From *Scopes* to Present: An Evaluation of Evolution Curriculum in Public Schools and Tennessee's Latest Attempt to Encourage The Teaching of Intelligent Design

*By Emily Root*

I. Introduction

As famously affirmed in *Tinker v. Des Moines*, “It can hardly be argued that either students or teachers shed their constitutional rights to freedom of speech or expression at the schoolhouse gate.”¹ Similarly, students maintain the right to freedom of religion found in the First Amendment of the United States Constitution.² Public schools play an important role in our society as the setting for not just the teaching of impressionable youth, but also as the platform for democracy itself and the inculcation of civic values.³ One of James Madison’s arguments against religious education was that a state’s establishment or preference of one religion over another creates an “obstacle to the victorious progress of truth.”⁴ Thus, while state governments and local school boards retain broad discretion in the management of school affairs, they must always be mindful that their curriculum decisions are not interfering with their students’ First Amendment rights.⁵

One area that has provoked much controversy is the teaching of evolution. States have attempted to limit its presence in science curriculum by: banning it entirely;⁶ requiring balanced treatment of evolution and creationism;⁷ mandating that a teacher read a disclaimer before

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² “Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof…” U.S. CONST. amend. I.
⁷ *Edwards*, 482 U.S. at 578.
teaching evolution; and most recently, including a statement in the science curriculum detailing the gaps in evolution and introducing the theory of intelligent design. Courts across the country have repeatedly held these laws unconstitutional using the Lemon test, the endorsement test, or both.

However, the contents of a school’s science curriculum remain a divisive issue as both teachers and state legislatures advocate for the instruction of creationism and intelligent design in biology classes across the nation. In a 2011 survey, only twenty eight percent of biology teachers indicated that they present evolution and the facts supporting it straightforwardly; thirteen percent directly advocate creationism or intelligent design. The remaining sixty percent endorse neither evolution nor its religious alternatives. On the legislative side, state governments have attempted to encourage the teaching of creationism and intelligent design in science curriculum through statutes. One such statute is Tennessee House Bill 368, which the Governor allowed to pass into law without his signature on April 10, 2012. This law protects teachers who help students challenge the science underlying existing scientific theories like evolution and climate change. While the stated intent of the law is a secular one of encouraging student’s critical thinking skills, many critics of the bill, which has been nicknamed the

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8 Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337 (5th Cir. 1999).
11 Id.
12 Id.
14 TENN. H.B. 368.
15 Id.
“monkey bill,” believe that it is just a sham to make it easier to raise creationism or intelligent design theories, to the detriment of the teaching of evolution.\textsuperscript{16}

In the infamous 1925 \textit{Scopes v. State} “Monkey Trial”, the Supreme Court of Tennessee upheld the Butler Law, which prohibited the teaching of evolution in public schools.\textsuperscript{17} 87 years later, Tennessee is again in the news with the passage of HB368. This law, if tested by either the Lemon or endorsement test, would be deemed an unconstitutional violation of the First Amendment. Not only is its stated secular purpose a sham, but the effect of the law is to endorse the religious theories of creationism and intelligent design. If the American public school system would like to remain the “marketplace of ideas required for the evolution toward truth”\textsuperscript{18} as envisioned by James Madison, the government cannot unconstitutionally incorporate religious doctrine in science curriculum through laws like HB368.

\textbf{II. First Amendment Jurisprudence as it Relates to Public School Curriculum}

In the wake of \textit{Scopes}, Arkansas enacted an anti-evolution law that made it illegal for a teacher in any public school to teach evolution or use a textbook that promulgates the concept.\textsuperscript{19} However, perhaps in the wake of growing uncertainty regarding America’s scientific prowess, in the 1965-1966 school year, the school administration adopted a textbook containing a chapter on evolution, and Susan Epperson, a biology teacher in Little Rock, filed suit, seeking a declaration that the law was void and enjoining the state from dismissing her if she taught the chapter on evolution in her classroom.\textsuperscript{20} In the resulting case, \textit{Epperson v. Arkansas}, the Supreme Court held that this law was plainly establishing religion in schools because it attempted to prevent the

\textsuperscript{17} Scopes v. State, 1 Smith (TN) at 105.
\textsuperscript{18} See supra note 4.
\textsuperscript{19} Epperson, 393 U.S. at 98-99.
\textsuperscript{20} Id. at 100.
teaching of a scientific theory due to its conflict with a religious faith, and as such was in violation of the First Amendment.\textsuperscript{21}

In reaching this holding, the Court noted that while it typically refuses to involve itself in the daily operations of a school, which are properly handled by state and local authorities, it must intervene when these operations implicate students’ constitutional rights.\textsuperscript{22} The First Amendment requires government neutrality regarding religion, and the Court “does not tolerate laws that cast a pall of orthodoxy over the classroom.”\textsuperscript{23} Therefore, when a law prohibits teachers from including a scientific theory in their curriculum for reasons which violate the First Amendment, the Court will intercede to protect the rights of the students.\textsuperscript{24} In this case, the intent of the Arkansas law was clear; it sought to prevent teachers from discussing evolution because it was contrary to the religious doctrine as to the origin of man.\textsuperscript{25} Thus, the law was not in accordance with the religious neutrality mandated by the First Amendment, and was deemed unconstitutional.\textsuperscript{26}

In the wake of \textit{Epperson} and the overturning of laws banning the teaching of evolution in schools, proponents of creationism sought to influence school curriculum through “balanced treatment” laws in which evolution and creationism were required to be taught together. One such law was Louisiana’s “Balanced Treatment for Creation-Science and Evolution Science in Public School Instruction” Act, which forbid the teaching of evolution in public schools unless creationism was taught simultaneously.\textsuperscript{27} Parents of children attending Louisiana public schools,

\begin{itemize}
\item \textsuperscript{21} \textit{Id.} at 109.
\item \textsuperscript{22} \textit{Id.} at 104-105.
\item \textsuperscript{23} Keyishian v. Bd. of Regents, 385 U.S. 589, 603 (1967).
\item \textsuperscript{24} Epperson, 393 U.S. at 107.
\item \textsuperscript{25} \textit{Id.}
\item \textsuperscript{26} \textit{Id.} at 109.
\item \textsuperscript{27} Edwards, 482 U.S. at 581.
\end{itemize}
Louisiana teachers, and religious leaders filed suit, questioning the constitutionality of the Act.\textsuperscript{28} Louisiana officials defended the Act on the ground that its intent was to protect the secular interest of academic freedom.\textsuperscript{29} In the case, \textit{Edwards v. Aguillard}, the Supreme Court held that because the primary purpose of the Act was to advance a particular religious belief, namely that of the Bible’s theory of the origin of man, it endorses religion in violation of the First Amendment.\textsuperscript{30}

The Court used the Lemon test to evaluate the Act.\textsuperscript{31} Under the three-pronged Lemon test, “a government-sponsored message violates the Establishment Clause of the First Amendment if: (1) it does not have a secular purpose; (2) its principal or primary effect advances or inhibits religion; or (3) it creates an excessive entanglement of the government with religion.”\textsuperscript{32} Since \textit{Lemon}, many courts have combined the last two prongs into one “effect” inquiry, which looks to whether the government-sponsored message conveys a message of endorsement of religion to an informed, reasonable observer.\textsuperscript{33} Turning to the first prong, a government’s intention to promote religion either generally or through the advancement of a particular religious principle is evidence of an unconstitutional religious purpose.\textsuperscript{34} Additionally, the government’s stated purpose must be sincere and not a sham.\textsuperscript{35} In this case, the Court found that while the stated purpose of the Act was to promote academic freedom, this was merely a cover for the government’s true purpose of reforming the science curriculum to conform to

\begin{itemize}
  \item \textsuperscript{28} Id.
  \item \textsuperscript{29} Id.
  \item \textsuperscript{30} Id. at 593.
  \item \textsuperscript{31} Id. at 585.
  \item \textsuperscript{32} Lemon v. Kurtzman, 403 U.S. 602, 612-613 (1971).
  \item \textsuperscript{34} Edwards, 482 U.S. at 585.
  \item \textsuperscript{35} Id. at 586-587.
\end{itemize}
religious, creationist views, and there was no true secular purpose.\textsuperscript{36} Noting that when a law is
enacted for the purpose of endorsing religion, there is no need to consider the other prongs of the
Lemon test, the Court held that this Act was unconstitutional.\textsuperscript{37}

Barred from introducing creationism into the curriculum through “balanced treatment”
laws, the Tangipahoa Parish Board of Education, located in Louisiana, entered the curriculum
fray by adopting a resolution disclaiming the endorsement of evolution.\textsuperscript{38} The disclaimer reads in
part: “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.”\textsuperscript{39} Seven months after the
resolution passed, several parents of school children affected by the disclaimer brought suit,
questioning the validity of the resolution under the First Amendment.\textsuperscript{40} In the case, Freiler v.
\textit{Tangipahoa Parish Board of Education}, the Fifth Circuit Court of Appeals held that the
resolution fails both the Lemon and establishment tests and is therefore unconstitutional.\textsuperscript{41}

While evaluating the disclaimer under the first prong of the Lemon test, the court held
that of the three articulated purposes for the disclaimer made by the School Board, at least one
(“to encourage informed freedom of belief”) was a sham.\textsuperscript{42} The disclaimer stated that evolution
was “not intended to influence or dissuade the Biblical version of Creation or any other concept,”
which is at odds with an intent to encourage critical thinking.\textsuperscript{43} Instead, the court held that the

\begin{itemize}
\item \textsuperscript{36} Id. at 593.
\item \textsuperscript{37} Id. at 585.
\item \textsuperscript{38} Freiler, 185 F.3d at 341.
\item \textsuperscript{39} Id.
\item \textsuperscript{40} Id.
\item \textsuperscript{41} Id. at 348.
\item \textsuperscript{42} Id. at 345.
\item \textsuperscript{43} Id.
\end{itemize}
purpose was really to protect traditional religious theories.\textsuperscript{44} The court next evaluated the disclaimer under the second prong of the Lemon test and found that “the primary effect of the disclaimer is to protect and maintain a particular religious viewpoint, namely the belief in the Biblical version of creation.”\textsuperscript{45} The court then looked at the disclaimer using the endorsement test, which examines whether a government goes beyond the limits of neutrality and acts in a way which demonstrates religious favoritism or sponsorship.\textsuperscript{46} By urging students to contemplate creationism while studying evolution, the court held that the disclaimer conveyed a message that this religious viewpoint was favored over others.\textsuperscript{47} Therefore, the disclaimer was violated both the second prong of the Lemon test and the endorsement test and was in violation of the First Amendment.\textsuperscript{48} It would appear that the courts had officially closed the door to any attempts to insert creationism into public school curriculums. However, local governments were already attempting a new maneuver in order to introduce religion into science classrooms: the teaching of Intelligent Design.

III. The Court’s Recent Test of Teaching Intelligent Design: \textit{Kitzmiller v. Dover Area School}

In 2004, the Dover Area School District passed a resolution that required all biology class teachers to read this statement in their classes:

\begin{quote}

The Pennsylvania Academic Standards require students to learn about Darwin's Theory of Evolution and eventually to take a standardized test of which evolution is a part. Because Darwin's Theory is a theory, it continues to be tested as new evidence is discovered. The Theory is not a fact. Gaps in the Theory exist for which there is no evidence. A theory is defined as a well-tested explanation that unifies a broad range of observations. Intelligent Design is an explanation of the origin of life that differs from Darwin's view. The reference book, Of Pandas and People, is available for students who might be interested in gaining an
\end{quote}

\textsuperscript{44} \textit{Id.}
\textsuperscript{45} \textit{Id.} at 346.
\textsuperscript{46} \textit{Id.} at 343.
\textsuperscript{47} \textit{Id.} at 343.
\textsuperscript{48} \textit{Id.}
understanding of what Intelligent Design actually involves. With respect to any theory, students are encouraged to keep an open mind.49

Plaintiffs filed suit challenging the constitutionality of this resolution.50 Using both the Lemon and endorsement tests, the United States District Court held that this resolution violated the First Amendment.51

After evaluating the resolution under the Lemon test, the court concluded that it violated the First Amendment because its true purpose was to change the biology curriculum to promote religious theories,52 and it had the primary effect of injecting a religious viewpoint into the classroom.53 The court then proceeded to use the endorsement test. In evaluating whether the resolution conveyed a message of governmental endorsement of religion, the court articulated the importance of considering the social and historical context of the resolution.54 In this case, the court held that a reasonable observer would be aware of the history of the intelligent design movement, the fact that it is a form of creationism, and its supporters’ plan to weaken the evolution curriculum by showing students alleged theoretical gaps.55 Based on this knowledge, an objective student would view the statement as the school’s unconstitutional endorsement of religion.56 Therefore, this statement, which injected the religious teaching of intelligent design into the biology classroom and encouraged students to question evolution, is a violation of the First Amendment. Despite this ruling, many state and local governments around the country

49 Kitzmiller, 400 F. Supp. 2d at 708-709.
50 Id. at 709.
51 Id. at 764.
52 Id. at 763.
53 Id. at 764.
54 Id. at 714-715.
55 Id. at 716.
56 Id. at 724.
were utilizing similar policies in order to advance the teaching of intelligent design in public school curriculum.\textsuperscript{57}

\textbf{IV. Putting Tennessee’s Law to the Constitutional Test}

On April 17, 2012, Tennessee’s Governor Bill Haslam allowed HB368 to become state law, albeit without his signature.\textsuperscript{58} HB368, which had been resoundingly passed by the Tennessee House of Representatives 72-23, states in part, “(a) The general assembly finds that: 1) An important purpose of science education is to inform students about scientific evidence and to help students develop critical thinking skills necessary to becoming intelligent, productive, and scientifically informed citizens; 2) The teaching of some scientific subjects, including, but not limited to biological evolution, the chemical origins of life, global warming, and human cloning, can cause controversy.”\textsuperscript{59} It then goes on to state, “(b) The state board of education […] shall endeavor to assist teachers to find effective ways to present the science curriculum as it addresses scientific controversies. Toward this end, teachers shall be permitted to help students understand, analyze, critique, and review in an objective manner the scientific strengths and scientific weaknesses of existing scientific theories covered in the course being taught.”\textsuperscript{60} Finally, the bill states, “(e) This section only protects the teaching of scientific information, and shall not be construed to promote any religious or non-religious doctrine, promote discrimination for or against a particular set of religious beliefs or non-beliefs, or promote discrimination for or against any religion.”\textsuperscript{61}

\textsuperscript{58} See supra note 13.
\textsuperscript{59} See supra note 14.
\textsuperscript{60} Id.
\textsuperscript{61} Id.
While the bill’s supporters articulated that its intent is to promote students’ critical thinking skills, its vocal critics believed it is simply a shield for teachers to instruct evolution alternatives like creationism and intellectual design.\textsuperscript{62} Similar to its predecessors, this bill addresses the topic of evolution, and like the statement in \textit{Kitzmiller}, encourages students to keep an open mind regarding alternatives to Darwin’s Theory.\textsuperscript{63} However, unlike the government acts described above, this bill does not introduce the topics of either creationism nor intelligent design; in fact, the act goes so far as to make a disclaimer at that it does not seek to promote religious doctrine.\textsuperscript{64} Yet, I believe that if this bill were to be challenged under the First Amendment jurisprudence discussed above using either the Lemon or endorsement test, it would be found unconstitutional.

Turning first to the Lemon test, the stated secular purpose of the bill is to inform students of weaknesses of established scientific theories and help them develop critical thinking skills.\textsuperscript{65} While this at first appears to be valid, the legislative and social history behind bills like this one leads to the ultimate conclusion that this purpose is a sham. Despite the disclaimer in the bill that it only protects scientific questioning, if the intent of HB368 is not religious in nature, then it would simply not have been drafted. The public education system, teachers, and curriculum all encourage critical thinking by design. Therefore, a bill which only encourages secular scientific questioning would superfluous. In the past, most critical thinking and questioning of evolution was done by virtue of the doctrines of creationism or intelligent design. Therefore, by linking the

\textsuperscript{63} \textit{See supra} note 14.
\textsuperscript{64} \textit{Id}.
\textsuperscript{65} \textit{Id}.
goal of critical thinking to the topic of evolution, the state legislature clearly intends to introduce such religious theories into the classroom impermissibly.

Next, the primary effect of this bill is not one of increased scientific inquiry or more open-minded students. Rather, based on the social and legislative history of these types of bills, as described in *Kitzmiller*, this type of scientific questioning leads to an unconstitutional advancement of religious theory in the classroom by presenting creationism and intelligent design doctrine as valid alternatives to evolution. Finally, using the endorsement test, it is clear that a reasonable, informed observer who is armed with the legal and social knowledge of these types of bills would be able to identify that this bill endorses the teaching of religious doctrine in the form of intellectual design and creationism. By allowing teachers to encourage and assist students in questioning the supposed weaknesses of evolution, the state is endorsing a particular set of religious beliefs over other religious beliefs or non-beliefs. Although at first blush HB368 appears to differ from the policies articulated in *Edwards, Epperson, Freiler, and Kitzmiller*, it is simply the most recent attempt by a state government to unconstitutionally establish religion in a public school’s evolution curriculum.