



SC.912.N.1.3 -- “Recognize that the strength or usefulness of a scientific claim is evaluated through scientific argumentation, which depends on critical and logical thinking, and the active consideration of alternative scientific explanations to explain the data present.”

SC.912.N.2.2 -- “Identify which questions can be answered through science and which questions are outside the boundaries of scientific investigation, such as questions addressed by other ways of knowing, such as art, philosophy, and religion.”

These *Nature of Science* standards are intended to help public school science educators increase the science literacy of their students and to support students not only with acquisition of science content knowledge, but also to have a greater understanding of the scientific method of inquiry and an ability to understand how “scientists know what they know.”<sup>1</sup> Taken as a whole, the science standards encourage teachers and students to discuss the full range of scientific evidence related to all science, including evolution.<sup>2</sup>

### **Academic Freedom**

State law requires the establishment of curriculum standards<sup>3</sup> and the local school districts have the obligation to ensure that the standards are taught. Furthermore, as Florida’s curriculum standards are revised, they would require incorporation of critical thinking, problem-solving, creativity, innovation, collaboration, and communication skills.<sup>4</sup> The development and encouragement of these skills would necessitate that teachers address controversial subject matter and alternative theories, albeit in a professional and objective manner, that allow students to consider and debate a wide spectrum of ideologies and theories in all subject areas.

According to the Department of Education, there has never been a case in Florida where a public school teacher or public school student has claimed that they have been discriminated against based on their science teaching or science course work.

### **III. Effect of Proposed Changes:**

Under the bill, all teachers are granted the affirmative right to present objectively the full range of scientific views regarding evolution without fear of reprisal or discrimination. Conversely, students are afforded the same protections and rights with respect to their views on evolution.

Under the bill, the term scientific information is defined as germane, current facts, data, and peer reviewed research specific to topics involving chemical and biological evolution.

The bill clarifies that the intent is not to modify the state’s adopted curriculum standards nor is the bill intended to promote any form of religious indoctrination or religious beliefs.

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<sup>1</sup> Department of Education, March 13, 2008

<sup>2</sup> *Id.*

<sup>3</sup> s. 1003.41, F.S.

<sup>4</sup> Bureau of Curriculum and Innovation, Florida Department of Education

**Ambiguity**

The bill defines the term “scientific information” as germane current facts, data, and peer-reviewed research specific to evolution as described in the science standards. The bill is silent on who determines whether the teacher’s presentation of scientific information meets the definition and is therefore afforded protection under the act. Presumably, the determination would be made by the school district but this is not stated. Additionally, the definition appears to encompass a rather wide range of information within the protected presentation by the teacher. It appears that the only requirement is that the information is germane, relevant to the science standards pertaining to evolution, and that the information is presented objectively. Again, the bill is silent on who defines the objectivity of the scientific information presented. The administration and the teacher may have quite different views on the objectiveness of the information presented.

**Teacher Discipline and the Standards**

The bill is silent on the school district’s or principal’s authority to discipline a teacher for failing to teach the standards. Presumably, if the teacher is protected when delivering the alternate instruction in addition to the standards, the teacher is not protected for failing to teach the standards or teaching the alternate instruction in lieu of the standards. This should be made more explicit.

**Student Expectations**

The bill provides a protection for a student’s views on chemical or biological evolution. This provision may be unnecessary and may have an unintended consequence. Students already are protected for their views regarding any position under the First Amendment under certain circumstances. In fact, the provision may harm school districts and the state if a court were to construe that this provision afforded students a right in excess of the rights afforded under the First Amendment.

**IV. Constitutional Issues:****A. Municipality/County Mandates Restrictions:**

None.

**B. Public Records/Open Meetings Issues:**

None.

**C. Trust Funds Restrictions:**

None.

**D. Other Constitutional Issues:****Free Speech/Expression Rights of Students**

Although public school students do not shed their constitutional rights to freedom of speech or expression at the schoolhouse gate, the First Amendment rights of students in the public schools are not automatically coextensive with the rights of adults in other

settings, and must be applied in light of the special characteristics of the school environment.<sup>5</sup>

### **Free Speech/Expression Rights of Teachers**

The First Amendment affords ample freedom of religious expression; however, it does not necessarily include the right for a teacher or a student to have an audience held captive or to require other students or teachers to participate or adhere to specific doctrine.<sup>6</sup> Accordingly, while teachers retain their First Amendment rights, public schools may limit classroom speech to promote educational goals. School committees may regulate a teacher's classroom speech if the regulation is reasonably related to legitimate pedagogical concern and the school provides the teacher with notice of what conduct was prohibited. A teacher's statements in class during instructional periods are part of the curriculum and regular class activity and thus subject to reasonable speech regulation.<sup>7</sup>

### **Establishment Clause**

In order to survive an objection to the constitutionality of a statute based on the Establishment Clause, one must consider whether:

- the statute has a secular legislative purpose;
- that the primary effect of the statute neither advances nor inhibits religion; and
- there is assurance that the statute does not foster excessive entanglement with religion. (Lemon v. Kurtzman, 403 U.S. 602 (1971)).

### **Evolution in the Context of Free Speech, the Establishment Clause, and the Free Exercise Clause**

*Epperson v. State of Ark.*, 393 U.S. 97 (1968) states in part that. . . a state statute prohibiting any teacher in the state schools from teaching the Darwinian theory of evolution is contrary to the mandate of the First Amendment, and in violation of the Fourteenth Amendment, as conflicting with the constitutional prohibition of state laws respecting an establishment of religion or prohibiting the free exercise thereof.

### **Permissible laws:**

Teaching or using books referring to evolution does not violate the free exercise rights of persons believing in the literal truth of the biblical story of creation, since the mere exposure to objectionable ideas, without governmental compulsion to affirm or deny a religious belief, is insufficient to support a free exercise complaint.<sup>8</sup>

### **Impermissible laws:**

A school district's policy on the teaching of intelligent design in high school biology classes, which required students to hear a statement mentioning intelligent design as an alternative to Darwin's Theory of Evolution, amounted to an endorsement of religion in

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<sup>5</sup> Axson-Flynn v. Johnson, 356 F.3d 1277, (10th Cir. 2004).

<sup>6</sup> U.S. Department of Education – Guidelines to *Religious Expression in Public Schools*, May, 1998.

<sup>7</sup> Ward v. Hickey, 996 F.2d 448 (C.A.1. Mass. 1993).

<sup>8</sup> Mozert v. Hawkins County Bd. of Educ., 827 F.2d 1058 (6th Cir. 1987).

violation of the establishment clause of the First Amendment, since the policy imposed a religious view of biological origins into the biology course.<sup>9</sup>

A state statute, providing that the public schools are not required to teach either the theory of evolution or "creation science," but that if either one is taught, the other must also be taught, advances a religious doctrine in violation of the First Amendment's Establishment Clause, when the state officials charged with implementing the statute fail to identify a clear secular purpose for it.<sup>10</sup>

**V. Fiscal Impact Statement:**

**A. Tax/Fee Issues:**

None.

**B. Private Sector Impact:**

None.

**C. Government Sector Impact:**

None.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Additional Information:**

**A. Committee Substitute – Statement of Substantial Changes:**  
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

**CS by Education Pre-K-12 on March 26, 2008**

The CS for SB 2692:

- Defines the term scientific information as germane current facts, data, and peer-reviewed research specific to topics involving chemical and biological evolution as prescribed in Florida's Sunshine State Standards; and
- Requires, rather than permits, a student to be evaluated on their understanding of the science standards.

<sup>9</sup> Kitzmiller v. Dover Area School Dist., 400 F. Supp. 2d 707 (M.D. Pa. 2005).

<sup>10</sup> Edwards v. Aguillard, 482 U.S. 578, (1987).

B. Amendments:

None.

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This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

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