



Political Threats to Evolution Education

Attacks on the integrity of science education persist as advocates for intelligent design/creationism pursue efforts to pass legislation or to rewrite academic standards in state capitals and local school boards across the nation. This document provides brief summaries of recent anti-science initiatives.

ALABAMA—A bill that would have allowed religious courses that teach evolution to be eligible for credit died with the end of the legislative session. HB 133 was passed by the House Education Policy Committee in February 2012, but never came to the House floor for a vote. The bill was sponsored by Rep. Blaine Galliher (R-District 30). The bill would "authorize local boards of education to include released time religious instruction as an elective course for high school students."

In February 2009, House Bill (HB) 300 was introduced in the Alabama House of Representatives. HB 300, the Academic Freedom Act, was introduced by David Grimes (R-District 73), who introduced a similar bill in 2008. HB 300 died in committee when the legislature adjourned in May 2009. If passed, HB 300 would have allowed teachers to critique scientific theories associated with topics such as "biological or chemical origins of life" and gave teachers protection for teaching alternatives to the theory of evolutionary origins.

ALASKA—On 28 August 2008, Arizona Senator and 2008 Republican Presidential nominee John McCain announced that he had selected Alaska Governor Sarah Palin as his Vice Presidential running mate. Palin established her creationist credentials during a 2006 gubernatorial debate when she stated that creationism should be taught alongside evolution in Alaska public school classrooms.

ARIZONA—Senate Bill 1213 died on February 22, 2013, when the deadline for Senate bills to be heard in their Senate committees passed. The legislation introduced in the Arizona state Senate threatened the teaching of evolution in public schools. The bill was the first anti-science legislation introduced in the state in at least a decade, according to the National Center for

Science Education. The bill's sponsors claimed that the bill would preserve "academic freedom" by encouraging school administrators to "create an environment in schools that encourages students to explore scientific questions, learn about scientific evidence, develop critical thinking skills, and respond appropriately and respectfully to differences of opinion about controversial issues." Evolution, climate change, and human cloning are singled out as subjects that "can cause controversy" in the science classroom. The bill would have allowed teachers to help students analyze the "scientific strengths and scientific weaknesses of existing scientific theories." The primary sponsors of Senate Bill 1213 were Senators Judy Burges (R-District 22) and Chester Crandell (R-District 6).

CALIFORNIA—On 21 February 2012, the U.S. Supreme Court declined to hear an appeal from Chad Farnan, a former high school student who sued his history teacher, James Corbett, over claims of "repeatedly promoting hostility toward Christians in class and advocating 'irreligion over religion' in violation of the First Amendment's establishment clause." The case dates back to 2009, when the district court wrote, "The Court cannot discern a legitimate secular purpose in this statement, even when considered in context. The statement therefore constitutes improper disapproval of religion in violation of the Establishment Clause." The district court also ruled that there was no clear precedent regarding Corbett's comment, protecting him from liability. Upon appeal from both Farnan and Corbett, the Ninth Circuit overturned the district court's ruling "to the extent it decided the constitutionality of any of Corbett's statements," while upholding Corbett's immunity.

On 12 October 2010, the Supreme Court declined to review *ACSI et al. v. Stearns et al.* The case originated in 2005 when the Association of Christian Schools International (ACSI) and others filed a lawsuit against the University of California. The central issue of the case was the university's disapproval of high school biology courses that use textbooks published by Bob Jones University Press and A Beka Books. The university maintained that high school biology courses that use these textbooks did not meet their college preparatory requirements. In January 2010, the Ninth Circuit Court of Appeals affirmed a federal district court's summary judgment supporting the University of California system in *ACSI et al. v. Stearns et al.* The University of California (UC) also won a multiyear court battle in 2008, which was brought by several Christian schools and students. Back then, a federal judge issued a partial ruling that

established the constitutionality of the UC policy for evaluating applicant credentials.

In 2007, a Federal judge ruled against Larry Caldwell, a creationist lawyer and parent who sued the Roseville Joint Union High School District and school officials, claiming his civil rights had been violated when he unsuccessfully lobbied the school board to teach alternatives to evolution.

In March 2006, a U.S. District Court judge dismissed a lawsuit filed against the UC Museum of Paleontology and the National Center for Science Education. The lawsuit charged that the "Understanding Evolution" Web site hosted by the two organizations violated the Constitution's Establishment Clause.

COLORADO—The House Committee on Education rejected a measure that would have undermined the teaching of evolution. In a 7-6 vote on 4 February 2013, the committee postponed further action on the bill indefinitely. House Bill 13-1089 would have encouraged teachers in Colorado to help students assess the strengths and weaknesses of evolution and climate change. The bill would have applied for K-12 as well as higher education.

Bill Ritter (D) was elected governor in 2006, when he defeated Bob Beauprez (R). Beauprez's running mate, Janet Rowland, stirred controversy by supporting the teaching of creationism alongside evolution in the science classroom. Colorado scientists organized to establish the Colorado Evolution Response Team, a group that combats threats to science education.

FLORIDA—An anti-evolution bill was introduced in the state Senate in March 2011. Senate Bill 1854 would have amended a section of Florida law to require a "thorough presentation and critical analysis of the scientific theory of evolution" in the state's public schools. The bill was sponsored by Stephen R. Wise (R-District 5), who had sponsored a similar bill in the last session of the legislature. SB 1854 was vigorously opposed by the American Civil Liberties Union of Florida, Florida Citizens for Science, the Florida Academy of Sciences, and newspapers across the state. The bill died in committee on 7 May 2011.

On 12 July 2009, a creationist theme park in Pensacola, Florida (Dinosaur Adventure Land), was seized by the federal government after it failed to pay taxes and evaded the Internal Revenue Service.

Senate Bill 2396 was filed on 27 February 2009 and aimed to amend a section of the Florida state law to require a "thorough presentation and critical analysis of the scientific theory of evolution." The bill died in committee with the conclusion of the legislative session in May 2009.

On 19 February 2008, by a 4-3 vote, the State Board of Education approved new science standards that include the term "evolution." These standards replaced the 1999 Sunshine State Standards for Science, which were widely criticized by science education experts for their deficiencies. In response to the new standards, some legislators introduced the Evolution Academic Freedom Act (HB 1483, SB 2692). The legislation sought to "protect the right of teachers to objectively present scientific information relevant to the full range of scientific views regarding chemical and biological evolution." The measures died in the legislature.

GEORGIA—On 19 December 2006, a settlement was announced in *Selman v. Cobb County*. The Cobb County Board of Education and School District agreed not to restore a warning sticker in science textbooks that described evolution as "a theory, not a fact." Additionally, the board and district were enjoined to not take any number of actions that "would prevent or hinder the teaching of evolution" and to reimburse \$166,659 of the plaintiffs' legal fees. The settlement followed a May 2006 11th U.S. Circuit Court of Appeals decision that sent the case back to U.S. District Court over evidentiary concerns. The Cobb County Board of Education had appealed a 13 January 2005 federal court ruling, which ordered the textbook warning stickers to be removed immediately, as they were considered a violation of the Establishment Clause of the First Amendment. The initial trial of *Selman v. Cobb County* took place in late 2004 after 11 parents filed suit against the Cobb County School Board, which, under pressure from local creationists, had adopted the stickers in 2002.

INDIANA—House Bill 1283 died on 25 February 2013, when the deadline passed for the third reading of the bill. The legislation was similar a bill that passed the Indiana Senate in 2012. Although evolution was not specifically mentioned in the bill, the legislation contained language that is similar to other anti-evolution bills. HB 1283 was sponsored by Jeff Thompson (R-28), who sponsored a creationist bill passed by the upper chamber in 2012. The bill would have encouraged school administrators to create an environment that "encourages students to explore questions, learn about evidence, develop critical thinking skills, and respond appropriately and respectfully to different conclusions and theories concerning" such topics.

HB 1283 would also encourage teachers to help students to assess the "strengths and weaknesses" of scientific concepts. The bill stated that it "may not be construed to promote: (1) any religious or nonreligious doctrine; (2) discrimination for or against a particular set of religious beliefs or nonbeliefs; or (3) discrimination for or against religion or nonreligion."

KANSAS—The Kansas Board of Education held a hearing on 12 June 2012 on the Next Generation Science Standards. The Associated Press reported that Ken Willard, a board member, stated that the standards "ignore evidence against evolution, don't respect diversity, and promote secular humanism, which precludes God or another supreme being in considering how the universe works." According to the Associated Press, chair of the Board of Education David Dennis said the board would likely adopt evolution-friendly guidelines because Democrats and moderate Republicans constitute a majority of the board.

During a February 2007 meeting, the Kansas State Board of Education revised state science standards to appropriately consider evolution and reject the "teach the controversy" stance implemented by the previous board, which was dominated by creationists. On 7 November 2006 supporters of evolution education took control of the State Board of Education.

KENTUCKY—Mike Wilson (R-District 32), chair of the Kentucky Senate Standing Committee on Education, "has no intention of using his new role to help push his personal belief in creationism into the curriculum of public schools," according to the 12 December 2012 issue of the *Louisville Courier-Journal*.

According to the *Lexington Herald-Leader*, "Several GOP lawmakers questioned new proposed student standards and tests that delve deeply into biological evolution," during a meeting of the Interim Joint Committee on Education on 15 August 2012. State Senator David Givens (R-District 9) said to the *Herald-Leader*, "I would hope that creationism is presented as a theory in the classroom, in a science classroom, alongside evolution." State Representative Ben Waide (R-District 10) added, "the theory of evolution is a theory, and essentially the theory of evolution is not science — Darwin made it up."

The superintendent of Hart County school system blasted evolution in a letter to state education commissioner Terry Holliday and the state board of education on 21 November 2011. According to the *Lexington Herald-Leader*, Line expressed "deep

concern about the increased emphasis on the evolution content required in the new End-of-Course Blueprint." In a response to the *Lexington Herald Leader*, Holliday said, "I think what was unclear to Rickey is that we certainly are not teaching evolution as a fact, but as a scientific theory."

In August 2011, Ark Encounter, a proposed creationist theme park to be located in northern Kentucky, was granted a 75 percent property tax break for the next 30 years by the city of Williamstown, Kentucky. This is in addition to nearly \$200,000 given to the project's developer by Grant County's economic development arm, as well as 100 acres of reduced-price land. The Kentucky Tourism Development Finance Authority previously approved tax incentives for the theme park. According to the National Center for Science Education, the "tax incentives will allow Ark Encounter to recoup 25 percent of its development costs by retaining the sales tax generated by the project. With the development costs of the park estimated at 150 million dollars, the incentives would amount to 37.5 million dollars over ten years." The religious theme park will feature a full-scale replica of Noah's Ark. Construction of the project is expected to be completed with private funds.

Kentucky's House Bill 169 would, if enacted, allow teachers to "use, as permitted by the local school board, other instructional materials to help students understand, analyze, critique, and review scientific theories in an objective manner." Dubbed the Kentucky Science Education and Intellectual Freedom Act, HB 169 was introduced in the Kentucky House of Representatives on 4 January 2011; the sole sponsor of the bill was Tim Moore (R-District 26). No particular scientific theories were cited in HB 169, but the bill is very similar to HB 397, which was sponsored by Moore in 2010. HB 169 died in committee on 9 March 2011.

In April 2010, the Kentucky Science Education and Intellectual Freedom Act (House Bill 397) died in committee when the Kentucky legislature adjourned. The bill would have allowed teachers to use instructional materials to help students analyze and critique scientific theories including evolution, climate change, and human cloning.

In May 2007, the \$27-million, privately funded Answers in Genesis Creation Museum opened in northern Kentucky, near Cincinnati. The 60,000-square-foot museum features science-mimicking exhibits that present the story of Biblical creation as literal truth.

In January 2007, the Kentucky Board of Education discussed requisite qualifications for a new education commissioner, but did not include potential candidates' positions on intelligent design.

On 9 January 2006, Governor Ernie Fletcher (R) advocated teaching intelligent design in his annual State of the Commonwealth address. Former Commissioner Gene Wilhoit later contradicted this message when he publicly voiced concerns that hiring someone who believes intelligent design should be taught in public schools would be a mistake.

In December 2005, the Kentucky Academy of Science expressed its opposition to attempts to equate intelligent design/creationism with evolution.

LOUISIANA— A bill filed by Louisiana state Senator Karen Carter Peterson (D-New Orleans) to repeal an anti-evolution education law was rejected on a 2-3 vote on 2 May 2013. SB 26 would have repealed the Louisiana Science Education Act, which was enacted in 2008. Most science education experts consider the state law to be a misguided effort to allow the teaching of creationism in public schools, as it calls on state and local education administrators to help to promote "critical thinking skills, logical analysis, and open and objective discussion of scientific theories being studied including, but not limited to, evolution, the origins of life, global warming, and human cloning." The repeal effort had the support of several science educator associations and scientific societies, including the American Institute of Biological Sciences. Moreover, 75 Nobel laureates have written to the Louisiana state legislature in support of overturning the law. "This year the Governor has asked the Louisiana legislature to focus on education," said Senator Peterson. "If this Legislative session is truly about improving Louisiana's education system, then the first place to start is to repeal the Louisiana Science Education Act." Two previous attempts to repeal the Louisiana Science Education Act were also defeated in committee.

The Orleans Parish School Board voted to ban the teaching of intelligent design in science classes and the purchasing of textbooks that promote creationism on 18 December 2012. The policy will only apply in the six schools run by the city's local school board; other schools in New Orleans are run independently or by the state. The policy does not appear to be prompted by any particular threat to the teaching of evolution. The vote was taken at the behest of Thomas Robichaux, the outgoing president of the board. This is the second action taken in New Orleans in opposition to creationism.

In 2011, the city council approved a resolution that endorsed the repeal of the Louisiana Science Education Act, which most science education experts consider the state law to be a misguided effort to allow the teaching of creationism in public schools

Louisiana's voucher program was ruled to violate the state constitution on 30 November 2012, according to the Baton Rouge *Advocate*. According to NCSE, "Zack Kopplin, the activist who organized the effort to repeal the so-called Louisiana Science Education Act," claimed that "of the roughly 6600 spaces available for students under the program, 1350 will be filled." The voucher program was struck down because it directed tax dollars from public to private schools, not because of creationism issues.

In December 2010, the Louisiana State Board of Elementary and Secondary Education advisory committee, made up of educators and lawmakers, voted 8-4 to recommend adoption of new biology textbooks that included evolution. The state Board of Education followed suit and voted 8-2 to approve the high school textbooks. In November 2010, the Louisiana Family Forum announced that proposed high school biology textbooks do not comply with the Louisiana Science Education Act (LSEA). One of their complaints was that the textbooks failed to discuss "intelligent design."

In 2009, the Louisiana Board of Elementary and Secondary Education adopted a policy about what supplementary materials are allowable under the LSEA. The policy no longer contains a provision that prohibits the use of material that teaches creationism or intelligent design.

The LSEA (SB 733), formerly the Louisiana Academic Freedom Act (SB 561), passed the Louisiana Senate in April 2008, 27 years after the state passed its Balanced Treatment for Evolution-Science and Creation-Science Act, a law overturned by the Supreme Court in 1987. SB 733 was quietly signed into law by Governor Bobby Jindal (R) on 25 June 2008. Sponsored by State Senator Ben Nevers (D-District 12), the legislation seeks to create questions that do not exist around evolution and climate change. The statewide measure was modeled on a policy passed by the Ouachita Parish School Board in 2006. Before approval by the Senate Education Committee, the legislation was renamed, renumbered, and "sanitized" by removing "strengths and weaknesses" language and the list of specific scientific topics. Nevers later restored the list of topics—"biological evolution, the chemical origins of

life, global warming, and human cloning"—to SB 733.

In 2007, David Vitter (R), one of Louisiana's U.S. Senators, sought to secure a \$100,000 earmark in a federal appropriations bill for the Louisiana Family Forum (LFF) "to promote better science education." The LFF is a Christian group that opposes the teaching of evolution. A coalition of national organizations joined together to oppose the earmark. Senator Vitter ultimately withdrew his request in October 2007.

MICHIGAN—HB 6027, an "academic freedom" bill, was introduced in the Michigan House of Representatives on 30 April 2008. Science education advocates opposed HB 6027 because it was intended to create questions that do not exist around the issues of evolution and climate change. The bill was cosponsored by John Moolenaar (R-District 98), who previously cosponsored legislation that would have encouraged the teaching of "the design hypothesis as an explanation for the origin and diversity of life" in public-school science classes. An identical bill, SB 1361, was introduced in the state Senate in June; both measures died in committee.

In October 2006, the State Board of Education approved "science content expectations" that require high-school students to explain the process of evolution and its supporting scientific evidence.

MINNESOTA—On 20 May 2006, education legislation (SF 2994) passed the state House of Representatives and Senate. A provision in the original legislation that banned the Department of Education and school districts from "utilizing a nonscientific based curriculum, such as intelligent design," was stricken from the final bill.

MISSISSIPPI—House Bill 586, introduced on 12 January 2010, would have required local school boards in Mississippi to include a lesson on human evolution at the beginning of their high school biology classes, but the lesson would have had to include "equal instruction from education materials that present scientifically sound arguments by protagonists and antagonists of the theory of evolution." The bill died in committee in February 2010.

In January 2009, House Bill 25 was introduced in the House of Representatives. The bill would mandate that the state board of education require every textbook that discusses evolution to include a disclaimer describing evolution as a "controversial theory." The bill died in committee in February 2009.

Legislation that would authorize local school boards to teach alternatives to evolution (HB 625) died in the House Education Committee on 30 January 2007.

In April 2006, HB 214 was signed into law, which allows teachers to "answer questions from individual students on the origin of life."

In January 2005, SB 2286 was introduced in the state Senate. The bill would have required public schools to teach creationism if they teach evolution; the legislative language was similar to a Louisiana measure that the U.S. Supreme Court found unconstitutional in the 1987 *Edwards v. Aguillard* case. SB 2286 died in committee.

MISSOURI—Rick Brattin (R-District 55) introduced House bill 291 on 23 January 2013, which would require "the equal treatment of science instruction regarding evolution and intelligent design." The legislation would apply to public elementary, secondary and higher education science introductory courses. Known as the Missouri Standard Science Act, HB 291 is identical to HB 1227, which was also introduced by Brattin before dying in committee in May 2012.

Representative Andrew Koenig (R-District 99) introduced a bill on 16 January 2013 that would encourage public school teachers to help their students explore the strengths and weaknesses of scientific issues. Evolution is highlighted as one topic in need of further evaluation. House Bill 179 calls on state and local education administrators to "endeavor to create an environment within public elementary and secondary schools that encourages students to explore scientific questions, learn about scientific evidence, develop critical thinking skills, and respond appropriately and respectfully to differences of opinion about controversial issues, including biological and chemical evolution." HB 179 was similar to HB 1276, which died at the end of the legislative session without receiving a hearing on 18 May 2012, as well as HB 195 in 2011 and HB 1651 in 2010, both of which died without being assigned to committee.

On 7 August 2012, voters in Missouri overwhelmingly approved an amendment to the state constitution regarding religious freedom. Although the proposal does not explicitly address the teaching of evolution, it does state, "that no student shall be compelled to perform or participate in academic assignments or educational presentations that violate his or her religious beliefs." Some are concerned that this language could allow public school students who believe in

creationism to skip school assignments on evolution.

HB 656, introduced in January 2009, would have required state and local education administrators to permit teachers to “help students understand, analyze, critique and review in an objective manor the scientific strengths and scientific weaknesses of theories of biological and chemical evolution.” The bill died before being assigned to a committee.

HB 2554, an act “relating to teacher academic freedom to teach scientific evidence regarding evolution,” died in May 2008 with the end of the legislative session. Passed by the House of Representatives’ Committee on Elementary and Secondary Education, the legislation used rhetoric from “academic freedom” legislation of other states. Representative Robert Wayne Cooper (R-District 155) introduced the legislation. In 2004, he sponsored HB 911 and HB 1722—legislation that would have permitted equal time for “intelligent design” in Missouri’s schools.

MONTANA—Montana’s House Education Committee tabled a measure that would “encourage critical thinking regarding controversial scientific theories” such as “biological evolution, the chemical origins of life, random mutation, natural selection, DNA, and fossil discoveries.” House Bill 183 was discussed in the committee on 25 January 2012. According to the National Center for Science Education, over twenty people attended the hearing and spoke in opposition to the bill.

House Joint Resolution 21 and Senate Joint Resolution 8 were introduced in the State Legislature in 2007. The resolutions would have supported the “separation of church and state and quality education.” The resolutions died in committee.

In 2004, a Darby, Montana, minister led an effort to pressure the local school board to adopt a policy that would support the teaching of nonscientific criticisms of evolution. The school board ultimately defeated the proposal by a 3-2 vote. School board members that supported the policy were not reelected.

NEVADA—The Secretary of State filed a “Truth in Science” initiative in February 2006, which called for a state constitutional amendment requiring that “strengths and weaknesses” of evolution be taught in public schools. The initiative was withdrawn in June 2006 because supporters were unable to garner the required 83,184 signatures to place the measure on the ballot.

NEW HAMPSHIRE—The House of Representatives defeated two anti-evolution bills in March 2012. HB 1148, sponsored by freshman lawmaker Jerry Bergevin (R-District 17), would have charged the state board of education to “[r]equire evolution to be taught in the public schools of this state as a theory, including the theorists’ political and ideological viewpoints and their position on the concept of atheism.” The bill was defeated in a vote of 280 to 7. HB 1457, which was introduced by Gary Hopper (R-District 7) and freshman John Burt (R-District 7), was defeated by voice vote. The bill would have charged the state board of education to “[r]equire science teachers to instruct pupils that proper scientific inquire [sic] results from not committing to any one theory or hypothesis, no matter how firmly it appears to be established, and that scientific and technological innovations based on new evidence can challenge accepted scientific theories or modes.” Hopper told the Concord Monitor that he would like to see intelligent design taught in schools: “I want the problems with the current theories to be presented so that kids understand that science doesn’t really have all the answers. They are just guessing.”

NEW MEXICO—House Bill 302 was introduced in the New Mexico House of Representatives on 1 February 2011. The bill aimed to require teachers to be allowed to inform students “about relevant scientific information regarding either the scientific strengths or scientific weaknesses” pertaining to “controversial” scientific topics; the bill would protect teachers from “reassignment, termination, discipline or other discrimination for doing so.” The sole sponsor of HB 302 was Thomas A. Anderson (R-District 29); the legislation was similar to Senate Bill 433 from the 2009 legislative session. New Mexico’s House Bill 302 died in committee on 19 March 2011, when the legislative session ended.

In 2009, three anti-evolution bills were introduced in the state legislature, including Senate Bill (SB) 433. SB 433 would have required schools to allow teachers to inform students “about relevant scientific information regarding either the scientific strengths or scientific weaknesses pertaining to biological evolution or chemical evolution.” It also would have protected teachers who chose to do so from potential consequences such as termination or reassignment. The bill died in committee when legislature adjourned in March 2009.

In January 2007, four anti-evolution bills were introduced in the legislature. These proposals died at the end of the legislative session. HB 506 and SB 371, identical legislation, would have allowed teachers to provide information about the strengths and weaknesses of evolution when teaching about

“biological origins,” encouraging students to come to their own conclusions. HJM 14 and SJM 9 would have required compliance with the above bills by the Public Education Department.

On 10 April 2006, the Rio Rancho School Board voted to amend Science Policy 401, replacing language considered by some to promote teaching intelligent design with language directly from state science standards.

NEW YORK—In June 2006, AB 8036, an anti-evolution bill that would have required students to receive instruction in “all aspects of the controversy surrounding evolution,” died in committee.

OHIO—The Freshwater saga continues, as the Ohio Supreme Court will hear the appeal of John Freshwater to challenge the decision to terminate his employment as a middle school teacher in Mount Vernon, Ohio over charges that he displayed religious materials in class and burned religious symbols in the skin of some students. The Associated Press (5 July 2012) summarized, “The court said Freshwater can argue that it is unconstitutional to fire someone without clear guidance on what teaching materials or methods are acceptable. Freshwater also can argue that it is unconstitutional to fire someone over the mere presence of a religious text like the Bible in the classroom.” Previous legal challenges to the decision to terminate his employment were defeated on 25 March 2012, when Ohio’s Fifth District Court of Appeals upheld a Knox County Common Pleas Court lower court’s rejection of his legal challenge on 5 October 2011. The Freshwater case also provoked a lawsuit, *Doe v. Mount Vernon Board of Education et al.*, which was settled in December 2010. The terms of the settlement include monetary retributions of almost half a million dollars to be paid to the family filing the lawsuit against Freshwater to cover “mental pain and other damages suffered” as well as attorney fees for the plaintiffs.

In December 2008, the Cincinnati Zoo removed a controversial package ticket deal with the nearby Creation Museum (in Kentucky) after receiving criticism about the partnership.

In February 2006, the Ohio Board of Education voted 11-4 to remove a 2004 “Critical Analysis of Evolution” lesson plan and a corresponding indicator from the state science standards. Scientists and educators actively opposed the lesson plan, contending it was a thinly disguised attempt to introduce intelligent design/creationism into the curriculum. In an effort to circumvent this decision, the “Framework for Teaching

Controversial Issues” was introduced in July 2006 and was supported by several board members. However, in October 2006 the board voted 14-3 to end discussion of these proposed teacher guidelines.

In November 2006, 5 of 11 elected positions on the state board of education were on the ballot; pro-science candidates won four of those seats, including one formerly held by Deborah Owens-Fink, a vocal supporter of anti-science measures. Voters also elected Democrat Ted Strickland to be governor. Strickland opposed the teaching of intelligent design in science classrooms.

OKLAHOMA—Senate Bill 758 died in committee on 25 February 2013. SB 758 would have required science teachers to help students evaluate the scientific strengths and weaknesses of “existing scientific theories.” Although evolution and climate change were not directly mentioned in the legislation, the bill was similar to efforts in other states to introduce creationism into the classroom. The bill was sponsored by Oklahoma State Senator Brecheen, who previously sponsored legislation in 2011 and 2012 to weaken the teaching of evolution in Oklahoma. AIBS wrote to urge members of the Oklahoma Senate Education Committee to oppose SB 758.

SB 1674, sponsored by Gus Blackwell (R-District 61), died in the Oklahoma House of Representatives on 14 March 2013. If enacted, the bill would have encouraged teachers to help students analyze the “scientific strengths and weaknesses of existing scientific theories pertinent to the course being taught,” specifically mentioning “biological evolution, the chemical origins of life, global warming, and human cloning.”

Two anti-evolutionary bills died in the Senate early in 2012. Senate Bill 1742 died in committee 1 March 2012, when the deadline passed for bills in the Senate to be reported from their committees. The bill, which would have enabled the teaching of creationism in schools, was modeled after the Louisiana Science Education Act. Legislative prospects for HB 1551 also died, after the Senate Education Committee failed to act on the bill before the deadline of 5 April 2012. The bill would have encouraged teachers to present the strengths and weakness of “controversial” topics, including evolution and climate change. HB 1551 had passed the Oklahoma House of Representatives in March 2012. Steve Russell (R-District 45) tried to revive the legislative prospects of HB 1551 by offering it as an amendment to another bill. That bill ultimately died. Similar bills were rejected in the 2011 and 2009 legislative sessions.

Two resolutions (HR 1014 and HR 1015) targeted the University of Oklahoma for inviting Richard Dawkins to speak on campus in March 2009. Both resolutions died after Dawkins spoke during the University's celebration of Darwin's 150th anniversary of his publication, "On the Origin of Species."

Although it died in the State Senate Rules Committee in April 2008, the Religious Viewpoints Antidiscrimination Act (HB 2211) was resurrected by its supporters in the form of a Senate amendment to HB 2633. The measure passed the House in May 2008 by a 70-28 vote and was sent to Governor Brad Henry (D). The governor vetoed the legislation.

In April 2006, four anti-evolution bills died in committees, including HB 2107, the Academic Freedom Act, which had passed the House in March 2006.

PENNSYLVANIA—In November 2006, Bob Casey (D) defeated incumbent Senator Rick Santorum (R), chairman of the Senate Republican Conference and a powerful supporter of the intelligent design movement. Santorum was a member of the advisory board to the organization that defended the Dover school board in the 2005 *Kitzmiller v. Dover Area School District* case. The case began in October 2004 when the school board amended the district's science curriculum to authorize the use of an intelligent design textbook, and 11 local parents later filed a federal lawsuit. Following a trial in 2005, federal Judge John E. Jones III ruled that the district's inclusion of the creationist textbook in the science curriculum violated the Establishment Clause of the First Amendment of the Constitution. The ruling also declared that intelligent design is not science, and "moreover intelligent design cannot uncouple itself from its creationist, and thus religious antecedents." On 8 November 2005, before Judge Jones's decision, eight anti-evolution members of the Dover school board who voted for the weakened science standards failed to win reelection.

SOUTH CAROLINA—Two anti-evolution bills, Senate Bill 873 and Senate Bill 875, died in committee on 10 June 2010. SB 875 was an "academic freedom" bill that would require educators to "help students understand, analyze, critique and review...the scientific strengths and weaknesses of existing scientific theories." SB 873 was unique in that it would have required the state board of education to "examine all curriculum in use in this state that purports to teach students about

the origins of mankind to determine whether the curriculum maintains neutrality toward religion."

In June 2008, SB 1386—so-called academic freedom legislation aimed at undermining the teaching of evolution—died in the state Senate. Introduced in May 2008, the legislation singled out evolution as a controversial subject and encouraged critical analyses of its strengths and weaknesses. Its sponsor, Senator Michael Fair (R-District 6), previously spearheaded efforts to hinder the teaching of evolution in the state standards.

In June 2006, the South Carolina Education Oversight Committee approved new science standards that included a "critical analysis" indicator in the evolution section. In August 2007, the anti-evolution standards approved by the State Board of Education in November 2005 went into effect.

TENNESSEE—Under a new Tennessee law, teachers would be encouraged to present the "scientific strengths and scientific weaknesses" of "controversial" topics, including "biological evolution, the chemical origins of life, global warming, and human cloning." In what became known as the "monkey bill," HB 368 became law on 10 April 2012, despite the fact that it did not receive the signature of Governor Bill Haslam (R), who neither signed the bill nor vetoed it. Although the law would not require the teaching of creationist theories, it would prevent school administrators from reproaching educators who pursue alternatives to evolution. Critics of the legislation argue that the measure will allow teachers to introduce non-scientific ideas into the science classroom. The House passed a similar measure (HB 368) a year ago. AIBS wrote to Governor Haslam, Senate Speaker Ron Ramsey, and House Speaker Beth Harwell in opposition to House Bill 368 and Senate Bill 893.

In January 2007, Senator Raymond Finney (R-District 8) introduced SR 17, legislation that would have required the commissioner of education to justify the fact that creationism is not taught in the state's public schools. The measure died in the legislature.

TEXAS—The House Committee on Higher Education failed to act upon a bill that would have prevented Texas institutions of higher education from discriminating against faculty or students based on their beliefs on intelligent design. House Bill 285 died in committee after faculty from the University of Texas voiced their opposition to the bill. The bill's sponsor was Bill Zedler (R-District 96), who introduced an identical bill in 2011.

The former head of the Texas Education Agency, Christine Comer, lost her appeal regarding her former employer's neutrality policy on evolution and creationism. On 2 July 2010, the U.S. Court of Appeals for the Fifth Circuit upheld a lower court's decision that the education agency had the right to require its employees to be neutral when talking about evolution and creationism. In December 2007, Comer was pressured to resign from the Texas Education Agency after forwarding an e-mail about an upcoming talk by Barbara Forrest, coauthor of *Creationism's Trojan Horse*, a scholarly work that chronicles how creationist politics influence public school science curricula.

In June 2010, the Institute for Creation Research (ICR) voted to close their graduate school after unsuccessfully seeking accreditation from the state for a master's degree in science education. In a lawsuit filed by the ICR to appeal the state's decision, a U.S. District Court ruled in favor of the state.

On 2 March 2010, creationist Don McLeroy (R) lost his bid for reelection to the State Board of Education. McLeroy had served on the board since 1998. His nomination to chair the board was blocked by the Texas Senate in May 2009 over concerns about his support of creationism.

In March 2009, the Texas state board of education voted to adopt a set of state science standards that contain a requirement that students examine "all sides of scientific evidence." The board also voted to add or amend standards to encourage creationist claims about the age of the universe, complexity of the cell, and completeness of the fossil record. This outcome surprised some, as the board had dropped controversial language requiring that both the "strengths and weaknesses" of evolution be taught to students from their December 2008 draft standards.

Two anti-evolution bills (HB 2800 and HB 4224) died in June 2009. HB 2800 would have allowed the Institute for Creation Research to offer a master's degree in science education even though the state denied ICR's request for certification in 2008.

In June 2007, two bills troubling to evolution advocates were signed into law: HB 188, which changed the process by which textbooks are reviewed and adopted by public school districts or open-enrollment charter schools; and HB 3678, the Religious Viewpoint Anti-Discrimination Act. There is concern that HB 188 will permit nonscientific books to be incorporated into the biology curriculum as supplementary material. It appears that HB 3678

will allow students in science classes to offer religious and creationist explanations for natural phenomena in class work; further, it has served as a template for other "academic freedom" legislation in other states.

UTAH—In September 2005, the Utah State Board of Education called evolution "a major unifying concept in science and appropriately included in Utah's K–12 Science Core Curriculum."

VIRGINIA—Senate Joint Resolution 287 died 5 February 2013 as legislature adjourned sine die. It would have revised a portion of the state constitution to provide "that no student in public schools shall be compelled to perform or participate in academic assignments or educational presentations that violate his religious beliefs." SJR 287 was sponsored by William M. Stanley, Jr. (R-District 20) and Charles W. Carrico Sr. (R-District 40), with Mark L. Cole (R-District 88) serving as its sponsor in the House.

WISCONSIN—In May 2006, AB 1143 died in the State General Assembly. This legislation would have instructed the state school board to ensure that material "presented as science within the school curriculum" is "testable as a scientific hypothesis and describes only natural processes," and is consistent with the National Academy of Sciences' definition of science. The legislation was intended to counteract actions that weakened evolution education, including the December 2004 Grantsburg School Board resolution that stated: "Students shall be able to explain the scientific strengths and weaknesses of evolutionary theory. This policy does not call for the teaching of creationism or intelligent design."

For more information

The American Institute of Biological Sciences (AIBS) Evolution Initiatives web page (www.aibs.org/public-policy/teaching_evolution.html) includes updates about current threats to evolution education and links to helpful AIBS resources for science education advocates. From this site you may also access the AIBS/National Center for Science Education State Evolution Listserv Network.