Report of the State Board of Education Committee of the Full Board Wednesday, January 29, 2025

The State Board of Education Committee of the Full Board met at 9:01 a.m. on Wednesday, January 29, 2024, in the State Board of Education Room, #2.035, of the Barbara Jordan Building, 1601 N. Congress Avenue, Austin, Texas. Attendance was noted as follows:

<u>Present</u>: Aaron Kinsey, chair; Rebecca Bell-Metereau; Evelyn Brooks; Staci Childs; LJ Francis; Brandon Hall; Will Hickman; Keven Ellis; Pam Little; Tom Maynard; Gustavo Reveles; Marisa B. Perez-Diaz; Julie Pickren; Audrey Young; Tiffany Clark.

Public Testimony

The Committee of the Full Board heard public testimony on agenda item 7. 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, 7, 8, 5, 11.

DISCUSSION ITEMS

1. Commissioner's Comments (Board agenda page I-42) [Official agenda item #7]

Commissioner Mike Morath presented TEA's 2024 Annual Report to the members. He walked through the Annual Report, which included updates on school safety and security, school funding, CTE, special education, and the STAAR assessment. He further provided an updated comparison to updated 2024 NAEP data.

2. Discussion of Review of 19 TAC Chapter 101, <u>Assessment</u>, Subchapter A, <u>General Provisions</u>, Subchapter B, <u>Implementation of Assessments</u>, and Subchapter C, <u>Local Option</u> (Board agenda page I-43) [Official agenda item #3]

This item was postponed to the January 30, 2025, meeting of the Committee of the Full Board.

ACTION ITEMS

3. Proposed Amendment to 19 TAC Chapter 74, <u>Curriculum Requirements</u>, Subchapter A, <u>Required Curriculum</u>, §74.3 <u>Description of a Required Secondary Curriculum</u> (Second Reading and Final Adoption) (Board agenda page I-48) [Official agenda item #7]

This item was postponed to the January 30, 2025, meeting of the Committee of the Full Board.

4. Proposed New 19 TAC Chapter 127, <u>Texas Essential Knowledge and Skills for Career</u> <u>Development and Career and Technical Education</u>, Subchapter C, <u>Agriculture, Food, and</u> <u>Natural Resources</u>, §127.59 and §127.61; Subchapter F, <u>Business, Marketing, and Finance</u>, §127.262 and §127.263; Subchapter J, <u>Health Science</u>, §127.510 and §127.511; Subchapter K, <u>Hospitality and Tourism</u>, §§127.569, 127.571, and 127.604; Subchapter M, <u>Information Technology</u>, §§127.689-127.691 and 127.695-127.699, and Subchapter N, <u>Law and Public Service</u>, §127.773 (Second Reading and Final Adoption) (Board agenda page I-54) [Official agenda item #8]

This item was postponed to the January 30, 2025, meeting of the Committee of the Full Board.

DISCUSSION ITEM

5. Public Hearing on Proposed New 19 Texas Administrative Code (TAC) Chapter 111, <u>Texas</u> <u>Essential Knowledge and Skills for Mathematics</u>, Subchapter B, <u>Middle School</u>, §§111.29-111.32 (Board agenda page I-120)

No public testimony was received on this item.

ACTION ITEM

 6. Proposed New 19 TAC Chapter 111, <u>Texas Essential Knowledge and Skills for Mathematics</u>, Subchapter B, <u>Middle School</u>, §§111.29-111.31 (First Reading and Filing Authorization) (Board agenda page I-122) [Official agenda item #9]

This item was postponed to the January 30, 2025, meeting of the Committee of the Full Board.

DISCUSSION ITEM

7. Public Hearing on Proposed New 19 TAC Chapter 127, <u>Texas Essential Knowledge and Skills in Career Development and Career and Technical Education</u>, Subchapter I, <u>Engineering</u> (Board agenda page I-141) [Official agenda item #10]

Invited Testimony was provided by the following individual:

NAME:Trevor ReedAFFILIATION:Environmental Engineering Work Group Subcommittee

ACTION ITEM

 Proposed New 19 TAC Chapter 127, <u>Texas Essential Knowledge and Skills for Career</u> <u>Development and Career and Technical Education</u>, Subchapter I, <u>Engineering</u>, §§127.402-127.419, 127.452, and 127.453 (First Reading and Filing Authorization) (Board agenda page I-143) Ms. Martinez provided an overview of the CTE career clusters, programs of study, and courses. She explained that all CTE courses include an employability skills strand with student expectations that are similar but not identical. She explained a suggestion by Chairman Kinsey that the board adopt a single set of employability skills standards that would apply to all CTE courses. Ms. Martinez added that staff recommended that the board consider one set of employability standards for level 1 and 2 courses and a different set for level 3 and 4 CTE courses.

Ms. Snyder explained that this item would add new courses and update existing courses that are being added to the new engineering career cluster.

MOTION AND VOTE: It was moved by Mrs. Little, seconded by Mr. Maynard, and carried without objection to recommend that the State Board of Education suspend operating rules to consider separate employability standards for first reading and filing authorization at the next State Board of Education meeting.

MOTION: It was moved by Mrs. Little to recommend that the State Board of Education approve for first reading and filing authorization new 19 TAC Chapter 127, <u>Texas Essential Knowledge and Skills</u> for Career Development and Career and Technical Education, Subchapter I, <u>Engineering</u>, §§127.402-127.419, 127.452, and 127.453.

MOTION AND VOTE: It was moved by Ms. Pickren, seconded by Dr. Young and carried to divide the question to consider §127.407, Environmental Engineering, separately.

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Pickren, and carried to recommend that the State Board of Education amend \$127.402(d)(1)(G) to read:

"demonstrate respect for differences diversity in the workplace;"

and apply this change as a conforming amendment to all courses where the language appears.

MOTION AND VOTE: It was moved by Ms. Pickren, seconded by Mr. Hall, and carried to recommend that the State Board of Education add new student expectation (d)(1)(D) to §§127.402-127.406, 127.408-419, 127.452 and 127.453 to read:

"identify the importance of meritocracy and a hard work ethic in the workplace;"

MOTION AND VOTE: It was moved by Ms. Pickren, seconded by Mr. Hickman, and carried to recommend that the State Board of Education amend $\S127.402(d)(1)(H)$ to read:

"identify consequences relating to discrimination , and harassment , and inequality;"

and apply this change as a conforming amendment in all other places where the language appears. **MOTION AND VOTE:** It was moved by Ms. Pickren, seconded by Mr. Francis, and carried to recommend that the State Board of Education add new student expectation (d)(1)(1) to §§127.402-127.406, 127.408-419, 127.452 and §127.453 to read:

(d)(1)(I) "identify the benefits of equal opportunity in the workplace; "

<u>MOTION AND VOTE</u>: It was moved by Mr. Francis, seconded by Mr. Maynard, and carried without objection to recommend that the State Board of Education amend (d)(1)(I) in §127.402 and in all other courses where the language appears to read:

(d)(1)(I) "identify and discuss elements of professional codes of conduct or creeds in engineering such as the National Society of Professional Engineers Code of Ethics for Engineers;"

(d)(1)(F) "<u>identify and</u> discuss the importance of professionalism, <u>standards of conduct</u>, and ethics in engineering design as defined by <u>the Texas Engineering Practice Act and rules concerning the practice</u> <u>of engineering and surveying</u>; professional organizations such as the National Society of Professional Engineers;"

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend §127.402(d)(6)(E) to read:

"define and discuss intellectual property laws such as patents, copyrights, <u>and trade secret law</u> and <u>their role in protecting proprietary information in the research process;</u>"

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 §127.402(d)(6)(F) to read:

"identify limitations in <u>information and</u> research such as outdated, conflicting, proprietary, or <u>limited</u> access to information;"

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Pickren, and carried to recommend that the State Board of Education amend $\S127.406(d)(5)(B)$ to read:

"relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of <u>various</u> diverse scientists and engineers as related to the content; and"

MOTION AND VOTE: It was moved by Mr. Francis, seconded by Ms. Pickren, and carried to recommend that the State Board of Education amend §127.408(b) to read:

"General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: at least one credit in a course from the Engineering Career Cluster and Physics or Chemistry. Prerequisite or corequisite: Algebra II. Recommended prerequisite or corequisite: Algebra II Physics. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course."

MOTION AND VOTE: It was moved by Mr. Francis, seconded by Ms. Pickren, and carried to recommend that the State Board of Education amend §127.409(b) to read:

"General requirements. This course is recommended for students in Grades <u>11</u> 10-12. Prerequisite: at least one credit from the Engineering Career Cluster <u>and Physics</u>. Prerequisites or corequisites: Algebra II<u>. and Chemistry. Recommended prerequisite or corequisite: Physics</u>. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for the successful completion of this course."

MOTION AND VOTE: It was moved by Mr. Hickman and seconded by Mr. Hall to recommend that the State Board of Education amend \$127.409(c)(3) to read:

"Students enrolled in Mechanics of Materials describe the mechanical behavior of engineering materials, including metals, ceramics, polymers, composites, welds, and adhesives, and the

applications of <u>welds</u>, load, deformation, stress and strain relationships for deformable bodies, and mechanical elements relevant to engineers. The course includes axially loaded members, buckling of columns, torsional members, beams, and failure."

The motion failed.

MOTION AND VOTE: It was moved by Mr. Francis, seconded by Ms. Pickren, and carried to recommend that the State Board of Education amend §127.410(b) to read:

"General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: at least one credit in a course from the Engineering Career Cluster <u>and Physics</u>. Prerequisite or corequisite: Algebra II. Recommended prerequisite or corequisite: Physics."

<u>MOTION AND VOTE</u>: It was moved by Mr. Hickman, seconded by Dr. Bell-Metereau, and carried without objection to recommend that the State Board of Education amend 127.412(d)(8)(C) to read:

"document requirements in correct format with appropriate standards such as the National Aeronautics and Space Administration (NASA), military-standards, and the International Council on Systems Engineering (INCOSE);"

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend §127.412(d)(11) to read:

"Concept generation. The student generates <u>multiple</u> systematic multiple concepts using appropriate ideation tools. The student is expected to:"

MOTION AND VOTE: It was moved by Mr. Francis and seconded by Ms. Pickren to recommend that the State Board of Education amend §127.415(b) to read:

"General requirements. Prerequisite: <u>Geometry</u> <u>Algebra I</u> and <u>either</u> Introduction to Computer-Aided Design and Drafting or Principles of Applied Engineering. Recommended prerequisite: Geometry. Students shall be awarded one credit for successful completion of this course."

The motion failed.

MOTION AND VOTE: It was moved by Ms. Brooks to recommend that the State Board of Education amend \$127.415(d)(18)(A) and strike \$127.415(d)(18)(B) as follows:

(d)(18)(A) "describe the potential impacts of <u>ecofriendly</u> sustainable practices on local and global communities, environments, and economies;"

(d)(18)(B) "describe sustainability standards used throughout the project life cycle;"

The motion failed.

MOTION AND VOTE: It was moved by Ms. Pickren and seconded by Mr. Hall to recommend that the State Board of Education strike \$127.415(d)(A) and (B) as follows:

(d)(18)(A) "describe the potential impacts of sustainable practices on local and global communities, environments, and economies;"

(d)(18)(B) "describe sustainability standards used throughout the project life cycle;"

<u>Aye:</u>	Ms. Brooks Mr. Francis Mr. Hall	Mr. Kinsey Mr. Maynard Ms. Pickren
<u>No:</u>	Dr. Bell-Metereau Ms. Childs Dr. Clark Mr. Hickman	Mrs. Little Ms. Perez-Diaz Mr. Reveles

The motion failed with 6 members voting Aye and 7 members voting No as follows:

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Mrs. Brooks, and carried to recommend that the State Board of Education amend $\S127.415(d)(18)(A)$ to read:

"describe the potential impacts, <u>costs</u>, and <u>benefits</u> of sustainable practices on local and global communities, environments, and economies;"

The motion carried.

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Mr. Reveles, and carried without objection to recommend that the State Board of Education amend \$127.415(d)(17)(A) to read:

"research and identify the fundamental engineering ethics established by the Texas Board of Professional Engineers and Land Surveyors and other professional organizations such as American Society of Civil Engineers, the National Society of Professional Engineers, the National Council of Examiners for Engineering and Surveying, and the National Institute of Engineering Ethics; and"

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend §127.416(d)(16)(A) to read:

"track team goals to verify completion of contribute project milestones;"

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Mr. Hall, and carried without objection to recommend that the State Board of Education amend §127.416(d)(18)(C) to read:

"explain how sustainable programs and certifications potentially impact the design elements <u>and cost</u> <u>of in-a</u> project;"

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Mr. Hall, and carried without objection to recommend that the State Board of Education amend §127.416(d)(18)(D) to read:

"explain how design choices potentially impact <u>human health</u>, the environment, and <u>the cost of a</u> <u>project human health</u>; and"

MOTION AND VOTE: It was moved by Dr. Bell-Metereau, seconded by Mr. Hickman, and carried without objection to recommend that the State Board of Education amend §127.416(d)(18)(E) to read:

"explain how elements of the construction process potentially impact <u>human health and</u> the environment-and human health."

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Mrs. Little, and carried without objection to recommend that the State Board of Education amend §127.417 to read:

(d)(8)(A) "research federal regulatory agencies and describe the role federal regulatory agencies serve in relation to an engineering projects such as the Environmental Protection Agency (EPA), Federal Aviation Administration (FAA), and Army Corps of Engineers;

(d)(8)(B) "research state regulatory agencies such as the Texas Department of Transportation (TxDOT), Texas Commission on Environmental Quality (TCEQ), and the Texas Railroad Commission (TRC) and describe the role these agencies serve in relation to an engineering projects;"

(d)(8)(C) "research local regulatory agencies <u>such as cities and counties</u> and describe the role local regulatory agencies serve in relation to <u>an engineering projects</u>; and"

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 §127.418(d)(5)(A) to read:

"identify and describe common building materials such as wood, masonry, <u>concrete</u>, metal, glass, aggregate, and plastic;"

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 (127.418(d))(5)(F) to read:

"research and describe sustainable building materials and , methods , and costs;"

MOTION AND VOTE: It was moved by Mr. Maynard, seconded by Ms. Pickren, and carried to recommend that the State Board of Education amend \$127.402(c)(4) to read:

"Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other <u>organizations that foster leadership and career development in the profession such as student chapters of related professional associations.</u> leadership or extracurricular organizations."

and apply this change as a conforming amendment to all courses where the language appears.

MOTION AND VOTE: It was moved by Mr. Francis and seconded by Mr. Hall to recommend that the State Board of Education amend §127.419(b) to read:

"General requirements. This course is recommended for students in Grades 10-12. Prerequisite: <u>Geometry.</u> Algebra I. Recommended prerequisites: Geometry and Introduction to Computer-Aided Design and Drafting. Students shall be awarded two credits for successful completion of this course."

The motion failed.

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Mr. Francis, and carried to recommend that the State Board of Education amend §127.411(d), to read:

- "(6) "<u>Applications for mechanical design. The student examines domestic, commercial, and</u> industrial applications of mechanical design. The student is expected to:
 - (A) explain applications of mechanical design in various industries, including medical, aeronautical, automotive, naval, and robotics industries;
 - (B) research and identify commercial applications for mechanical design such as heating and cooling systems and robotics; and
 - (C) identify and discuss household items that are impacted by mechanical design such environmental controls, refrigerators, washing machines, and clothes dryers."

"(d)(11)(I) "<u>identify and use</u> define engineering computational tools such as computer aided design (CAD), finite element analysis (FEA), or computational fluid dynamics (CFD)."

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Mrs. Little, and carried without objection to recommend that the State Board of Education adopt amendments to §127.412, as follows:

(d)(6)(C) "identify and discuss household items that are impacted by mechanical design such <u>as</u> environmental controls, refrigerators, washing machines, and clothes dryers."

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Dr. Bell-Metereau, and carried to recommend that the State Board of Education adopt amendments to §127.412, Mechanical Design II, as follows:

(d)(8)(G) "analyze how key mechanical design concepts such as heat transfer, mechanics of materials, statics, or fluids impact the design process, design requirements, and design decisions; and"

(d)(8)(G) "explain how the key mechanical engineering concepts relate to the requirements, such as heat transfer, statics, dynamics, or materials"

and deleting knowledge and skills (d)(17) and student expectations (d)(17)(A)-(C):

- " (17) Continuous learning. The student relates key mechanical engineering concepts in education and practice. The student is expected to:
 - (A) explain how key mechanical engineering concepts are addressed in college engineering plans of study;
 - (B) explain how to interpret an engineering job description; and
 - (C) identify which key mechanical engineering concepts are relevant and the minimum educational expectations for mechanical engineering positions."

The motion carried.

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend §127.413, as follows:

"(d)(16) Alternate applications for aerospace design. The student <u>examines</u> identifies and discusses alternate applications for aerospace design <u>in various industries</u> techniques, including the

automotive, naval, and other commercial industries and home products. The student is expected to:":

- "(11) Computerized design tools. The student understands that computerized technology is available for design and analysis. The student is expected to:
 - (A) identify engineering computational tools such as computer aided design (CAD), finite element analysis (FEA), or computational fluid dynamics (CFD); and
 - (B) explain the applications of engineering computational tools used in mechanical design."

and apply a conforming amendment to (d)(2)(B) in §§127.402-127.419 as follows:

"explain how factors, including complexity, scope, resources, ethics, regulations, manufacturability, <u>maintainability</u>, and technology, impact stages of the engineering design process;"

MOTION AND VOTE: It was moved by Mr. Maynard, seconded by Mr. Hickman, and carried without objection to recommend that the State Board of Education apply all conforming amendments relating to the employability skills and the amendment to (d)(2)(B) in §§127.402-127.419 to §127.407, Environmental Engineering.

MOTION AND VOTE: It was moved by Ms. Pickren and seconded by Mr. Hall, to recommend that the State Board of Education reject, §127.407, Environmental Engineering.

The motion failed with 5	members voting	Ave and 9 membe	rs voting No as follows:
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Ms. Brooks	Ms. Pickren
Mr. Francis	Dr. Young
Mr. Hall	
Dr. Bell-Metereau	Mr. Maynard
Ms. Childs	Ms. Perez-Diaz
Dr. Clark	Mr. Reveles
Dr. Ellis	Mr. Hickman
Mrs. Little	
	Mr. Francis Mr. Hall Dr. Bell-Metereau Ms. Childs Dr. Clark Dr. Ellis

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend §127.407(c)(3) to read:

"In Environmental Engineering, students research, develop, and design solutions related to water, land, and energy <u>problems</u>, with consideration to ethics and regulations. Using technology and the engineering design process, students devise innovative solutions to address current and future engineering challenges."

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend \$127.407(d)(4)(C) to read:

"evaluate and explain an engineering ethical dilemma between environmental <u>considerations</u> limitations and the needs and wants of society;"

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend \$127.407(d)(6)(G) to read:

"explain why there are often multiple viable solutions."

<u>MOTION AND VOTE</u>: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend \$127.407(d)(10)(F) to read:

"outline the stages of treatment that a typical <u>septic system and modern sewage treatment plant use</u> uses to treat sewage water;"

<u>MOTION AND VOTE</u>: It was moved by Mr. Hickman, seconded by Ms. Childs, and carried without objection to recommend that the State Board of Education amend §127.407(d)(11)(A) to read:

"explain the differences between <u>and costs of</u> renewable and non-renewable sources of energy and provide examples of each;"

MOTION AND VOTE: It was moved by Mr. Hickman, seconded by Mrs. Little, and carried to recommend that the State Board of Education strike \$127.407(d)(11)(C):

"calculate the carbon footprint of a household;"

<u>MOTION AND VOTE</u>: It was moved by Mr. Hickman, seconded by Mrs. Little, and carried without objection to recommend that the State Board of Education amend $\S127.407(d)(12)(A)$ to read:

"describe mitigation techniques and their associated costs for air pollutants and greenhouse gas emissions;"

MOTION AND VOTE: It was moved by Mr. Hickman and seconded by Mr. Hall to recommend that the State Board of Education amend \$127.407(d)(15) to read:

"Regulations. The student understands the role of global, national, and local standards and regulations in environmental design. The student is expected to;"

The motion carried.

MOTION AND VOTE: It was moved by Ms. Childs and seconded by Dr. Clark to recommend that the State Board of Education amend \$127.407 by adding a new (d)(11)(C) to read:

"explain what a carbon footprint is;"

The motion failed.

<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 127, <u>Texas Essential Knowledge and Skills for Career Development and Career and Technical Education</u>, Subchapter I, <u>Engineering</u>, §127.407, <u>Environmental Science</u>, as amended. The motion carried.

<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 127, <u>Texas Essential Knowledge and Skills for Career Development and Career and Technical Education</u>, Subchapter I, <u>Engineering</u>, §§127.402-127.406, and §§127.408-127.419, as amended. The motion carried.

DISCUSSION ITEMS

9. Discussion of Proposed New Texas Essential Knowledge and Skills for Career and Technical Education Courses (Roard agondo page L 241)

(Board agenda page I-241)

This item was postponed to the January 30, 2025, meeting of the Committee of the Full Board.

10. Discussion of Pending Litigation (Board agenda page I-244)

The committee did not discuss pending litigation; therefore, no executive session was held.

DISCUSSION ITEM

11. Ethics Training

(Board agenda page I-21)

This item was postponed from the January 28, 2025, meeting of the Committee of the Full Board.

Adrienne Butcher, TEA Ethics Provider, presented a recent Texas Ethics Commission Opinion that concerns how the three statewide revolving door statutes apply to former SBOE Members and discussed the Texas Education Code revolving door provision and prohibitions of certain individuals from making campaign contributions and participating in campaigns of SBOE Members. Mr. Maska also answered ethics questions from the SBOE Members.

Chairman Kinsey adjourned the meeting at 10:24 pm.