

**Report of the State Board of Education  
Committee of the Full Board  
Wednesday, November 17, 2021**

The State Board of Education Committee of the Full Board met at 9:01 a.m. on Wednesday, November 17, 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:

Present: Keven Ellis, chair; Lawrence A. Allen, Jr.; 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 received presentations of public testimony on agenda items #4, #5, and #7.

**DISCUSSION ITEM**

**1. Commissioner's Comments**  
(Board agenda page I-9)

Commissioner Mike Morath provided updates on implementation of several education bills that were passed by the 87th Texas Legislature, 2021 during the regular session and three special sessions.

**ACTION ITEMS**

**2. Implementation of Senate Bill (SB) 1232, 87th Legislature, Regular Session, 2021**  
(Board agenda page I-4)

This item was postponed from the Tuesday, November 16 agenda.

Holland Timmins, executive administrator, and chief investment officer for the Permanent School Fund (PSF) provided the board with an overview of the history of the PSF's momentous events and introduced John Grubenman, director of private markets, to provide details related to the implementation of SB 1232. Mr. Grubenman discussed the three initial steps the board would need to take related to the formation of the Texas PSF Corporation. Chuck Campbell, fiduciary counsel, provided an overview of the fiduciary implications of the board's vote.

**MOTION:** *It was moved by Mr. Maynard and seconded by Ms. Hardy to recommend that the State Board of Education, as authorized by Senate Bill 1232, 87th Legislature:*

- 1) approve the incorporation of the Texas Permanent School Fund Corporation pursuant to the authority granted to the Board under Section 43.052, Texas Education Code, and adopt the initial Certificate of Formation of the Corporation;*
- 2) authorize the Board's fiduciary counsel, Jackson Walker LLP, to serve as the organizer of the Corporation and file the documents required under state law to create the Corporation,*

*including the initial Certificate of Formation, and take any other actions that are necessary to effectuate such filing; and*

- 3) *establish the Board's policy that the five members of the Board who are appointed to serve on the Committee on School Finance/Permanent School Fund are by virtue of that appointment the individuals who are appointed to serve as the five SBOE members of the Board of Directors of the Corporation in accordance with Section 43.053(a)(1), Texas Education Code, with such appointments to be effective immediately upon the Corporation being incorporated.*

**MOTION AND VOTE:** *It was moved by Mr. Hickman and carried to recommend that the organizer of the Corporation be the Chair of the State Board of Education.*

**VOTE:** *A vote was taken on the motion to recommend that the State Board of Education, as authorized by Senate Bill 1232, 87th Legislature:*

- 1) *approve the incorporation of the Texas Permanent School Fund Corporation pursuant to the authority granted to the Board under Section 43.052, Texas Education Code, and adopt the initial Certificate of Formation of the Corporation;*
- 2) *authorize the Chair of the State Board of Education, to serve as the organizer of the Corporation and file the documents required under state law to create the Corporation, including the initial Certificate of Formation, and take any other actions that are necessary to effectuate such filing; and*
- 3) *establish the Board's policy that the five members of the Board who are appointed to serve on the Committee on School Finance/Permanent School Fund are by virtue of that appointment the individuals who are appointed to serve as the five SBOE members of the Board of Directors of the Corporation in accordance with Section 43.053(a)(1), Texas Education Code, with such appointments to be effective immediately upon the Corporation being incorporated.*

*The vote carried unanimously.*

*(Mr. Cortez was absent for the vote.)*

### **3. Consideration of Amendment to Texas Certificate of High School Equivalency Contract** (Board agenda page I-5)

This item was postponed from the Tuesday, November 16 agenda.

Monica Martinez, associate commissioner for standards and support services, explained that the GED Testing Service (GEDTS) requested approval to increase the price for the GED Ready practice test. She further stated that with the board's approval, TEA staff would amend the current contract with GEDTS to reflect the change in price.

**MOTION AND VOTE:** *It was moved by Mrs. Melton-Melton, seconded by Ms. Hardy, and carried to recommend that the State Board of Education approve the GED Testing Service's request for a contract amendment to increase pricing for the GED Ready practice test.*

**DISCUSSION ITEM**

- 4. Discussion of Proposed Amendments to 19 TAC Chapter 120, Other Texas Essential Knowledge and Skills, Subchapter A, Character Traits**  
(Board agenda page I-7)

This item was postponed from the Tuesday, November 16 agenda.

Ms. Ramos provided a brief update on the draft recommendations for the positive character traits Texas Essential Knowledge and Skills (TEKS) and explained that Senate Bill 123 (87th Texas Legislature, 2021, Regular Session) required the inclusion of personal, interpersonal, self-management, and responsible decision-making skills.

NAME: Kara Belew  
AFFILIATION: Texas Public Charter School Association

NAME: Shannon Epner  
AFFILIATION: Self

**ACTION ITEMS**

- 5. Proposed New 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §§112.1-112.7, and Subchapter B, Middle School, §§112.25-112.28**  
**(Second Reading and Final Adoption)**  
(Board agenda page I-10)

Public testimony was provided by the following individuals:

NAME: Cynthia Soliz  
AFFILIATION: Self

NAME: Francisco Gonzalez-Lima  
AFFILIATION: Self

NAME: Sandra West  
AFFILIATION: Self

NAME: Gerald Mulvey  
AFFILIATION: Self

NAME: Carisa Lopez  
AFFILIATION: Self

NAME: Meenal McNary  
AFFILIATION: Self

NAME: Tiffanie Harrison  
AFFILIATION: Self

NAME: Lori Mayfield  
AFFILIATION: Self

NAME: Tristan Childress  
AFFILIATION: Self

NAME: Susana Carranza  
AFFILIATION: Self

NAME: John Elford  
AFFILIATION: Self

NAME: Brianna Escobar  
AFFILIATION: Self

NAME: Jennifer Meyer  
AFFILIATION: Self

NAME: Stephanie Hoffman  
AFFILIATION: Self

NAME: John Tate  
AFFILIATION: Self

NAME: Evan Whitfield  
AFFILIATION: Self

NAME: Tad Fielder  
AFFILIATION: Self

NAME: William J. Moulton  
AFFILIATION: Self

NAME: Eliza Epstein  
AFFILIATION: Self

NAME: Maria Paz-Tripi  
AFFILIATION: Self

Invited testimony was provided by the following individuals:

NAME: Ray Bohlin  
AFFILIATION: Probe Ministries

NAME: Ron Wetherington  
AFFILIATION: Southern Methodist University

NAME: Arden Zimmerman  
AFFILIATION: Friendswood ISD

Shelly Ramos, senior director, curriculum standards and student support division, explained that the science content advisors had been convened to develop consensus recommendations for feedback related to the public comments.

**MOTION:** *It was moved by Mr. Maynard and seconded by Dr. Robinson 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 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; and*

*Make an affirmative finding that immediate adoption of the 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, 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 Ms. Davis, seconded by Dr. Bell-Metereau, and carried unanimously to recommend that the State Board of Education amend §112.2(b)(4)(B) to read:*

*"identify ~~what~~ scientists and engineers such as Isaac Newton, Mae Jemison, and Ynes Mexia ~~are~~ and explore what different scientists and engineers do."*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried unanimously to recommend that the State Board of Education amend §112.2(b)(1)(D), §112.3(b)(1)(D), and §112.4(b)(1)(D) by deleting "technology."*

**MOTION AND VOTE:** *It was moved by Ms. Davis, seconded by Ms. Pérez and carried unanimously to recommend that the State Board of Education amend §112.3(b)(4)(B) to read:*

*"identify ~~what~~ scientists and engineers such as Katherine Johnson, Sally Ride, and Ernest Just ~~are~~ and explore what different scientists and engineers do."*

**MOTION AND VOTE:** *It was moved by Ms. Davis, seconded by Ms. Pérez, and carried to recommend that the State Board of Education amend §112.3(b)(8)(A) by replacing the word "hair" with the word "clothes."*

**MOTION:** *It was moved by Ms. Davis and seconded by Dr. Bell-Metereau to recommend that the State Board of Education amend §112.3(b)(11) by adding a new student expectation to read:*

*"(C) explain the importance of water conservation."*

**MOTION AND VOTE:** *It was moved by Mr. Hickman and carried to recommend that the State Board of Education amend proposed new §112.3(b)(11)(C) to read:*

*"explain why water conservation is important."*

**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 §112.3(b)(11) by switching the order of student expectations (B) and (C).*

**VOTE:** *A vote was taken on the motion to recommend that the State Board of Education add proposed new §112.3(b)(11)(C), as amended.*

*The motion carried.*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.3(b)(11)(B) to read:*

*"describe ways to conserve water such as turning off the faucet when brushing teeth and protect natural sources of water such as ~~turning off the faucet when brushing teeth~~ and keeping trash out of bodies of water."*

**MOTION AND VOTE:** *It was moved by Ms. Davis, seconded by Ms. Pérez, and carried to recommend that the State Board of Education amend §112.4(b)(4)(B) to read:*

*"identify ~~what~~ scientists and engineers such as Alexander Graham Bell, Marie Daly, Mario Molina, and Jane Goodall ~~are~~ and explore what different scientists and engineers do."*

**MOTION AND VOTE:** *It was moved by Dr. Bell-Metereau and seconded by Dr. Robinson to recommend that the State Board of Education amend §112.4(b)(10) by adding a new student expectation to read:*

*"(D) explain the variations in intensity of severe weather events."*

*The motion failed.*

**MOTION:** *It was moved by Ms. Davis and seconded by Ms. Hardy to recommend that the State Board of Education amend §112.5(b)(11) by adding a new student expectation to read:*

*"explain the importance of conservation of natural resources;"*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Davis, and carried to recommend that the State Board of Education amend §112.5(b)(11) to read:*

*"(C) explain why the conservation of natural resources is important;"*

**VOTE:** *A vote was taken on the original motion to add new student expectation §112.5(b)(11)(C), as amended.*

*The motion carried unanimously.*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.5(b)(11) by switching the order of the new student expectation in §112.5(b)(11)(C) and §112.5(b)(11)(B).*

**MOTION AND VOTE:** *It was moved by Ms. Davis and seconded by Ms. Pérez to recommend that the State Board of Education amend §112.6(b)(11) by adding a new student expectation to read:*

**"(C) explain the relationship between natural resource management and climatic variations;"**

*The motion failed.*

**MOTION:** *It was moved by Dr. Johnson and seconded by Ms. Hardy to recommend that the State Board of Education amend §112.6(b)(11)(B) to read:*

**"explain the value of energy and how conservation, disposal, and recycling of natural resources impact the environment and modern life."**

**MOTION AND VOTE:** *It was moved by Mrs. Melton-Malone, seconded by Dr. Young, and carried to recommend that the State Board of Education amend §112.6(b)(11)(B) by replacing the word "value" with the phrase "critical role."*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.6(b)(11)(B) by adding the word "resources" after the word "energy."*

**VOTE:** *A vote was taken on the original motion to amend §112.6(b)(11)(B), as amended.*

*The motion carried.*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.4(b)(9)(B) to read:*

**"observe and compare how objects in the sky are more visible and can appear different using tools such as ~~with~~ a telescope than with an unaided eye."**

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.5(b)(9)(B) by replacing the word "sequence" with the word "order."*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.6(b)(6)(B) by replacing the word "and" with the word "or."*

**MOTION AND VOTE:** *It was moved by Ms. Davis, seconded by Mr. Hickman, and carried without objection to recommend that the State Board of Education amend §112.7(b)(8)(C) by striking the word "and" and adding the phrase "or absorbed" after the word "refracted."*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.7(b)(6)(B) by replacing the word "and" after the phrase "iron filings and sand" with the word "or."*

**MOTION AND VOTE:** *It was moved by Ms. Davis and seconded by Dr. Bell-Metereau to recommend that the State Board of Education amend §112.26(b)(4)(A), §112.27(b)(4)(A), and §112.28(b)(4)(A) by striking the phrase "cost-benefit analysis."*

*The motion failed.*

**MOTION AND VOTE:** *It was moved by Ms. Hardy, seconded by Mrs. Little, and carried unanimously to recommend that the State Board of Education amend §112.26(b)(6)(C) to read:*

*"classify elements on the periodic table as metals, nonmetals, and metalloids using their physical properties and describe the position of rare earth elements and their importance to modern life;"*

**MOTION AND VOTE:** *It was moved by Ms. Hardy, seconded by Mr. Maynard, and carried unanimously to recommend that the State Board of Education amend §112.26(b)(11) by adding a new student expectation to read:*

*"(A) research and describe why resource management is important in reducing global energy poverty, malnutrition, and air and water pollution; and"*

*"(B) explain how conservation, increased efficiency, and technology can help manage air, water, soil, and energy resources"*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.28(b)(6)(C) by striking the phrase "sour or bitter taste, and how these substances feel to the touch."*

**MOTION:** *It was moved by Dr. Young and seconded by Ms. Hardy that the State Board of Education amend §112.28(b)(6) by adding a new student expectation to read:*

*"(B) interpret the arrangement of the periodic table, including groups and periods, to explain how properties are used to classify elements;"*

**MOTION AND VOTE:** *It was moved by Ms. Perez-Diaz and carried to recommend that the State Board of Education amend §112.28(b)(6)(B) by replacing the word "interpret" with the word "describe."*

**VOTE:** *A vote was taken on the original motion to recommend that the State Board of Education amend §112.28(b)(6) by adding new student expectation (6)(B), as amended.*

*The motion carried.*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education strike §112.28(b)(11)(C).*

**MOTION AND VOTE:** *It was moved by Dr. Bell-Metereau to recommend that the State Board of Education amend §112.28(b)(11) by deleting the word "can." The motion failed.*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.26(b)(1)(D), §112.27(b)(1)(D), and §112.28(b)(1)(D) by adding the phrase "lab notebooks or journals."*

**MOTION AND VOTE:** *It was moved by Ms. Hardy, seconded by Ms. Davis, and carried to recommend that the State Board of Education amend §112.28(b)(11)(B) by replacing the phrase "such as" with the word "including."*

**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, 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, as amended; and*

*Make an affirmative finding that immediate adoption of the 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, as amended, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register.*

*The vote carried unanimously.*

*(Mr. Allen and Dr. Robinson were absent for the vote.)*

6. **Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training; Subchapter I, Health Science; Subchapter J, Hospitality and Tourism; Subchapter M, Law and Public Service; and Subchapter O, Science, Technology, Engineering, and Mathematics (Second Reading and Final Adoption)**  
(Board agenda page I-54)

Ms. Ramos gave an overview of the expected timeline for implementation of the proposed new standards and discussed staff recommendations for revisions to the proposed new TEKS.

**MOTION:** *It was moved by Mr. Maynard and seconded by Mrs. Little to recommend that the State Board of Education approve for second reading and final adoption 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, §§127.417-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482;*

Subchapter M, Law and Public Service, §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787; and

Approve the withdrawal of proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter I, Health Science, §127.416, Implementation of Texas Essential Knowledge and Skills for Health Science, Adopted 2021; Subchapter M, Law and Public Service, §127.651, Implementation of Texas Essential Knowledge and Skills for Law and Public Service, Adopted 2021; and Subchapter O, Science, Technology, Engineering, and Mathematics, §127.788, Fundamentals of Computer Science (One Credit), Adopted 2021, §127.789, Computer Science I (One Credit), Adopted 2021, §127.790, Computer Science II (One Credit), Adopted 2021, and §127.791, Computer Science III (One Credit), Adopted 2021; and

Make an affirmative finding that immediate adoption of 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, §§127.417-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787, 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 Mr. Maynard, seconded by Ms. Hardy, and carried to recommend that the State Board of Education adopt staff recommendations as follows:*

“§127.320(c)(2)(D) “explore the educational and academic ~~educational/academic~~ requirements and possible degrees and certifications ~~degrees/certifications~~ available in early childhood education.”

“§127.320(c)(3)(A) (A) apply and reflect on the application of principles and theories of human development appropriate to early learning situations ~~and reflect on the application thereof;~~

“§127.320(c)(3)(B) (B) apply and reflect on the application of principles and theories about the learning process to specific early learning situations ~~and reflect on the application thereof;~~

“§127.325(c)(3)(B) summarize and apply acquired ~~determine and implement~~ pedagogical knowledge and skills ~~learned in this course and~~ needed by teaching and training professionals;

“§127.325(c)(4)(D) explain the relationship between effective instructional practices and providing support for learning differences, learner exceptionality, and learners with special needs;

“§127.326(c)(3)(E) determine the educational and academic ~~educational/academic~~ requirements and possible degrees and certifications ~~degrees/certifications~~ necessary for a profession of interest in teaching and training;

“§127.417(c)(3)(A) demonstrate appropriate verbal strategies such as correct pronunciation of medical terms and written strategies such as correct ~~pronunciation of medical terms and~~ spelling in a variety of health science scenarios;

“§127.420(c)(2)(D) compare the functions of public health organizations, including the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) at the local, state, national, including the Centers for Disease Control and Prevention (CDC); and international, including the World Health Organization (WHO), levels;

“§127.420(c)(6) The student recognizes the ethical and legal aspects involved in clinical research. The student is expected to identify issues and explain the ethical and legal guidelines, including informed consent and patient confidentiality, for the conduct of research involving human subjects, ~~including informed consent and patient confidentiality.~~”

§127.421(c)(3)(G) compare and contrast use of information and disclosure ~~of or~~ information; and

§127.423(c)(8)(D) identify and locate the anatomy of ~~spongy and compact~~ bone, including spongy and compact tissue, epiphysis, diaphysis, medullary cavity, periosteum, bone marrow, and endosteum;

§127.423(c)(11)(A) summarize and distinguish between the major physiological functions of the nervous system, including sensation, integration, and motor response;”

§127.423(c)(14)(C) investigate and illustrate how systemic circulation transports blood, gasses, and nutrients from the heart to the internal anatomy of the heart, including tissue layers, chambers, and valves, and external anatomy of the heart, including ~~tissue layers, chambers, valves, and~~ coronary vessels;

§127.424(c)(8)(D) research ~~and differentiate between~~ the causes, prevention, and impact of nosocomial infections and differentiate between the causes, prevention, and impact of nosocomial infections versus community-acquired infections

§127.425(c)(8)(C) describe procedures for inventory control, including removal of expired and recalled ~~expired/recalled~~ drug products, rotating inventory, performing a physical inventory, ordering medications and supplies, ~~medications/supplies~~, monitoring periodic automatic replenishment (PAR) levels, and using just-in-time ordering;

§127.432(c)(8) The student provides ~~is expected to provide~~ care for diverse populations such as persons from varying age groups and persons with physical limitations or mental health needs in clinical or simulated environment. The student is expected to:

§127.652(c)(12)(B) perform the analysis of hair and fiber evidence using forensic science methods such as microscopy and flame testing;

§127.781(c)(11)(F) test and evaluate proposed solutions using engineering methods such as creating models, prototypes, mock-ups, or simulations or performing critical design review, statistical analysis, or experiments;

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Maynard, seconded by Mrs. Little, and carried to recommend that the State Board of Education adopt the recommended changes to course prerequisites as follows:*

§127.319(a) General requirements. This course is recommended for students in Grades 10-12 ~~Grades 10-12 but open for students through Grade 12~~. Recommended prerequisites: Principles of Education and Training or Principles of Human Services. Students shall be awarded one credit for successful completion of this course.

§127.321(a) General requirements. This course is recommended for students in Grade 12. ~~Prerequisite: Required prerequisite:~~ Child Guidance. Recommended prerequisites: Child

Development or Child Development Associate Foundations. Corequisite: Practicum in Early Learning. This course must be taken concurrently with Practicum in Early Learning and may not be taken as a stand-alone course. Students shall be awarded one credit for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

§127.325(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: At least one credit in a course from the education and training career cluster. Recommended prerequisites: Principles of Education and Training, Human Growth and Development, or Child Development. Students shall be awarded two credits for successful completion of this course.

§127.419(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Medical Terminology ~~and Business Information Management I.~~ Recommended ~~prerequisites~~ prerequisite: Principles of Health Science and Business Information Management I. Students shall be awarded one credit for successful completion of this course.

§127.420(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and at least one credit in a Level 2 or higher course from the health science career cluster ~~Principles of Health Science. Recommended prerequisite: Medical Terminology.~~ Students shall be awarded one credit for successful completion of this course.

§127.422(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and at least one credit in a course from the health science career cluster ~~one credit from a level one course or level two course within a health science program of study.~~ Recommended prerequisite: Medical Terminology. Recommended corequisite: Health Science Clinical. Students shall be awarded one credit for successful completion of this course.

§127.423(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: one credit in biology and one credit in chemistry, Integrated Physics and Chemistry, or physics. ~~and one additional credit of high school science. Recommended prerequisite: a course from the Health Science Career Cluster.~~ This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

§127.424(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology, and one credit in chemistry, and at least one credit in a Level 2 or higher course from the health science career cluster. Recommended prerequisite: Anatomy and Physiology. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

§127.426(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology, ~~and one credit in chemistry,~~ and one credit in Pharmacy I. Recommended prerequisites: Algebra I and Introduction to Pharmacy Science. Students shall be awarded two credits for successful completion of this course.

§127.428(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology, ~~and one credit in chemistry,~~ and at least one credit in a Level 2 or higher course from the health science career cluster. ~~Recommended prerequisite: a course from~~

~~the Health Science Career Cluster.~~ Students shall be awarded one credit for successful completion of this course.

§127.429(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: At least one credit in a course from the health science career cluster. ~~Prerequisite or corequisite: Anatomy and Physiology. Recommended prerequisite: a course from the Health Science Career Cluster.~~ Students shall be awarded one credit for successful completion of this course.”

§127.431(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology, ~~and~~ one credit in chemistry, ~~and~~ at least one credit in a course from the health science career cluster. ~~Recommended prerequisite: Science of Nursing a course from the Health Science Career Cluster.~~ Students shall be awarded one credit for successful completion of this course.

§127.432(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology, one credit in chemistry, and at least one credit in a Level 2 or higher course in the nursing science program of study ~~course from the Health Science Career Cluster.~~ Recommended prerequisites: Science of Nursing, Medical Terminology, and Anatomy and Physiology. Students shall be awarded two credits for successful completion of this course.

§127.433(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology, ~~and~~ one credit in chemistry, ~~and~~ at least one credit in a course from the health science career cluster. ~~Recommended prerequisite: a course from the Health Science Career Cluster.~~ This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

§127.482(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology, ~~and~~ one credit in chemistry, ~~and~~ at least one credit in a Level 2 or higher course from the hospitality and tourism career cluster. Recommended prerequisite: Principles of Hospitality and Tourism. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

§127.652(a) General requirements. The course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology, ~~and~~ one credit in chemistry, ~~and~~ at least one credit in a Level 2 or higher course from the law and public safety career cluster. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

§127.780(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: ~~Biotechnology I~~ ~~and~~ one credit in chemistry ~~and~~ Biotechnology I. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

§127.782(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: Algebra I, ~~and~~ one credit in biology, ~~and~~ at least one credit in a course from the science, technology, engineering, and mathematics career cluster. Recommended prerequisites: Geometry, Integrated Physics and Chemistry (IPC), one credit in chemistry, or one credit in physics. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

§127.785(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Algebra I, ~~and Geometry, and at least one credit in a Level 2 or higher course in the science, technology, engineering, and mathematics career cluster. Recommended prerequisites: two credits from the Science, Technology, Engineering, and Mathematics (STEM) Career Cluster.~~ This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §127.316(c)(6)(B) to read:*

“describe different types of schools in urban and rural areas and public and private schools such as academies and Montessori, ~~public, private, charter, and magnet schools and schools in urban and rural areas;~~”

*(Dr. Robinson was 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 strike §127.319(7)(A). The motion failed.*

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §127.320(c)(8) to read:*

“The student develops technology skills appropriate for effectively supporting students in the classroom. The student is expected to:  
(A) utilize a variety of assistive technologies ~~current technology applications~~ that are age-appropriate for specific student learning needs, including for early learners with special needs; and  
(B) integrate various educational technologies as tools ~~the skillful use of technology as a tool~~ for instruction, evaluation, communication, and management.”

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §127.325(c)(15) to read:*

“The student demonstrates knowledge and understanding of teacher responsibility with regard to accommodations and modifications for students with special needs. The student is expected to:

(A) identify the Individuals with Disabilities Education Act and Section 504 of the Rehabilitation Act of 1973;

(B)(A) explain the structure and components of an individualized education program (IEP);

(C)(B) explain the structure and components of a Section 504 Plan plan; and

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §127.419(c)(2)(F) to read:*

“explain how socially responsible management policies such as health care health equity access, inclusion, and diversity policies are initiated and implemented;”

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried unanimously to recommend that the State Board of Education amend §127.420(c)(3)(A) to read:*

“compare the availability and quality of health care in developing and developed countries;”

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §127.422(c)(3) to read:*

“The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will become familiar with industry-based standards for documenting and maintaining medical information; research industry employment requirements, including education, certification, and licensing requirements; and evaluate ethical and legal responsibilities of health science professionals. Students will employ hands-on experiences for continued clinical knowledge and skill development.”

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Mr. Maynard, and carried to recommend that the State Board of Education amend §127.422(c)(12)(A) to read:*

“describe governmental regulations and guidelines from entities such as the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), U.S. Food and Drug Administration (FDA), The Joint Commission, and the National Institute of Health (NIH), and Texas Department of State Health Services (DSHS);”

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Pérez, and carried without objection to recommend that the State Board of Education amend §127.423(c)(2)(D) to read:*

“use appropriate tools such as lab notebooks or journals, calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, meter sticks, electronic balances, micro pipettors, hand lenses, Celsius thermometers, hot plates, timing devices, Petri dishes, agar, lab incubators, dissection equipment, models, diagrams, or samples of biological specimens or structures, reflex hammers, pulse oximeters, stethoscope, otoscope, sphygmomanometers, pen lights, and ultrasound equipment, and models, diagrams, or samples of biological specimens or structures;”

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Dr. Ellis, and carried without objection to recommend that the State Board of Education amend §127.423(2)(D) to replace the word sphygmomanometers with the phrase blood pressure monitors (sphygmomanometers).*

The committee requested that staff make similar changes to any student expectations to align with the change to the term sphygmomanometers.

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Mrs. Melton-Malone, and carried without objection to recommend that the State Board of Education amend §127.426(c)(2)(B) change the word population to populations.*

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Ms. Pérez, and carried to recommend that the State Board of Education amend §127.426(6)(D) to read:*

*“identify the required steps in preparing sterile compounded products, including putting on (donning) ~~donning~~ personal protective equipment (PPE), cleaning the vertical or horizontal flow hoods, selecting correct supplies, and preparing the product for dispensing;”*

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Hickman, seconded by Mr. Maynard, and carried without objection to recommend that the State Board of Education amend §127.426(c)(13)(E) to read:*

*“explain the types and uses of personal protective equipment (PPE) and the steps for putting on (donning) ~~donning~~ and removing (doffing) ~~doffing~~ PPE; and”*

The committee requested that staff make similar changes to any student expectations that include the terms donning and/or doffing.

*(Dr. Robinson was 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 §127.429(c)(2)(B) to read:*

*“identify the impact of cultural diversity on patient care such as differences in race, ~~culture, and religion~~,”*

*The motion failed.*

*(Dr. Robinson was absent for the vote.)*

**MOTION AND VOTE:** *It was moved by Mr. Cortez, seconded by Mr. Hickman, and carried without objection to recommend that the State Board of Education amend §127.429(c)(2)(B) and 127.430(c)(2)(B) to read:*

*“identify how race, culture and religion impact patient care ~~the impact of cultural diversity on patient care such as differences in race, culture, and religion~~,”*

(Dr. Robinson was absent for the vote.)

**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 Texas Administrative Code (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, §§127.417-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787 as amended; and*

*Approve the withdrawal of proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter I, Health Science, §127.416, Implementation of Texas Essential Knowledge and Skills for Health Science, Adopted 2021; Subchapter M, Law and Public Service, §127.651, Implementation of Texas Essential Knowledge and Skills for Law and Public Service, Adopted 2021; and Subchapter O, Science, Technology, Engineering, and Mathematics, §127.788, Fundamentals of Computer Science (One Credit), Adopted 2021, §127.789, Computer Science I (One Credit), Adopted 2021, §127.790, Computer Science II (One Credit), Adopted 2021, and §127.791, Computer Science III (One Credit), Adopted 2021; and*

*Make an affirmative finding that immediate adoption of the 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, §§127.417-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register.*

*The motion carried.*

(Mr. Cortez, Ms. Davis, and Dr. Robinson were absent for the vote.)

7. **Proposed Repeal of 19 TAC Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, §§130.161-130.166; Subchapter G, §§130.201-130.211; Subchapter H, §§130.221-130.234; Subchapter I, §§130.251-130.263; Subchapter L, §§130.331-130.343; Subchapter O, §§130.401-130.435; and Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, §§127.309-127.314; Subchapter I, §§127.402-127.415; Subchapter J, §§127.468-127.480; Subchapter M, §§127.625-127.648; and Subchapter O, §§127.742-127.776**

**(First Reading and Filing Authorization)**

(Board agenda page I-189)

Ms. Ramos stated that the current structure of Chapter 130 does not include a sufficient number of sections to add the new CTE courses currently under consideration in their assigned subchapters. Ms. Ramos explained that repealing and moving the CTE TEKS in Chapter 130 to existing Chapter 127 would provide the necessary room for the addition of new and future courses.

Public testimony was provided by the following individual:

NAME: Kara Belew  
AFFILIATION: Texas Public Charter School Association

**MOTION AND VOTE:** *It was moved by Mr. Maynard, seconded by Mr. Allen, and carried to recommend that the State Board of Education approve for first reading and filing authorization proposed repeal of 19 TAC Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, Education and Training, §§130.161-130.166; Subchapter G, Government and Public Administration, §§130.201-130.211; Subchapter H, Health Science, §§130.221-130.234; Subchapter I, Hospitality and Tourism, §§130.251-130.263; Subchapter L, Law, Public Safety, Corrections, and Security, §§130.331-130.343; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§130.401-130.435; and*

*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, §§127.309-127.314; Subchapter I, Health Science, §§127.402-127.415; Subchapter J, Hospitality and Tourism, §§127.468-127.480; Subchapter M, Law and Public Service, §§127.625-127.650; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.742-127.776.*

*(Dr. Robinson was absent for the vote.)*

## **DISCUSSION ITEM**

- 8. Discussion of Proposed Amendments to 19 TAC Chapter 74, Curriculum Requirements, Subchapter B, Graduation Requirements**  
(Board agenda page I-193)

Ms. Ramos explained that this item provides an opportunity for the committee to discuss proposed amendments to the current high school graduation requirements. The proposed amendments would update the high school graduation requirements to align with recent legislation and with changes to course names and other references to the TEKS. The proposed changes would be implemented beginning with the 2022-2023 school year. Ms. Ramos also shared feedback from the College Board concerning the performance acknowledgment related to performance on a college entrance exam or a preliminary college preparation exam. The committee requested that staff bring two options for revising the qualifying scores for the board's consideration at the January 2022 meeting.

## **ACTION ITEMS**

- 9. Update on Texas Essential Knowledge and Skills (TEKS) Review**  
(Board agenda page I-213)

Ms. Martinez explained that staff would provide updates on several aspects of ongoing TEKS review processes.

Marcette Kilgore, director of career and technical education, provided the committee with an overview of information that had been used to determine recommendations for courses to include in upcoming

CTE TEKS review. Information included a skills gap analysis and data regarding enrollment and job openings. Jessica Snyder, special projects director, curriculum standards and student support division, explained the expected timeline for review of CTE TEKS concurrently with review of TEKS for foundation and enrichment subjects.

Ms. Ramos provided an update on the review and revision of the technology applications TEKS and stated that the work groups were on track to complete draft recommendations in advance of the January 2022 board meeting.

Ms. Ramos provided a brief update on the social studies TEKS review process. She also gave an overview of a recent review of state social studies standards, and shared areas of strength and opportunity in the social studies TEKS.

The committee discussed the possibility of requesting a commissioner's draft to be used as a starting point for the upcoming review and revision of the social studies TEKS.

## **DISCUSSION ITEM**

### **10. Discussion on Pending Litigation**

(Board agenda page I-216)

Von byer, general counsel, announced that the State Board of Education was successfully dismissed from the Student v. Conroe ISD, Texas Education Agency and State Board of Education case No. 230-SE-0721.

Dr. Ellis adjourned the meeting at 8:23 p.m.