Report of the State Board of Education Committee of the Full Board November 17, 2020

The State Board of Education Committee of the Full Board met at 9:07 a.m. on Tuesday, November 17, 2020, 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.; Donna Bahorich; Barbara Cargill; Ruben Cortez, Jr.; Aicha Davis; Pat Hardy; Pam Little; Tom Maynard; Sue Melton-Malone; Ken Mercer; Georgina C. Pérez; Marisa B. Perez-Diaz; Matt Robinson; Marty Rowley

Public Testimony

The Committee of the Full Board heard public testimony on agenda items #1, #2, and #3. Information regarding the individuals who presented public testimony is included in the discussion of that item.

DISCUSSION ITEMS

1. Public Hearing on Proposed New 19 TAC Chapter 115, <u>Texas Essential Knowledge and Skills for Health Education</u>, Subchapter A, <u>Elementary</u>, §§115.11-115.17, Subchapter B, <u>Middle School</u>, §§115.25-115.28, and Subchapter C, <u>High School</u>, §§115.37-115.40 (Board agenda page I-1)

Public testimony was provided by the following individuals:

NAME: Jules Mandel

AFFILIATION: Texas Freedom Network

NAME: Lori Kuykendall

AFFILIATION: Medical Institute for Sexual Health

NAME: Karen Krajcer

AFFILIATION: Self

NAME: Anna Nguyen

AFFILIATION: Self

NAME: Suzi Nelson

AFFILIATION: Self

NAME: Jessica Soukup

AFFILIATION: Self

NAME: Tonya Waite

AFFILIATION: Self

NAME: Suzanne Kerns

AFFILIATION: Self

NAME: Sarah Anderson

AFFILIATION: Self

NAME: Mary Elizabeth Castle

AFFILIATION: Texas Values

NAME: Dan Bailey AFFILIATION: Just say YES

NAME: Deborah Simmons

AFFILIATION: Self

NAME: Marilyn Henderson

AFFILIATION: Self

NAME: Janice Weaver

AFFILIATION: South Texas Pregnancy Care Center

NAME: Candace Russell

AFFILIATION: Self

NAME: Christy Baca

AFFILIATION: Self

NAME: Marcia Lamb

AFFILIATION: Self

NAME: Shelly Skeen AFFILIATION: Lambda Legal

NAME: Katherine Goldey

AFFILIATION: Self

NAME: Rebecca Jowers AFFILIATION: Poiema Foundation

NAME: Caryl Ayala

AFFILIATION: Self

NAME: Lorie Meynig

AFFILIATION: Self

NAME: Ricardo Martinez AFFILIATION: Equality Texas

NAME: Geoffrey Carlisle

AFFILIATION: Self

NAME: Mary Anne Mosack

AFFILIATION: Ascend

NAME: Janet Teal

AFFILIATION: Self

NAME: Ruth York

AFFILIATION: Self

NAME: Ellen Klipp

AFFILIATION: Self

NAME: Connie Wyatt-Coleman AFFILIATION: Wise Choices PRC

NAME: Heather Frederick AFFILIATION: Texas GSA Network

NAME: Angela Lutts

AFFILIATION: National Association of Social Workers, Texas Chapter

NAME: Lawrence Hulsey

AFFILIATION: Self

NAME: Rebecca Hardy

AFFILIATION: Texans for Vaccine Choice

NAME: Rev. Angela Williams

AFFILIATION: Just Texas

NAME: Audrey Werner

AFFILIATION: Self

NAME: Lee Spiller

AFFILIATION: Citizens Commission on Human Rights-TX

NAME: Irene Ericksen

AFFILIATION: The Institute for Research & Evaluation

NAME: Lauren DeWitt

AFFILIATION: Self

NAME: Diana Richards

AFFILIATION: Self

NAME: Rosann Mariappuram AFFILIATION: Jane's Due Process

NAME: Madeleine Croll

AFFILIATION: GENTEX

NAME: Karole Fedrick

AFFILIATION: Self

NAME: Lydia Ayala

AFFILIATION: Self

NAME: Becky Baker

AFFILIATION: Self

NAME: Bob Tupin AFFILIATION: Self

NAME: Ginger Bloomer

AFFILIATION: Self

NAME: Shannon Jaquette

AFFILIATION: Texas Catholic Conference of Bishops

NAME: Rachana Chhin

AFFILIATION: Texas Catholic Conference of Bishops

NAME: Susie Roselle

AFFILIATION: Self

2. Public Hearing on Proposed New 19 TAC Chapter 116, <u>Texas Essential Knowledge and Skills for Physical Education</u>, Subchapter A, <u>Elementary</u>, §§116.11-116.17, Subchapter B, <u>Middle School</u>, §§116.25-116.28, and Subchapter C, <u>High School</u>, §§116.61-116.64 (Board agenda page I-3)

No public testimony was provided during this item.

3. Public Hearing on Proposed New 19 TAC Chapter 112, <u>Texas Essential Knowledge and Skills</u> for Science, Subchapter C, High School, §§112.41-112.45

(Board agenda page I-5)

Public testimony was provided by the following individuals:

NAME: Juli Berwald

AFFILIATION: Self

NAME: Suzi Nelson

AFFILIATION: Self

NAME: Christopher Garcia

AFFILIATION: Self

NAME: Carisa Lopez

AFFILIATION: Texas Freedom Network

NAME: Michael Clayton

AFFILIATION: Self

NAME: Geoffrey Carlisle

AFFILIATION: Self

NAME: Olivia Harris

AFFILIATION: Self

NAME: Ann Mulvihill

AFFILIATION: Texas Science Educator Leadership Association

NAME: Abagail Milam

AFFILIATION: Self

NAME: Tony Halstead

AFFILIATION: Self

NAME: Susan Barnum

AFFILIATION: Self

NAME: David Bonnette

AFFILIATION: Self

NAME: Maxine Jenks

AFFILIATION: Self

NAME: Eliza Epstein

AFFILIATION: Self

NAME: Gregory Alvord

AFFILIATION: Self

NAME: Linda Cook

AFFILIATION: Self

NAME: John Geissman

AFFILIATION: Self

NAME: Myrriah Gossett

AFFILIATION: Self

NAME: Selena Wilson

AFFILIATION: DFW Science Supervisors (MASS)

NAME: Ashley Carter

AFFILIATION: DFW Science Supervisors (MASS)

NAME: Deyadira Arellano

AFFILIATION: Self

NAME: Sharon Mineo

AFFILIATION: Self

NAME: Crystal Lantrip

AFFILIATION: Self

NAME: Hadia Noor

AFFILIATION: Self

NAME: Leila Cornelius

AFFILIATION: Self

NAME: Robert Martinez

AFFILIATION: Self

NAME: Kenric Davies

AFFILIATION: TX Section of American Association of Physics Teachers

NAME: Jennifer Meyer

AFFILIATION: Texas Science Teachers Association

NAME: Daniela De Urioste

AFFILIATION: Self

NAME: Marilyn Kortum

AFFILIATION: Self

NAME: Shane Woods

AFFILIATION: Self

NAME: Kathlene Sheets

AFFILIATION: Self

NAME: Adrienne Abrahamson

AFFILIATION: Self

NAME: Nalleli Hidalgo

AFFILIATION: TX Environmental Justice Advocacy Services

NAME: Sandra West

AFFILIATION: Self

NAME: Ashley-Meggan Bowie

AFFILIATION: Self

NAME: Jennifer Bernabo

AFFILIATION: Self

NAME: Kathy Shannon AFFILIATION: Petroleum Museum NAME: Jason Isaac

AFFILIATION: Self

NAME: Stephanie Thomas

AFFILIATION: Self

NAME: Marlene Plua

AFFILIATION: Self

NAME: Taren Hodges

AFFILIATION: Self

NAME: Michael Link

AFFILIATION: Self

ACTION ITEMS

4. Proposed New 19 TAC Chapter 116, <u>Texas Essential Knowledge and Skills for Physical Education</u>, Subchapter A, <u>Elementary</u>, §§116.11-116.17, Subchapter B, <u>Middle School</u>, §§116.25-116.28, and Subchapter C, <u>High School</u>, §§116.61-116.64 (Second Reading and Final Adoption)

(Board agenda page I-7)

Monica Martinez, associate commissioner for standards and support services, explained that the content advisors provided responses to public comments that were received on the proposed revisions to the physical education TEKS for kindergarten through high school.

MOTION AND VOTE: It was moved by Mr. Maynard, seconded by Mr. Rowley, and carried unanimously to recommend that the State Board of Education approve for second reading and final adoption proposed new 19 TAC Chapter 116, <u>Texas Essential Knowledge and Skills for Physical Education</u>, Subchapter A, <u>Elementary</u>, §§116.11-116.17, Subchapter B, <u>Middle School</u>, §§116.25-116.28, and Subchapter C, <u>High School</u>, §§116.61-116.64.

(Mr. Allen was absent for the vote.)

5. Proposed New 19 TAC Chapter 115, <u>Texas Essential Knowledge and Skills for Health Education</u>, Subchapter A, <u>Elementary</u>, §§115.11-115.17, Subchapter B, <u>Middle School</u>, §§115.25-115.28, and Subchapter C, <u>High School</u>, §§115.37-115.40 (Second Reading and Final Adoption)

(Board agenda page I-58)

The committee postponed consideration of this item until Wednesday, November 18, 2020.

6. Proposed New 19 TAC Chapter 112, <u>Texas Essential Knowledge and Skills for Science</u>, Subchapter C, <u>High School</u>, §§112.41-112.45 (Second Reading and Final Adoption) (Board agenda page I-116)

Ms. Martinez explained that staff had distributed the cumulative public comments received for this item and that the science content advisors had been convened to review the comments and provide consensus feedback on public comments that were received.

MOTION: It was moved by Mr. Rowley and seconded by Mrs. Melton-Malone to recommend that the State Board of Education approve for second reading and final adoption proposed new 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter C, High School, §§112.41, Implementation of Texas Essential Knowledge and Skills for Science, High School, Adopted 2020; 112.42, Biology (One Credit), Adopted 2020; 112.43, Chemistry (One Credit), Adopted 2020; and 112.45, Physics (One Credit), Adopted 2020; and

Make an affirmative finding that immediate adoption of 19 TAC Chapter 112, <u>Texas Essential Knowledge and Skills for Science</u>, Subchapter C, <u>High School</u>, §§112.41, <u>Implementation of Texas Essential Knowledge and Skills for Science</u>, <u>High School</u>, <u>Adopted 2020</u>; 112.42, <u>Biology (One Credit)</u>, <u>Adopted 2020</u>; 112.43, <u>Chemistry (One Credit)</u>, <u>Adopted 2020</u>; 112.44, <u>Integrated Physics and Chemistry (One Credit)</u>, <u>Adopted 2020</u>; and 112.45, <u>Physics (One Credit)</u>, <u>Adopted 2020</u>, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register.

MOTION AND VOTE: It was moved by Mrs. Cargill, seconded by Mr. Rowley, and carried to recommend that the State Board of Education amend §112.42(c)(6)(A) to read:

"explain the importance of the cell cycle to the growth of organisms, including <u>an overview of the</u> stages of the cell cycle and deoxyribonucleic acid (DNA) replication models"

MOTION AND VOTE: It was moved by Mrs. Cargill, seconded by Mr. Rowley, and carried to recommend that the State Board of Education amend §112.42(c)(7)(D) to read:

"discuss the importance describe the function of molecular technologies such as PCR, gel electrophoresis, and gene modification that are applicable in current research and engineering practices"

MOTION AND VOTE: It was moved by Mrs. Cargill, seconded by Mr. Rowley, and carried to recommend that the State Board of Education amend §112.42(c)(10)(D) to read:

"analyze evolutionary mechanisms other than natural selection, including genetic drift, gene flow, mutation, and genetic recombination, and their effect on the gene pool of a population"

MOTION AND VOTE: It was moved Mrs. Cargill, seconded by Mr. Rowley, and carried to recommend that the State Board of Education amend §112.42(c)(11)(A) to read:

"explain how matter is conserved and energy is transferred during photosynthesis and cellular respiration using models, including <u>the</u> chemical equations <u>for these processes</u>;"

MOTION AND VOTE: It was moved by Mrs. Cargill, seconded by Mr. Rowley, and carried to recommend that the State Board of Education amend §112.42(c)(11)(B) to read:

"identify and investigate and explain the role of enzymes in facilitating cellular processes"

MOTION AND VOTE: It was moved by Mrs. Cargill, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.42(c)(12)(B) to read:

"explain how the <u>interactions that occur among systems that perform</u> the functions of transport, reproduction, and response in plants are facilitated by their structures."

MOTION AND VOTE: It was moved by Mrs. Cargill, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend $\S112.43(c)(11)(C)$ to read:

"investigate <u>how</u> <u>factors that influence</u> solid and gas solubilities <u>are influenced by such as</u> temperature using solubility curves and <u>how</u> rates of dissolution <u>are influenced by such as</u> temperature, agitation, and surface area;"

MOTION AND VOTE: It was moved by Mrs. Cargill, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.43(c)(11)(D) to read:

"investigate the general rules regarding solubility and predict the solubility of the products of a double replacement reaction;"

The board requested that staff correct the spelling of "Van de Graaff" in student expectation $\S112.45(c)(6)(C)$ as a technical edit.

MOTION: It was moved by Mr. Rowley and seconded by Mrs. Little to recommend that the State Board of Education strike $\S112.45(c)(9)(A)$ —(D) and add new $\S112.45(c)(8)(H)$ to read:

"(H) investigate and understand how quantum physics applies to the behavior of waves, including mass-energy equivalence, the photoelectric effect, and the dual nature of light."

<u>MOTION AND VOTE</u>: It was moved by Mrs. Little, seconded by Mr. Maynard, and carried to insert "and emission spectra" after "photoelectric effect."

MOTION AND VOTE: It was moved by Mr. Rowley and carried to change "understand" to "explain."

<u>VOTE</u>: A vote was taken on the motion to recommend that the State Board of Education strike $\S 112.45$ (c)(9)(A)–(D) and add $\S 112.45$ (c)(8)(H) as amended to read:

"(H) investigate and explain how quantum physics applies to the behavior of waves including mass energy equivalence, the photoelectric effect and emission spectra, and the dual nature of light."

The motion failed.

MOTION AND VOTE: It was moved by Mrs. Cargill, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend $\S\S112.42(c)(4)$, 112.43(c)(4)(C), 112.44(c)(4)(C), and 112.45(c)(4)(C) to read:

"research and explore <u>resources such as museums, libraries, professional organizations, private</u> <u>companies, online platforms and mentors employed in a STEM field in order to investigate</u> <u>connections between grade-level appropriate science concepts and</u> science, technology, engineering, and mathematics (STEM) careers."

MOTION AND VOTE: It was moved by Ms. Perez-Diaz and seconded by Mr. Cortez to recommend that the State Board of Education postpone second reading and final adoption of proposed new 19 TAC §§112.41-112.45 to the January 2021 SBOE meeting. The motion failed.

VOTE: A vote was taken on the original motion to recommend that the State Board of Education approve for second reading and final adoption proposed new 19 TAC Chapter 112, <u>Texas Essential Knowledge and Skills for Science</u>, Subchapter C, <u>High School</u>, §§112.41, <u>Implementation of Texas Essential Knowledge and Skills for Science</u>, High School, Adopted 2020; 112.42, Biology (One Credit), Adopted 2020; 112.43, <u>Chemistry (One Credit)</u>, Adopted 2020; 112.44, <u>Integrated Physics and Chemistry (One Credit)</u>, Adopted 2020; and 112.45, <u>Physics (One Credit)</u>, Adopted 2020, as amended; and

Make an affirmative finding that immediate adoption of 19 TAC Chapter 112, <u>Texas Essential Knowledge and Skills for Science</u>, Subchapter C, <u>High School</u>, §§112.41, <u>Implementation of Texas Essential Knowledge and Skills for Science</u>, <u>High School</u>, <u>Adopted 2020</u>; 112.42, <u>Biology (One Credit)</u>, <u>Adopted 2020</u>; 112.43, <u>Chemistry (One Credit)</u>, <u>Adopted 2020</u>; 112.44, <u>Integrated Physics and Chemistry (One Credit)</u>, <u>Adopted 2020</u>; and 112.45, <u>Physics (One Credit)</u>, <u>Adopted 2020</u>, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register. The motion carried.

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