

## Texas Essential Knowledge and Skills for Kindergarten

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### §110.2. English Language Arts and Reading, Kindergarten, 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 literacy.
- (2) The seven strands of the essential knowledge and skills for English language arts and reading are intended to be integrated for instructional purposes and are recursive in nature. Strands include the four domains of language (listening, speaking, reading, and writing) and their application in order to accelerate the acquisition of language skills so that students develop high levels of social and academic language proficiency. Although some strands may require more instructional time, each strand is of equal value, may be presented in any order, and should be integrated throughout the year. It is important to note that encoding (spelling) and decoding (reading) are reciprocal skills. Decoding is internalized when tactile and kinesthetic opportunities (encoding) are provided. Additionally, students should engage in academic conversations, write, read, and be read to on a daily basis with opportunities for cross-curricular content and student choice.
- (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 be maximized across grade levels (Kinsella, 2010). In order for students to become thinkers and proficient speakers in science, social studies, mathematics, fine arts, language arts and reading, and career and technical education, they must have multiple opportunities to practice and apply the academic language of each discipline (Fisher, Frey, & Rothenberg, 2008).
  - (7) 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.
- (b) Knowledge and skills.
- (1) Developing and sustaining foundational language skills: listening, speaking, discussion, and thinking--oral language. The student develops oral language through listening, speaking, and discussion. The student is expected to:
    - (A) listen actively and ask questions to understand information and answer questions using multi-word responses;
    - (B) restate and follow oral directions that involve a short, related sequence of actions;
    - (C) share information and ideas by speaking audibly and clearly using the conventions of language;
    - (D) work collaboratively with others by following agreed-upon rules for discussion, including taking turns; and
    - (E) develop social communication such as introducing himself/herself, using common greetings, and expressing needs and wants.
  - (2) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--beginning reading and writing. The student develops word structure knowledge through phonological awareness, print concepts, phonics, and morphology to communicate, decode, and spell. The student is expected to:
    - (A) demonstrate phonological awareness by:
      - (i) identifying and producing rhyming words;
      - (ii) recognizing spoken alliteration or groups of words that begin with the same spoken onset or initial sound;
      - (iii) identifying the individual words in a spoken sentence;
      - (iv) identifying syllables in spoken words;
      - (v) blending syllables to form multisyllabic words;

- (vi) segmenting multisyllabic words into syllables;
  - (vii) blending spoken onsets and rimes to form simple words;
  - (viii) blending spoken phonemes to form one-syllable words;
  - (ix) manipulating syllables within a multisyllabic word; and
  - (x) segmenting spoken one-syllable words into individual phonemes;
- (B) demonstrate and apply phonetic knowledge by:
- (i) identifying and matching the common sounds that letters represent;
  - (ii) using letter-sound relationships to decode, including VC, CVC, CCVC, and CVCC words;
  - (iii) recognizing that new words are created when letters are changed, added, or deleted such as it - pit - tip - tap; and
  - (iv) identifying and reading at least 25 high-frequency words from a research-based list;
- (C) demonstrate and apply spelling knowledge by:
- (i) spelling words with VC, CVC, and CCVC;
  - (ii) spelling words using sound-spelling patterns; and
  - (iii) spelling high-frequency words from a research-based list;
- (D) demonstrate print awareness by:
- (i) identifying the front cover, back cover, and title page of a book;
  - (ii) holding a book right side up, turning pages correctly, and knowing that reading moves from top to bottom and left to right with return sweep;
  - (iii) recognizing that sentences are comprised of words separated by spaces and recognizing word boundaries;
  - (iv) recognizing the difference between a letter and a printed word; and
  - (v) identifying all uppercase and lowercase letters; and
- (E) develop handwriting by accurately forming all uppercase and lowercase letters using appropriate directionality.
- (3) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--vocabulary. The student uses newly acquired vocabulary expressively. The student is expected to:
- (A) use a resource such as a picture dictionary or digital resource to find words;
  - (B) use illustrations and texts the student is able to read or hear to learn or clarify word meanings; and
  - (C) identify and use words that name actions; directions; positions; sequences; categories such as colors, shapes, and textures; and locations.
- (4) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--self-sustained reading. The student reads grade-appropriate texts independently. The student is expected to self-select text and interact independently with text for increasing periods of time.

- (5) Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to:
- (A) establish purpose for reading assigned and self-selected texts with adult assistance;
  - (B) generate questions about text before, during, and after reading to deepen understanding and gain information with adult assistance;
  - (C) make and confirm predictions using text features and structures with adult assistance;
  - (D) create mental images to deepen understanding with adult assistance;
  - (E) make connections to personal experiences, ideas in other texts, and society with adult assistance;
  - (F) make inferences and use evidence to support understanding with adult assistance;
  - (G) evaluate details to determine what is most important with adult assistance;
  - (H) synthesize information to create new understanding with adult assistance; and
  - (I) monitor comprehension and make adjustments such as re-reading, using background knowledge, checking for visual cues, and asking questions when understanding breaks down with adult assistance.
- (6) 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;
  - (B) provide an oral, pictorial, or written response to a text;
  - (C) use text evidence to support an appropriate response;
  - (D) retell texts in ways that maintain meaning;
  - (E) interact with sources in meaningful ways such as illustrating or writing; and
  - (F) respond using newly acquired vocabulary as appropriate.
- (7) Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts--literary elements. The student recognizes and analyzes literary elements within and across increasingly complex traditional, contemporary, classical, and diverse literary texts. The student is expected to:
- (A) discuss topics and determine the basic theme using text evidence with adult assistance;
  - (B) identify and describe the main character(s);
  - (C) describe the elements of plot development, including the main events, the problem, and the resolution for texts read aloud with adult assistance; and
  - (D) describe the setting.
- (8) Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts--genres. The student recognizes and analyzes genre-specific characteristics, structures, and purposes within and across increasingly complex traditional, contemporary, classical, and diverse texts. The student is expected to:
- (A) demonstrate knowledge of distinguishing characteristics of well-known children's literature such as folktales, fables, fairy tales, and nursery rhymes;

- (B) discuss rhyme and rhythm in nursery rhymes and a variety of poems;
  - (C) discuss main characters in drama;
  - (D) recognize characteristics and structures of informational text, including:
    - (i) the central idea and supporting evidence with adult assistance;
    - (ii) titles and simple graphics to gain information; and
    - (iii) the steps in a sequence with adult assistance;
  - (E) recognize characteristics of persuasive text with adult assistance and state what the author is trying to persuade the reader to think or do; and
  - (F) recognize characteristics of multimodal and digital texts.
- (9) Author's purpose and craft: listening, speaking, reading, writing, and thinking using multiple texts. The student uses critical inquiry to analyze the authors' choices and how they influence and communicate meaning within a variety of texts. The student analyzes and applies author's craft purposefully in order to develop his or her own products and performances. The student is expected to:
- (A) discuss with adult assistance the author's purpose for writing text;
  - (B) discuss with adult assistance how the use of text structure contributes to the author's purpose;
  - (C) discuss with adult assistance the author's use of print and graphic features to achieve specific purposes;
  - (D) discuss with adult assistance how the author uses words that help the reader visualize; and
  - (E) listen to and experience first- and third-person texts.
- (10) Composition: listening, speaking, reading, writing, and thinking using multiple texts--writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to:
- (A) plan by generating ideas for writing through class discussions and drawings;
  - (B) develop drafts in oral, pictorial, or written form by organizing ideas;
  - (C) revise drafts by adding details in pictures or words;
  - (D) edit drafts with adult assistance using standard English conventions, including:
    - (i) complete sentences;
    - (ii) verbs;
    - (iii) singular and plural nouns;
    - (iv) adjectives, including articles;
    - (v) prepositions;
    - (vi) pronouns, including subjective, objective, and possessive cases;
    - (vii) capitalization of the first letter in a sentence and name;
    - (viii) punctuation marks at the end of declarative sentences; and

- (ix) correct spelling of words with grade-appropriate orthographic patterns and rules and high-frequency words; and
  - (E) share writing.
  - (11) Composition: listening, speaking, reading, writing, and thinking using multiple texts--genres. The student uses genre characteristics and craft to compose multiple texts that are meaningful. The student is expected to:
    - (A) dictate or compose literary texts, including personal narratives; and
    - (B) dictate or compose informational texts.
  - (12) Inquiry and research: listening, speaking, reading, writing, and thinking using multiple texts. The student engages in both short-term and sustained recursive inquiry processes for a variety of purposes. The student is expected to:
    - (A) generate questions for formal and informal inquiry with adult assistance;
    - (B) develop and follow a research plan with adult assistance;
    - (C) gather information from a variety of sources with adult assistance;
    - (D) demonstrate understanding of information gathered with adult assistance; and
    - (E) use an appropriate mode of delivery, whether written, oral, or multimodal, to present results.
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## **§111.2. Mathematics, Kindergarten, Adopted 2012.**

- (a) Introduction.
  - (1) The desire to achieve educational excellence is the driving force behind the Texas essential knowledge and skills for mathematics, guided by the college and career readiness standards. By embedding statistics, probability, and finance, while focusing on computational thinking, mathematical fluency, and solid understanding, Texas will lead the way in mathematics education and prepare all Texas students for the challenges they will face in the 21st century.
  - (2) The process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will 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. Students will select appropriate tools such as real objects, manipulatives, algorithms, paper and pencil, and technology and techniques such as mental math, estimation, number sense, and generalization and abstraction to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, computer programs, and language. Students will use mathematical relationships to

generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

- (3) For students to become fluent in mathematics, students must develop a robust sense of number. The National Research Council's report, "Adding It Up," defines procedural fluency as "skill in carrying out procedures flexibly, accurately, efficiently, and appropriately." As students develop procedural fluency, they must also realize that true problem solving may take time, effort, and perseverance. Students in Kindergarten are expected to perform their work without the use of calculators.
  - (4) The primary focal areas in Kindergarten are understanding counting and cardinality, understanding addition as joining and subtraction as separating, and comparing objects by measurable attributes.
    - (A) Students develop number and operations through several fundamental concepts. Students know number names and the counting sequence. Counting and cardinality lay a solid foundation for number. Students apply the principles of counting to make the connection between numbers and quantities.
    - (B) Students use meanings of numbers to create strategies for solving problems and responding to practical situations involving addition and subtraction.
    - (C) Students identify characteristics of objects that can be measured and directly compare objects according to these measurable attributes.
  - (5) 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.
- (b) Knowledge and skills.
- (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 understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system. The student is expected to:
- (A) count forward and backward to at least 20 with and without objects;
  - (B) read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures;
  - (C) count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order;
  - (D) recognize instantly the quantity of a small group of objects in organized and random arrangements;
  - (E) generate a set using concrete and pictorial models that represents a number that is more than, less than, and equal to a given number up to 20;
  - (F) generate a number that is one more than or one less than another number up to at least 20;
  - (G) compare sets of objects up to at least 20 in each set using comparative language;
  - (H) use comparative language to describe two numbers up to 20 presented as written numerals; and
  - (I) compose and decompose numbers up to 10 with objects and pictures.
- (3) Number and operations. The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems. The student is expected to:
- (A) model the action of joining to represent addition and the action of separating to represent subtraction;
  - (B) solve word problems using objects and drawings to find sums up to 10 and differences within 10; and
  - (C) explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete and pictorial models, and number sentences.

- (4) Number and operations. The student applies mathematical process standards to identify coins in order to recognize the need for monetary transactions. The student is expected to identify U.S. coins by name, including pennies, nickels, dimes, and quarters.
- (5) Algebraic reasoning. The student applies mathematical process standards to identify the pattern in the number word list. The student is expected to recite numbers up to at least 100 by ones and tens beginning with any given number.
- (6) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:
  - (A) identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles;
  - (B) identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world;
  - (C) identify two-dimensional components of three-dimensional objects;
  - (D) identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably;
  - (E) classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size; and
  - (F) create two-dimensional shapes using a variety of materials and drawings.
- (7) Geometry and measurement. The student applies mathematical process standards to directly compare measurable attributes. The student is expected to:
  - (A) give an example of a measurable attribute of a given object, including length, capacity, and weight; and
  - (B) compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.
- (8) Data analysis. The student applies mathematical process standards to collect and organize data to make it useful for interpreting information. The student is expected to:
  - (A) collect, sort, and organize data into two or three categories;
  - (B) use data to create real-object and picture graphs; and
  - (C) draw conclusions from real-object and picture graphs.
- (9) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:

- (A) identify ways to earn income;
  - (B) differentiate between money received as income and money received as gifts;
  - (C) list simple skills required for jobs; and
  - (D) distinguish between wants and needs and identify income as a source to meet one's wants and needs.
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### **§112.11. Science, Kindergarten, Adopted 2017.**

- (a) Introduction.
  - (1) In Kindergarten, students observe and describe the natural world using their senses. Students do science as inquiry in order to develop and enrich their abilities to understand scientific concepts and processes. Students develop vocabulary through their experiences investigating properties of common objects, earth materials, and organisms.
    - (A) A central theme throughout the study of scientific investigation and reasoning; matter and energy; force, motion, and energy; Earth and space; and organisms and environment is active engagement in asking questions, creating a method to answer those questions, answering those questions, communicating ideas, and exploring with scientific tools. Scientific investigation and reasoning involves practicing safe procedures, asking questions about the natural world, and seeking answers to those questions through simple observations used in descriptive investigations.
    - (B) Matter is described in terms of its physical properties, including relative size, weight, shape, color, and texture. The importance of light, thermal, and sound energy is identified as it relates to the students' everyday life. The location and motion of objects are explored.
    - (C) Weather is recorded and discussed on a daily basis so students may begin to recognize patterns in the weather. Other patterns are observed in the appearance of objects in the sky.
    - (D) In life science, students recognize the interdependence of organisms in the natural world. They understand that all organisms have basic needs that can be satisfied through interactions with living and nonliving things. Students will investigate the life cycle of plants and identify likenesses between parents and offspring.
  - (2) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process."
  - (3) Recurring themes are pervasive in sciences, mathematics, and technology. These ideas transcend disciplinary boundaries and include patterns, cycles, systems, models, and change and constancy.

- (4) The study of elementary science includes planning and safely implementing classroom and outdoor investigations using scientific processes, including inquiry methods, analyzing information, making informed decisions, and using tools to collect and record information, while addressing the major concepts and vocabulary, in the context of physical, earth, and life sciences. Districts are encouraged to facilitate classroom and outdoor investigations for at least 80% of instructional time.
  - (5) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (b) Knowledge and skills.
- (1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and uses environmentally appropriate and responsible practices. The student is expected to:
    - (A) identify, discuss, and demonstrate safe and healthy practices as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately; and
    - (B) demonstrate how to use, conserve, and dispose of natural resources and materials such as conserving water and reusing or recycling paper, plastic, and metal.
  - (2) Scientific investigation and reasoning. The student develops abilities to ask questions and seek answers in classroom and outdoor investigations. The student is expected to:
    - (A) ask questions about organisms, objects, and events observed in the natural world;
    - (B) plan and conduct simple descriptive investigations;
    - (C) collect data and make observations using simple tools;
    - (D) record and organize data and observations using pictures, numbers, and words; and
    - (E) communicate observations about simple descriptive investigations.
  - (3) Scientific investigation and reasoning. The student knows that information and critical thinking are used in scientific problem solving. The student is expected to:
    - (A) identify and explain a problem such as the impact of littering and propose a solution;
    - (B) make predictions based on observable patterns in nature; and
    - (C) explore that scientists investigate different things in the natural world and use tools to help in their investigations.
  - (4) Scientific investigation and reasoning. The student uses age-appropriate tools and models to investigate the natural world. The student is expected to:

- (A) collect information using tools, including computing devices, hand lenses, primary balances, cups, bowls, magnets, collecting nets, and notebooks; timing devices; non-standard measuring items; weather instruments such as demonstration thermometers; and materials to support observations of habitats of organisms such as terrariums and aquariums; and
  - (B) use the senses as a tool of observation to identify properties and patterns of organisms, objects, and events in the environment.
- (5) Matter and energy. The student knows that objects have properties and patterns. The student is expected to:
- (A) observe and record properties of objects, including bigger or smaller, heavier or lighter, shape, color, and texture; and
  - (B) observe, record, and discuss how materials can be changed by heating or cooling.
- (6) Force, motion, and energy. The student knows that energy, force, and motion are related and are a part of their everyday life. The student is expected to:
- (A) use the senses to explore different forms of energy such as light, thermal, and sound;
  - (B) explore interactions between magnets and various materials;
  - (C) observe and describe the location of an object in relation to another such as above, below, behind, in front of, and beside; and
  - (D) observe and describe the ways that objects can move such as in a straight line, zigzag, up and down, back and forth, round and round, and fast and slow.
- (7) Earth and space. The student knows that the natural world includes earth materials. The student is expected to:
- (A) observe, describe, and sort rocks by size, shape, color, and texture;
  - (B) observe and describe physical properties of natural sources of water, including color and clarity; and
  - (C) give examples of ways rocks, soil, and water are useful.
- (8) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:
- (A) observe and describe weather changes from day to day and over seasons;
  - (B) identify events that have repeating patterns, including seasons of the year and day and night; and

- (C) observe, describe, and illustrate objects in the sky such as the clouds, Moon, and stars, including the Sun.
- (9) Organisms and environments. The student knows that plants and animals have basic needs and depend on the living and nonliving things around them for survival. The student is expected to:
- (A) differentiate between living and nonliving things based upon whether they have basic needs and produce offspring; and
- (B) examine evidence that living organisms have basic needs such as food, water, and shelter for animals and air, water, nutrients, sunlight, and space for plants.
- (10) Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to:
- (A) sort plants and animals into groups based on physical characteristics such as color, size, body covering, or leaf shape;
- (B) identify basic parts of plants and animals;
- (C) identify ways that young plants resemble the parent plant; and
- (D) observe changes that are part of a simple life cycle of a plant: seed, seedling, plant, flower, and fruit.

### **§113.11. Social Studies, Kindergarten, Adopted 2018.**

- (a) Introduction.
- (1) In Kindergarten, the study of the self, home, family, and classroom establishes the foundation for responsible citizenship in society. Students explore state and national heritage by examining the celebration of patriotic holidays and the contributions of individuals. The concept of chronology is introduced. Students apply geographic concepts of location and physical and human characteristics of place. Students identify basic human needs and ways people meet these needs. Students learn the purpose of rules and the role of authority figures in the home and school. Students learn customs, symbols, and celebrations that represent American beliefs and principles and contribute to our national identity. Students compare family customs and traditions and describe examples of technology in the home and school. Students acquire information from a variety of oral and visual sources. Students practice problem-solving, decision-making, and independent-thinking skills.
- (2) To support the teaching of the essential knowledge and skills, the use of a variety of rich material is encouraged. 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 (b) 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 patriotism, function in a free enterprise society, and appreciate the basic democratic values of our state and nation as referenced in the Texas Education Code (TEC), §28.002(h).
  - (6) Students understand that a constitutional republic is a representative form of government whose representatives derive their authority from the consent of the governed, serve for an established tenure, and are sworn to uphold the constitution.
  - (7) Students must demonstrate learning performance related to any federal and state mandates regarding classroom instruction. Although Kindergarten is not required to participate in Celebrate Freedom Week, according to the TEC, §29.907, primary grades lay the foundation for subsequent learning. As a result, Kindergarten Texas essential knowledge and skills include standards related to this patriotic observance.
  - (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.
- (b) Knowledge and skills.
- (1) History. The student understands that holidays are celebrations of special events. The student is expected to:
    - (A) identify national patriotic holidays such as Constitution Day, Presidents' Day, Veterans Day, and Independence Day; and
    - (B) identify customs associated with national patriotic holidays such as parades and fireworks on Independence Day.
  - (2) History. The student understands how historical figures helped shape the state and nation. The student is expected to identify contributions of historical figures, including Stephen F. Austin, George Washington, Christopher Columbus, and José Antonio Navarro, who helped to shape the state and nation.
  - (3) Geography. The student understands the concept of location. The student is expected to:
    - (A) use spatial terms, including over, under, near, far, left, and right, to describe relative location;
    - (B) locate places on the school campus and describe their relative locations; and
    - (C) identify and use geographic tools that aid in determining location, including maps and globes.

- (4) Geography. The student understands physical and human characteristics of place to better understand self, home, family, classroom, and the world around them. The student is expected to:
- (A) identify the physical characteristics of place such as landforms, bodies of water, Earth's resources, and weather; and
  - (B) identify how geographic location influences human characteristics of place such as shelter, clothing, food, and activities.
- (5) Economics. The student understands the difference between human needs and wants and how they are met. The student is expected to:
- (A) identify basic human needs of food, clothing, and shelter;
  - (B) explain the difference between needs and wants; and
  - (C) explain how basic human needs and wants can be met.
- (6) Economics. The student understands the value of jobs. The student is expected to:
- (A) identify jobs in the home, school, and community; and
  - (B) explain why people have jobs.
- (7) Government. The student understands the purpose of rules. The student is expected to:
- (A) identify purposes for having rules; and
  - (B) identify rules that provide order, security, and safety in the home and school.
- (8) Government. The student understands the role of authority figures. The student is expected to:
- (A) identify authority figures in the home, school, and community; and
  - (B) explain how authority figures enforce rules.
- (9) Citizenship. The student understands important symbols, customs, and responsibilities that represent American beliefs and principles and contribute to our national identity. The student is expected to:
- (A) identify the United States flag and the Texas state flag;
  - (B) recite the Pledge of Allegiance to the United States Flag and the Pledge to the Texas Flag; and
  - (C) use voting as a method for group decision making.
- (10) Culture. The student understands similarities and differences among individuals. The student is expected to identify similarities and differences among individuals such as kinship and religion.
- (11) Culture. The student understands the importance of family traditions. The student is expected to:
- (A) describe and explain the importance of family traditions; and
  - (B) compare traditions among families.
- (12) Science, technology, and society. The student understands ways technology is used in the home and school and how technology affects people's lives. The student is expected to:
- (A) identify examples of technology used in the home and school;
  - (B) describe how technology helps accomplish specific tasks and meet people's needs; and
  - (C) describe how his or her life might be different without modern technology.

- (13) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of valid sources, including technology. The student is expected to:
- (A) gather information about a topic using a variety of valid oral and visual sources such as interviews, music, pictures, symbols, and artifacts with adult assistance; and
  - (B) sequence and categorize information.
- (14) Social studies skills. The student communicates in oral and visual forms. The student is expected to:
- (A) place events in chronological order;
  - (B) use social studies terminology related to time and chronology correctly, including before, after, next, first, last, yesterday, today, and tomorrow;
  - (C) express ideas orally based on knowledge and experiences; and
  - (D) create and interpret visuals, including pictures and maps.
- (15) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others. The student is expected to use problem-solving and decision-making processes to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.
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#### **§114.4. Languages Other Than English, Elementary, Adopted 2014.**

- (a) According to the National Standards for Foreign Language Learning, advanced level language proficiency is necessary for college and career readiness. To that end, students should have uninterrupted, consistent access to early standards-based learning experiences in languages other than English. School districts are strongly encouraged to offer languages other than English in the elementary grades in immersion or Foreign Language in 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.
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#### **§115.2. Health Education, Kindergarten.**

- (a) Introduction.
- (1) In health education, students acquire the health information and skills necessary to become healthy adults and learn about behaviors in which they should and should not participate. To achieve that goal, students will understand the following: students should first seek guidance in

the area of health from their parents; personal behaviors can increase or reduce health risks throughout the lifespan; health is influenced by a variety of factors; students can recognize and utilize health information and products; and personal/interpersonal skills are needed to promote individual, family, and community health.

- (2) Kindergarten students are taught basic factors that contribute to health literacy. Students learn about their bodies and the behaviors necessary to protect them and keep them healthy. Students also understand how to seek help from parents and other trusted adults.

(b) Knowledge and skills.

- (1) Health behaviors. The student recognizes that personal health decisions and behaviors affect health throughout life. The student is expected to:

- (A) identify and practice personal health habits that help individuals stay healthy such as a proper amount of sleep and clean hands;
- (B) identify types of foods that help the body grow such as healthy breakfast foods and snacks; and
- (C) identify types of exercise and active play that are good for the body.

- (2) Health behaviors. The student understands that behaviors result in healthy or unhealthy conditions throughout the life span. The student is expected to:

- (A) identify the purpose of protective equipment such as a seat belt and a bicycle helmet;
- (B) identify safe and unsafe places to play such as a back yard and a street;
- (C) name the harmful effects of tobacco, alcohol, and other drugs;
- (D) identify ways to avoid harming oneself or another person;
- (E) practice safety rules during physical activity such as water safety and bike safety;
- (F) identify how to get help from a parent and/or trusted adult when made to feel uncomfortable or unsafe by another person/adult;
- (G) demonstrate procedures for responding to emergencies including dialing 911; and
- (H) name objects that may be dangerous such as knives, scissors, and screwdrivers and tell how they can be harmful.

- (3) Health behaviors. The student demonstrates decision-making skills for making health-promoting decisions. The student is expected to:

- (A) demonstrate how to seek the help of parents/guardians and other trusted adults in making decisions and solving problems; and
- (B) plan a healthy meal and/or snack.

- (4) Health information. The student knows the basic structures and functions of the human body and how they relate to personal health. The student is expected to:
- (A) name the five senses;
  - (B) name major body parts and their functions; and
  - (C) name and demonstrate good posture principles such as standing straight with shoulders back.
- (5) Health information. The student understands how to recognize health information. The student is expected to:
- (A) name people who can provide helpful health information such as parents, doctors, teachers, and nurses; and
  - (B) explain the importance of health information.
- (6) Influencing factors. The student understands the difference between being sick and being healthy. The student is expected to:
- (A) tell how germs cause illness and disease in people of all ages;
  - (B) name symptoms of common illnesses and diseases;
  - (C) explain practices used to control the spread of germs such as washing hands; and
  - (D) discuss basic parts of the body's defense system against germs such as the skin.
- (7) Influencing factors. The student understands that various factors influence personal health. The student is expected to:
- (A) tell how weather affects individual health such as dressing for warmth, protecting skin from the sun, and keeping classrooms and homes warm and cool; and
  - (B) identify ways to prevent the transmission of head lice such as sharing brushes and caps.
- (8) Personal/interpersonal skills. The student understands ways to communicate consideration and respect for self, family, friends, and others. The student is expected to:
- (A) recognize and describe individual differences and communicate appropriately and respectfully with all individuals;
  - (B) explain the importance of showing consideration and respect for teachers, family members, friends, peers, and other individuals; and
  - (C) recognize and explain the importance of manners and rules for healthy communication and treating others with respect.

- (9) Personal/interpersonal skills. The student comprehends the skills necessary for building and maintaining healthy relationships. The student is expected to:
- (A) identify and use refusal skills to avoid unsafe behavior situations such as saying no in unsafe situations and then telling an adult if he/she is threatened; and
  - (B) demonstrate skills for making new acquaintances.
- (10) Personal/interpersonal skills. The student understands that bullying behaviors result in unhealthy conditions throughout the life span. The student is expected to:
- (A) identify bullying behaviors;
  - (B) identify replacement behaviors to avoid bullying friends, family members, and peers;
  - (C) demonstrate how to get help from a teacher, parent, or trusted adult in solving problems and conflicts with peers; and
  - (D) describe appropriate actions to take in response to bullying.
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### **§116.2. Physical Education, Kindergarten.**

- (a) Introduction.
- (1) In Physical Education, students acquire the knowledge and skills for movement that provide the foundation for enjoyment, continued social development through physical activity, and access to a physically-active lifestyle. The student exhibits a physically-active lifestyle and understands the relationship between physical activity and health throughout the lifespan.
  - (2) In Grades K-2, children learn fundamental movement skills and begin to understand how the muscles, bones, heart, and lungs function in relation to physical activity. Students begin to develop a vocabulary for movement and apply concepts dealing with space and body awareness. Students are engaged in activities that develop basic levels of strength, endurance, and flexibility. In addition, students learn to work safely in group and individual movement settings. A major objective is to present activities that complement their natural inclination to view physical activity as challenging and enjoyable.
  - (3) The focus for kindergarten students is on learning basic body control while moving in a variety of settings. Students become aware of strength, endurance and flexibility in different parts of their bodies and begin to learn ways to increase health-related fitness.
- (b) Knowledge and skills.
- (1) Movement. The student demonstrates competency in fundamental movement patterns and proficiency in a few specialized movement forms. The student is expected to:
    - (A) travel in different ways in a large group without bumping into others or falling;

- (B) demonstrate clear contrasts between slow and fast movement when traveling;
  - (C) demonstrate non-locomotor (axial) movements such as bend and stretch;
  - (D) maintain balance while bearing weight on a variety of body parts;
  - (E) walk forward and sideways the length of a beam without falling;
  - (F) demonstrate a variety of relationships such as under, over, behind, next to, through, right, left, up, down, forward, backward, and in front of;
  - (G) roll sideways (right or left) without hesitating; and
  - (H) toss a ball and catch it before it bounces twice.
- (2) Movement. The student applies movement concepts and principles to the learning and development of motor skills. The student is expected to:
- (A) identify selected body parts such as head, back, chest, waist, hips, arms, elbows, wrists, hands, fingers, legs, knees, ankles, feet, and toes; and
  - (B) demonstrate movement forms of various body parts such as head flexion, extension, and rotation.
- (3) Physical activity and health. The student exhibits a health enhancing, physically-active lifestyle that improves health and provides opportunities for enjoyment and challenge. The student is expected to:
- (A) describe and select physical activities that provide opportunities for enjoyment and challenge;
  - (B) participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate, and perspiration;
  - (C) participate in appropriate exercises for flexibility in shoulders, legs, and trunk;
  - (D) lift and support his/her own weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back, and legs such as hanging, hopping, and jumping; and
  - (E) describe the benefits from involvement in daily physical activity such as feel better and sleep better.
- (4) Physical activity and health. The student knows the benefits from being involved in daily physical activity and factors that affect physical performance. The student is expected to:
- (A) observe and describe the immediate effect of physical activity on the heart and breathing rate and perspiration;

- (B) locate the lungs and explain their purpose; and
  - (C) state that rest and sleep are important in caring for the body.
- (5) Physical activity and health. The student understands safety practices associated with physical activity and space. The student is expected to:
- (A) use equipment and space properly;
  - (B) know and apply safety practices associated with physical activity such as not pushing in line and drinking water during activity;
  - (C) explain how proper shoes and clothing promotes safe play and prevent injury;
  - (D) explain appropriate water safety rules such as never swim alone, never run around pools, look before you jump, enter feet first, and know the role of the lifeguard; and
  - (E) explain appropriate reactions during emergencies in physical activities.
- (6) Social development. The student understands basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance, and gymnastics. The student is expected to:
- (A) respond appropriately to starting and stopping signals; and
  - (B) demonstrate the ability to play within boundaries during games and activities.
- (7) Social development. The student develops positive self-management and social skills needed to work independently and with others in physical activity settings. The student is expected to:
- (A) follow rules, procedures, and safe practices;
  - (B) work in a group setting in cooperation with others; and
  - (C) share space and equipment with others.

**§117.102. Art, Kindergarten, 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 applicable to college readiness, career opportunities, workplace environments, social skills, and everyday life. Students develop aesthetic and cultural awareness through exploration, leading to

creative expression. Creativity, encouraged through the study of the fine arts, is essential to nurture and develop the whole child.

- (2) Four basic strands--foundations: observation and perception; creative expression; historical and cultural relevance; and critical evaluation and response--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Each strand is of equal value and may be presented in any order throughout the year. Students rely on personal observations and perceptions, which are developed through increasing visual literacy and sensitivity to surroundings, communities, memories, imaginings, and life experiences, as sources for thinking about, planning, and creating original artworks. Students communicate their thoughts and ideas with innovation and creativity. Through art, students challenge their imaginations, foster critical thinking, collaborate with others, and build reflective skills. While exercising meaningful problem-solving skills, students develop the lifelong ability to make informed judgments.
- (3) 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.

(b) Knowledge and skills.

- (1) Foundations: observation and perception. The student develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. The student uses what the student sees, knows, and has experienced as sources for examining, understanding, and creating artworks. The student is expected to:
  - (A) gather information from subjects in the environment using the senses; and
  - (B) identify the elements of art, including line, shape, color, texture, and form, and the principles of design, including repetition/pattern and balance, in the environment.
- (2) Creative expression. The student communicates ideas through original artworks using a variety of media with appropriate skills. The student expresses thoughts and ideas creatively while challenging the imagination, fostering reflective thinking, and developing disciplined effort and progressive problem-solving skills. The student is expected to:
  - (A) create artworks using a variety of lines, shapes, colors, textures, and forms;
  - (B) arrange components intuitively to create artworks; and
  - (C) use a variety of materials to develop manipulative skills while engaging in opportunities for exploration through drawing, painting, printmaking, constructing artworks, and sculpting, including modeled forms.
- (3) Historical and cultural relevance. The student demonstrates an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures. The student develops global awareness and respect for the traditions and contributions of diverse cultures. The student is expected to:

- (A) identify simple subjects expressed in artworks;
  - (B) share ideas about personal experiences such as family and friends and develop awareness and sensitivity to differing experiences and opinions through artwork;
  - (C) identify the uses of art in everyday life; and
  - (D) relate visual art concepts to other disciplines.
- (4) Critical evaluation and response. The student responds to and analyzes artworks of self and others, contributing to the development of lifelong skills of making informed judgments and reasoned evaluations. The student is expected to:
- (A) express ideas about personal artworks or portfolios;
  - (B) express ideas found in collections such as real or virtual art museums, galleries, portfolios, or exhibitions using original artworks created by artists or peers; and
  - (C) compile collections of artwork such as physical artwork, electronic images, sketchbooks, or portfolios for the purposes of self-evaluations or exhibitions.

### **§117.103. Music, Kindergarten, 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 applicable to college readiness, career opportunities, workplace environments, social skills, and everyday life. Students develop aesthetic and cultural awareness through exploration, leading to creative expression. Creativity, encouraged through the study of the fine arts, is essential to nurture and develop the whole child.
  - (2) Four basic strands--foundations: music literacy; creative expression; historical and cultural relevance; and critical evaluation and response--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. The foundation of music literacy is fostered through reading, writing, reproducing, and creating music, thus developing a student's intellect. Through creative expression, students apply their music literacy and the critical-thinking skills of music to sing, play, read, write, and/or move. By experiencing musical periods and styles, students will understand the relevance of music to history, culture, and the world, including the relationship of music to other academic disciplines and the vocational possibilities offered. Through critical listening, students analyze, evaluate, and respond to music, developing criteria for making critical judgments and informed choices.

- (3) 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.
- (b) Knowledge and skills.
- (1) Foundations: music literacy. The student describes and analyzes musical sound. The student is expected to:
    - (A) identify the differences between the five voices, including singing, speaking, inner, whispering, and calling voices;
    - (B) identify the timbre of adult and child singing voices;
    - (C) identify the timbre of instrument families;
    - (D) identify same/different in beat/rhythm, higher/lower, louder/softer, faster/slower, and simple patterns in musical performances; and
    - (E) identify beat, rhythm, and simple two-tone or three-tone melodies using iconic representation.
  - (2) Creative expression. The student performs a varied repertoire of developmentally appropriate music in informal or formal settings. The student is expected to:
    - (A) sing or play classroom instruments independently or in groups;
    - (B) sing songs or play classroom instruments from diverse cultures and styles independently or in groups;
    - (C) move alone or with others to a varied repertoire of music using gross and fine locomotor and non-locomotor movement;
    - (D) perform simple partwork, including beat versus rhythm; and
    - (E) perform music using louder/softer and faster/slower.
  - (3) Historical and cultural relevance. The student examines music in relation to history and cultures. The student is expected to:
    - (A) sing songs and play musical games, including rhymes, folk music, and seasonal music; and
    - (B) identify simple interdisciplinary concepts related to music.
  - (4) Critical evaluation and response. The student listens to, responds to, and evaluates music and musical performances. The student is expected to:
    - (A) identify and demonstrate appropriate audience behavior during live or recorded performances;

- (B) identify steady beat in musical performances; and
  - (C) compare same/different in beat/rhythm, higher/lower, louder/softer, faster/slower, and simple patterns in musical performances.
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**§117.104. Theatre, Kindergarten, 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 applicable to college readiness, career opportunities, workplace environments, social skills, and everyday life. Students develop aesthetic and cultural awareness through exploration, leading to creative expression. Creativity, encouraged through the study of the fine arts, is essential to nurture and develop the whole child.
  - (2) Four basic strands--foundations: inquiry and understanding; creative expression; historical and cultural relevance; and critical evaluation and response--provide broad, unifying structures for organizing knowledge and skills students are expected to acquire. Through the foundations: inquiry and understanding strand, students develop a perception of self, human relationships, and the world using elements of drama and conventions of theatre. Through the creative expression strand, students communicate in a dramatic form, engage in artistic thinking, build positive self-concepts, relate interpersonally, and integrate knowledge with other content areas in a relevant manner. Through the historical and cultural relevance strand, students increase their understanding of heritage and traditions in theatre and the diversity of world cultures as expressed in theatre. Through the critical evaluation and response strand, students engage in inquiry and dialogue, accept constructive criticism, revise personal views to promote creative and critical thinking, and develop the ability to appreciate and evaluate live theatre.
  - (3) 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.
- (b) Knowledge and skills.
  - (1) Foundations: inquiry and understanding. The student develops concepts about self, human relationships, and the environment using elements of drama and conventions of theatre. The student is expected to:
    - (A) develop self-awareness through dramatic play;
    - (B) explore space using expressive movement;

- (C) imitate sounds; and
  - (D) imitate and recreate objects in dramatic play.
- (2) Creative expression: performance. The student interprets characters using the voice and body expressively and creates dramatizations. The student is expected to:
- (A) demonstrate safe use of movement and voice;
  - (B) assume roles through imitation and recreation;
  - (C) identify the characteristics of dramatic play; and
  - (D) participate in dramatic play.
- (3) Creative expression: production. The student applies design, directing, and theatre production concepts and skills. The student is expected to:
- (A) create playing space using common objects such as tables or chairs;
  - (B) create costumes using simple materials such as cardboard, newspaper, or fabric;
  - (C) rehearse dramatic play; and
  - (D) cooperate with others in dramatic play.
- (4) Historical and cultural relevance. The student relates theatre to history, society, and culture. The student is expected to:
- (A) rehearse and perform real and imaginative situations of family cultures of students in the class; and
  - (B) rehearse and perform stories from American history.
- (5) Critical evaluation and response. The student responds to and evaluates theatre and theatrical performances. The student is expected to:
- (A) discuss, practice, and display appropriate audience behavior; and
  - (B) respond to dramatic activities through discussion.

## **§126.6. Technology Applications, Kindergarten-Grade 2.**

- (a) Introduction.
  - (1) The technology applications curriculum has six strands based on the National Educational Technology Standards for Students (NETS•S) and performance indicators developed by the International Society for Technology in Education (ISTE): creativity and innovation;

communication and collaboration; research and information fluency; critical thinking, problem solving, and decision making; digital citizenship; and technology operations and concepts.

- (2) Through the study of the six strands in technology applications, students use creative thinking and innovative processes to construct knowledge and develop products. Students communicate and collaborate both locally and globally to reinforce and promote learning. Research and information fluency includes the acquisition and evaluation of digital content. Students develop critical-thinking, problem-solving, and decision-making skills by collecting, analyzing, and reporting digital information. Students practice digital citizenship by behaving responsibly while using technology tools and resources. Through the study of technology operations and concepts, students learn technology related terms, concepts, and data input strategies.
- (3) 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.

(b) Knowledge and skills.

- (1) Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to:
  - (A) apply prior knowledge to develop new ideas, products, and processes;
  - (B) create original products using a variety of resources;
  - (C) explore virtual environments, simulations, models, and programming languages to enhance learning;
  - (D) create and execute steps to accomplish a task; and
  - (E) evaluate and modify steps to accomplish a task.
- (2) Communication and collaboration. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:
  - (A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally;
  - (B) participate in digital environments to develop cultural understanding by interacting with learners of multiple cultures;
  - (C) format digital information, including font attributes, color, white space, graphics, and animation, for a defined audience and communication medium; and
  - (D) select, store, and deliver products using a variety of media, formats, devices, and virtual environments.
- (3) Research and information fluency. The student acquires and evaluates digital content. The student is expected to:

- (A) use search strategies to access information to guide inquiry;
  - (B) use research skills to build a knowledge base regarding a topic, task, or assignment; and
  - (C) evaluate the usefulness of acquired digital content.
- (4) Critical thinking, problem solving, and decision making. The student applies critical-thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to:
- (A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem;
  - (B) evaluate the appropriateness of a digital tool to achieve the desired product;
  - (C) evaluate products prior to final submission; and
  - (D) collect, analyze, and represent data using tools such as word processing, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages.
- (5) Digital citizenship. The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to:
- (A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment;
  - (B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws; and
  - (C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.
- (6) Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:
- (A) use appropriate terminology regarding basic hardware, software applications, programs, networking, virtual environments, and emerging technologies;
  - (B) use appropriate digital tools and resources for storage, access, file management, collaboration, and designing solutions to problems;
  - (C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files;
  - (D) use a variety of input, output, and storage devices;
  - (E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten-Grade 2 learning;
  - (F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning; and

(G) use the help feature online and in applications.