

**HOUSE OF REPRESENTATIVES STAFF ANALYSIS**

**BILL #:** HB 1483 Teaching Chemical and Biological Evolution

**SPONSOR(S):** Hays and others

**TIED BILLS:** **IDEN./SIM. BILLS:** CS/SB 2692

---

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
1) Schools & Learning Council		Kutasi	Cobb
2)			
3)			
4)			
5)			

---

**SUMMARY ANALYSIS**

House Bill 1483 creates the “Academic Freedom Act.” The bill provides that every public school teacher in grades K through 12 has the affirmative right and freedom to objectively present scientific information relevant to the full range of views regarding biological and chemical evolution in connection with teaching any prescribed curriculum regarding chemical or biological origins. The bill further provides that a public school teacher may not be disciplined, denied tenure, terminated, or otherwise discriminated against for objectively presenting scientific information relevant to the full range of scientific views regarding biological or chemical evolution in connection with teaching any prescribed curriculum regarding chemical or biological origins.

The bill clarifies that the rights and privileges contained in the bill do not require or encourage any change in the state curriculum standards for the K-12 public school system. Finally, the bill provides that a public school student in the state’s K-12 school system may be evaluated based upon his or her understanding of course materials, but may not be penalized in any way because he or she subscribes to a particular position or view regarding biological or chemical evolution.

See FISCAL ANALYSIS, Section II. D. for fiscal comments and COMMENTS, Section III. for constitutional issues.

## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. HOUSE PRINCIPLES ANALYSIS:

The bill does not appear to implicate any of the House Principles.

#### B. EFFECT OF PROPOSED CHANGES:

##### **Background:**

Public K-12 educational instruction is based on the “Sunshine State Standards” (SSS) which “delineate the academic achievement of students, for which the state will hold schools accountable.”<sup>1</sup> The Sunshine State Standards were first approved by the State Board of Education (SBE) in 1996 in order to identify academic expectations and provide greater accountability for student achievement.<sup>2</sup>

Florida adopted a six year “review and revise” cycle for all of the state’s K-12 SSS.<sup>3</sup> More particularly, the review of the science standards began in June 2007.<sup>4</sup>

##### **Present Situation:**

In February 2008, the SBE adopted revised Science SSS for K-12.<sup>5</sup> The new standards include content related to the scientific theory of evolution.<sup>6</sup> For example, the following are included in the standards for grades 9-12:

- 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.
- Discuss mechanisms of evolutionary change other than natural selection such as genetic drift and gene flow.
- Explain how the scientific theory of evolution is supported by the fossil record, comparative anatomy, comparative embryology, biogeography, molecular biology, and observed evolutionary change.<sup>7</sup>

---

<sup>1</sup> §1003.41, Fla. Stat.

<sup>2</sup> The Department of Education, *Florida’s Student Performance Standards-Adopted Feb. 19, 2008*, available at [http://www.fldoestem.org/FLDOE\\_STEM/Review\\_FL\\_Science\\_Standards.aspx](http://www.fldoestem.org/FLDOE_STEM/Review_FL_Science_Standards.aspx) (last viewed Apr. 9, 2008).

<sup>3</sup> *Id.*

<sup>4</sup> The Department of Education, *Sunshine State Standards Proposed Six Year Cycle: Standards Revisions, Instructional Materials Adoption, and Assessment Alignment* (Jun. 20, 2006).

<sup>5</sup> The Department of Education, *Florida Standards-Science*, available at <http://www.floridastandards.org/FlStandardSearch.aspx> (last viewed Apr. 9, 2008).

<sup>6</sup> *Id.*

<sup>7</sup> *Mozert v. Hawkins Co. Bd. of Edu.*, 827 F.2d 1058 (6<sup>th</sup> Cir. 1987) (finding that teaching or using books referring to, in example, 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).

- 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.<sup>8</sup>

These SSS 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>9</sup> The science SSS encourage teachers and students to discuss scientific evidence related to all science, including evolution.<sup>10</sup>

### **Effect of Proposed Changes:**

#### **Teacher’s Rights and Prescribed Curriculum:**

The bill provides that every public school teacher in grades K through 12 has the “affirmative right and freedom” to “objectively present scientific information relevant to the full range of views regarding biological and chemical evolution in connection with teaching any prescribed curriculum regarding chemical or biological origins.” If a teacher determines that certain information is sufficiently “scientific” and “relevant,” the teacher has a “right” to teach that material irrespective of whether such information is contrary to the curriculum adopted by the State Board of Education through the SSS or by the school district through its instructional materials. The principal, the district school superintendent, the district school board, or the State Board of Education may disagree that the information is “scientific,” “relevant,” or “objectively present[ed];” however, that fact does not affect that teacher’s “right” to present the material. If the principal or other school district staff attempts to restrict a teacher’s ability to teach such information, or govern the manner of presentation, it appears the bill grants the teacher a cause of action to enforce the “right” granted in the bill.<sup>11</sup>

The bill, in effect, with regard only to biological or chemical evolution restricts the ability of the State Board of Education or the district school board to define and regulate curriculum content.

#### **Teacher Immunity:**

The bill provides that a public school teacher “may not be disciplined, denied tenure, terminated, or otherwise discriminated against” for “objectively presenting scientific information relevant to the full range of scientific views regarding biological or chemical evolution in connection with teaching any prescribed curriculum regarding chemical or biological origins.”

---

<sup>8</sup> *Florida Standards-Science*, available at <http://www.floridastandards.org/FIStandardSearch.aspx>.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> See *Tinker v. Des Moines Indep. Community Sch. Dist.*, 393 U.S. 503 (1969) (recognizing that public schools may limit classroom speech to promote educational goals), and U.S. Dep’t of Ed.-Guidelines to *Religious Expression in Public Schools* (May 1998) (stating that 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 a specific doctrine), and *Hazelwood Sch. Dist. V. Kuhlmeier*, 484 U.S. 260 (1988), with *Keyishian v. Board of Regents*, 385 U.S. 589 (1967) (establishing the test for whether a school may regulate a teacher’s classroom speech by determining whether the “the regulation is reasonably related to legitimate pedagogical concern” and if “the school provided the teacher with notice of what conduct was prohibited.”), and *Ward v. Hickey*, 996 F.2d 448 (C.A.1 Mass. 1993) (finding that 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).

A teacher's "affirmative right and freedom" to teach anything he or she deems appropriate only applies to the teaching of science and more specifically, to the particular area of biological and chemical evolution, yet the title of the bill is the "Academic Freedom Act."<sup>12</sup> Teachers are not granted such a "right" in any other subject area. This fact raises issues concerning the underlying intent of the bill.

The bill provides that the "rights and privileges" contained in the bill "do not require or encourage any change in the state curriculum standards for the K-12 public school system." It appears that a teacher must still teach the prescribed curriculum as dictated by the SSS. However, it is unclear how this provision will be executed if other "objective and relevant" curriculum, which is within the teacher's purview to determine, is inconsistent with the prescribed curriculum.<sup>13</sup> The bill does not describe how to remedy potential conflicts between the SSS standards and information a teacher deems "objective and relevant."

Finally, if a principal, the district school superintendent, or the school board determine that the information a teacher is presenting is not objective, relevant, or scientific, then the administration must prove its case prior to any action against a teacher. This may result in case-by-case determinations which, based on the propensities of the science teachers in the district, may prove frequent and challenging. This bill will affect costs of administering the science curriculum and, although indeterminate, may increase litigation expenses for the school district.

#### Student Performance:

The bill provides that "a public school student in the state's K-12 school system may be evaluated based upon his or her understanding of *course materials*, but may not be penalized in any way because he or she subscribes to a particular position or view regarding biological or chemical evolution." It is unclear if a student's performance in a science class will be measured based upon his or her position regarding evolution (or the teacher's), or by a consistent standard applied to all students. There may be difficulty in implementing and monitoring this provision. This bill may result in inconsistent standards in grading among teachers in a school, among schools in the district, and among schools in the state.

"Course materials" may include any supplemental "scientific, relevant, objective" information deemed appropriate by each, individual science teacher. Accordingly, the teacher could include in any student evaluation the content of such supplemental course materials. To the degree the supplemental course material contradicts the established science curriculum (as set forth in the SSS and established by the school district), the student is put in a tenuous situation. Likewise, the Florida Comprehensive Assessment Test (FCAT) in science, which is given in the eleventh grade, expects a student to understand the adopted science curriculum. The student is expected to respond to the FCAT questions based on that student's knowledge of the adopted science curriculum, not upon any understanding of supplemental information the science teacher may have provided the students based upon his or her personal understanding of what is "scientific, relevant, and objective" information.

---

<sup>12</sup> See *supra* text page 2; Teachers already have the opportunity to "consider[ ] alternative scientific explanations to explain the data present." Therefore, the need to elevate such explanations to a "right" clearly intends to raise teacher discretion over curriculum above that of the State Board of Education or the district school board.

<sup>13</sup> The bill states that it does not "require or encourage any change in the state curriculum standards;" however, if the information the teacher presents is in conflict with the SSS it appears the teacher's "right" would not be diminished.

C. SECTION DIRECTORY:

**Section 1.** Creates the “Academic Freedom Act;” granting teachers the right to present certain information regarding biological and chemical evolution; preventing discipline of teachers for presenting information regarding biological and chemical evolution; preventing students from being penalized for subscribing to certain views concerning biological and chemical evolution; and providing that the bill does not require changes to the state curriculum standards.

**Section 2.** Provides an effective date of October 1, 2008.

**II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

See FISCAL COMMENTS.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

Although there is no direct fiscal impact upon the school districts, to the degree the bill creates the opportunity for litigation, the cost thereof is indeterminate.

### III. COMMENTS

#### A. CONSTITUTIONAL ISSUES:

##### 1. Applicability of Municipality/County Mandates Provision:

This bill does not appear to require a city or county to expend funds or to take any action requiring the expenditure of funds.

This bill does not appear to reduce the authority that municipalities or counties have to raise revenues in the aggregate.

This bill does not appear to reduce the percentage of state tax shared with counties or municipalities.

##### 2. Other:

##### The First Amendment to the United States Constitution-Establishment Clause:

The Establishment Clause forbids the enactment of any law “respecting an establishment of religion.”<sup>14</sup> The United States Supreme Court has established a three-prong test that a statute must meet in order to not violate the Establishment Clause.<sup>15</sup> The first prong states that “the legislature must have adopted the law with a secular purpose.”<sup>16</sup> In determining whether the state’s purpose is indeed secular, the Court is “normally deferential” to the state; however, “it is required that the statement of such purpose be sincere and not a sham.”<sup>17</sup>

The United States Supreme Court found, in *Edwards v. Aguillard*, that a Louisiana statute violated the Establishment Clause when it required the teaching of “creation science” if the teaching of evolution occurred in public schools.<sup>18</sup> The Court examined whether the statute was adopted with a secular purpose and to “advance academic freedom.”<sup>19</sup> Although this bill does not require the teaching of “creation science,” evaluating the purpose of the bill in light of *Aguillard* is appropriate.<sup>20</sup>

The Court in *Aguillard* looked to the statutes already in place governing the content of science curriculum and found that the act in question “does not grant teachers a flexibility that they did not already possess” and that “no law prohibited . . . public school teachers from teaching any scientific

---

<sup>14</sup> *Edwards v. Aguillard*, 482 U.S. 578 (1987). The First Amendment to the United States Constitution states, “Congress shall make no law respecting an establishment of religion . . .”

<sup>15</sup> *Edwards* at 583.

<sup>16</sup> *Lemon v. Kurtzman*, 403 U.S. 602 (1971). The other two prongs of the test require that the statute’s principal or primary effect be one that neither advances nor inhibits religion and the statute must not result in an excessive entanglement of government with religion. Once the Court has found that a statute was enacted for the “purpose of endorsing religion” then “no consideration of the second or third criteria is necessary.”

<sup>17</sup> *Edwards* at 586-87; see also *Epperson v. Arkansas*, 393 U.S. 97 (1968) (holding that an Arkansas statute violated the Establishment Clause even though the law “did not explicitly state its predominant religious purpose”).

<sup>18</sup> *Edwards* at 587.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.* at 584. The United States Supreme Court has, “been particularly vigilant in monitoring compliance with the Establishment Clause in elementary and secondary schools. Families entrust public schools with the education of their children, but condition their trust on the understanding that the classroom will not purposely be used to advance religious views that may conflict with the private beliefs of the students and his or her family. Students in such institutions are impressionable and their attendance is involuntary. The State exerts great authority and coercive power through mandatory attendance requirements, and because of the students’ emulation of teachers as role models and the children’s susceptibility to peer pressure.”

theory.”<sup>21</sup> The Court determined that “the Act provides . . . school teachers with no new authority . . . [and] the stated purpose is not furthered by it.”<sup>22</sup>

The SSS already authorize “consideration of alternative scientific explanations to explain data,” and school districts have flexibility in shaping curriculum as well.<sup>23</sup> This includes discretion to establish course requirements and determine the instructional materials that will be used in classroom instruction.

**B. RULE-MAKING AUTHORITY:**

None.

**C. DRAFTING ISSUES OR OTHER COMMENTS:**

None.

**D. STATEMENT OF THE SPONSOR**

None, due to time constraints.

**IV. AMENDMENTS/COUNCIL SUBSTITUTE CHANGES**

Not applicable.

---

<sup>21</sup> *Id.* at 587.

<sup>22</sup> *Id.*

<sup>23</sup> *See supra* page 2 of text, and *see also* § 1003.02, Fla. Stat.; The Department of Education, *Course Code Directory System Guide*, states that, “[D]istricts and schools [have] flexibility in designing educational programs which meet the needs of their students . . . district school boards may . . . substitute locally approved course requirements within a Course Description, provided these substitutions adequately address the major concepts and content contained in the Course Description and provided the waiver request is submitted in accordance with specified procedures.” *available at* [http://www.fldoe.org/articulation/CCD/files/0708/curicstand07\\_08.pdf](http://www.fldoe.org/articulation/CCD/files/0708/curicstand07_08.pdf) (last viewed Apr. 9, 2008).