

Statewide Policies Affecting Evolution Education

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Introduction

Several states have academic freedom laws or resolutions. These states are:

Louisiana (2008)

Tennessee (2012)

Alabama (2017)

*Indiana – one-chamber Senate resolution (2017)

Several states have science standards with language making clear that students will learn about the scientific strengths and weaknesses of evolution. These include:

South Carolina

Texas

Some states have other kinds of legislation or policies which encourage teaching the scientific controversy over evolution.

Legislation in Mississippi

Education section in the Pennsylvania code

Alabama textbook sticker

Next Generation Science Standards (NGSS)

Most states have science standards that are some variation of the NGSS or are heavily influenced by them. One part of the NGSS are the overarching science and engineering practices. A teacher can incorporate skills from the science and engineering practices to help students to use scientific inquiry in their examination of evolutionary theory. Standards are a floor, not a ceiling, and teachers may complete the standards recommendations and teach further skills.

**This document does not cover the NGSS. Please see the My State page on TeachingEvolution.org for more information about the NGSS and evolution education.*

Louisiana Science Education Act (2008)

285.1. Science education; development of critical thinking skills

A. This Section shall be known and may be cited as the "Louisiana Science Education Act."

B. (1) The State Board of Elementary and Secondary Education, upon request of a city, parish, or other local public school board, shall allow and assist teachers, principals, and other school administrators to create and foster an environment within public elementary and secondary schools that promotes 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. (2) Such assistance shall include support and guidance for teachers regarding effective ways to help students understand, analyze, critique, and objectively review scientific theories being studied, including those enumerated in Paragraph (1) of this Subsection.

C. A teacher shall teach the material presented in the standard textbook supplied by the school system and thereafter may use supplemental textbooks and other instructional materials to help students understand, analyze, critique, and review scientific theories in an objective manner, as permitted by the city, parish, or other local public school board unless otherwise prohibited by the State Board of Elementary and Secondary Education.

D. This Section shall not be construed to promote any religious doctrine, promote discrimination for or against a particular set of religious beliefs, or promote discrimination for or against religion or nonreligion.

E. The State Board of Elementary and Secondary Education and each city, parish, or other local public school board shall adopt and promulgate the rules and regulations necessary to implement the provisions of this Section prior to the beginning of the 2008-2009 school year.

Tennessee Law – HB 368 (2012)

AN ACT to amend Tennessee Code Annotated, Title 49, Chapter 6, Part 10, relative to teaching scientific subjects in elementary schools.

WHEREAS, the general assembly finds that:

An important purpose of science education is to inform students about scientific evidence and to help students develop critical thinking skills necessary to become intelligent, productive, and scientifically informed citizens;

The teaching of some scientific subjects required to be taught under the curriculum framework developed by the state board of education may cause debate and disputation including, but not limited to, biological evolution, the chemical origins of life, global warming, and human cloning; and

Some teachers may be unsure of the expectation concerning how they should present information when debate and disputation occur on such subjects; now, therefore,

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1.

Tennessee Code Annotated, Title 49, Chapter 6, Part 10, is amended by adding the following as a new, appropriately designated section:

(a) The state board of education, public elementary and secondary school governing authorities, directors of schools, school system administrators, and public elementary and secondary school principals and administrators shall 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 scientific subjects required to be taught under the curriculum framework developed by the state board of education.

(b) The state board of education, public elementary and secondary school governing authorities, directors of schools, school system administrators, and public elementary and secondary school principals and administrators shall endeavor to assist teachers to find effective ways to present the science curriculum taught under the curriculum framework developed by the state board of education as it addresses scientific subjects that may cause debate and disputation.

(c) Neither the state board of education, nor any public elementary or secondary school governing authority, director of schools, school system administrators, or any public elementary or secondary school principal or administrators shall prohibit any teacher in a public school system of this state from helping 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 within the curriculum framework developed by the state board of education.

(d) 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 religion or non-religion.

SECTION 2.

By no later than the start of the 2012-2013 school term, the department of education shall notify all directors of schools of the provisions of this act. Each director shall notify all employees within the director's school system of the provisions of this act.

SECTION 3.

This act shall take effect upon becoming a law, the public welfare requiring it.

Indiana Senate Resolution (2017)

SENATE RESOLUTION No. 17

A SENATE RESOLUTION urging the Department of Education to reinforce support of teachers who choose to teach a diverse curriculum.

Whereas, The Indiana General Assembly understands that an important purpose of science education is to inform students about scientific evidence and to help students develop the critical thinking skills they need in order to become intelligent, productive, and scientifically informed citizens;

Whereas, The Indiana General Assembly further understands the recommendation by the U.S. Congress, as stated in the report language of the 2001 No Child Left Behind Act, namely, "Where topics are taught that may generate controversy (such as biological evolution), that the curriculum should help students to understand the full range of scientific views that exist, why such topics can generate controversy, and how scientific discoveries can profoundly affect society";

Whereas, The Indiana General Assembly further understands that the ACLU and like organizations agree in principle that any genuinely scientific evidence for or against any explanation of life may be taught;

Whereas, The Indiana General Assembly urges in principle the recommendation by U.S. Congress as stated above;

Whereas, The Indiana General Assembly understands that neither recommendations, nor endorsements, nor implications by the courts have the force of law, but to avoid legal or other conflicts, teachers should not be intimidated, fired, or restricted from following the recommendation named herein or students penalized for holding differing positions based on the evidence objectively presented, as long as they meet specified curriculum requirements otherwise;

Whereas, the Indiana General Assembly understands that neither the specified recommendation nor endorsement extends to the promotion of any religious or non-religious doctrine, or to the promotion or discrimination for or against a particular set of religious beliefs or non-beliefs, or the promotion or discrimination for or against religion or non-religion; and

Whereas, The Indiana General Assembly urges the Department of Education to notify all public school system superintendents of the provisions herein that they might disseminate copies to all their employees within their district:

Therefore, Be it resolved by the Senate of the General Assembly of the State of Indiana:

SECTION 1. That the Indiana Senate urges the Department of Education to reinforce support of teachers who choose to teach a diverse curriculum.

SECTION 2. The Secretary of the Senate is hereby directed to transmit a copy of this Resolution to the Indiana Department of Education.

South Carolina Biology Standard

Standard B-5: The student will demonstrate an understanding of biological evolution and the diversity of life.

B-5.5 Exemplify scientific evidence in the fields of anatomy, embryology, biochemistry, and paleontology that underlies the theory of biological evolution.

B-5.6 Summarize ways that scientists use data from a variety of sources to investigate and critically analyze aspects of evolutionary theory.

Texas Biology Standards

Standard 3A says in part: “The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to: A) analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing;...”

- Standard 4A: “Compare and contrast prokaryotic and eukaryotic cells, including their complexity, and compare and contrast scientific explanations for cellular complexity”
- Standard 6A: “Identify components of DNA, identify how information for specifying the traits of an organism is carried in the DNA, and examine scientific explanations for the origin of DNA.”
- Standard 7A: “Analyze and evaluate how evidence of common ancestry among groups is provided by the fossil record, biogeography, and homologies, including anatomical, molecular, and developmental;”
- Standard 7B: “Examine scientific explanations of abrupt appearance and stasis in the fossil record.”
- Standard 7C: “Analyze and evaluate how natural selection produces change in populations, not individuals;”
- Standard 7D: “Analyze and evaluate how the elements of natural selection, including inherited variation, the potential of a population to produce more offspring than can survive, and a finite supply of environmental resources, result in differential reproductive success;”
- Standard 7E: “Analyze and evaluate the relationship of natural selection to adaptation and to the development of diversity in and among species...”

The Texas editions of various biology textbooks follow Texas’ standards, which are historically a bit more objective on evolution than those of many other states.

Pennsylvania Code

<https://www.pacode.com/secure/data/022/chapter4/chap4toc.html>

“Critically evaluate the status of existing theories (e.g., germ theory of disease, wave theory of light, classification of subatomic particles, theory of evolution, epidemiology of aids).”

Alabama

Insert for Biology Textbooks

“[E]volution by natural selection is a controversial theory. ...Instructional material associated with controversy should be approached with an open mind, studied carefully, and critically considered.”

House Joint Resolution 78, passed in 2017

<http://alisondb.legislature.state.al.us/ALISON/SearchableInstruments/2017RS/PrintFiles/HJR78-int.pdf>

URGING TEACHER ACADEMIC FREEDOM REGARDING SCIENTIFIC EVIDENCE SUBJECTS.

WHEREAS, an important purpose of science education is to inform students about scientific evidence and to help students develop critical thinking skills necessary to become intelligent, productive, and scientifically informed citizens; and

WHEREAS, the teaching of some scientific subjects required to be taught under the curriculum framework developed by the State Board of Education may cause controversy including, but not limited to, biological evolution, the chemical origins of life, global warming, and human cloning; and

WHEREAS, some teachers may be unsure of the expectation concerning how they should present information when controversy occurs on such subjects; now therefore,

BE IT RESOLVED BY THE LEGISLATURE OF ALABAMA, BOTH HOUSES THEREOF CONCURRING, That we strongly urge: (a) The State Board of Education, public elementary and secondary school governing authorities, directors of schools, school system administrators, and public elementary and secondary school principals and administrators and teachers should endeavor to create an environment within public elementary and secondary schools that encourages students to explore scientific questions, develop critical thinking skills, analyze the scientific strengths and weaknesses of scientific explanations, and respond appropriately and respectfully to differences of opinion about scientific subjects required to be taught under the curriculum framework developed by the State Board of Education. (b) The State Board of Education, public elementary or secondary school governing authorities, directors of schools, school system administrators, and public elementary or secondary school principals and administrators should refrain from prohibiting any teacher in a public school system of this state from helping 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 within the curriculum framework developed by the State Board of Education.

BE IT FURTHER RESOLVED, That this resolution is intended to support the teaching of scientific information and shall not be construed to promote any religious or nonreligious doctrine, promote discrimination for or against a particular set of religious beliefs or non-beliefs, or promote discrimination for or against religion or non-religion.

Mississippi Code § 37-11-63

“No local school board, school superintendent or school principal shall prohibit a public school classroom teacher from discussing and answering questions from individual students on the origin of life.