Back to Dayton

Joan Wagner

Joan Wagner teaches Regents biology, 7th grade life science, earth science and physical science at Burnt Hills-Ballston Lake Central Schools, Burnt Hills, NY 12027. She has a B.A. in psychology from Syracuse University and a M.A. in science education from Teachers College at Columbia University and is working toward her M.A. in educational administration at the College of St. Rose. A participant in the Teacher in Space program, Wagner works to motivate talented students to remain in science. Her interest in environmental education resulted in a Prentice Hall/Allyn and Bacon Excellence in Science Teaching Award in 1986 from the State Teachers Association of New York State.

Ever since John Scopes agreed to be a scapegoat in order to test the constitutionality of a Tennessee law which forbade the teaching of human evolution, the courts have had the difficult task of ruling on some very sensitive issues related to the first amendment's guarantee of the right of free speech and to the establishment and free exercise clauses. Scopes was not even a biology teacher. He had merely been a biology substitute when George Rappleyea and other Dayton citizens asked him to help challenge the Tennessee law which prevented the teaching of evolution (de Camp 1968). In some ways, this was a capricious move by the citizens because, in practice, evolution was taught in the schools. They thought, though, that providing the American Civil Liberties Union with a case might help put their town on the map. The outcome of the "Monkey Trials" is history and attests to how fundamentalist beliefs and anti-science attitudes precipitated the passage of similar statutes in other states. It was not until 1968, in *Epperson v. Arkansas* that the U.S. Supreme Court ruled it unconstitutional for a state to pass a statute that proscribed the teaching of evolution (Kemerer 1968). Some may have thought this issue was finally laid to rest but a new branch of "science" called "creationism" emerged instead.

Creation science, "secular humanism" . . . somebody get me an English teacher. While the former is enmeshed in contradictory imagery, the latter is entombed by redundancy. The early cases which concerned statutes that negate the teaching of evolution were often moot because although the law resided on the books, evolution was taught in the schools. The textbooks, supplied by the state, had chapters dealing with evolution. In *Epperson v. Arkansas*, Justice Black seemed to question why the case ever reached the bench:

> Although . . . the statute alleged to be unconstitutional was passed by the voters in 1928, we are informed that there has not even been a single attempt by the State to enforce it. And the pallid, unenthusiastic, even apologetic defense of the Act presented by the State in this Court indicated that the State would make no attempt to enforce the law should it remain on the books for the next century" (Kemerer 1968).

This case was decided in 1968. The rebirth of fundamentalism in "middle America" is again challenging the teaching of evolution. However, the fundamentalists have done their homework. They are bringing forth some innovative strategies as they attempt to coerce schools to give "equal time" to that neophyte branch of "science" called creationism so it can compete equitably with the "religion" of secular humanism.

When the latest "equal time" cases deliberated by the Supreme Court are analyzed, one cannot help but become a bit confounded and yet react vigorously to the creative strategies employed by the adherents of "creationism." On June 19, 1987, in *Edwards v. Aquillard*, the fundamentalists succumbed to defeat in this second "equal time" case to reach the Supreme Court (West Educational Law Reporter 1987). Though it could be surmised that this issue received a terminal prognosis with this ruling, don't hold your breath. The fundamentalists will be back (Boxer 1987).

What are the legal issues permeating these cases? What are the arguments expounded by both camps as they attempt to defend their respective stances? An examination of our Constitution leads to two amendments—the first, with its guarantee of free speech and the establishment and free exercise clauses, and the 14th, which extended the Bill of Rights to the states, ensuring due process and equal protection before the law.

Our country was founded by immigrants who wanted to be free to worship as they saw fit and our forefathers meticulously wrote this "right" into the Constitution. In 1802, while speaking to a group of Baptists in Danbury, Connecticut, Thomas Jefferson emphasized the significance of the establishment clause by stating the First Amendment erected "a wall of separation between Church and State" (Kemerer 1968).

Over the years, the courts have been inundated with cases that attempted to scrutinize the composition of said "wall." This has not been an easy task, but the "wall's" makeup often seemed to reflect the times and ideologies of the Supreme Court Justices. Today, the fact that the challenged "Balanced Treatment Act" received certiorari by the Supreme Court is testimony to the conservative philosophy of the present Justices. In their attempt to be just and fair to

both appellees and appellants, the courts have been like tight-rope performers, frequently executing a demanding balancing act.

The Supreme Court ruling in the 1947 *Everson v. Board of Education* case is significant. The Court held for the first time that under the establishment clause, the federal and state governments are precluded from erecting legislation that sets up a church, promotes one religion, or shows preference for one religion over another (Rapp Educational Law 1984). The balancing act is also apparent. The Court ruled it was constitutional for the state to reimburse parents for transporting their children to parochial schools because it was the parent—not the school—who benefited from this action. Undoubtedly, there is often a fine line that delineates between secular and religious interests and the establishment verses the free exercise clauses.

Epperson v. State of Arkansas is a landmark case because it is the first case in which the Court ruled it was unconstitutional for a state to pass a law preventing the teaching of Darwinian evolution (Kemerer 1968). The chancery court held that the statute violated the free speech component of the first amendment because it "tends to hinder the quest for knowledge, restrict the freedom to learn and restrain the freedom to teach" (Kemerer 1968). However, the Arkansas Supreme Court reversed this ruling on the grounds that the state has the right to control curriculum in its public schools. When this case reached the U.S. Supreme Court, it was also recognized that the statute may infringe on due process as guaranteed by the 14th amendment because of its vagueness.

This was not the reasoning utilized by the Court. Instead, they found it to violate the establishment clause of the First Amendment. It was obvious that the court was in vital need of some tangible guidelines, particularly urgent in light of the nascent "creation science" and the perseverance of the fundamentalists to receive "equal time" for their "scientific theory."

In 1971, *Lemon v. Kurtzman* reached the Supreme Court's docket. This case voided two Pennsylvania statutes which provided reimbursement to private schools for the cost of teacher salaries, textbooks and instructional material used for a secular purpose. Because more than 96 percent of the schools were Roman Catholic, and because there would be excessive entanglement by the state regarding statute's stipulation about reimbursing only secular activities, the Court ruled that the statutes were invalid because they violated the Constitution's establishment clause (Kemerer 1979). From this case there emerged a three-pronged test dubbed the "Lemon test" which determines whether a statute violated the establishment and free exercise clauses of the first amendment (Rapp Educational 1984). The three criteria are:

1) the statute must have a secular purpose;
2) its principal or primary effect must be one that neither advances nor inhibits religion;
3) the statute should not cause any undue entanglement of the state in attempting to enforce it (Rapp Educational 1984).

The utilitarian features of this test were quickly adopted by the Court as it ruled on those tenuous cases involving the government and religion in an educational setting. The test set priorities for how the Court should examine a statute, so that if a statute failed the first test, there was no need to deliberate its constitutionality any further. Justice Black's admonishment about steering away from a statute's purpose, ironically, has become an extremely useful tool when the Court has been called to deliberate on church-state issues. The debates that precede the passage of statutes today are taped and open to public scrutiny, greatly facilitating the job of determining a statute's purpose.

This three-pronged Lemon Test quickly pierced holes into Arkansas' "Balanced Treatment for Creation-Science and Evolution-Science Act (Hooker 1982). In *McLean v. the Arkansas Board of Education,* the plaintiffs argued that:

1) the Act constitutes an establishment of religion prohibited by the First Amendment and
2) the Act violates the First Amendment free speech clause because it inhibits academic freedom (Hooker 1982).

In deciding this case, the U.S. Supreme Court found the Law failed all three prongs of the Lemon Test. The Court examined the history of the case's passage in determining its non-secular purpose. This strategy has frequently been used when determining whether a statute has failed the first prong of the Lemon Test. It's failure of the other two prongs was evident because it tended to promote religion and because there would undoubtedly be entanglement by the state since education is a state function.

The fundamentalists (in *McLean v. the Arkansas Board of Education*) even tried to classify evolution as part of the religion of secular humanism. Ironically, this terminology was first used in a footnote in the 1961 case of *Torasco v. Watkins* and was not intended to be literally interpreted to mean that secular philosophy is also a religion (Sorenson 1986). In this Arkansas case, the Justices gave science some legality by defining what it entails, and in doing so admonished the fundamentalists that their "creation science" flunks that test. Science, they stated, has the following essential characteristics:

1) it is guided by natural law;
2) it has to be explanatory by reference to natural law;
3) it is testable against the empirical world;

4) its conclusions are tentative (i.e., are not necessarily the final word); and
5) it is possible to falsify it (Hooker 1982).

Again, the fundamentalists were quick to adapt their strategies and "empirical creation science" was born. The creationist headquarters, the Institute for Creation Research (ICR) in Sankee, California, is testimony to the fundamentalists' persistence of their goal of having "creation science" taught along with evolution. The Institute's mission is to address the "urgent need for our nation to return to belief in a personal, omnipotent Creator, who has a purpose for His creation and to whom all people must eventually give account" (Boxer 1987).

Its membership is quite prestigious, including those with doctorates in biology, chemistry and geology. These scientists' respectability in the scientific community was greatly diminished, however, by their membership in the Institute. For example, their arguments supporting the notion that the earth is chronologically young are basically bad science because they cannot be tested against the empirical world. They reason that the carbon-14 levels in fossils were not reduced by radioactive decay, but because of God's preparation for the great flood. In order to inundate the earth for 40 days and nights, God lifted all the water from the earth into a vapor blanketing it. This acted to block cosmic rays that cause carbon-12 to change into carbon-14 (Boxer 1987).

The most recent case involving the movement to have creationism taught in public schools is *Edwards v. Aguillard* which was decided on June 19, 1987. In this case, the state of Louisiana had passed a statute requiring creationism to be taught along with Darwinian evolution. The statute, titled the "Balanced Treatment Act," was ruled unconstitutional by the U.S. Supreme Court. The Court used the history of the statute in deciding that it lacked a secular purpose as dictated by the Lemon test. The court renounced the argument that teachers would be given more academic freedom through the right to teach creation science because that freedom was inherent in the free speech clause of the first amendment. Justice Brennen stated:

> The Act does not grant teachers 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. . . . No law prohibited Louisiana public school teachers from teaching any scientific theory (Flygae 1987).

The court reviewed the history of the Act through transcripts and tapes of the proceedings accompanying the passage of the "Balanced Treatment Act." In them, Bill Keith, the Act's sponsor, had stated, "My preference would be that neither (creationism nor evolution) be taught" (West Educational Reporter 1987). The court found these transcripts exceedingly useful in determining that the Act lacked a secular purpose, and therefore, failed the first prong of the Lemon test. Since the Creationist Act embodied the beliefs of a particular religion, it then also acted to promote that religion, thus flunking the second prong of the Lemon test (West Educational Law Reporter 1987). The court did not mention the third prong, although based on my research I believe it is obvious that there would have been entanglement. The state was providing curriculum guides on creationism and a panel of "experts" to facilitate the teaching of "creationism." This undoubtedly has the "seeds" of entanglement.

In his dissenting opinion, Justice Scalia pointed out that the Court has often ruled Acts constitutional as long as they did not intentionally advocate a religion. In *Everson v. Board of Education* 330 U.S. 1 (1947), the state could reimburse parents for transporting their children to a religious school because this falls under the umbrella of the free exercise clause of the first amendment (West Educational Law Reporter 1987). In *Hobbie vs. Unemployment Appeals Commission of Florida,* 480 U.S. 107 S.Ct. (1987), it was held that the State must accommodate the religious beliefs of citizens, even if it means they are exempted from regulations that the general public must follow (West Educational Law Reporter 1987).

This most recent Creation case to reach the docket of the Supreme Court seems to have resulted in some modification of the Lemon test as used in *Wallace v. Jaffree.* In that case, simply failing the first prong of the Lemon Test, which stated that a statute could not have a religious purpose, was sufficient to declare it unconstitutional. Therefore, the Louisiana case also incorporated the second prong which emphasized that a statute cannot advance or retard a religion. The impact of this ruling will certainly be seen in other church-state cases, and it would not be presumptuous to hypothesize that the first prong of the Lemon test has lost some of its "bite."

It would be short-sighted to assume that the door has been shut for the creationists; it would be more pragmatic to anticipate their rearmament. This most recent ruling did not say that teachers cannot teach creationism. Therefore, be prepared for the next round when the scenario might go something like this:

Smith v. Middletown
Board of Education

> BACKGROUND: David Smith is the father of Peter Smith, a student in the biology class of Samuel Jones. Mr. Jones was recently hired by the Middletown Board of Education. Mr. Jones is a fundamentalist and has been teaching "creationism" in his class along with Darwinian evolution. He maintains that the Institute for Creation Science has uncovered convincing evidence that supports the bible version for creation. The majority of the Board's membership are also fundamentalists and are very pleased with the teaching

demonstrated by Mr. Jones. Most of the community is supporting the Board, although there is a strong contingent supporting Mr. Smith. Mr. Jones is stating that his academic freedom as protected by the first amendment is being impinged. Furthermore, he stated that students who felt his theory imposed on their religious beliefs could be excused from that portion of his class.

ISSUES: Is Samuel Jones' first amendment right of free speech being violated? Since education is a state function, and local school boards traditionally decide on school policy (such as the content of a course), can the state be called in to intervene? Are the establishment and free exercise clauses as applied to the states by the 14th amendment being infringed upon?

RULING: pending

If this strikes science educators as being preposterous, then watch the newspapers. The two rights most coveted by and frequently protected by the highest court of this country have intentionally been pitted against one another by this author. I am sure that it is just a matter of time before our Supreme Court Justices once again find themselves in a very demanding and creative balancing act as they deliberate on the teaching of creationism.

References

Boxer, S. Will creation science rise again?, *Discover, 8*(10), 80-85.

de Camp, S.L. (1968). *The great monkey trial.* (p. 9). Garden City, NY: Double & Co.

DiGuilo, J., Hamilton, D.A. Aguillard v. Treen: Creation statute violates Louisiana constitution. *West Educational Reporter, 8,* 223-229.

Edwards v. Aguillard 107 S. Ct. 2573 (1987, August 20). West Educational Law Reporter, 959-992.

Flygae, T.J. (1987, September). Supreme Court strikes down Louisiana creationism act. *Phi Delta Kappan, 69*(1), 77-79.

Hooker, C.P. Creation science has no legitimate educational purpose: McLean v. the Arkansas board of education. *West Educational Law Reporter, 1,* 1069-1076.

Kemerer, F.R., Deutsch, K.L. (1979). Epperson v. State of Arkansas 393 U.S. 97 (1968) (pp. 240-251). *Constitutional rights and student life.* West Publishing Co.

Lines, P.M. Excusal from public school curriculum requirements. *West Educational Reporter, 5,* 691-699.

Separation of church and state. *Rapp Educational Law, 1,* 2-20.

Sorenson, G.P. *West Educational Law Reporter, 3,* 1065-1074.

Wallace v. Jaffree U.S. 105 S. Ct. 2479 (1985). *Religion in Public Education,* 140-145.