

**State Board of Education
Summary of Action Items
March 27, 2009**

Student Performance

The James Bowie High School Jazz Choir from the Austin Independent School District performed for the board.

Staff Contact: Questions about this item should be directed to the Office of the State Board of Education at (512) 463-9007.

1. Resolutions and Presentations

There were no resolutions or presentations at this meeting.

Staff Contact: Questions about this item should be directed to the Office of the State Board of Education at (512) 463-9007.

2. Approval of Consent Agenda

Any agenda item may be placed on the Consent Agenda by any State Board of Education committee.

(1.) Ratification of the Purchases and Sales of the Investment Portfolio of the Permanent School Fund for the Months of December 2008 and January 2009

The board approved the purchases and sales of securities executed in the portfolio of the PSF for the months of December 2008 and January 2009 in the amounts of \$667,387,330 and \$658,796,495, respectively.

Staff Contact: Questions about this item should be directed to the Office of the Permanent School Fund (512) 463-9169.

(2.) Recommendation for Appointments to the Lackland Independent School District Board of Trustees

The board approved the appointment of MSgt Elizabeth Morales to the Lackland Independent School District Board of Trustees.

Staff Contact: Questions about this item should be directed to the Division of Governance and General Inquiries at (512) 475-3697.

**ITEMS FOR ACTION BY THE FULL SBOE
(COMMITTEE OF THE FULL BOARD)**

**3. Proposed Revisions to 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, Subchapter B, Middle School, and Subchapter C, High School
(Second Reading and Final Adoption)**

The board approved a heavily amended 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, Subchapter B, Middle School, and Subchapter C, High School on a 13-2 vote. The board began its review using the TEKS document that was preliminarily approved in January 2009 as its base document. That document can be viewed at: http://ritter.tea.state.tx.us/sboe/schedule/2009/march/full_board/thur_5_ch112_a2.pdf . Amendments shown in Attachment I were made during the Committee of the Full Board meeting on March 26 and amendments made during the March 27 general meeting are shown in Attachment II. A version of the document that incorporates all the amendments will be posted at <http://ritter.tea.state.tx.us/rules/home/sboeadopt.html> as soon as it becomes available.

Staff Contact: Questions about this item should be directed to the Curriculum Division at (512) 463-9581.

4. Approval of Question and Answer Document for the Midcycle 2010 Proclamation

The board approved the Midcycle 2010 Proclamation, which details textbook subject areas that are eligible for a midcycle adoption. The following subjects, for both elementary and secondary grades, are eligible for review and adoption under this proclamation: Mathematics, Technology Applications, Languages Other Than English, Health, Physical Education, and Fine Arts. Statutory authority for this action is Texas Education Code (TEC), §28.002.

Staff Contact: Questions about this item should be directed to the Instructional Materials & Educational Technology Division at (512) 463-9601.

5. Consideration of Options for Graduation Credit for Athletics

The board voted to move forward with high school graduation plan modifications that would allow students to receive up to four state credits for athletics. A rule will now come before the board in subsequent months to formalize this change. Statutory authority for this action is Texas Education Code (TEC), §§7.102(c)(4), 28.002, and 28.025(a).

Staff Contact: Questions about this item should be directed to the Curriculum Division at (512) 463-9581.

**6. Proposed Amendment to 19 TAC Chapter 30, Administration, Subchapter A, State Board of Education: General Provisions, §30.1, Petition for Adoption of Rule Changes
(Second Reading and Final Adoption)**

Board members approved for second reading and final adoption the proposed amendment to 19 TAC Chapter 30, Administration, Subchapter A, State Board of Education: General Provisions, §30.1, Petition for Adoption of Rule Changes. The proposed amendment would adopt the petition form in rule as part of the State Board of Education (SBOE) process for petitioning the adoption of changes to SBOE rules. Statutory authority for this action is Texas Government Code, §2001.021.

Staff Contact: Questions about this item should be directed to the Policy Coordination Division at (512) 475-1497.

COMMITTEE ON INSTRUCTION

**1. Adoption of Review of 19 TAC Chapter 101, Assessment
(Moved to the Consent Agenda)**

The board approved the adoption of the review of SBOE rules in 19 TAC Chapter 101, Assessment. The rules for assessment provide requirements for the development and administration of tests, testing for graduation, testing accommodations and exemptions, test security and confidentiality, reporting of test results, and the administration and reporting of group-administered achievement tests.

Staff Contact: Questions about this item should be directed to the Student Assessment Division at (512) 463-9536.

**2. Requests to Approve Substitutions of Instructional Materials
(Moved to the Consent Agenda)**

The board approved a request from SRA McGraw-Hill to substitute newer versions of two components of its currently adopted Pre-Kindergarten product The DLM Early Childhood Express Texas Package. The board also approved a request from Bedford, Freeman & Worth Publishing to substitute a newer version of their currently adopted instructional materials for AP Psychology, Psychology and AP European History, The Making of the West.

Staff Contact: Questions about this item should be directed to the Instructional Materials and Educational Technology at (512) 463-9601.

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND

9. Proposed Amendment to 19 TAC Chapter 129, Student Attendance, Subchapter B, Student Attendance Accounting §129.21, Requirements for Student Attendance Accounting for State Funding Purposes

The board voted to give final approval to the amendment, which updates the rule to reflect statutory changes and changes in other administrative rules providing for an alternative attendance accounting program. The amendment modifies certain attendance accounting requirements that school districts must follow. The changes become effective 20 days after filing as adopted with the Texas Register.

Staff Contact: Questions about this item should be directed to the Office of School Finance at (512) 463-9238.

10. Proposed Amendment to 19 TAC Chapter 30, Administration, Subchapter B, State Board of Education: Purchasing and Contracts §30.21, Historically Underutilized Business (HUB) Program

The board voted to give final approval to a rule update reflecting the transfer of HUB rules from the Texas Building and Procurement Commission (TBPC) to the Comptroller of Public Accounts.

Staff Contact: Questions about this item should be directed to the Purchasing and Contracts Division at (512) 463-7822.

11. Proposed Ratification of Increase in the Reserve for the Guarantee Program for School District Bonds

The board voted to ratify an increase from 5 to 8 percent in the reserve capacity of the Bond Guarantee Program.

Staff Contact: Questions about this item should be directed to the Office of School Finance at (512) 463-9238.

12. Search for Outside Legal Counsel for the Permanent School Fund

The board took no action on this item.

Staff Contact: Questions about this item should be directed to the office of the Permanent School Fund (512) 463-9169.

13. Decision on a Real Estate Policy Statement

The board approved the Texas Permanent School Fund Real Estate Investment Policy Statement dated March 2009.

Staff Contact: Questions about this item should be directed to the office of the Permanent School Fund (512) 463-9169.

14. Authorization to Issue a Request for Proposals for Global Custody and Securities Lending Services for the Permanent School Fund

The board voted to issue a Request for Proposals for Global Custody and Securities Lending Services for the Permanent School Fund.

Staff Contact: Questions about this item should be directed to the office of the Permanent School Fund (512) 463-9169.

15. Authorization to Issue a Request for Proposals for a Private Equity Discretionary Separate Account Manager

The board authorized the issuance of Request for Proposals for a private equity discretionary separate account manager.

Staff Contact: Questions about this item should be directed to the office of the Permanent School Fund (512) 463-9169.

16. Authorization to Issue a Request for Proposals for Performance Measurement Services for the Permanent School Fund

The board voted to issue a Request for Proposals for Performance Measurement Services for the Permanent School Fund.

Staff Contact: Questions about this item should be directed to the office of the Permanent School Fund (512) 463-9169.

COMMITTEE ON SCHOOL INITIATIVES

The item before the Committee was approved on the consent agenda.

Attachment I

**Excerpts from the March 26, 2009
Committee of the Full Board minutes**

5. **Proposed Revisions to 19 TAC Chapter 112,
Texas Essential Knowledge and Skills for
Science,
Subchapter A, Elementary, Subchapter B,
Middle School, and Subchapter C, High School**
(Second Reading and Final Adoption)
(Board agenda page I-1)
[Official agenda item #3]

Anita Givens, associate commissioner, standards and programs, introduced the item.

MOTION: *It was moved by Mr. Bradley to recommend that the State Board of Education, by an affirmative vote of two-thirds of the members of the board, approve for second reading and final adoption the proposed revisions to 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, Subchapter B, Middle School, and Subchapter C, High School, as amended, with an effective date of 20 days after filing as adopted with the Texas Register.*

MOTION: *It was moved by Mr. Mercer to amend the motion to adopt the proposed revisions by replacing the proposed language in subchapters 112.32, 112.33, 112.34, 112.35, 112.36, 112.37, 112.38, and 112.39 part (c)(3)(A) with the following: “(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information.”*

MOTION AND VOTE: *It was moved by Mr. Craig and seconded by Mrs. Miller to amend the current proposed language by adding to subchapters 112.32, 112.33, 112.34, 112.35, 112.36, 112.37, 112.38, and 112.39 part (c)(3)(A) the following language: “(A) analyze and evaluate scientific explanations using empirical evidence, logical reasoning and experimental and observational testing, including discussing what is not fully understood in all fields of science, so as to encourage critical thinking by the student.” The motion failed, with 6 members voting Aye and 8 members voting No, as follows:*

<u>Aye:</u>	Mr. Allen	Mrs. Knight
	Mr. Craig	Mrs. Miller
	Ms. Hardy	Mr. Nuñez
<u>No:</u>	Mr. Agosto	Ms. Leo
	Mr. Bradley	Mrs. Lowe
	Mrs. Cargill	Dr. McLeroy
	Ms. Dunbar	Mr. Mercer

VOTE: *A vote was taken on the motion to amend the motion to adopt the proposed revisions by replacing the proposed language in subchapters 112.32, 112.33, 112.34, 112.35, 112.36, 112.37, 112.38, and 112.39 part (c)(3)(A) with the following: “(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and*

weaknesses using scientific evidence and information.” The motion failed, with 7 members voting Aye and 7 members voting No, as follows:

<u>Aye:</u>	Mr. Bradley	Mrs. Lowe
	Mrs. Cargill	Dr. McLeroy
	Ms. Dunbar	Mr. Mercer
	Ms. Leo	
<u>No:</u>	Mr. Agosto	Mrs. Knight
	Mr. Allen	Mrs. Miller
	Mr. Craig	Mr. Nuñez
	Ms. Hardy	

The following amendments were carried by unanimous consent:

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §112.11 Science, Kindergarten by substituting the following in part (b)(4)(A):*

“(A) collect information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, and notebooks; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as terrariums and aquariums; and”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §112.12 Science, Grade 1 by substituting the following in part (b)(4)(A):*

“(A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as terrariums and aquariums; and”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §112.12 Science, Grade 1 by adding the following words in part (b)(8)(C):*

“and day and night”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §112.13 Science, Grade 2 by substituting the following in part (b)(4)(A):*

“(A) collect, record, and compare information using tools, including computers, hand lenses, rulers, primary balances, plastic beakers, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and stopwatches; weather instruments such as thermometers, wind vanes, and rain gauges; and materials to support observations of habitats of organisms such as terrariums and aquariums; and”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §112.13 Science, Grade 2 by substituting the following in part (b)(7)(A):*

“(A) observe and describe rocks by size, texture, and color;”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.13 Science, Grade 2 by substituting the following in part (b)(8)(D):*

“(D) observe, describe, and record patterns of objects in the sky, including the appearance of the Moon.”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.14 Science, Grade 3 by substituting the following in part (b)(4)(A):*

“(A) collect, record, and analyze information using tools, including microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, wind vanes, rain gauges, pan balances, graduated cylinders, beakers, spring scales, hot plates, meter sticks, compasses, magnets, collecting nets, notebooks, sound recorders, Sun/Earth/Moon system models; timing devices, including clocks and stopwatches; and materials to support observation of habitats of organisms such as terrariums and aquariums; and”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.14 Science, Grade 3 by making the following addition in part (b)(6)(A):*

insert the word “mechanical” after the word “including”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.14 Science, Grade 3 by substituting the following in part (b)(6)(B):*

“(B) demonstrate and observe how position and motion can be changed by pushing and pulling objects to show work being done such as swings, balls, pulleys, and wagons; and”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.14 Science, Grade 3 by making the following substitution in part (b)(8):*

strike the words “in the Sun, Earth, and Moon system” and insert the words “among objects in the sky”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.14 Science, Grade 3 by adding the following in part (b)(8):*

“(D) identify the planets in Earth’s solar system and their position in relation to the Sun;”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.14 Science, Grade 3 by making the following substitution in part (b)(10)(B):*

strike the words “from the” and insert the words “in response to living in a certain”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.14 Science, Grade 3 by making the following substitution in part (b)(10)(C):*

strike the word “mealworms” and insert the word “frogs”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.15 Science, Grade 4 by substituting the following in part (b)(4)(A):*

“(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, mirrors, spring scales, pan balances, triple beam balances, graduated cylinders, beakers, hotplates, meter sticks, compasses, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observation of habitats of organisms such as terrariums and aquariums; and”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.15 Science, Grade 4 by making the following substitution in part (b)(6):*

strike the word “occurs” and insert the word “exists”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.15 Science, Grade 4 by inserting and substituting the following in part (b)(6)(A):*

insert the word “mechanical” after the word “including” and substitute the word “electrical” for “electricity”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.15 Science, Grade 4 by substituting the following in part (b)(6)(D):*

“(D) design an experiment to test the effect of force on an object such as a push or a pull, gravity, friction, or magnetism;”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.15 Science, Grade 4 by substituting the following in part (b)(8)(A):*

“(A) measure and record changes in weather and make predictions using weather maps, weather symbols, and a map key;”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.15 Science, Grade 4 by making the following substitution in part (b)(8)(C):*

strike the words “in the reflection of sunlight,” and insert the words “tides, seasons,”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.15 Science, Grade 4 by substituting the following in part (b)(9)(A):*

“(A) investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food; and”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.16 Science, Grade 5 by adding the following in part (b)(4)(A):*

insert the words “spring scales” after the word “balances”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §1 12.16 Science, Grade 5 by adding the following in part (b)(6)(A):*

insert the word “mechanical” after the word “including”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §112.16 Science, Grade 5 by adding the following in part (b)(6):*

“(D) design an experiment that tests the effect of force on an object;”

MOTION: *It was moved by Mrs. Cargill to amend the current proposed language of §112.16 Science, Grade 5 by adding the following in part (b)(8):*

“(D) identify and compare the physical characteristics of the Sun, Earth, and Moon.”

MOTION: *It was moved by Mrs. Lowe to amend subchapters 112.32, 112.33, 112.34, 112.36, 112.37, 112.38, and 112.39 of the current proposed language by substituting the following in part (1)(B):*

“(B) demonstrate an understanding of the use and conservation of resources and the proper disposal or recycling of materials;”

MOTION: *It was moved by Mrs. Lowe to amend part (c)(3) of all proposed high school science TEKS to include the following language:*

“draw inferences based on data related to promotional materials for products and services”

This language will be substituted for the currently proposed (c)(3)(B) in subchapters 112.34 and 112.35.

This language will be substituted for the currently proposed (c)(3)(C) in subchapters 112.32, 112.37, and 112.39.

This language will be added as (c)(3)(B) in subchapter 112.36.

MOTION: *It was moved by Mrs. Lowe to amend part (c)(3) of all proposed high school science TEKS to include the following language:*

“communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles and marketing materials”

This language will be substituted for the currently proposed (c)(3)(B) in subchapters 112.32, 112.36, 112.37 and 112.39.

This language will be substituted for the currently proposed (c)(3)(E) in subchapter 112.34.

This language will be added as (c)(3)(B) in subchapters 112.33, 112.35 and 112.38.

MOTION: *It was moved by Mrs. Lowe to amend the current proposed language of subchapter 112.32, Aquatic Science by substituting the following in part (c)(3)(F):*

“(F) research and describe the history of aquatic science and contributions of scientists.”

MOTION: *It was moved by Mrs. Lowe to amend subchapter 112.34, Biology of the current proposed language by adding the following in part (c)(3):*

“(F) research and describe the history of biology and contributions of scientists.”

MOTION: *It was moved by Mrs. Lowe to amend the current proposed language of subchapter 112.35, Chemistry by substituting the following in part (c)(1)(A):*

“(A) demonstrate safe practices during laboratory and field investigations, including the appropriate use of safety showers, eyewash fountains, safety goggles and fire extinguishers.”

MOTION: *It was moved by Ms. Leo to amend the current proposed language of subchapter 112.36, Earth and Space Science by making the following substitution in part (c)(5)(B):*

replace “sources of heat” with “thermal energy sources.”

MOTION: *It was moved by Mr. Craig to amend the current proposed language of subchapter 112.36, Earth and Space Science by striking the word “the” before “Earth” in part (c)(6)(D).*

MOTION: *It was moved by Mrs. Lowe to amend the current proposed language of subchapter 112.37, Environmental Systems by substituting the following in part (c)(9)(G):*

“(G) analyze how ethical beliefs can be used to influence scientific practices such as methods for increasing food production;”

MOTION: *It was moved by Mrs. Knight to amend the current proposed language of subchapter 112.37, Environmental Systems by adding the following in part (c)(9):*

“Analyze and evaluate different views on the existence of global warming.”

MOTION AND VOTE: *It was moved by Ms. Leo and seconded by Mrs. Cargill to amend the current proposed language by adding to subchapter 112.34, Biology (c)(9) the following language: “(D) analyze and evaluate the evidence regarding formation of simple organic molecules and their organization into long complex molecules having information such as the DNA molecule for self-replicating life.” The motion carried, with 9 members voting Aye and 5 members voting No, as follows:*

<u>Aye:</u>	<i>Mr. Agosto</i>	<i>Ms. Leo</i>
	<i>Mr. Bradley</i>	<i>Mrs. Lowe</i>
	<i>Mrs. Cargill</i>	<i>Dr. McLeroy</i>
	<i>Mr. Craig</i>	<i>Mr. Mercer</i>
	<i>Ms. Dunbar</i>	

<u>No:</u>	<i>Mr. Allen</i>	<i>Mrs. Miller</i>
	<i>Ms. Hardy</i>	<i>Mr. Nuñez</i>
	<i>Mrs. Knight</i>	

MOTION AND VOTE: *It was moved by Mrs. Knight and seconded by Ms. Hardy to amend the current proposed language by striking (c)(7)(B) from subchapter 112.34, Biology. The motion failed, with 6 members voting Aye, 7 members voting No and 1 member voting to Abstain, as follows:*

<u>Aye:</u>	<i>Mr. Allen</i>	<i>Mrs. Knight</i>
	<i>Mr. Craig</i>	<i>Mrs. Miller</i>
	<i>Ms. Hardy</i>	<i>Mr. Nuñez</i>

<u>No:</u>	<i>Mr. Bradley</i>	<i>Ms. Leo</i>
	<i>Mrs. Cargill</i>	<i>Mrs. Lowe</i>
	<i>Ms. Dunbar</i>	<i>Dr. McLeroy</i>
		<i>Mr. Mercer</i>

Abstain: *Mr. Agosto*

MOTION: *It was moved by Dr. McLeroy and seconded by Mrs. Lowe to amend the current proposed language by adding to subchapter 112.34, Biology (c)(7) the following language: “(G) analyze and evaluate the sufficiency or insufficiency of natural selection to explain the complexity of the cell.”*

MOTION AND VOTE: *It was moved by Mr. Craig and seconded by Mrs. Miller to amend Dr. McLeroy’s proposed amendment by striking “sufficiency or insufficiency of natural selection to explain” and replacing it with the following language: “evolutionary explanation of.” The motion failed, with 6 members voting Aye and 8 members voting No, as follows:*

<u>Aye:</u>	Mr. Allen	Mrs. Knight
	Mr. Craig	Mrs. Miller
	Ms. Hardy	Mr. Nuñez
<u>No:</u>	Mr. Agosto	Ms. Leo
	Mr. Bradley	Mrs. Lowe
	Mrs. Cargill	Dr. McLeroy
	Ms. Dunbar	Mr. Mercer

VOTE: *The motion as originally made by Dr. McLeroy carried with 8 members voting Aye and 6 members voting No, as follows:*

<u>Aye:</u>	Mr. Agosto	Mrs. Lowe
	Mr. Bradley	Dr. McLeroy
	Mrs. Cargill	Mr. Mercer
	Ms. Dunbar	Ms. Leo
<u>No:</u>	Mr. Allen	Mrs. Knight
	Mr. Craig	Mrs. Miller
	Ms. Hardy	Mr. Nuñez

MOTION AND VOTE: *It was moved by Mr. Craig and seconded by Ms. Hardy to amend the current proposed language in subchapter 112.36 (c)(4) as follows: “(4) Earth in space and time. The student knows how Earth-based and space-based astronomical observations reveal ~~differing theories about~~ information about the structure, scale, composition, origin, and history of the universe.” The motion failed, with 6 members voting Aye and 8 members voting No, as follows:*

<u>Aye:</u>	Mr. Allen	Mrs. Knight
	Mr. Craig	Mrs. Miller
	Ms. Hardy	Mr. Nuñez
<u>No:</u>	Mr. Agosto	Ms. Leo
	Mr. Bradley	Mrs. Lowe
	Mrs. Cargill	Dr. McLeroy
	Ms. Dunbar	Mr. Mercer

model, such as red shift and cosmic microwave background radiation, and ~~the concept of an expanding universe that originated about 14 billion years ago,~~ current theories of the evolution of the universe including estimates for the age of the universe; and” The motion carried, with 11 members voting Aye and 3 members voting No, as follows:

<u>Aye:</u>	Mr. Agosto	Ms. Hardy
	Mr. Allen	Ms. Leo
	Mr. Bradley	Mrs. Lowe
	Mrs. Cargill	Dr. McLeroy
	Mr. Craig	Mr. Mercer
	Ms. Dunbar	

<u>No:</u>	Mrs. Knight
	Mrs. Miller
	Mr. Nuñez

MOTION AND VOTE: It was moved by Mrs. Cargill to amend the current proposed language in subchapter 112.36 (c)(6)(A) as follows: “(A) analyze the changes of Earth’s atmosphere that could have occurred through time from the original hydrogen-helium atmosphere, the carbon dioxide-water vapor-methane atmosphere, and the current nitrogen-oxygen atmosphere.” The motion carried, with 10 members voting Aye and 4 members voting No, as follows:

<u>Aye:</u>	Mr. Agosto	Ms. Hardy
	Mr. Allen	Ms. Leo
	Mr. Bradley	Mrs. Lowe
	Mrs. Cargill	Dr. McLeroy
	Ms. Dunbar	Mr. Mercer

<u>No:</u>	Mr. Craig	Mrs. Miller
	Mrs. Knight	Mr. Nuñez

MOTION AND VOTE: It was moved by Mrs. Cargill to amend the current proposed language in subchapter 112.36 (c)(7)(B) as follows: “(B) ~~apply radiometric dating methods that can be used to~~ calculate the ages of igneous rocks from Earth and the Moon and meteorites using radiometric dating methods; and” The motion carried, with 8 members voting Aye and 6 members voting No, as follows:

<u>Aye:</u>	Mr. Agosto	Ms. Leo
	Mr. Bradley	Mrs. Lowe
	Mrs. Cargill	Dr. McLeroy
	Ms. Dunbar	Mr. Mercer

<u>No:</u>	Mr. Allen	Mrs. Knight
	Mr. Craig	Mrs. Miller
	Ms. Hardy	Mr. Nuñez

MOTION AND VOTE: *It was moved by Mrs. Cargill to amend the current proposed language in subchapter 112.36 (c)(13)(F) as follows: “(F) discuss scientific hypotheses for the origin of life by abiotic chemical processes in an aqueous environment through complex geochemical cycles given the complexity of living systems.” The motion carried, with 8 members voting Aye and 6 members voting No, as follows:*

<u>Aye:</u>	Mr. Agosto	Ms. Leo
	Mr. Bradley	Mrs. Lowe
	Mrs. Cargill	Dr. McLeroy
	Ms. Dunbar	Mr. Mercer

<u>No:</u>	Mr. Allen	Mrs. Knight
	Mr. Craig	Mrs. Miller
	Ms. Hardy	Mr. Nuñez

VOTE: *A vote was taken on the motion to recommend that the State Board of Education, by an affirmative vote of two-thirds of the members of the board, approve for second reading and final adoption the proposed revisions to 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, Subchapter B, Middle School, and Subchapter C, High School, as amended, with an effective date of 20 days after filing as adopted with the Texas Register. The motion carried unanimously.*

Attachment II

Amendments Proposed for Science TEKS During March 27, 2009 State Board of Education Meeting

Science amendments made on Friday, March 27, 2009

(Text in orange indicates amendments that were proposed but failed. Text in black indicates amendments that were approved. Text in blue indicates grades or subjects that were not amended during the March 27 meeting.)

Motion by Dunbar: For grades 3 & up

Analyze, evaluate, and critique scientific explanations in all fields of science by using empirical evidence, logical reasoning and experimental and observational testing, by examining both scientific evidence that is supportive and not supportive of those explanations so as to encourage critical thinking by the student.

Substitute by Craig:

Analyze, evaluate, and critique scientific explanations in all fields of science by using empirical evidence, logical reasoning and experimental and observational testing, including examining all sides of the scientific evidence of those scientific explanations so as to encourage critical thinking by the student.

Friendly amendment offered by Cargill to rearrange wording:

For grades 3 and up

In all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning and experimental and observational testing, including examining all sides of the scientific evidence of those scientific explanations so as to encourage critical thinking by the student. Approved 13-2 (Berlanga, Nunez)

Middle School

Motion by Knight: For grade 6

(8)E to read: investigate how inclined planes and pulleys can be used to change the amount of force to move an object. (Approved 9-6)

Motion by Knight: For grade 7

(14)C to read: recognize that inherited traits of individuals are governed in the genetic material found in the genes within the chromosomes in the nucleus. (Approved 8-7)

Motion by Knight: For grade 8

(9)B to read: illustrate how plate tectonics causes major geological events, such as ocean basins, earthquakes, volcanic eruptions, and mountain building. (Failed 7-7-1).

Grade 4

Motion by Knight:

(4)A to read: Within the physical environment, students learn to measure physical properties of matter and to compare and contrast a variety of mixtures and solutions. The students explore different forms of energy. The students will design an experiment to test the effect of force on objects. (Failed 5-7-3)

Grade 6

Motion by Cargill:

(5)D: identify the formation of a new substance compounds by using the evidence of a possible chemical change such as production of a gas, change in temperature, production of a precipitate, or color change. (Approved, voice vote with one no vote)

Motion by Cargill:

(8)B: identify and describe the changes in position, direction, ~~motion~~, and speed of an object when acted upon by unbalanced forces. (Approved, voice vote with one no vote)

Motion by Mercer:

(2)A: insert “comparative and” (Approved, voice vote with one no vote)

Grade 7

Motion by Cargill:

(7)B: illustrate the transformation of energy within an organism such as the transfer from chemical energy to heat and thermal energy in digestion. (Approved 11-4)

Motion by Cargill:

(12)A: investigate and explain how internal structures of organisms have adaptations that allow specific functions, such as gills in fish, hollow bones in birds, or xylem in plants (Approved, voice vote with two no votes)

Motion by Mercer:

(2)A (page 1-30): insert “comparative and” (Approved with one no vote)

Grade 8

Page I-36 Motion by Cargill:

(7)C: relate the position of the moon and sun to their effect on ocean tides. (Approved, voice vote with two no votes)

Motion by Mercer, Page I-35

(2)A: insert “comparative and” (Approved, voice vote with two no votes)

(2)B: insert “comparative and” (Approved, voice vote with two no votes)

High School

BIOLOGY

Motion by Allen:

Section 112.34(c) strike 7B—analyze and evaluate the sufficiency or insufficiency of common ancestry to explain the sudden appearance, stasis and sequential nature of groups in the fossil record. (Approved 8-7)

Motion by Dunbar:

7B—new 7B to read: analyze and evaluate the sufficiency of scientific explanations concerning any data of sudden appearance, stasis and the sequential nature of groups in the fossil record.

Substitute amendment by Craig:

Analyze and evaluate scientific explanations concerning any data of sudden appearance, stasis and the sequential nature of groups in the fossil record. (Approved 13-2)

Motion by Allen:

Section 112.34(c) strike 7G—analyze and evaluate the sufficiency or insufficiency of natural selection to explain the complexity of the cell. (Approved 8-7)

Motion by Craig:

(7)G: analyze and evaluate scientific explanations concerning the complexity of the cell. (Approved 13-2)

Motion by Allen:

Section 112.34(c) strike 9D—analyze and evaluate the evidence regarding formation of simple organic molecules and their organization into long complex molecules having information such as the DNA molecule for self-replicating life. (Failed 5-10)

Motion by Mercer:

112.34 (2)E—plan and implement descriptive, comparative and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology. (Approved 11-4)

CHEMISTRY

Motion by Hardy:

See highlighted packet. Amendment failed.

EARTH & SPACE SCIENCE

Motion by Craig

Amend Section 112.36 (c) 4 to read: The student knows how Earth-based and space-based astronomical observations reveal ~~differing theories about~~ information about the structure, scale, composition, origin, and history of the universe. (Failed 7-8)

Motion by Dunbar

Amend Section 112.36 (c) 8A to read: analyze and evaluate a variety of fossil types, such as transitional fossils, proposed transitional fossils, fossil lineages, and significant fossil deposits with regard to their appearance, completeness and alignment with scientific explanations in light of this fossil data. (Approved 9-6)

PHYSICS

(5)C to read: describe and calculate how the magnitude of the electrical force between two objects depends on their charges and the distance between them. (Approved 14-1)