Texas Essential Knowledge and Skills for Grade 4

§110.6. English Language Arts and Reading, Grade 4, Adopted 2017.

(a) Introduction.

(1) The English language arts and reading Texas Essential Knowledge and Skills (TEKS) embody the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing to ensure a literate Texas. The strands are integrated and progressive with students continuing to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and

(3) Text complexity increases with challenging vocabulary, sophisticated sentence structures, nuanced text features, cognitively demanding content, and subtle relationships among ideas (Texas Education Agency, *STAAR Performance Level Descriptors*, 2013). As skills and knowledge are obtained in each of the seven strands, students will continue to apply earlier standards with greater depth to increasingly complex texts in multiple genres as they become self-directed, critical learners who work collaboratively while continuously using metacognitive skills.

(4) English language learners (ELLs) are expected to meet standards in a second language; however, their proficiency in English influences the ability to meet these standards. To demonstrate this knowledge throughout the stages of English language acquisition, comprehension of text requires additional scaffolds such as adapted text, translations, native language support, cognates, summaries, pictures, realia, glossaries, bilingual dictionaries, thesauri, and other modes of

comprehensible input. ELLs can and should be encouraged to use knowledge of their first language to enhance vocabulary development; vocabulary needs to be in the context of connected discourse so that it is meaningful. Strategic use of the student's first language is important to ensure linguistic, affective, cognitive, and academic development in English.

(5) Current research stresses the importance of effectively integrating second language acquisition with quality content area education in order to ensure that ELLs acquire social and academic language proficiency in English, learn the knowledge and skills, and reach their full academic potential. Instruction must be linguistically accommodated in accordance with the English Language Proficiency Standards (ELPS) and the student's English language proficiency levels to ensure the mastery of knowledge and skills in the required curriculum is accessible. For a further understanding of second language acquisition needs, refer to the ELPS and proficiency-level descriptors adopted in Chapter 74, Subchapter A, of this title (relating to Required Curriculum).

(6) Oral language proficiency holds a pivotal role in school success; verbal engagement must pTge(s ac)-nsure tdt

(E) make connections to personal experiences, ideas in other texts, and society;

(F) make inferences and use evidence to support understanding;

(G) evaluate details read to determine key ideas;

(H) synthesize information to create new understanding; and

(I) monitor comprehension and make adjustments such as re-reading, using background knowledge, asking questions, and annotating when understanding breaks down.

(7) Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to:

(A) describe personal connections to a variety of sources, including self-selected texts;

(B) write Th (r)-1.e

(vi) prepositions and prepositional phrases;

(vii) pronouns, including reflexive;

(viii)

(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

(A) apply mathematics to problems arising in everyday life, society, and the workplace;

(B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;

(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;

(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;

(E) create and use representations to organize, record, and communicate mathematical ideas;

(F) analyze mathematical relationships to connect and communicate mathematical ideas; and

(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:

(A) interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left;

(B) represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals;

(C) compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols >, <, or =;

(D) round whole numbers to a given place value through the hundred thousands place;

(E) represent decimals, including tenths and hundredths, using concrete and visual models and money;

(F) compare and order decimals using concrete and visual models to the hundredths;

(G)

(A) identify points, lines, line segments, rays, angles, and perpendicular and parallel lines;

(B) identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure;

(C) apply knowledge of right angles to identify acute, right, and obtuse triangles; and

(D) classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.

(7) Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:

(A) illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle. Angle measures are limited to whole numbers;

(B) illustrate degrees as the units used to measure an angle, where 1/360 of any circle is one degree and an angle that "cuts" n/360 out of any circle whose center is at the angle's vertex has a measure of n degrees. Angle measures are limited to whole numbers;

(C) determine the approximate measures of angles in degrees to the nearest whole number using a protractor;

(D) draw an angle with a given measure; and

[redacted]n-overlapping adjacent angles given one or both angle measures.

(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:

[redacted]-1.8 (t)-1.7 10.98 03 0 Td(s (y)-1.7 (h)

(E) describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending.

---

§112.6. Science, Grade 4, Adopted 2021.

(a) Introduction.

(1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 4, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, correlative, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations includes descriptive investigations, which have no hypothesis that tentatively answers the research question and involve collecting data and recording observations without making comparisons; correlative and comparative investigations, which have a hypothesis that predicts a relationship and involve collecting data, measuring variables relevant to the hypothesis that are manipulated, and comparing results; and experimental investigations, which involve processes similar to comparative investigations but in which a hypothesis can be tested by comparing a treatment with a control.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 50% of instructional time.

(B) Matter and energy. Students investigate matter's measurable properties, including mass, volume, states, temperature, magnetism, and relative density, to determine how it is classified, changed, and used. Students compare and contrast a variety of mixtures, including solutions, and demonstrate that matter is conserved.

(C) Force, motion, and energy. Students investigate forces, including friction, gravity, and magnetism, to observe their effects on objects. They differentiate between mechanical,

(B) model and describe slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice; and

(C) differentiate between weather and climate.

(11) Earth and space. The student understands how natural resources are important and can be managed. The student is expected to:

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

(B) explain the critical role of energy resources to modern life and how conservation, disposal, and recycling of natural resources impact the environment; and

(C) determine the physical properties of rocks that allow Earth's natural resources to be stored there.

(12) Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments. The student is expected to:

(A) investigate and explain how most producers can make their own food using sunlight, water, and carbon dioxide through the cycling of matter;

(B) describe the cycling of matter and flow of energy through food webs, including the roles of the Sun, producers, consumers, and decomposers; and

(C) identify and describe past environments based on fossil evidence, including common Texas fossils.

(13) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that function to help them survive within their environments. The student is expected to:

(A) explore and explain how structures and functions of plants such as waxy leaves and deep roots enable them to survive in their environment; and

(B) differentiate between inherited and acquired physical traits of organisms.

Source: The provisions of this §112.6 adopted to be effective April 26, 2022, 47 TexReg 2136.

---

§113.15. Social Studies, Grade 4, Adopted 2022.

(a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.

(b) Introduction.

(1) In Grade 4, students examine the history of Texas from the early beginnings to the present within the context of influences of North America. Historical content focuses on Texas history, including the Texas Revolution, establishment of the Republic of Texas, and subsequent annexation to the United States. Students discuss important issues, events, and individuals of the 19th, 20th, and 21st centuries. Students conduct a thorough study of regions in Texas and North America resulting from human activity and from physical features. The location, distribution, and patterns of economic activities and settlement in Texas further enhance the concept of regions. Students describe how early American Indians in Texas and North America met their basic economic needs. Students identify motivations for European exploration and colonization and reasons for the establishment of Spanish settlements and missions. Students explain how

American Indians governed themselves and identify characteristics of Spanish colonial and Mexican governments in Texas. Students recite and explain the meaning of the Pledge to the Texas Flag. Students identify the contributions of people of various racial, ethnic, and religious groups to Texas and describe the impact of science and technology on life in the state. Students use critical-thinking skills to identify cause-and-effect relationships, compare and contrast, and make generalizations and predictions.

(2) To support the teaching of the essential knowledge and skills, the use of a variety of rich primary and secondary source material such as documents, biographies, novels, speeches, letters, poetry, songs, and artworks is encouraged. Where appropriate, local topics should be included. Motivating resources are available from museums, historical sites, presidential libraries, and local and state preservation societies.

(3) The eight strands of the essential knowledge and skills for social studies are intended to be integrated for instructional purposes. Skills listed in the social studies skills strand in subsection (c) of this section should be incorporated into the teaching of all essential knowledge and skills for social studies. A greater depth of understanding of complex content material can be attained when integrated social studies content from the various disciplines and critical-thinking skills are taught together. Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(4) Students identify the role of the U.S. free enterprise system within the parameters of this course and understand that this system may also be referenced as capitalism or the free market system.

(5) Throughout social studies in Kindergarten-Grade 12, students build a foundation in history; geography; economics; government; citizenship; culture; science, technology, and society; and social studies skills. The content, as appropriate for the grade level or course, enables students to understand the importance of patriotis7 (ci)-1 tooen

Pursuit of Happiness--That to secure these Rights, Governments are instituted among Men, deriving their just Powers from the Consent of the Governed."

(8) Students discuss how and whether the actions of U.S. citizens and the local, state, and federal governments have achieved the ideals espoused in the founding documents.

(c) Knowledge and skills.

(1) History. The student understands the origins, similarities, and differences of American Indian groups in Texas before European exploration. The student is expected to:

(A) explain the possible origins of American Indian groups in Texas;

(B) identify and compare the ways of life of American Indian groups in Texas before European exploration such as the Lipan Apache, Karankawa, Caddo, and Jumano;

(C) describe the cultural regions in which American Indians lived such as Gulf, Plains, Puebloan, and Southeastern; and

(D) locate American Indian groups remaining in Texas such as the Ysleta Del Sur Pueblo, Alabama-Coushatta, and Kickapoo.

(2) History. The student understands the causes and effects of European exploration and colonization of Texas. The student is expected to:

(A) summarize motivations for European exploration and settlement of Texas, including economic opportunity, competition, and the desire for expansion;

(B) identify the accomplishments and explain the impact of significant explorers, including Cabeza de Vaca; Francisco Coronado; and René Robert Cavelier, Sieur de la Salle, on the settlement of Texas;

(C) explain when, where, and why the Spanish established settlements and Catholic missions in Texas as well as important individuals;

(D) identify Texas' role in the Mexican War of Independence and the war's impact on the development of Texas; and

(E) identify the accomplishments and explain the economic motivations and impact of significant empresarios, including Stephen F. Austin and Martín de León, on the

(E) explain the events that led to the annexation of Texas to the United States and the impact of the U.S.-Mexican War.

(4) History. The student understands the political, economic, and social changes in Texas during the last half of the 19th century. The student is expected to:

(A)

(9) Economics. The student understands the basic economic activities of early societies in Texas. The student is expected to:

(A) explain the economic activities various early American Indian groups in Texas used to meet their needs and wants such as farming, trading, and hunting; and

(B) explain the economic activities early settlers to Texas used to meet their needs and wants.

(10) Economics. The student understands the characteristics and benefits of the free enterprise system in Texas. The student is expected to:

(A) describe how the free enterprise system works, including supply and demand;

(B) identify examples of the benefits of the free enterprise system such as choice and opportunity; and

(C) describe the development of the free enterprise system in Texas such as the growth of cash crops by early colonists and the railroad boom.

(11) Economics. The student understands patterns of work and economic activities in Texas. The student is expected to:

(A) identify how people in different regions of Texas earn their living, past and present;

(B) explain how physical geographic factors such as climate and natural resources have influenced the location of economic activities in Texas;

(C) identify the effects of exploration, immigration, migration, and limited resources on the economic development and growth of Texas; and

(D) explain how developments in transportation and communication have influenced economic activities in Texas.

(12) Government. The student understands how people organized governments in different ways during the early development of Texas. The student is expected to:

(A) compare how various American Indian groups such as the Caddo and the Comanche governed themselves; and

(B) compare characteristics of the Spanish colonial government and the early Mexican governments in Texas.

(13) Government. The student understands important ideas in historical documents of Texas and the United States. The student is expected to:

(A) identify the purposes and explain the importance of the Texas Declaration of Independence and the Texas Constitution;

(B) identify and explain the basic functions of the three branches of government according to the Texas Constitution; and

(C) identify the intent, meaning, and importance of the Declaration of Independence, the U.S. Constitution, and the Bill of Rights (Celebrate Freedom Week).

(14) Citizenship. The student understands important customs, symbols, and celebrations of Texas. The student is expected to:

(A) explain the meaning of various patriotic symbols and landmarks of Texas, including the six flags that flew over Texas, the Alamo, and the San Jacinto Monument;

(B) sing or recite "Texas, Our Texas";

(C) recite and explain the meaning of the Pledge to the Texas Flag; and

(D) describe the origins and significance of state celebrations such as Texas Independence Day and Juneteenth.

(15) Citizenship. The student understands the importance of active individual participation in the democratic process. The student is expected to:

(A) identify important individuals who have participate ofp(o:

6

Elementary Schools (FLES) settings with consistent and frequent exposure. For districts that offer languages in elementary school, the expected student outcomes are the same as those designated at levels I-IV in Subchapter C of this chapter (relating to Texas Essential Knowledge and Skills for Languages Other Than English).

(b) Districts may offer a level of a language in a variety of scheduling arrangements that may extend or reduce the traditional schedule when careful consideration is given to the instructional time available on a campus and the language ability, access to programs, and motivation of students.

---

§115.16. Health Education, Grade 4, Adopted 2020.

(a) Introduction.

(1) The goal of health education is to provide instruction that allows youth to develop and sustain health-promoting behaviors throughout their lives. The understanding and application of these standards will allow students the ability to gather, interpret, and understand health information; achieve health literacy; and adapt to the ever-evolving science of health. The health education knowledge and skills should be presented to students in a positive manner to support the development of a healthy self-concept and responsible decision making. The standards will help students reinforce, foster, and apply positive character traits.

(2) There are essential skills that repeat throughout the six strands and embody the interconnection of health literacy. These skills include decision making, problem solving, goal setting, maintaining healthy relationships with self and others, seeking help and support, and recognizing various influences on health such as social, environmental, media, and genetic. These skills, developed early on and reinforced throughout a student's education, will foster mastery of health concepts. Health class educators are encouraged to partner with school counselors where available to schedule time for them to deliver classroom guidance lessons to help teach these essential competencies.

(3) In Grade 4 and higher, students gain an understanding of health information and skills through six strands: physical health and hygiene; mental health and wellness; healthy eating and physical activity; injury and violence prevention and safety; alcohol, tobacco, and other drugs; and reproductive and sexual health.

(A) Physical health and hygiene education helps to prepare students for improved lifelong health outcomes. Learning about body systems will lay the foundation for personal health and hygiene. Health literacy and preventative behaviors empower students to make informed choices to support self, family, and community.

(B) The mental health and wellness strand recognizes that the knowledge and skills necessary to manage emotions, reactions, and relationships are essential to reaching one's full potential. Students gain knowledge about social and emotional health, developing a healthy self-concept, understanding risk and protective factors, and identifying and managing mental health and wellness concerns. In the early grades, students develop fluency around emotions and self-regulation and understand the relationship between feelings, thoughts, and behavior. In subsequent grades, students learn and practice appropriate ways to solve interpersonal conflicts, work to develop a positive self-image, and develop healthy self-management skills.

(C) The healthy eating and physical activity strand addresses the importance of nutrition and physical activity to support a healthy lifestyle. Students apply critical-thinking and decision-making skills to make positive health choices. Students learn about essential nutrients, food groups, portion control, government nutritional recommendations, and the

(A) describe methods for managing concerns related to long-term health conditions for self

(A) describe the short- and long-term harmful effects of alcohol, tobacco, other drugs, and dangerous substances such as inhalants and household products on mental and social health; and

(B) describe the legal consequences of the misuse of alcohol, tobacco, other drugs, and dangerous substances.

(17) Alcohol, tobacco, and other drugs--treatment. The student understands how to seek emergency help for self and others in poisoning and overdose situations. The student is expected to describe

(B) Physically literate students have the ability to develop a lifetime of wellness. Physical literacy can be described as the ability to move with competence and confidence, to acquire knowledge and understanding, and to value and take responsibility for engagement in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person (Mandigo, Francis, Lodewyk & Lopez, 2012, and Whitehead, 2016).

(C) Research shows physical education is important to the development of the whole child and increases a lifetime of wellness. The Association for Supervision and Curriculum Development and the National Academy of Medicine support the belief that physical education, taught at a developmentally appropriate level, improves physical fitness and skill development, supports and improves academic achievement, reinforces self-discipline and teacher goal setting, reduces stress and increases blood flow to the brain, strengthens peer relationships, and improves self-confidence and self-esteem.

(2) The physical education standards are categorized into five strands that are of equal importance and value. The movement patterns and movement skills strand guides the physically literate student in the development of fundamental movement patterns, spatial and body awareness, and rhythmic activities. The performance strategies strand guides the physically literate student in utilizing strategies in fundamental components of games, activities, and outdoor and recreational pursuits. The health, physical activity, and fitness strand encompasses health-related fitness, environmental awareness, and safety practices that guide students to a health-enhancing, physically active lifestyle. The physically literate student demonstrates skills and mechanics used during physical activity and analyzes data used during fitness performance. The physically literate student recognizes the correlation between nutrition, hydration, and physical activity. The social and emotional health strand incorporates working with others, responding to class expectations, and applying self-management skills. The lifetime wellness strand engages students in physical activity for the purposes of self-expression, enjoyment, and challenge.

(3) Quality physical education programs include a comprehensive curriculum, physical activity, safety policies, safe environments, qualified physical education specialists instructing the class, and student assessment and do not use physical activity as a form of punishment. Texas state law outlines state requirements that support these essential components. In accordance with state law, physical education curriculum and instruction must be sequential, developmentally appropriate, and designed to meet the needs of all students, including students with disabilities and of all physical ability levels. At least 50% of the physical education class must be used for actual stude (r)-1.4ll0 15.6346 (ab)-3.8 (i) (t)-1.7 (s 9)-5.8 (l)-1.7 (aw)]TJ0 -1.148 TD[o)- c[a)4.4 (a)4 4 (a)c (a)t

(9) Health, physical activity, and fitness--analyze data. The physically literate student demonstrates competency in the ability to analyze data used during fitness performance. The student is expected to:

(A) develop personal fitness goals for health-related fitness; and

(B) track progress and analyze data for health-related fitness activities.

(10) Health, physical activity, and fitness--nutrition and hydration. The physically literate student recognizes the correlation between nutrition, hydration, and physical activity. The student is expected to:

(A) examine the relationship between nutrition and optimal physical performance; and

(B)

(A) differentiate among types of and participate in moderate to vigorous physical activities for a sustained period of time on a regular basis using technology when available; and

(B) participate in a variety of physical activities in the school and community for personal enjoyment.

---

§117.114. Art, Grade 4, Adopted 2013.

(a) Introduction.

(1) The fine arts incorporate the study of dance, music, theatre, and the visual arts to offer unique experiences and empower students to explore realities, relationships, and ideas. These disciplines engage and motivate all students through active learning, critical thinking, and innovative problem solving. The fine arts develop cognitive functioning and increase student academic achievement, higher-order thinking, communication, and collaboration skills, making the fine arts

(E) perform simple part work, including rhythmic and melodic ostinati, derived from known repertoire; and

(F) interpret through performance new and previously learned music symbols and terms referring to tempo; dynamics, including crescendo and decrescendo; and articulation, including staccato and legato.

(4) Creative Expression: [illegible]

(2) Four basic strands--foundations: inquiry and understanding; creative expression; historical and

(A)

empower students to apply current and emerging technologies in their careers, their education, and beyond.

(2) The technology applications Texas Essential Knowledge and Skills (TEKS) consist of five strands that prepare students to be literate in technology applications by Grade 8: cok cf-1.7 (cEn)-3.7 (t)-1.7 c nti51.7 (n)g c24.4 (r02.7 (e24.4 (a24.4 tivt)-1.7 (tyl)-1.7 ((a24.4 (

(3) Creativity and innovation--innovative design process. The student takes an active role in learning by using a design process to solve authentic problems for a local or global audience, using a variety of technologies. The student is expected to:

(A) explain the importance of and demonstrate personal skills and behaviors, including problem solving and questioning, effective communication, following directions, mental agility, and metacognition, that are needed to implement a design process successfully; and

(B) apply an appropriate design process that includes components to improve processes and

apply an appriappla (l)2.3 .Tw T[an)-3.8 8.97]TJ0 Tc 0 Tw 1.448 0 Td( )T3 /Type /Pa5.536c 0