Report of the State Board of Education Committee of the Full Board Wednesday, September 1, 2021

The State Board of Education Committee of the Full Board met at 9:06 a.m. on Wednesday, September 1, 2021, in the State Board of Education Room, #1-104, of the William B. Travis Building, 1701 N. Congress Avenue, Austin, Texas. Attendance was noted as follows:

<u>Present</u>: Keven Ellis, chair; Lawrence A. Allen, Jr. (virtual); Rebecca Bell-Metereau; Ruben Cortez, Jr.; Aicha Davis; Patricia Hardy; Will Hickman; Jay Johnson; Pam Little; Tom Maynard; Sue Melton-Malone; Georgina C. Pérez; Marisa B. Perez-Diaz; Matt Robinson; Audrey Young

Public Testimony

The Committee of the Full Board heard public testimony on agenda item #5. Information regarding the individuals who presented public testimony is included in the discussion of that item.

The Committee of the Full Board considered items in the following order: Item number 1, 2, 3, 7, 4, 5, 6.

DISCUSSION ITEMS

1. Commissioner's Comments

(Board agenda page I-6)

Commissioner Mike Morath provided an overview of Texas COVID Learning Acceleration Supports (TCLAS) funding and supports that will be provided to school districts and charter schools through a single, streamlined, discretionary non-competitive grant application. TCLAS includes the following five accelerated learning strategies: strategic planning, instructional materials, teacher pipelines, more time, and innovative school models. Commissioner Morath also explained tutoring implementation supports that will be available to school districts. He also provided an overview of House Bill (HB) 1525 that creates a one-time funding source to help high schools adopt and build career pathways and adjusts the weighted funding for CTE courses to create a financial incentive for school districts to implement rigorous pathways for students.

ACTION ITEMS

2. Proposed New 19 TAC Chapter 127, <u>Texas Essential Knowledge and Skills for Career Development</u>, Subchapter G, <u>Education and Training</u>; Subchapter I, <u>Health Science</u>; Subchapter J, <u>Hospitality and Tourism</u>; Subchapter M, <u>Law and Public Service</u>; and Subchapter O, <u>Science</u>, <u>Technology</u>, <u>Engineering</u>, <u>and Mathematics</u> (<u>First Reading and Filing Authorization</u>)
(Board agenda page I-7)

Shelly Ramos, senior director, curriculum standards and student support, explained that this item proposes new Texas Essential Knowledge and Skills (TEKS) for 38 of the career and technical education (CTE) courses from subchapters E, H, I, J, L, and O.

MOTION: It was moved by Mr. Maynard and seconded by Ms. Hardy to recommend that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.416-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.651 and §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.791.

Ms. Ramos explained that staff recommendations for minor revisions to the proposed TEKS had been incorporated into the rule text for the board's consideration. She also explained possible misalignment between the technology applications TEKS for Kindergarten-Grade 8 and the high school computer science courses dependent upon the outcome of the technology applications TEKS review.

MOTION AND VOTE: It was moved by Mrs. Little, seconded by Ms. Hardy, and carried without objection to amend the main motion by striking "Subchapter O, <u>Science, Technology, Engineering, and Mathematics</u>, §§127.777-127.782 and 127.785-127.791" and inserting "Subchapter O, <u>Science, Technology, Engineering, and Mathematics</u>, §§127.777-127.782 and 127.785-127.787."

<u>VOTE</u>: A vote was taken on the main motion to recommend that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 127, <u>Texas Essential Knowledge and Skills for Career Development</u>. Subchapter G, <u>Education and Training</u>, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, <u>Health Science</u>, §§127.416-127.433; Subchapter J, <u>Hospitality and Tourism</u>, §127.481 and §127.482; Subchapter M, <u>Law and Public Service</u>, §127.651 and §127.652; and Subchapter O, <u>Science</u>, <u>Technology</u>, <u>Engineering</u>, and <u>Mathematics</u>. §§127.777-127.782 and 127.785-127.787, as amended. The motion carried unanimously.

3. Proposed New 19 TAC Chapter 112, <u>Texas Essential Knowledge and Skills for Science</u>, Subchapter A, <u>Elementary</u>, §§112.1-112.7, and Subchapter B, <u>Middle School</u>, §§112.25-112.28 (First Reading and Filing Authorization)

(Board agenda page I-11)

Ms. Ramos provided an overview of the process for revisions to the Kindergarten-Grade 8 science TEKS. At the request of the board, Work Group F met virtually and made final recommendations that would clean up language and vertically align the K-8 science standards.

MOTION: It was moved by Mrs. Little and seconded by Mrs. Melton-Malone to recommend that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021.

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Hardy, and carried to recommend that the State Board of Education add new \S 112.2(a)(3)(A) and (B), 112.3(a)(3)(A) and (B), 112.5(a)(3)(A) and (B), \S 112.6(a)(3)(A) and (B), and \S 112.7 (a)(3)(A) and (B) to read:

- "(3) Scientific hypotheses and theories. Students are expected to know that:
 - "(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - "(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed."

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend $\S\S112.2(a)(4)$, 112.3(a)(4), 112.4(a)(4), 112.5(a)(4), 112.6(a)(4), 112.7(a)(4), 112.26(a)(5), 112.27(a)(5), and 112.28(a)(5) to replace the phrase "stability and change" with "change and constancy."

MOTION AND VOTE: It was moved by Ms. Hardy, seconded by Mrs. Melton-Malone, and carried to recommend that the State Board of Education amend $\S\S112.26(b)(4)(B)$, 112.27(b)(4)(B), and 112.28(b)(4)(B) to add "cost-effectiveness" after the word "accuracy."

MOTION AND VOTE: It was moved by Mr. Hickman and seconded by Ms. Hardy to recommend that the State Board of Education amend §112.2 (a)(2) to strike the word "currently" from the phrase "not currently scientifically testable." The motion failed.

MOTION AND VOTE: It was moved by Mr. Hickman and seconded by Mrs. Little to recommend that the State Board of Education amend $\S112.6(a)(D)$ and $\S112.7(a)(D)$ to read:

"Earth and space. Students learn about processes on Earth that create patterns of change. These processes include the water cycle, weathering, erosion, deposition, the appearance of the Moon, and seasons. Students build on this understanding in Grade 5 when they learn about day and night, shadows, and the appearance of apparent movement of the Sun due to the rotation of Earth on its axis. Finally, students identify Earth's resources and classify them as renewable or nonrenewable." *The motion failed.*

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Mrs. Little, and carried to recommend that the State Board of Education amend \$112.5(b)(3)(B), \$112.6(b)(3)(B) and \$112.7(b)(3)(B) to read:

"communicate <u>explanations and solutions</u> individually and collaboratively <u>in a variety of settings and formats</u> <u>valid conclusions to determine explanations from both direct and indirect evidence</u>; and" (Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.2(b)(8)(A) to read:

"communicate the idea identify that objects can only be seen when a light source is present and compare the effects of different amounts of light on the appearance of objects; and"

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.2(b)(8)(B) to read:

"identify and demonstrate and explain that light travels through some objects and is blocked by other objects, creating shadows."

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Mrs. Little, and carried without objection to recommend that the State Board of Education amend §112.2(b)(10)(C) to read:

"identify evidence that supports the idea describe that air is all around us and demonstrate that wind is moving air using items such as a windsock, pinwheel, or ribbon."

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.2(b)(13)(A) to read:

"identify the structures and functions of plants, including roots, stems, leaves, flowers, and fruits;"

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.2(b)(13)(B) to read:

"identify the that animals have different structures that animals have that allow them to interact with their environment such as seeing, hearing, moving, and grasping objects;"

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.3(b)(6)(C) to read:

"demonstrate <u>and explain</u> that a whole object is a system made of organized parts such as a toy that can be taken apart and put back together."

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Ms. Hardy, seconded by Mrs. Little, and carried without objection to recommend that the State Board of Education amend §112.3(b)(10)(B) to read:

"investigate and describe how water can move <u>rock</u> rocks and soil <u>particles</u> from one place to another;"

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Ms. Hardy, seconded by Mr. Maynard, and carried to recommend that the State Board of Education amend §112.4(b)(10)(A) to read:

"investigate and describe how wind and water move soil and <u>rock particles</u> rocks across the Earth's surface such as wind blowing sand into dunes on a beach or a river carrying rocks as it flows;"

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Pérez and carried without objection to recommend that the State Board of Education amend §112.4(b)(11)(B) to read:

"describe demonstrate how to limit human impact can be limited by making choices to conserve and properly dispose of materials such as reducing use of, reusing, or recycling paper, plastic and metal."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Ms. Hardy, seconded by Mr. Hickman, and carried without objection to recommend that the State Board of Education amend §112.5(b)(12)(D) to read:

"identify fossils as evidence of past living organisms <u>and environments, including common Texas</u> fossils."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Mr. Hickman and seconded by Ms. Hardy to recommend that the State Board of Education amend $\S\S112.5(b)(1)(D)$, 112.6(b)(1)(D), and 112.7(b)(1)(D) to read:

"use tools, including hand lenses; metric rulers; Celsius thermometers; wind vanes; rain gauges; graduated cylinders; beakers; digital scales; hot plates; measuring meter sticks; magnets; notebooks; Sun, Earth, Moon system models; timing devices; materials to support observation of habitats of organisms such as terrariums, aquariums, and collecting nets; and materials to support digital data collection such as computers, tablets, and cameras, to observe, measure, test, and analyze information;"

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Mr. Maynard, and carried without objection to recommend that the State Board of Education amend §112.6(b)(8)(C) to read:

"demonstrate and <u>describe how</u> identify that electrical energy travels in a closed path that can produce light and thermal energy."

MOTION AND VOTE: It was moved by Ms. Hardy, seconded by Mr. Hickman, and carried without objection to recommend that the State Board of Education amend §112.6(b)(12)(C) to read:

"identify and describe past environments including based on fossil evidence, including common Texas fossils."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Dr. Johnson, and carried to recommend that the State Board of Education amend $\S\S112.6(a)(1)(D)$ and 112.7(a)(1)(D) to change the phrase "the apparent movement of the Sun" to "the rotation of Earth on its axis."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Ms. Hardy and seconded by Ms. Pérez to recommend that the State Board of Education amend §112.6(b)(11)(A) to read:

"identify and explain advantages and disadvantages of using Earth's <u>natural</u> renewable resources such as wind, water, sunlight, plants, and animals, and nonrenewable resources such as coal, oil, and natural gas; and"

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Dr. Robinson, and carried to recommend that the State Board of Education amend §112.6(b)(11)(A) to read:

"identify and explain advantages and disadvantages of using Earth's renewable resources such as wind, water, sunlight, plants, and animals and nonrenewable natural resources such as wind, water, sunlight, plants, animals, coal, oil, and natural gas; and"

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Ms. Hardy, seconded by Mrs. Melton-Malone, and carried unanimously to recommend that the State Board of Education amend §112.6(b)(11)(B) to read:

"explain how conservation, disposal, and recycling of renewable and non-renewable natural resources impact the environment."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.7(b)(9) to read:

"Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects. The student is expected to demonstrate that Earth rotates on its axis once approximately every 24 hours and explain how that causes causing the day/night cycle and the apparent movement of the Sun across the sky, resulting in changes in shadow positions and shapes."

MOTION AND VOTE: It was moved by Mr. Maynard, seconded by Ms. Hardy, and carried unanimously to recommend that the State Board of Education amend §112.7(b)(9) to read:

"Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects. The student is expected to demonstrate that Earth rotates on its axis once approximately every 24 hours and explain how that causes the day/night cycle and the appearance of the Sun moving across the sky and the apparent movement of the Sun across the sky, resulting in changes in shadow positions and shapes."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Ms. Hardy, seconded by Mr. Maynard, and carried without objection to recommend that the State Board of Education amend §112.7(b)(11) to read:

"Earth and space. The student understands how natural resources are important and can be managed. The student is expected to design and explain solutions such as conservation, recycling, or proper disposal to minimize environmental impact of the use of renewable and non-renewable natural resources."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Robinson, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.4(b)(8)(A) to read:

"demonstrate and explain that sound is made by vibrating matter <u>and that vibrations can be caused</u> by a variety of means, including sound and that sound can make matter vibrate;"

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Dr. Johnson, and carried without objection to recommend that the State Board of Education amend* §112.7(b)(1)(D) to read:

"Earth and space. This strand is focused on identifying recognizable patterns and processes as students learn about Earth's rotation and demonstrate the effects this movement has on Earth's surface, including day and night, shadows, and rotation of Earth on its axis. Students continue their learning of patterns and processes on Earth while exploring weather, climate, the water cycle, the formation of sedimentary rock and fossil fuels, and the formation of landforms. Finally, students learn ways to manage <u>natural renewable</u> and <u>nonrenewable</u> resources to support a healthy environment."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Bell-Metereau and seconded by Ms. Davis to recommend that the State Board of Education amend §112.7(b)(8)(C) to read:

"Demonstrate and explain how light generally travels in a straight line and but can be reflected, and refracted, or bent by gravity."

The motion failed.

MOTION AND VOTE: It was moved by Dr. Robinson, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.26(b)(8)(A) to read:

"compare and contrast kinetic energy with gravitational, elastic, and chemical potential energies with kinetic energy;"

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Ms. Pérez and carried to recommend that the State Board of Education amend §112.28(b)(1)(D) to add weather maps to the list of tools.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

<u>MOTION AND VOTE</u>: It was moved by Ms. Perez-Diaz to recommend that the State Board of Education amend §112.28(b)(11)(A) to read:

"use scientific evidence to describe how the release and absorption of greenhouse gases, abrupt changes in ocean currents, and other natural events, natural events such as volcanic eruptions and meteor impacts, abrupt changes in ocean currents, and the release and absorption of greenhouse gases influence climate; and"

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young and seconded by Ms. Hardy to recommend that the State Board of Education amend §112.28 (b)(11)(B) to read:

"ask questions and research evidence to develop arguments about how human activities may affect climate change use scientific evidence to describe how human activities can influence climate such as the release of greenhouse gases."

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Ms. Perez-Diaz, seconded by Dr. Robinson, and carried to recommend that the State Board of Education amend §112.28(b)(11)(B) to read:

"use scientific evidence to describe how human activities over the past 150 years, including the release of greenhouse gases, can influence climate such as the release of greenhouse gases."

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Ms. Perez-Diaz, seconded by Dr. Bell-Metereau, and carried to recommend that the State Board of Education add new §112.28(b)(11)(C) to read:

"describe efforts to mitigate climate change, including a reduction in greenhouse gas emissions."

MOTION AND VOTE: It was moved by Ms. Pérez, seconded by Ms. Davis, and carried to recommend that the State Board of Education amend §112.28(b)(11)(A) to read:

"use scientific evidence to describe how natural events, including such as volcanic eruptions, meteor impacts, abrupt changes in ocean currents, and the release and absorption of greenhouse gases influence climate;"

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: It was moved by Dr. Young, seconded by Mr. Maynard, and carried to recommend that the State Board of Education amend §112.7(b)(6)(C) to read:

"compare the properties of substances before and after they are combined into a solution and demonstrate that matter is conserved in solutions; and"

(Mr. Cortez and Dr. Ellis were absent for the vote.)

<u>VOTE</u>: A vote was taken on the original motion to recommend that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 112, <u>Texas</u>

<u>Essential Knowledge and Skills for Science</u>, Subchapter A, <u>Elementary</u>, §112.1, <u>Implementation of Texas Essential Knowledge and Skills for Science</u>, <u>Elementary</u>, <u>Adopted 2021</u>; §112.2, <u>Science</u>, <u>Kindergarten</u>, <u>Adopted 2021</u>; §112.3, <u>Science</u>, <u>Grade 1</u>, <u>Adopted 2021</u>; §112.4, <u>Science</u>, <u>Grade 2</u>, <u>Adopted 2021</u>; §112.5, <u>Science</u>, <u>Grade 3</u>, <u>Adopted 2021</u>; §112.6, <u>Science</u>, <u>Grade 4</u>, <u>Adopted 2021</u>; and §112.7, <u>Science</u>, <u>Grade 5</u>, <u>Adopted 2021</u>, and Subchapter B, <u>Middle School</u>, §112.25, <u>Implementation of Texas Essential Knowledge and Skills for Science</u>, <u>Middle School</u>, Adopted 2021; §112.26, <u>Science</u>, <u>Grade 6</u>, <u>Adopted 2021</u>; §112.27, <u>Science</u>, <u>Grade 7</u>, <u>Adopted 2021</u>; and §112.28, <u>Science</u>, <u>Grade 8</u>, <u>Adopted 2021</u>, as amended.

The motion carried.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

DISCUSSION ITEM

4. Update on the Review of *Proclamation 2022* Instructional Materials (Board agenda page I-53)

Amie Williams, director, instructional materials review and procurement, provided a brief update on the instructional material review of health and PE materials for *Proclamation 2022* that was held this summer. Ms. Williams presented preliminary reports compiled from the results of the *Proclamation 2022* review and explained that the board will have the opportunity to adopt these materials at the November 2021 meeting.

ACTION ITEM

5. Update on Texas Essential Knowledge and Skills (TEKS) Review

(Board agenda page I-54)

Public testimony was provided by the following individuals:

NAME: Renee Blackmon

AFFILIATION: Self

NAME: Meghan Dougherty

AFFILIATION: Self

NAME: Ann Mulvihill

AFFILIATION: Self

NAME: Cindy Bronson

AFFILIATION: Self

NAME: Sandra West

AFFILIATION: Self

Ms. Ramos provided an update on the review process for the Texas Essential Knowledge and Skills (TEKS) that are currently under review or are soon to be under review: career and technical education (CTE), technology applications, and social studies.

DISCUSSION ITEMS

6. Discussion of 19 TAC Chapter 101, Assessment, Subchapter A, <u>General Provisions</u>, Subchapter B, Implementation of Assessments, and Subchapter C, Local Option

(Board agenda page I-57)

Julie Cole, director of policy and publications, student assessment divisions, explained that this item provided an opportunity for the board to discuss administrative rules in 19 TAC Chapter 101 related to student assessment.

7. Discussion on Pending Litigation

(Board agenda page I-62)

<u>MOTION AND VOTE</u>: It was moved by Ms. Pérez and carried that the Committee of the Full Board meet in executive session with the Board and their attorneys present to discuss pending litigation under Texas Government Code, §551.071.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

The board met in executive session.

Dr. Ellis adjourned the meeting at 6:08 p.m.