18; Anjetta McQueen, Science Debate Causes Confusion, at http://www.freerepublic.com/forum/a38038a7a48ae.htm (Oct. 12, 1999); see also McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1274 (E.D. Ark. 1982) (noting the ramifications of removing evolution from the science curriculum).

B. "Disclaimers" or "Warning Labels"

A second approach that creationists have employed to counteract the effects of teaching evolution in public schools is the use of "disclaimers," or statements that deny evolution as a scientific fact and make reference to the possibility that the earth's origin could be attributable to the Biblical theory of creation.²⁰¹ State legislatures and education boards have constructed anti-evolution messages, which are somewhat akin to a warning label, that are inserted into biology textbooks and read to students before any evolutionary concepts are taught.²⁰² As mentioned in Part II, the use of these disclaimers has already faced some legal barricades.²⁰³

The Tangipahoa Parish Board of Education ("Board") in Louisiana has witnessed a constant struggle between supporters of creationism and the teaching of evolution in its public schools. In 1994, the Board adopted a resolution that disclaimed the endorsement of evolution and mandated that teachers read the disclaimer prior to any discussion of the subject.²⁰⁴ After only seven months. parents of several students challenged the action as a violation of the Establishment Clause. 205 Affirming the district court, the Court of Appeals of the Fifth Circuit agreed with the parents and found that the disclaimer was aimed at the "protection and maintenance of a particular religious viewpoint."206 In reaching its holding, the Fifth Circuit paid particular attention to the purpose and intent of the resolution when it was enacted and to the disclaimer's exclusive reference to "the Biblical version of Creation." The Fifth Circuit's finding, while acknowledging the controversial history between these two subjects, ultimately relied on the language of the disclaimer itself and its specific inclusion of creationism.²⁰⁸ Therefore, a less assertive disclaimer that merely espouses the possibility of many origin theories, and not just creationism, may be constitutionally permissible. Furthermore, although the Supreme Court denied certiorari, Justices Scalia, Rehnquist, and Thomas issued a

^{201.} See generally Freiler v. Tangipahoa Parish Bd. of Educ., 385 F.3d 337 (5th Cir. 1999) (striking down a disclaimer for its specific reference to the Biblical theory of creation).

^{202.} See Benen, supra note 4, at 154-55.

^{203.} See supra notes 149-59 and accompanying text.

^{204.} See Freiler, 185 F.3d at 337; see also Andrea Ahlskog Mittleider, Case Note, Freiler v. Tangipahoa Parish Board of Education: Ignoring the Flows in the Establishment Clause, 46 LOY. L. REV. 467, 476-82 (2000) (analyzing the Fifth Circuit's application of Supreme Court Establishment Clause precedent in holding the disclaimer unconstitutional).

^{205.} Mittleider, supra note 204, at 468-69.

^{206.} Freiler, 185 F.3d at 344-45.

^{207.} Id. at 346 & n.4.

^{208.} Id. at 346.

dissent suggesting that a future Court might render a different decision.²⁰⁹

Louisiana is not the only state to have employed the use of disclaimers. For example, Alabama textbooks contain a message filled with traditional creationist arguments: students are advised that because no human was present when life first appeared, "any statement about life's origins should be considered as theory, not fact." While Alabama's action has not been contested, a similar measure in Oklahoma faced legal difficulties when the Oklahoma state attorney general frustrated the Oklahoma State Textbook Committee's efforts to mimic Alabama's disclaimers by ruling that the Committee lacked the authority to alter the textbook. Considering the obstacles that disclaimers have faced, it seems that this strategy is "legally dubious," and it is uncertain whether creationist leaders will continue its use. 212

C. The "Theory" of Evolution and Intelligent Design

For decades, states such as North Carolina and Ohio have enacted laws requiring that evolution be presented as theory, not fact. This "theory" legislation, which appears sound and valid, is nonetheless problematic according to the National Academy for Sciences because "[i]n scientific terms, 'theory' does not mean 'guess' or 'hunch' as it does in every day usage [but is an] . . . explanation[] of natural phenomena built up logically from testable observations and hypotheses." Thus, legislative actions such as this tend to

^{209.} See id. at 337.

^{210.} White, *supra* note 25 (describing Alabama's biology textbooks, which carry a sticker calling evolution "a controversial theory some scientists present as a scientific explanation for the origin of living things").

^{211.} Certain Christian conservative legislators made additional efforts on April 5, 2000 when the Oklahoma House of Representatives passed a measure "requiring science textbooks to acknowledge that there is 'one God as the creator of human life in the universe.'" Benen, supra note 4, at 155. This measure eventually died in committee before the proposal was put to a vote. Id.

^{212.} Id.

^{213.} See id.; Greene, supra note 18.

^{214.} Benen, supra note 4, at 155. A publication by the National Academy for Sciences, Teaching About Evolution and the Nature of Science also goes on to state: "Biological evolution is the best scientific explanation we have for the enormous range of observations about the living world Scientists can also use the word 'fact' to mean something that has been tested or observed so many times that there is no longer a compelling reason to keep testing or looking for examples. The occurrence of evolution in this sense is a fact. Scientists no longer question whether descent with modification occurred because the evidence supporting the idea is so strong." National

confuse evolution's validity. Some believe that this will allow creationism to triumph over evolution, if not in the classroom, at least in public opinion.²¹⁵

Utilizing this mantra of "theory not fact," a third strategy, known as Intelligent Design, 216 has taken shape in recent years. This theory advises teachers to focus their attention on the holes and questions that evolution does not answer, rather than to teach what scientists affirmatively believe about the origins of the universe. 217 Intelligent Design theorists encourage local school boards, teachers, parents, and attorneys to "teach the controversy." 218 Incorporating this technique into the school curriculum involves discussing scientists who have disagreed with evolution and feel that certain evidence displays distinctive features of intelligently designed systems. 219 Although Intelligent Design specifically eliminates reference to a deity, the theory is premised on the supposition that "intelligent causes rather than undirected natural causes best explain many features of living systems." 220

Roger DeHart, a high school science teacher in northern Washington state, and Intelligent Design advocate, has recently faced legal threats from the American Civil Liberties Union ("ACLU") and parents for the unmistakable "religious message" in his presentation of evolution. DeHart's teaching method was first questioned when a student informed her father that the class's two-unit study of evolution included use of fifteen to twenty pages of photocopied excerpts from Of Pandas and People 222 and a viewing of the film Inherit the Wind, depicting the "Scopes Monkey Trial." In addition, DeHart would conclude his lesson with a student oral debate 224 discussing the pros and cons of teaching evolution in public

Academy of Sciences (U.S.) Working Group on Teaching Evolution, Teaching About Evolution and the Nature of Science, http://nap.edu/books/0309063647/html/index.html (1998).

^{215.} See Benen, supra note 4, at 11.

^{216.} See supra note 9 and accompanying text.

^{217.} See DEWOLF ET AL., supra note 176, at 23.

^{218.} See id.

^{219.} See id.

^{220.} Id. at 4, 19 (stating that "major biology texts present evolution as a process in which a purposeful intelligence (such as God) plays no detectable role").

^{221.} See Gibeaut, supra note 10, at 50 (asserting that DeHart had been teaching his beliefs regarding Intelligent Design in comparison to evolution for over ten years, but was forced to alter his lesson plan due to legal threats beginning in 1997).

^{222.} A Christian publisher in Texas says that they have been getting "plenty of orders" for this biology textbook, which presents the view that the state of the world is a product of design, an idea that critics feel is a code for creationism. See Greene, supra note 18.

^{223.} See Gibeaut, supra note 10, at 51.

²²⁴ While almost all students participated in the debate, they were given the option of instead writing a paper addressing the pros and cons of each side of the debate. See id.

schools, similar in substance to the debate between Darrow and Bryan.²²⁵ Upon being alerted to these techniques, the ACLU publicized information about DeHart's practices, which eventually led to the school superintendent "declar[ing] creationism off limits" and removing Of Pandas and People from the curriculum.²²⁶ Today, DeHart uses a small excerpt from Of Pandas and People and presents the concept of "irreducible complexities" without making specific reference to the term Intelligent Design.²²⁷

Attacking "theory" legislation and the teaching methods of Intelligent Design could be arduous because a claimant must prove that the action was "almost entirely motivated by religion." Challenging theory legislation proves difficult because although such actions are often religiously motivated, their effect on public school curriculum seems neutral, as the theory of evolution is not without scientific questions. Diluted versions of creationism, and legislative measures that mandate teaching methods, may actually be religiously neutral enough to survive constitutional scrutiny.

IV. CRITICAL FACTORS FOR ESTABLISHMENT CLAUSE SCRUTINY

Standard Establishment Clause analysis is inadequate to address the constitutionality of the current strategies for three principal reasons: (1) creationist proponents have substantial political power and sophisticated legal expertise; (2) the various tests are inconsistent and confusing; and (3) current analysis does not take into account the serious consequences that these efforts could have on a student's scientific knowledge and ability.²³⁰ In constructing a new approach, the Court should remember that today's Chris-

^{225.} See id.

^{226.} Id. at 52.

^{227.} DeHart was forced to appear before the school board and also before the school's curriculum committee, both times represented by an attorney, before the parties struck a compromise. See id. at 54. The school board's current position is that the religious overtones of DeHart's lesson have been removed and would pass constitutional muster, but many critics still believe that even allowing a discussion of Intelligent Design—even if those exact words are not used—is another version of creationism. See id.

^{228.} Id.

^{229.} Eugenie C. Scott acknowledges that evolution does not answer all of the questions remaining, as she states, "Evolution is accepted by scientists today because it explains more observations than any alternative." See Eugenie C. Scott, Dealing with Anti-Evolutionism, Reports of the National Center for Science Education, at http://www.ncseweb.org/resources/articles/5052_dealing_with_antievolutionism_1_9_2001.asp (last visited Nov. 16, 2001).

^{230.} See supra notes 21-27 and accompanying text.

tian fundamentalists remain as concerned with combating the teaching of evolutionary theory as were those in the 1920s.²³¹ Current doctrine permits creationists to achieve their purpose while still conforming their actions to law.²³² Thus, the Court should respond with a constitutional scrutiny that looks further than an act's articulated purpose.

By avoiding "buzz words," such as "creationism," and refraining from making specific reference to the Bible, recent strategists claim that their actions are within the specific allowances cited in Edwards v. Aguillard and other Establishment Clause cases. 233 For example, one leading Intelligent Design theorist, David DeWolf states, "Nothing in . . . Edwards forces local school districts, the states, or the federal government to . . . expose students to the scientific problems with current Darwinian theory as well as to any scientific alternatives." Because current strategists have carefully analyzed Supreme Court precedent in crafting their actions, any new test must seek to examine those pieces of evidence that go beyond the surface of an act to reveal its true purpose and motivation.

The Court has faced other situations in which it was forced to recognize that state action was specifically formulated to evade constitutional prohibition, and has determined that a stricter scrutiny of that action is necessary. Although the political motivations and severity of actions are very dissimilar, an analogy can be made between the scrutiny the Court applied to de facto and de jure race discrimination²³⁵ cases following the *Brown v. Board of Education*²³⁶

^{231.} See supra note 5 and accompanying text.

^{232.} See DEWOLF ET AL., supra note 176, at 20, 23 (distinguishing Intelligent Design from a religion or creation science in finding that the two "do not derive from the same source... [and]... Edwards does not apply to design theory and can provide no grounds for excluding discussion of design from the public school science curriculum").

^{233.} See Edwards v. Aguillard, 482 U.S. 578, 594 (1987) (noting that the teaching of other scientific theories about biological origins or presenting scientific critiques of evolution "might be validly done with the clear secular intent of enhancing the effectiveness of science instruction").

^{234.} DEWOLF ET AL., supra note 176, at 19 (emphasis added).

^{235.} De jure discrimination is demonstrated when a law is neutral in language and the "application may have been enacted with a purpose or motive to discriminate," whereas de facto is considered governmental action that appears neutral in its language, administration, and purpose, but its impact or effect is discriminatory. GERALD GUNTHER & KATHLEEN M. SULLIVAN, CONSTITUTIONAL LAW 749 (13th ed. 1997).

^{236.} Brown v. Bd. of Educ. (Brown 1), 347 U.S. 483 (1954). See generally GUNTHER & SULLI-VAN, supra note 235, at 749-77 (surveying state actions in which the Court engaged in an analysis that looked at the unconstitutional purpose or motivation behind the law in order to effectively invalidate it under the Fourteenth Amendment).

decision and the scrutiny required for the current religious strategies. 237

Once it became clear that racial segregation would not be tolerated under the Constitution, those seeking to perpetuate segregation became more sophisticated.²³⁸ They began to craft facially neutral laws that were nonetheless successful in perpetuating segregation,²³⁹ all in an effort to evade the Brown decision.²⁴⁰ For example, school boards developed "freedom of choice" desegregation plans, which operated not through rezoning districts or assigning blacks and whites together, but by allowing students to choose their schools regardless of where they lived.²⁴¹ The effect of these choice plans was that few black families would actually send their children to all white schools, and the schools remained substantially segregated.²⁴² Lower courts, anxious to evade the mandate of Brown, justified these plans with statements such as, "Nothing in the Constitution or in the [Brown] decision of the Supreme Court takes away from the people, the freedom to choose the schools they attend. The Constitution . . . does not require integration. It merely forbids discrimination."243 Thus, in order to combat maneuvers calculated to evade the Brown mandate, the Court adopted a strict scrutiny standard, allowing it to look beyond a statute's language at the true purpose, motivations, and effects of certain laws.²⁴⁴

^{237.} It should be noted that this Note is not trying to compare the struggle for racial equality and state resistance to desegregation to the efforts of Christian fundamentalists to remove evolution from public schools. Rather, it is only attempting to show the factors that the Court is willing to consider when addressing actions that appear facially neutral, but are intentionally designed to evade constitutional scrutiny. The comparison is for the purposes of identifying the evidentiary scope of a strict scrutiny standard of review.

^{238.} The Supreme Court has ruled in several cases that particular school integration plans that, even though *facially* neutral, nonetheless embodied a discriminatory intent. *See, e.g.*, Keyes v. Sch. Dist., 413 U.S. 189 (1973); Swann v. Charlotte-Mecklenburg Bd. of Educ., 402 U.S. 1 (1971); Green v. County Sch. Bd., 391 U.S. 430 (1968).

^{239.} See RICHARD KLUGER, SIMPLE JUSTICE 750-54 (1977).

^{240.} See Brown v. Bd. of Educ. (Brown II), 349 U.S. 294, 299, 301 (1955) (requiring that states take "substantial steps to eliminate racial discrimination in public schools... with all deliberate speed"); Brown I, 347 U.S. at 493-95 (declaring that education is one of the government's most important functions and that the "separate but equal" doctrine had no place in this field).

^{241.} See KLUGER, supra note 239, at 751-52.

^{242.} Id. at 752; see also Green, 391 U.S. at 439-40 & n.5 (listing five factors which have prevented students and parents from choosing to attend a segregated school under a "freedom of choice" plan).

^{243.} This declaration came to be known as the "Parker doctrine," named for the judge who coined it, and a number of southern courts used it to approve various tactics that were designed to prolong segregation despite the *Brown* decision. KLUGER, supra note 239, at 752.

^{244.} See GUNTHER & SULLIVAN, supra note 235, at 773-76.

Against this backdrop, the Court has relied on various factors in order to reveal the true purpose, motivation, and effect of laws that appear facially neutral, but are in fact discriminatory. For example, the Court has used statistical data in modern cases to show a discriminatory pattern,²⁴⁵ has emphasized a law's results rather than its process,²⁴⁶ and has focused on the actual effect of the enactment on certain racial groups.²⁴⁷ Thus, the Court has been willing to enter into an historical analysis beyond the particular law's enactment and consider the entire history of racial struggle and certain past tactics.²⁴⁸

This oscillation between recalcitrant states and the Court on the topic of race exemplifies the Court's willingness to increase its scrutiny when there is reason to believe that states are manipulating their actions to achieve unconstitutional results. Under strict scrutiny, the Court considers the action in the context of its history, the motivations behind the action, and the effect the act actually has on the public at large. By going beyond a simple facial examination, the Court seeks to ensure that states comply with the Constitution in substance as well as in form. This same strict scrutiny should be applied to the present creationist strategies because, although the actions appear facially neutral, they may fall short of the required religious neutrality.

In formulating a new test for the current strategies, the Court should use this judicial standard as a guide and focus on examining the "purpose and primary effect," first articulated in

^{245.} See, e.g., Castaneda v. Partida, 430 U.S. 482 (1977) (finding law that allows discriminatory practices in the case of jury selection to be unconstitutional); Carter v. Jury Comm'n, 396 U.S. 320 (1970) (same).

^{246.} See GUNTHER & SULLIVAN, supra note 235, at 773 (citing to a discussion on the "duty to desegregate-duty to integrate" distinction in *United States v. Jefferson County Bd. of Educ.*, 372 F.2d 836, 847 (5th Cir. 1966)).

^{247.} See Palmer v. Thompson, 403 U.S. 217, 229 (1971).

^{248.} In Rogers v. Lodge, the Court revealed the depth of its evidentiary examination in finding that Burke County's at-large system of elections was maintained for invidious purposes when it held:

The District Court began by determining the impact of past discrimination on the ability of blacks to participate effectively in the political process. . . . by means such as literacy tests, poll taxes, and white primaries . . . [T]he District Court inferred that "past discrimination has had an adverse effect on black voter registration which lingers to this date. . ." Evidence of historical discrimination is relevant to drawing an inference of purposeful discrimination, particularly in cases such as this one where the evidence shows that discriminatory practices were commonly utilized, that they were abandoned when enjoined by courts . . . and . . . were replaced by laws and practices which, though neutral on their face, serve to maintain the status quo.

458 U.S. 613, 624-25 (1982).

^{249.} See GUNTHER & SULLIVAN, supra note 235, at 630-33.

Epperson.²⁵⁰ Existing Supreme Court precedent demonstrates the scope of the Court's evidentiary examination when using a broad, expansive approach, as well as the factors considered under a text-based analysis.²⁵¹ In the past, a broad interpretation of the Establishment Clause has encompassed an examination of the entire context surrounding a state's action with regard to the evolution/creationism debate, and has considered the true relationship between scientific theory and religious tenet.²⁵² Focusing on the historical perspective and surrounding social climate aids in enlightening the Court as to the actual intent and nature of such actions.²⁵³

A strict textualist approach, however, limits its evidentiary scope and confines its consideration to the face of the statute as written.²⁵⁴ This narrower interpretation views an action as isolated from its historical affiliations²⁵⁵ and extends considerable deference

^{250.} See Epperson v. Arkansas, 393 U.S. 97, 107 (1968) (applying the following analysis: "What are the purpose and primary effect of the enactment? If either is the advancement or inhibition of religion then the enactment exceeds the scope of legislative power as circumscribed by the Constitution.").

^{251.} See Mitchell v. Helms, 530 U.S. 793, 120 S. Ct. 2530 (2000). Looking only to the facial result of the statute, the Mitchell majority held that a statute providing materials and equipment to both public and private schools did not advance religion in violation of the First Amondment. This discounted the dissent's consideration of whether the aid was pervasively sectarian as a factor because the "period [when this factor mattered] is one that the Court should regret, and it is thankfully long past." Id. at 2550. The dissent, however, provided a long and thorough examination of the history of such actions in finding that the Court's application of neutrality was a sufficient test and elimination of "enquiry into a law's effects. . . . breaks fundamentally with Establishment Clause principle" Id. at 2573 (Souter, J., dissenting).

^{252.} See Edwards v. Aguillard, 428 U.S. 578, 578 (1987) (noting that a court examines various pieces of evidence in recognizing the inherent religious nature behind creation science including the primary creators of the bill, the history of the creation/evolution debate, and the implicit religious messages asserted in creation science).

^{253,} See id. at 578, 591 (holding that "[i]t is clear that fundamentalist sectarian conviction was and is the law's reason for existence" and that the "same historic and contemporaneous antagonisms between the teaching of certain religious denominations and the teaching of evolution are present in this case").

^{254.} See id. at 611, 615 (Scalia, J., dissenting) (stating that "we must accept appellants' view of what the statute means" and that "we do not presume that the sole purpose of a law is to advance religion merely because it was supported strongly by organized religions or by adherents of particular faiths"); see also Tangipahoa Parish Bd. of Educ. v. Freiler, 530 U.S. 1251, 1255 (2000) (Scalia, J., dissenting) ("To think that this reference to a reality of religious literature . . . somehow controverts the otherwise innocuous disclaimer into an establishment of religion is quito simply absurd."); Santa Fe Indep. Sch. Dist. v. Doe, 530 U.S. 290, 323 (2000) (Rehnquist, C.J., dissenting) (stating that the majority's decision regarding the true purpose was based on the "view of the school district's history of Establishment Clause violations and the context in which the policy was written" whereas the school's attempted compliance "demonstrates that the school district was acting diligently to come within the governing constitutional law").

^{255.} This is not to say that this approach ignores religious affiliation as a whole, but, for example, it would not consider the history of the fundamentalist movement and its quest to remove evolution from public school curricula when analyzing the constitutionality of anti-evolution or

to the state government by assuming that its actions are constitutionally valid.²⁵⁶ Thus, the constitutionality of the current strategies depends entirely on which approach the Court adopts and whether its reading of purpose and primary effect considers the history and context of the action. Although the Court has maintained that local school boards are able to set their own curricula, how it will respond to changes that are specifically directed towards the removal of evolution, or modification in how evolution is taught, will be determined by its evidentiary analysis.

A. Purpose and Primary Effect Through an Historical Perspective

Existing Establishment Clause precedent reveals certain consistencies that suggest what a broad definition of purpose and primary effect might include. Determination of the *actual* purpose and intent of an action under this analysis encompasses the use of historical reference to the science versus religion controversy that began with the *Scopes* trial²⁵⁷ and its progeny.²⁵⁸ Similarly, ascertaining the primary effect of an act, or examining the message that the act is presenting to the community at large, would consider the reaction of reasonable observers to that act with the knowledge of the religious and political affiliations of the act's supporters.²⁵⁹

Both the Supreme Court²⁶⁰ and lower courts²⁶¹ have used this more expansive interpretation of the Establishment Clause to strike down laws involving the teaching of creationism or the prohibition of teaching evolution. The *McLean* case demonstrates perhaps the most extensive reliance on historical perspective and out-

balanced-treatment legislation. See generally Edwards, 482 U.S. at 610-40 (Scalin, J., dissenting) (examining the statute's text and limited legislative history to determine that it is constitutional).

^{256.} See, e.g., id. at 610.

^{257.} One could say that this debate began not with the *Scopes* trial, but rather in 1859 when Darwin's theory was first made public; however, for the purposes of this Note, the debate in the U.S. truly gained national attention with the "Scopes Monkey Trial" of 1925.

^{258.} The Court relies on not only its own precedent, but also those cases that were not heard before the Court, such as Scopes and McLean. See, e.g., Edwards, 482 U.S. at 601-02 (finding that the legislation in the present case was based on legislation that was adopted and struck down by the Arkansas district court in McLean); Epperson v. Arkansas, 393 U.S. 97, 98 (1968) (holding that Arkansas's legislation was modeled after the Tennessee law featured in the Scopes trial).

^{259.} See Vaught, supra note 73, at 1043.

^{260.} See cases cited supra note 240 and accompanying text; supra Part II.

^{261.} See, e.g., Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337 (5th Cir. 1999), cert. denied, 530 U.S. 1251 (2000); Peloza v. Capistrano Unified Sch. Dist., 37 F.3d 517 (9th Cir. 1994); McLean v. Arkansas, 529 F. Supp. 1255 (E.D. Ark. 1982).

side factors. Part II of the opinion is a six-plus page account of the history of the fundamentalist movement in America, the rise of creation science, and the inherent religious nature of the legislature's efforts to incorporate Christian ideology into public school curricula. Before the court even examined the language of the statute in question, or its articulated legislative purposes, it explored the true underpinnings of creation science and the inherent, historical religious motivation behind similar actions regarding evolution. While the language of each statute is critical and lends the most support for the intentions of legislatures, recent creationist actions require a deeper look at the historical aspects of the issue.

Understanding the factors courts have previously examined to ascertain the purpose and primary effect of an act will enable the Court to formulate a test that will appropriately confront creationist strategies that appear to purposely evade constitutional scrutiny. All three current strategies allege similar purposes and intentions for their actions: (1) to promote academic excellence and freedom, (2) to refrain from offending students' religious beliefs, and (3) to provide local school districts with autonomy in developing their own curriculum.²⁶³ Each action may, on its face, fulfill the articulated purposes; however, an understanding of the origins and context of each action's adoption could lead the Court to the opposite conclusion. Assuming the Court finds that an act has a valid secular purpose, the effect of these actions on the community extends beyond a mere change in curriculum or the promotion of teacher autonomy. Such legislation tends to suggest that the science curriculum of all students is controlled by one religious viewpoint. Thus, if the Court willingly engages in an expansive evidentiary analysis of an action's purpose and primary effect, it is likely that the religious involvement will render these three strategies unconstitutional.

^{262.} McLean, 529 F. Supp. at 1258-64.

^{263.} See Vaught, supra note 73, at 1038. These are specifically the purposes as stated by the Kansas Board of Education, but the other two strategies share substantially the same goals. See Freiler, 185 F.3d at 344 (stating that the three articulated purposes the disclaimer was intended to serve were "(1) to encourage informed freedom of belief, (2) to disclaim any orthodoxy of belief that could be inferred from the exclusive placement of evolution in the curriculum, and (3) to reduce offense to the sensibilities and sensitivities of any student or parent caused by the teaching of evolution"); DEWOLF ET AL., supra note 176, at 24 (promoting the teaching of Intelligent Design in the public schools because "it provides students with an important demonstration of the best way for them as future scientists and citizens to resolve scientific controversies—by a careful and fair-minded examination of the evidence").

1. Unmasking the Kansas Science Standards

In examining the purpose behind removing evolution from state science curriculum and state-mandated tests, the actions taken in Kansas provide an excellent case study in determining what factors may be necessary to determine the constitutionality of similar actions.²⁶⁴ Although the Board provided a "Vision Statement"265 promoting its desire for "academic freedom and excellence," this purpose has traditionally been suspect when the action results in removal of scientific theory from the curriculum. 266 Facially, the 1999 standards revealed a secular purpose in promoting critical thinking because they attempted to encourage students to think about those scientific questions that remain unanswered. 267 This academic freedom seems dubious, however, when examining the rationale for making specific changes. For example, the old standards instructed a teacher that when a student raises a question that she feels is outside the domain of science, she should refrain from discussion and encourage the student to address her concerns with parents or clergy.²⁶⁸ Conversely, the 1999 standards stated, "No evidence or analysis of evidence that contradicts a current science theory should be censored."269 Although it is possible to look at this statement and understand it to encourage open discussion about alternatives and questions of scientific theory, the history and context of the standards alter the sincerity of this change. Knowing that the president of a Genesis-based creation group²⁷⁰

^{264.} Although the Kansas Board of Education abandoned the "evolution-free" standards, and reincorporated evolutionary theory back into its science curriculum, the Board's 1999 adoption of the creationist-inspired standards provides a good analysis for evaluating the constitutionality of other similar, but less aggressive actions. See Kansas Votes to Restore Evolution in School Standards, supra note 185 and accompanying text.

^{265.} The Standards provide:

All students, regardless of gender, creed, cultural or ethnic background, future aspirations or interest and motivation in science, should have the opportunity to attain high levels of scientific literacy. These standards rest on the premise that science is an active process. Science is something that students and adults do, not something that is done to them. Therefore, these standards are not meant to encourage a single teaching methodology but instead should elicit a variety of effective approaches to learning science.

Knowledge Under Siege, supra note 182.

^{266.} See Edwards v. Aguillard, 482 U.S. 578, 587, 590-91 (1987) (stating that the Court cannot ignore the "historic and contemporaneous link" between the teaching of evolution and Christian ideology and that "there can be no legitimate state interest in protecting particular religions from scientific views 'distasteful to them'").

^{267.} See Knowledge Under Siege, supra note 182.

^{268.} Id.

^{269.} Id.

^{270.} See supra note 186 and accompanying text.

substantially wrote the 1999 standards could indicate that the purpose was actually to provide teachers with the ability to invite classroom dialogue about theories that children are learning in their homes and churches, namely Biblical creation.²⁷¹ Thus, the Court should consider who is leading such legislation because his or her alleged purpose may appear very different when analyzing the language of the Board's action.²⁷²

The legitimacy of the "academic freedom and excellence" argument is further suspect in light of the public opponents to the 1999 standards. For example, the twenty-seven member writing committee that drafted the original standards refused to support the significantly altered standards on the grounds that they were "incomplete in [their] treatment of science and unacceptable with the near deletion of standards relating to the theory of origins"²⁷³ As a public policy concern, the opinions and analysis of leading scientists and scholars indicate a lack of acceptance in the scientific community for such actions, calling into question the scientific integrity of the standards. When this lack of acceptance is examined, the motivation and validity of the Board is called into doubt regarding whether the standards were intended to achieve their purported academic excellence.

The Board claimed that its purpose for substantially altering the old standards was a desire to refrain from offending students' beliefs, which also justified its removal of certain topics from the 1999 version that the Board felt had become too controversial in public schools.²⁷⁴ Illinois superintendent Joseph Spagnolo defended similar actions taken in his state, claiming that Illinois was trying to deal "with theories like evolution . . . without creating an offensive word that really in and of itself didn't mean much."²⁷⁵ Yet selective deletions from science standards of controversial material often remove certain concepts and theories pointedly to allow the

^{271.} See Poindexter, supra note 187 (finding that the standards' original version is "concise, fair, and respectful of a student's religious view . . . [and] . . . [t]he adopted version is vague and leaves the science class as an open forum for student-initiated filibuster").

^{272.} The Kansas Citizens for Science has stated, "[T]he real reasons for the creationists' efforts are religious: they believe that evolution contradicts central tenets of their religion . . . [and] . . . eliminating all standards which contradict Genesis and . . . inserting many examples that bolster a creationist view, the Board has accommodated the . . . creationists" Creationists Secretly Authored Science Standards, Kansas Citizens for Science, at http://www.sunflower.com/~jkrebs/NEWS%RELEASE.html (Dec. 10, 1999).

^{273.} See Vaught, supra note 73, at 1039-40.

^{274.} See Martinez & Peltz, supra note 9.

^{275.} Id.

promotion of particular ideas prominent to creationist theory.²⁷⁶ For example, section 7-1 of the Kansas Science Standards addresses the dynamics of the earth's constructive and destructive forces over time.²⁷⁷ The old standards instructed a teacher to use examples, such as constructing models, to illustrate molten material crystallizing into rock or examining the effects of weathering.²⁷⁸ The new standards delete these examples and instead instruct a teacher to discuss the destructive force of volcanoes and major floods and resultant rocks.²⁷⁹ To the average viewer, this change seems minor; however, the deletion and subsequent change coincides with creationist theory that volcanoes and floods make rocks "appear" old when in fact they are not.²⁸⁰ Excessive selective editing, such as that performed on section 7-1 and other sections that are specifically intended to protect a Christian ideology, may tend to lead students towards the specific ideology of one certain religious tenet.²⁸¹

The Supreme Court has consistently supported the importance of the third purpose, local autonomy, and has often stated that the control of school curriculum should be left to the hands of the local teachers and school boards. Indeed, the 1999 standards (and all such state standards) were simply a guide for teachers and school boards to use in determining their own curriculum, thus encouraging local communities to act for themselves. The Court limited the scope of local autonomy, however, when it held that discretion to local boards in matters of education "must be exercised in a manner that comports with the transcendent imperatives of the First Amendment." These First Amendment principles are most

^{276.} See Poindexter, supra note 187.

^{277.} Id.

^{278.} Id.

^{279.} Id.

^{280,} Id.

^{281.} See id. (comparing the most significant changes from the original draft and the later version authored by Tom Willis and revealing a religious motivation).

^{282.} See Edwards v. Aguillard, 482 U.S. 578, 583 (1987) (noting that "[s]tates and local school boards are generally afforded considerable discretion in operating public schools"); Epperson v. Arkansas, 393 U.S. 97, 104 (1968) ("[P]ublic education in our Nation is committed to the control of state and local authorities. Courts do not and cannot intervene in the resolution of conflicts which arise in the daily operation of school systems . . . ").

^{283.} Linda Holloway, Chairwoman of the Board at the time of the vote, summarized the Board's actions as follows: "What we voted for was education, . . . not indoctrination . . . local control, . . . not censorship...for academic freedom. Evolutionists don't want their ideas censored . . . so we voted against censorship. They can teach every theory of evolution if they like . . . [or] . . . the very narrow Darwinian evolution that was presented to us. They can teach it any way they want." See Kansas Citizens for Science, The Kansas Science Standards—Local Control and a Whole Lot More, at http://www.kcfs.org (last visited Oct. 8, 2000).

^{284.} Bd. of Educ. v. Pico, 457 U.S. 853, 864 (1982).

important in public schools because students are required to attend classes.²⁸⁵ Thus, when local autonomy results in the promotion of one religious belief of a majority of a community, First Amendment protections will trump this local control.

Additionally, the purpose of local autonomy seems superfluous in that local school boards and teachers seemingly had the same autonomy to present alternative scientific theories under the old standards as under the new. Perhaps the Board's action of requiring that evolution no longer appear on state-mandated tests was intended to free teachers and local school boards from feeling compelled to teach evolution in order to prepare students for testing. Allowing local boards and teachers to tailor teaching methods around a religious controversy, however, would gut the *Epperson* Court's analysis of the First Amendment, which forbids "the preference of a religious doctrine or the prohibition of theory that is deemed antagonistic to a particular dogma." While the Court supports local control of school curriculum, it seems unlikely that this local autonomy is intended to allow communities to conform their teaching methods to a predominant religious tenet.

Determining the primary effect that removal of evolution could have on the community requires an examination of what the "reasonable observer" perceives the changes in the standards to accomplish. Although public opinion does not determine whether an action violates the Establishment Clause, it does reflect whether the community believes that the government is endorsing one religious viewpoint. For example, within days of the Board's adoption of the 1999 standards, national media sources, such as Time, 289 were suspicious of the possible religious implications and questioned the Board's true intent. 290 Public concern for the religious

^{285.} See, e.g., Grand Rapids Sch. Dist. v. Ball, 473 U.S. 373 (1985) (noting that First Amendment principles are especially important in the public school context because students are required to attend classes); Wallace v. Jaffree, 472 U.S. 38, 60 n.51 (1985) (same); Meek v. Pittenger, 421 U.S. 349, 369 (1975) (same).

^{286.} Epperson, 393 U.S. at 106-07.

^{287.} See, e.g., County of Allegheny v. ACLU, 492 U.S. 573 (1989) (holding that the display of a crèche in a county courthouse was unconstitutional because the message it proclaimed to the city's residents promoted one religion by not surrounding the crèche with other religious holiday symbols).

^{288.} See Vaught, supra note 73, at 1043.

^{289.} See Gould, supra note 32, at 59 (likening the Board's action to Scopes v. State in finding that the removal of evolution is "the latest episode of a long struggle by religious fundamentalists," which began in the 1920s).

^{290.} See, e.g., Kate Beem, Science Groups Rebuff Kansas: Evolution Issue Again in Focus, Kan. CITY STAR, Sept. 24, 1999, at A1; Diane Carroll, Board Gets Earful on Evolution, Kan. CITY STAR, Aug. 11, 1999, at A1; Editorial, Devolution in Kansas, CIN. POST, Aug. 16, 1999, at 14A;

motivation behind these actions increased when it was revealed that a leading creationist group assisted in writing the standards, creating a stronger impression that this action was primarily for the protection of one religion's beliefs.²⁹¹ In addition to the media's harsh criticism of the Board's action, a majority of scientists discredited the 1999 standards, fearing that students would be deprived of basic scientific principles.²⁹² Thus, the public and the scientific community were generally skeptical of the religious underpinnings of the Board's action, which indicates that the "reasonable observer" does not view this act as religiously neutral.²⁹³

2. Exploring Efforts to Disclaim

Without a clear statement from the Supreme Court regarding disclaimers, whether other courts adopt the Fifth Circuit's finding that this strategy is unconstitutional may depend on the circumstances of each case. Although the Freiler court found that the disclaimer fulfilled the second and third purposes that the Tangipahoa Parish School Board had articulated, it questioned the sincerity of its academic freedom purpose. 294 The court found this purpose to be a "sham" because the disclaimer succeeded in maintaining beliefs that students had been taught by their parents rather than requiring students to "approach new concepts with an open mind and willingness to alter and shift existing viewpoints." The court seemed to abandon its apparent text-based analysis when finding that the primary effect of the disclaimer advanced one reli-

Faith in Darwin, DAILY TELEGRAPH (London), Aug. 16, 1999, at 19; Paul Craig Roberts, Dogma Defeated . . . Or Scopes Redux?, WASH. TIMES, Aug. 16, 1999, at A13; Whitham, supra note 15.

^{291.} See Kate Beem, Pre-evolutionists Raise More Issues in Science Debate. Also, ACLU Says the Standards may Fail the Lemon Test, KAN. CITY STAR, Jan. 12, 2000, at B1.

^{292.} See National Association of Biology Teachers Statement on Teaching Evolution, at http://www.kcfs.org/why/ (last visited Oct. 8, 2000).

^{293.} Perhaps the best evidence is Kansas citizens' response in the November 2000 election when three of four Board members who supported the 1999 standards were not reelected. See supra note 185 and accompanying text. This result demonstrates a need for the Court to examine public reaction when evaluating similar actions.

^{294.} Although similar in substance to the purposes articulated by the Kansas Board of Education, the Tangipahoa Parish School Board claimed the disclaimer served "(1) to encourage informed freedom of belief, (2) to disclaim any orthodoxy of belief that could be inferred from the exclusive placement of evolution in the curriculum, and (3) to reduce offense to the sensibilities and sensitivities of any student or parent caused by the teaching of evolution." Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337, 344 (5th Cir. 1999), cert. denied, 530 U.S. 1251 (2000).

^{295.} Id. at 345 (finding that the disclaimer as a whole actually protected and maintained a particular religious viewpoint because its statement that teaching is "not intended to influence or dissuade the Biblical version of Creation" informs students that things taught in the classroom should not affect what they already know).

gious viewpoint, in part, due to its exclusive mention of the "Biblical version of Creation" as the only alternative theory. In response to the board's assertion that the Biblical reference was meant to be illustrative, the court relied on statements made during a board debate in which a board member stated that not including this reference would "gut... the basic message of the [disclaimer]." Thus, although the motivations of the proponents, and veracity of a disclaimer encouraging critical thinking, could aid a court in identifying a religious purpose, it is unclear whether this remains true absent a specific reference to Biblical creationism.

Facially neutral disclaimers,²⁹⁸ such as the one proposed in Oklahoma, could nevertheless be constitutionally dubious if the events surrounding their enactment served to protect a Christian ideology followed by a majority of the community.²⁹⁹

3. Testing the Validity of "Theory" Legislation and Intelligent Design

The third strategy of controlling teaching methods by mandating that evolution be taught as a theory has developed into two forms: first, legislative decrees, and second, individual teaching methods, such as Intelligent Design. Legislation identifying evolution as "just a theory" is the most neutral strategy because it is successful in delivering a certain idea to individuals regarding the validity of evolution without actually conveying a religious message. Due to this neutrality, "theory" legislation requires the most expansive evidentiary analysis to determine its constitutionality. The Court would almost certainly consider this type of legislation constitutional, unless it took extensive notice of the true motivation of the bill's proponents. The Court acknowledging that the legislation

^{296.} Id.

^{297.} Id. at 342, 346 & n.4 (noting that one board member felt the Biblical reference should be included because he believed that creation science and evolution are the "two basic concepts out there" and because the majority of the community "'fall[s] into the category of believing [in] divine creation,' the Board should not 'shy away, or hide away from saying that this is not to dissuade from the Biblical version'").

^{298.} Facially neutral in this context means a disclaimer that does not make explicit reference to creationism or Christianity, unlike the one adopted by Tangipahoa Parish.

^{299.} See Benen, supra note 4, at 155.

^{300.} See supra Part II.

^{301.} See supra Part II.

^{302.} The "true" motivation in this instance may still fulfill a secular purpose because it refrains teachers from presenting any scientific theory dogmatically, which should be avoided because science is never factual, but is rather a moving concept.

is relying on a confusion in terms will probably not be enough to strike down such a statute because evolution is a *scientific theory*. While this meaning is different than its ordinary association as a "guess" or "hunch," a law requiring that evolution be taught as a theory is not inconsistent with its meaning.³⁰³ Thus, the purpose of promoting academic freedom may be satisfied because teaching evolution as theory allows students to understand certain questions and mysteries that remain unanswered by the scientific community to this day.

Whether this legislation, however, actually promotes academic freedom is somewhat uncertain, because a law requiring that evolution be taught as a theory cannot possibly extend to teachers a freedom that they did not already possess prior to enactment of such a bill.³⁰⁴ While the risk of offending a student's beliefs could be a legitimate secular purpose, because the dogmatic teaching of evolution is an affront to Christian ideology, local autonomy could be questioned under an analysis similar to academic freedom. More specifically, the purpose of the entire bill is most because local school boards have historically had the ability to regulate teaching methods without the necessity of statewide legislation.

The effect of this legislation is difficult to ascertain because while it will likely perpetuate a misunderstanding of evolutionary theory, whether it will result in the protection or promotion of one religious tenet is unclear. If there was sufficient evidence in the legislative history that "fundamentalist sectarian conviction was and is the law's reason for existence,"³⁰⁵ it is possible that "theory" legislation would face the same fate as past legislation.³⁰⁵ Recognizing the historical religious tensions associated with evolution, and examining legislative motivation, could reveal that "theory" legislation is intended to exploit the misunderstanding of the scientific meaning of the word "theory," and thereby invite increased criti-

^{303.} See Benen, supra note 4, at 155.

^{304.} Just as the *Edwards* Court found the act did not fulfill its purpose of academic freedom because teachers already possessed the ability to teach any scientific theory, enactment of legislation that mandates a teaching method that is already employed does not provide any greater freedom than having no act at all. *See* 482 U.S. 578, 587 (1987) (noting that requiring schools to teach creation science concurrently with evolution did not advance academic freedom because teachers already possessed the flexibility to present "'any scientific concept that's based on established fact'") (quoting the President of the Louisiana Science Teachers Association from the record).

^{305.} Epperson v. Arkansas, 393 U.S. 97, 108-09 & n.16 (1968).

^{306.} Anti-evolution legislation and balanced-treatment legislation were refuted when courts examined the history and motivations of similar actions in the past. See id.; Edwards, 482 U.S. at 587.

cism and questioning of evolution's validity.³⁰⁷ Even if the Court is willing to enter into a highly expansive evidentiary analysis, the religious overtones might still be too tenuous to subject this legislation to Establishment Clause scrutiny.

Individual teaching methods, such as Intelligent Design, that use the "just a theory" approach to justify presenting the controversy between evolution and its religious alternative do not appear as religiously neutral as their legislative counterpart. On its face, presenting the criticisms of evolutionary theory and possible responses is simply a method of teaching and not subject to constitutional scrutiny. Establishment Clause concerns arise, however, when "teaching the controversy" moves from the point of teaching a number of theories directly to undermining evolution in order to contend that a designer is the only possible explanation. Recognizing this motivation is challenging, however, and may require more than a facial look at the motives and intentions of the movement's biggest proponents.

One of the chief concerns for the ACLU, and other critics who are wary of these teaching methods, is that Intelligent Design theorists deny any religious motivation. Neither the literature nor any of the theories' asserted premises contain specific references to God or the Bible, but instead refer to a "designer," which remains undefined. Facially, Intelligent Design may merely be described as "bad science," but seems to lack the religious motivation needed to challenge such a method under the Establishment Clause. Ter example, Intelligent Design undermines evolution with "scientific-sounding criticisms," but does not use religion to attack science. In addition, it seeks to answer questions raised by evolution without contemplating theories of morality or an afterlife,

^{307.} See Benen, supra note 4, at 155.

^{308.} Phillip Johnson, the "unofficial leader" of Intelligent Design, refers to this method of teaching as "the wedge," and claims that Intelligent Design theorists "intend to drive a wedge into the 'philosophy' of evolution" and through use of this "people will be introduced to the truth of the Bible, then 'the question of sin' and ultimately 'introduced to Jesus.' " Id. at 156 (quoting Phillip Johnson in a February 1999 speech and citing Johnson's book From Genesis to Dominion).

^{309.} See Gibeaut, supra note 10, at 51 (noting that Intelligent Design proposes that one of the biggest discrepancies in evolution is the "irreducible complexities," which is the belief that beings are too intricate to have evolved as Darwin claims, and thus, must be the result of a designer).

^{310.} See id.

^{311.} See id.

^{312.} See id. at 52 (quoting Eugenie C. Scott, executive director of the National Center for Science Education).

^{313.} Benen, supra note 4, at 156.

or making reference to the Bible or religious literature. These tactics make it difficult for the Court to classify Intelligent Design as a religion.³¹⁴

Despite this facial neutrality, the historical basis and religious context of the Intelligent Design movement indicates that it encompasses more than its "scientific" theories. 315 Identifying the subtle religious message will require the Court to enter into a broad interpretation similar to the analysis adopted in Edwards, looking to the proponents and underlying themes rather than ideas the theory espouses. Several factors call into question the true intentions of the movement: (1) Intelligent Design's leaders and proponents are religious right activists, such as James Dobson (Focus on the Family), Pat Robertson (of television's 700 Club) and his legal arm. American Center for Law and Justice;316 (2) prominent leaders such as Phillip Johnson³¹⁷ and William A. Dembski have made public statement's regarding the religious bias that is driving the movement; 318 and (3) it is backed by the Discovery Institute, a conservative think tank that aims "to send Darwin to the showers and put God back in the game."319 Additionally, creation scientists of the 1980s are now following the Intelligent Design movement because the ideologies "share the common goal of overthrowing naturalism" and use the same methodology of questioning certain evidence that refutes evolution. 320 Methods that seek to disprove evolution, rather than present it as one possibility, and that introduce the existence of a designer, underscore the question of whether such methods truly further academic freedom.

The true effects of Intelligent Design will be determined through an examination of students' reactions to teaching methods such as DeHart's and to the community's reaction to the entire the-

^{314.} See DEWOLF ET AL., supra note 176, at 14-17.

^{315.} See Gibeaut, supra note 10, at 51 (noting that opponents of Intelligent Design find "the religious message . . . unmistakable" and feel that this is a "different color, but same beast" as creation science).

^{316.} See Benen, supra note 4, at 156.

^{317.} See supra note 308 and accompanying text.

^{318.} At the National Religious Broadcasters meeting on February 6, 2000, Dembski stated: Since Darwin, we can no longer believe that a benevolent God created us in His image. Intelligent Design opens the whole possibility of us being created in the image of a benevolent God. And if there's anything that I think has blocked the growth of Christ as the free reign of the Spirit and people accepting the Scripture and Jesus Christ, it is the Darwinian naturalistic view . . . its important that we understand the world. God has created it; Jesus is incarnate in the world.

Benen, supra note 4, at 156-58.

^{319.} Gibeaut, supra note 10, at 54.

^{320.} See Beem, supra note 185.

orv. 321 DeHart's students have stated that they recognized the lesson's religious overtones. Some students saw the "debate" between evolution and Intelligent Design³²² as "an opportunity for people to get up on their soapboxes with little or no learning taking place" because DeHart's style did not encourage argument for both positions, but instead "promoted and fueled argument." 323 Community response and public opinion likewise seem to recognize the religious underpinnings, and many equate Intelligent Design to a masked version of creationism. 324 Individual stories and accounts provide significant evidence supporting the notion that despite the textual effect of teaching evolution through a method of questioning its validity, classroom discussions are taking a very different tone.325 Thus, an expansive analysis of the primary effect of such methods, determined through students' and public perceptions, will be imperative when analyzing this third strategy under the Establishment Clause. Likewise, an examination must include historical and contextual perspectives because the religious purpose will only be realized through the stories and real-life effects of what the legislation and teachers are actually accomplishing by use of these tactics.

B. Purpose and Primary Effect Under a Textual Analysis

While the religious facial neutrality of all three strategies have been alluded to, it is important to see the limits of a textual approach. The sort of actions that may be allowed under an analysis that defines purpose and primary effect strictly according to the text and articulated purpose of the government action is also vital to any critique of the textualist approach. Perhaps one of the most enlightening demonstrations of this deferential approach occurred when Justice Scalia stated in his *Edwards* dissent:

I would still find no justification for today's decision. The Louisiana legislators who passed [this Act], each of whom had sworn to support the Constitution, were well aware of the potential Establishment Clause problems and considered that aspect of the legislation with great care. . . . [T]hey approved the Act overwhelm-

^{321.} Although Intelligent Design theorists feel that they are separate from creationists, critics and Darwinian biologists feel that the groups are one and the same and supportive of one another because working for the same end goal. See id.

^{322.} See supra notes 224-25 and accompanying text.

^{323.} Gibeaut, supra note 10, at 55 (quoting Reverend Randy L. Quinn who for years had DeHart's students asking him how to prepare for the exercise).

^{324.} See id.

^{325.} An elementary school principal says that her son, a former student of DeHart's, came away from the class convinced that Intelligent Design is the only explanation for life's origins and that his parents "don't know the truth." *Id.*

ingly and specifically articulated the secular purpose they meant it to serve. . . . [The Court's holding today was decided] on the basis of "its visceral knowledge regarding what must have motivated the legislators."

Essentially, this statement asserts that reliance on the legislators to uphold their constitutional oath is sufficient to assume that certain legislation passed constitutional muster. Thus, the fact that creationists have historically made repeated attempts to remove evolution from, or incorporate creationism into, public school curriculum is not a necessary factor under this analysis. A textualist approach to the Establishment Clause implies accepting the strategists' "view of what the statute means." Thus, analysis is limited strictly to those words that are used in the action taken.

Removing evolution from standards and state-mandated tests appears facially neutral and, as a whole, fits within a state's and local school board's ability to control the curriculum of its public schools. Indeed, the text of the Kansas science standards asserts. "Some scientific concepts and theories . . . may conflict with a student's religious or cultural beliefs. The goal is to enhance understanding . . . [and] . . . compelling student belief is inconsistent with the goal of education."328 In examining a similar purpose in Edwards, the dissent determined that because this purpose, as articulated, showed a tension between teaching and inhibiting a student's belief system, the statute must be a valid response to eliminating that tension.329 While a textualist will sometimes examine certain legislative history or reports,330 it is unclear whether any statements made by Board members during adoption of the 1999 standards would alter the intentions of the Board to be sensitive to students' ideology. 331 Additionally, the dissent in Edwards was unwilling to examine outside definitions of creation science that were not provided in the statute. This narrow focus could prove equally problematic in attempting to explain the religious significance of certain changes made to the standards. 332 The Board, like those states that

^{326. 482} U.S. 578, 610 (1987) (Scalia, J., dissenting) (citing Aguillard v. Edwards, 778 F.2d 225, 227 (5th Cir. 1985) (Gee, J., dissenting)).

^{327.} Id. at 611.

^{328.} Knowledge Under Siege, supra note 182.

^{329. 482} U.S. at 617 (Scalia, J., dissenting) (finding that if the legislature "sincerely believed that the State's science teachers were being hostile to religion, our cases indicate that it could act to eliminate that hostility without running afoul of *Lemon*'s purpose test").

^{330.} See id. at 619-26.

^{331.} See supra note 282 and accompanying text.

^{332.} Edwards, 482 U.S. at 629 (Scalia, J., dissenting) (relying on two scientists, a philosopher, a theologian, and an educator as creation science "experts" to find that there is "no basis on

have adopted similar tactics, is careful to refrain from referencing specific religious literature or ideology in their text. Thus, absent explicit mention of one particular religious ideology, a textual analysis will likely not recognize a facial establishment or endorsement of religion.³³³

Given this textualist interpretation of disclaimers, it seems that a similar analysis would likewise find "theory" legislation constitutional. A statute that demands teaching evolution as a theory is a reiteration and codification of what is already a true statement. Promoting academic excellence is apparent from the text of such statutes because it ensures that teachers explore and examine possible alternative theories and offer students both those theories that scientists have established as near fact and those gaps in scientific understanding that evolution has not succeeded in answering. 334 It would seem nearly impossible to recognize any religious purpose or effect through the words of the statute itself because facially the statute's only purpose is to encourage students' freedom of thought. Thus, absent additional information regarding the intent to create confusion and undermine evolutionary theory, which would presumably not be available through the statute's text or legislative history, a narrow, textualist interpretation would recognize the secular purpose of such an action.

Intelligent Design's "teaching the controversy" approach textually advances freedom of thought by exposing students to various scientific theories, and also seems to conform exactly to the confines of a textualist analysis. First, DeHart and others like him, claim their purpose is to present students with a complete view of evolution and the controversy "without using religion." Indeed, presenting the controversy allows students to explore evolution and alternative theories and enables them to "follow the facts wherever

the record to conclude that creation science need be anything other than a collection of scientific data supporting the theory that life abruptly appeared on earth").

^{333.} Scalia's dissent in the Court's denial of certiorari in *Freiler* likewise exemplifies the limitations of a narrow approach. Scalia stated that although the disclaimer specifically mentioned one specific alternative, the effect of the disclaimer as a whole was to "advance freedom of thought... [and does not act] as an affirmative endorsement of any particular religious theory as to the origin of life...." Tangipahoa Parish Bd. of Educ. v. Freiler, 530 U.S.1251, 1253 (2000) (Scalia, J., dissenting). Thus, under a textual analysis such as Scalia's, the use of disclaimers could be considered constitutional. *See supra* notes 170-74 and accompanying text.

^{334.} See DEWOLF ET AL., supra note 176, at 22-23 (stating that the school boards will promote academic freedom if they allow teachers to present a number of scientific theories and teaching the controversy will fulfill the objectives of scientific objectives).

^{335.} Gibeaut, supra note 10, at 50.

they lead . . . [which is] true science."336 Textually speaking, DeHart and Intelligent Design theorists have been very careful to eliminate references to God and the Bible in their literature and instead place focus on discrediting Darwinian evolution. 337 The effects of Intelligent Design appear inherently secular because the theory does not fit within the traditional notions of a religion. Furthermore, it is not necessary to prove its scientific validity because it does not propose to put forth an entirely new theory, but rather simply rejects Darwinism.338 Textual analysis would reveal that Intelligent Design's intent is to (1) present more accurate information about the state of scientific thinking and evidence, (2) give students a better understanding about how scientists interpret data and evaluate competing interpretations, and (3) teach students how to address differences of opinion that naturally occur within our pluralistic society.339 Without any references to the "designer" as the Biblical God or to the Bible, a textual approach will rely on the intentions articulated by Intelligent Design's leaders and supporters, and view the movement as encouraging students to examine for themselves the scientific process and current scientific thought.340 This third strategy, more so than the other two, would require a deeper examination than the textualist analysis permits, and thus, would likely pass constitutional scrutiny.

Whether the three current actions are considered constitutionally valid will depend on the evidentiary expansiveness of the Court's Establishment Clause analysis. All three actions appear religiously motivated. The Court will best recognize this religious entanglement if it considers not only the text of the act, but also the historical controversy between science and religion, the political and social role of the promoters and supporters of the act, their true motivations and intentions, and any other relevant information that may shed light on the true purpose and intended effect. If all of these factors are examined, the proponents of all three strategies will face a tough battle proving a secular purpose for their act in the courtroom. Yet, these same actions will be viewed under an entirely different scope if the dissenters in *Edwards* and *Freiler* prevail and, using a text-based analysis, rely solely on the text and articulated purpose to determine constitutionality.

^{336.} Id. at 54 (quoting physician Paul C. Creelman, a family practitioner and a DeHart supporter).

^{337.} Id.

^{338.} See DEWOLF ET AL., supra note 176, at 19.

^{339.} Id. at 6.

^{340.} See Edwards v. Aguillard, 482 U.S. 578, 628 (1987) (Scalia, J., dissenting).

V. CONCLUSION

John Scopes likely did not realize the magnitude of his actions when he first prompted the debate between scientific theory and religious ideology in our public schools.³⁴¹ Yet, over seventy-five years later, this same tension incites passion from supporters on both sides of the argument. Religious beliefs have brought about wars, persecution against members of other faiths, incited government insurrections, and stimulated migrations.³⁴² With this propensity in mind, the Framers sought to create a separation between government and religion in hopes that those disastrous results could be avoided by allowing religious freedom to all. Justice Frankfurter explained the import of this separation in our public schools when he stated:

Designed to serve as perhaps the most powerful agency for promoting cohesion among a heterogeneous democratic people, the public school must keep scrupulously free from entanglement in the strife of sects. The preservation of the community from divisive conflicts, of Government from irreconcilable pressures by religious groups, of religion from censorship and coercion however subtly exercised, requires strict confinement of the State to instruction other than religious, leaving to the individual's church and home, indoctrination in the faith of his choice.³⁴³

This advice must be heeded when analyzing the recent creationist tactics, which aim to alter science curricula significantly and affect teaching methods related to evolutionary theory, merely because they are irreconcilable with Christian beliefs. While legislatures and boards of education justify their actions by inferring that they reflect the desires of the majority of Christian supporters in their communities,³⁴⁴ this justification is nonetheless contrary to the First Amendment's design of protecting minority beliefs.³⁴⁵ There-

^{341.} See supra note 2 and accompanying text.

^{342.} See McCarthy, supra note 26, at 123.

^{343.} See McCollum v. Maryland, 333 U.S. 203, 216-217 (1948).

^{344.} Benen cited to two studies regarding Americans' beliefs about human origins: a 1998 study at University of Cincinnati found forty-five percent of those polled believed in the "Young-Earth" approach, forty percent believed in God guiding evolution, and ten percent accepted evolution without supernatural direction, and a 2000 poll conducted by DYG, Inc. for People for the American Way found that eighty-three percent of Americans believe that evolution should be taught in public schools, but seventy-nine percent thought that creationism should also have some place in the classroom. See Benen, supra note 4, at 156.

^{345.} See Santa Fe Indep. Sch. Dist. v. Doe, 530 U.S. 290, 304 (2000) (finding that a school-wide election in which students elect to pray before a football game is nevertheless a violation of the First Amendment because "the majoritarian process implemented by the District guarantees, by definition, that minority candidates will never prevail and that their views will be effectively silenced").

fore, if the Court is to protect the true purpose and meaning of the First Amendment, this separation must be maintained.

The three current strategies were all entered into with full knowledge of the Supreme Court precedent and lower court interpretations of the roles of evolution and Biblical creation in public school curriculum. 346 Indeed, part of the creationist effort in the 1990s has been dedicated to ensuring that they refrain from mentioning religious motivation and intentions in any actions attacking evolutionary teaching.347 Thus, the new strategies are generally well crafted and void of overt discussion of religious doctrines and specific literature.348 The omission of explicit religious messages in the text, however, does not necessarily indicate that such actions are not religiously motivated and that their purpose and primary effect are not in violation of the Establishment Clause. Because of the subtlety and careful construction of recent actions, any test that the Supreme Court applies to analyze these tactics must allow for an examination of the context of the action.³⁴⁹ A more narrow, textualist interpretation is insufficient both because it fails to recognize the true purpose and primary effect of certain actions and because it circumvents the purpose of the First Amendment by allowing the will of the majority—or at least the politically powerful—to impress their religion on others.350

The Supreme Court did not render its decisions in *Epperson* or *Edwards* in order to provide guidance to creationists on how to proceed in the future to accomplish their tasks. These cases intended to send a message to the fundamentalist movement that "the vigilant protection of constitutional freedoms is nowhere more

^{346.} See DEWOLF ET AL., supra note 176, at 14-22 (dedicating sections four, five, six and seven of the book to an analysis of possible legal implications including: distinguishing Intelligent Design from constituting a religion and likewise from creation science; examining actions not considered unconstitutional according to Edwards; and contending that it would be viewpoint discrimination to limit teachers' ability to present Intelligent Design).

^{347.} See generally Gibeaut, supra note 10, at 50 (asserting that Intelligent Design theorists are attempting to evade constitutional scrutiny by "eliminating references to God and the Bible, and instead trying to discredit Darwin, often through a scientific sounding notion").

^{348.} See id.

^{349.} See id.

^{350.} Justice Souter cautioned against this result when he asserted in *Mitchell v. Helms*: The establishment prohibition . . . is meant to guarantee the right of individual conscience against compulsion, to protect the integrity of religion against the corrosion of secular support, and to preserve the unity of political society against the implied exclusion of the less favored and the antagonism of controversy over public support for religious causes.

⁵³⁰ U.S. 793, 868 (2000) (Souter, J., dissenting).

vital than in the community of American schools."351 The Supreme Court should remember its own words and recognize the importance of not allowing one religious group to alter the future of science in America's public schools merely because a scientific theory is contrary to their belief system. Determining the purpose and primary effect of a state action necessarily entails reaching beyond the text and articulated purposes of such actions and realizing that those purposes reveal little about the actual intent behind an act. A debate that has raged in schools, homes, and hearts for over seventy-five years requires that courts will recognize the nature of these strategies and not be afraid to look beyond the face of these actions to determine their constitutionality. What is apparent from the emergence of these new strategies is that the Court will likely face another decision regarding the teaching of evolution in public schools and that creationists do not intend to give up their cause. As Molleen Motsumura of the National Center for Science Education said, "They're not going away, and there's no miracle cure for this problem. Eternal vigilance, it has been said, is the price of libertv."352

Deborah A. Reule*

^{351.} Epperson v. Arkansas, 393 U.S. 97, 104 (1968) (citing Shelton v. Tucker, 364 U.S. 479, 487 (1960)).

^{352.} Benen, supra note 4, at 158.

^{*} I would like to thank Professor Rebecca Brown for her comments and advice while writing this Note and Nancy Vermylen for suggesting the topic in the first place. I would also like to extend special thanks to Lindsay Errickson, Chirag Shah, Kit Dimke, John Farringer, and Charles Sipos for their assistance, advice, and extremely helpful editing. Thanks also to my family and friends for their love and support.