

## Texas Essential Knowledge and Skills – Second Grade

### **§110.4. English Language Arts and Reading, Grade 2.**

#### (a) Introduction.

(1) In Grade 2, students read and write independently. Students have many opportunities to use spoken language. Second grade students understand that there are different purposes for speaking and listening. Students know how to attract and hold the attention of their classmates when they make announcements or share a story. Second grade students recognize a large number of words automatically and use a variety of word identification strategies to figure out words they do not immediately recognize. Students read regularly for understanding and fluency in a variety of genres, including selections from classic and contemporary works. Students read texts from which they acquire new information. Students summarize what they read and represent ideas gained from reading with story maps, charts, and drawings. Students use references, including dictionaries and glossaries, to build word meanings and confirm pronunciation. Second grade students revise and edit their own writing to make ideas more clear and precise. Students use appropriate capitalization and punctuation. Students use singular and plural nouns and adjust verbs for agreement. In Grade 2, students' penmanship is characterized by letters that are properly formed, words that are properly spaced, and overall compositions that are legible. Students begin to take simple notes and compile notes into outlines.

(2) For second grade students whose first language is not English, the students' native language serves as a foundation for English language acquisition.

(3) The essential knowledge and skills as well as the student expectations for Grade 2 are described in subsection (b) of this section. Following each statement of a student expectation is a parenthetical notation that indicates the additional grades at which these expectations are demonstrated at increasingly sophisticated levels.

(4) To meet Public Education Goal 1 of the Texas Education Code, §4.002, which states, "The students in the public education system will demonstrate exemplary performance in the reading and writing of the English language," students will accomplish the essential knowledge and skills as well as the student expectations for Grade 2 as described in subsection (b) of this section.

(5) To meet Texas Education Code, §28.002(h), which states, ". . . each school district shall foster the continuation of the tradition of teaching United States and Texas history and the free enterprise system in regular subject matter and in reading courses and in the adoption of textbooks," students will be provided oral and written narratives as well as other informational texts that can help them to become thoughtful, active citizens who appreciate the basic democratic values of our state and nation.

#### (b) Knowledge and skills.

(1) Listening/speaking/purposes. The student listens attentively and engages actively in a variety of oral language experiences. The student is expected to:

(A) determine the purpose(s) for listening such as to get information, to solve problems, and to enjoy and appreciate (K-3);

(B) respond appropriately and courteously to directions and questions (K-3);

(C) participate in rhymes, songs, conversations, and discussions (K-3);

(D) listen critically to interpret and evaluate (K-3);

(E) listen responsively to stories and other texts read aloud, including selections from classic and contemporary works (K-3); and

(F) identify the musical elements of literary language such as its rhymes, repeated sounds, or instances of onomatopoeia (2-3).

(2) Listening/speaking/culture. The student listens and speaks to gain knowledge of his/her own culture, the culture of others, and the common elements of cultures. The student is expected to:

(A) connect experiences and ideas with those of others through speaking and listening (K-3); and

(B) compare language and oral traditions (family stories) that reflect customs, regions, and cultures (K-3).

(3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to:

(A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3);

(B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3);

(C) ask and answer relevant questions and make contributions in small or large group discussions (K-3);

(D) present dramatic interpretations of experiences, stories, poems, or plays (K-3); and

(E) gain increasing control of grammar when speaking such as using subject-verb agreement, complete sentences, and correct tense (K-3).

(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to:

(A) use vocabulary to describe clearly ideas, feelings, and experiences (K-3);

(B) clarify and support spoken messages using appropriate props such as objects, pictures, or charts (K-3); and

(C) retell a spoken message by summarizing or clarifying (K-3).

(5) Reading/word identification. The student uses a variety of word identification strategies. The student is expected to:

(A) decode by using all letter-sound correspondences within a word (1-3);

(B) blend initial letter - sounds with common vowel spelling patterns to read words (1-3);

(C) recognize high frequency irregular words such as said, was, where, and is (1-2);

(D) identify multisyllabic words by using common syllable patterns (1-3);

(E) use structural cues to recognize words such as compound, base words, and inflections such as -s, -es, -ed, and -ing (1-2);

(F) use structural cues such as prefixes and suffixes to recognize words, for example, un- and -ly (2);

(G) use knowledge of word order (syntax) and context to support word identification and confirm word meaning (1-3); and

(H) read both regular and irregular words automatically such as through multiple opportunities to read and reread (1-3).

(6) Reading/fluency. The student reads with fluency and understanding in texts at appropriate difficulty levels. The student is expected to:

(A) read regularly in independent-level materials (texts in which no more than approximately 1 in 20 words is difficult for the reader) (2);

(B) read regularly in instructional-level materials that are challenging but manageable (texts in which no more than approximately 1 in 10 words is difficult for the reader; a "typical" second grader reads approximately 70 wpm) (2);

(C) read orally from familiar texts with fluency (accuracy, expression, appropriate phrasing, and attention to punctuation) (2);

(D) self-select independent-level reading by drawing on personal interests, by relying on knowledge of authors and different types of texts, and/or by estimating text difficulty (1-3); and

(E) read silently for increasing periods of time (2-3).

(7) Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to:

- (A) read classic and contemporary works (2-8);
- (B) read from a variety of genres for pleasure and to acquire information from both print and electronic sources (2-3); and
- (C) read to accomplish various purposes, both assigned and self-selected (2-3).

(8) Reading/vocabulary development. The student develops an extensive vocabulary. The student is expected to:

- (A) discuss meanings of words and develop vocabulary through meaningful/concrete experiences (K-2);
- (B) develop vocabulary by listening to and discussing both familiar and conceptually challenging selections read aloud (K-3);
- (C) develop vocabulary through reading (2-3); and
- (D) use resources and references such as beginners' dictionaries, glossaries, available technology, and context to build word meanings and to confirm pronunciation of words (2-3).

(9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to:

- (A) use prior knowledge to anticipate meaning and make sense of texts (K-3);
- (B) establish purposes for reading and listening such as to be informed, to follow directions, and to be entertained (K-3);
- (C) retell or act out the order of important events in stories (K-3);
- (D) monitor his/her own comprehension and act purposefully when comprehension breaks down such as rereading, searching for clues, and asking for help (1-3);
- (E) draw and discuss visual images based on text descriptions (1-3);
- (F) make and explain inferences from texts such as determining important ideas and causes and effects, making predictions, and drawing conclusions (1-3);
- (G) identify similarities and differences across texts such as in topics, characters, and problems (1-2);
- (H) produce summaries of text selections (2-3); and

(I) represent text information in different ways, including story maps, graphs, and charts (2-3).

(10) Reading/literary response. The student responds to various texts. The student is expected to:

(A) respond to stories and poems in ways that reflect understanding and interpretation in discussion (speculating, questioning) in writing, and through movement, music, art, and drama (2-3);

(B) demonstrate understanding of informational text in various ways such as through writing, illustrating, developing demonstrations, and using available technology (2-3);

(C) support interpretations or conclusions with examples drawn from text (2-3); and

(D) connect ideas and themes across texts (1-3).

(11) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts. The student is expected to:

(A) distinguish different forms of texts, including lists, newsletters, and signs and the functions they serve (K-3);

(B) identify text as written for entertainment (narrative) or for information (expository) (2);

(C) distinguish fiction from nonfiction, including fact and fantasy (K-3);

(D) recognize the distinguishing features of familiar genres, including stories, poems, and informational texts (1-3);

(E) compare communication in different forms such as contrasting a dramatic performance with a print version of the same story or comparing story variants (2-8);

(F) understand and identify simple literary terms such as title, author, and illustrator across a variety of literary forms (texts) (2);

(G) understand literary forms by recognizing and distinguishing among such types of text as stories, poems, and information books (K-2);

(H) analyze characters, including their traits, relationships, and changes (1-3);

(I) identify the importance of the setting to a story's meaning (1-3); and

(J) recognize the story problem(s) or plot (1-3).

(12) Reading inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to:

(A) identify relevant questions for inquiry such as "Why do birds build different kinds of nests?" (K-3);

(B) use alphabetical order to locate information (1-3);

(C) recognize and use parts of a book to locate information, including table of contents, chapter titles, guide words, and indices (1-3);

(D) use multiple sources, including print such as an encyclopedia, technology, and experts, to locate information that addresses questions (2-3);

(E) interpret and use graphic sources of information such as maps, charts, graphs, and diagrams (2-3);

(F) locate and use important areas of the library media center (2-3);

(G) demonstrate learning through productions and displays such as murals, written and oral reports, and dramatizations (2-3); and

(H) draw conclusions from information gathered (K-3).

(13) Reading/culture. The student reads to increase knowledge of his/her own culture, the culture of others, and the common elements of culture. The student is expected to:

(A) connect life experiences with the life experiences, language, customs, and culture of others (K-3); and

(B) compare experiences of characters across cultures (K-3).

(14) Writing/purposes. The student writes for a variety of audiences and purposes, and in various forms. The student is expected to:

(A) write to record ideas and reflections (K-3);

(B) write to discover, develop, and refine ideas (1-3);

(C) write to communicate with a variety of audiences (1-3); and

(D) write in different forms for different purposes such as lists to record, letters to invite or thank, and stories or poems to entertain (1-3).

(15) Writing/penmanship/capitalization/punctuation. The student composes original texts using the conventions of written language such as capitalization and penmanship to communicate clearly. The student is expected to:

(A) gain increasing control of aspects of penmanship such as pencil grip, paper position, stroke, and posture, and using correct letter formation, appropriate size, and spacing (2);

(B) use word and letter spacing and margins to make messages readable (1-2);

(C) use basic capitalization and punctuation correctly such as capitalizing names and first letters in sentences, using periods, question marks, and exclamation points (1-2); and

(D) use more complex capitalization and punctuation with increasing accuracy such as proper nouns, abbreviations, commas, apostrophes, and quotation marks (2).

(16) Writing/spelling. The student spells proficiently. The student is expected to:

(A) use resources to find correct spellings, synonyms, and replacement words (1-3);

(B) write with more proficient spelling of regularly spelled patterns such as consonant-vowel-consonant (CVC) (hop), consonant-vowel-consonant-silent e (CVCe) (hope), and one-syllable words with blends (drop) (1-3);

(C) write with more proficient spelling of inflectional endings, including plurals and verb tenses (1-2); and

(D) write with more proficient use of orthographic patterns and rules such as keep/cap, sack/book, out/cow, consonant doubling, dropping e, and changing y to i (2).

(17) Writing/grammar/usage. The student composes meaningful texts applying knowledge of grammar and usage. The student is expected to:

(A) use singular and plural forms of regular nouns (2);

(B) compose complete sentences in written texts and use the appropriate end punctuation (1-2);

(C) compose sentences with interesting, elaborated subjects (2-3); and

(D) edit writing toward standard grammar and usage, including subject-verb agreement; pronoun agreement, including pronouns that agree in number; and appropriate verb tenses, including to be, in final drafts (2-3).

(18) Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to:

(A) generate ideas for writing by using prewriting techniques such as drawing and listing key thoughts (2-3);

(B) develop drafts (1-3);

(C) revise selected drafts for varied purposes, including to achieve a sense of audience, precise word choices, and vivid images (1-3);

(D) edit for appropriate grammar, spelling, punctuation, and features of polished writings (2-3);

(E) use available technology for aspects of writing, including word processing, spell checking, and printing (2-3); and

(F) demonstrate understanding of language use and spelling by bringing selected pieces frequently to final form and "publishing" them for audiences (2-3).

(19) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to:

(A) identify the most effective features of a piece of writing using criteria generated by the teacher and class (1-3);

(B) respond constructively to others' writing (1-3);

(C) determine how his/her own writing achieves its purposes (1-3);

(D) use published pieces as models for writing (2-3); and

(E) review a collection of his/her own written work to monitor growth as a writer (2-3).

(20) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to:

(A) write or dictate questions for investigating (2-3);

(B) record his/her own knowledge of a topic in various ways such as by drawing pictures, making lists, and showing connections among ideas (K-3);

(C) take simple notes from relevant sources such as classroom guests, information books, and media sources (2-3); and

(D) compile notes into outlines, reports, summaries, or other written efforts using available technology (2-3).

## §111.14. Mathematics, Grade 2.

### (a) Introduction.

(1) Within a well-balanced mathematics curriculum, the primary focal points at Grade 2 are developing an understanding of the base-ten place value system, comparing and ordering whole numbers, applying addition and subtraction, and using measurement processes.

(2) Throughout mathematics in Kindergarten-Grade 2, students build a foundation of basic understandings in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; measurement; and probability and statistics. Students use numbers in ordering, labeling, and expressing quantities and relationships to solve problems and translate informal language into mathematical language and symbols. Students use objects to create and identify patterns and use those patterns to express relationships, make predictions, and solve problems as they build an understanding of number, operation, shape, and space. Students progress from informal to formal language to describe two- and three-dimensional geometric figures and likenesses in the physical world. Students begin to develop measurement concepts as they identify and compare attributes of objects and situations. Students collect, organize, and display data and use information from graphs to answer questions, make summary statements, and make informal predictions based on their experiences.

(3) Throughout mathematics in Kindergarten-Grade 2, students develop numerical fluency with conceptual understanding and computational accuracy. Students in Kindergarten-Grade 2 use basic number sense to compose and decompose numbers in order to solve problems requiring precision, estimation, and reasonableness. By the end of Grade 2, students know basic addition and subtraction facts and are using them to work flexibly, efficiently, and accurately with numbers during addition and subtraction computation.

(4) Problem solving, language and communication, connections within and outside mathematics, and formal and informal reasoning underlie all content areas in mathematics. Throughout mathematics in Kindergarten-Grade 2, students use these processes together with technology and other mathematical tools such as manipulative materials to develop conceptual understanding and solve meaningful problems as they do mathematics.

### (b) Knowledge and skills.

(2.1) **Number, operation, and quantitative reasoning.** The student understands how place value is used to represent whole numbers.

The student is expected to:

(A) use concrete models of hundreds, tens, and ones to represent a given whole number (up to 999) in various ways;

(B) use place value to read, write, and describe the value of whole numbers to 999; and

(C) use place value to compare and order whole numbers to 999 and record the comparisons using numbers and symbols ( $<$ ,  $=$ ,  $>$ ).

**(2.2) Number, operation, and quantitative reasoning.** The student describes how fractions are used to name parts of whole objects or sets of objects.

The student is expected to:

(A) use concrete models to represent and name fractional parts of a whole object (with denominators of 12 or less);

(B) use concrete models to represent and name fractional parts of a set of objects (with denominators of 12 or less); and

(C) use concrete models to determine if a fractional part of a whole is closer to 0,  $\frac{1}{2}$ , or 1.

**(2.3) Number, operation, and quantitative reasoning.** The student adds and subtracts whole numbers to solve problems.

The student is expected to:

(A) recall and apply basic addition and subtraction facts ( to 18);

(B) model addition and subtraction of two-digit numbers with objects, pictures, words, and numbers;

(C) select addition or subtraction to solve problems using two-digit numbers, whether or not regrouping is necessary;

(D) determine the value of a collection of coins up to one dollar; and

(E) describe how the cent symbol, dollar symbol, and the decimal point are used to name the value of a collection of coins.

**(2.4) Number, operation, and quantitative reasoning.** The student models multiplication and division.

The student is expected to:

(A) model, create, and describe multiplication situations in which equivalent sets of concrete objects are joined; and

(B) model, create, and describe division situations in which a set of concrete objects is separated into equivalent sets.

**(2.5) Patterns, relationships, and algebraic thinking.** The student uses patterns in numbers and operations.

The student is expected to:

- (A) find patterns in numbers such as in a 100s chart;
- (B) use patterns in place value to compare and order whole numbers through 999; and
- (C) use patterns and relationships to develop strategies to remember basic addition and subtraction facts. Determine patterns in related addition and subtraction number sentences (including fact families) such as  $8 + 9 = 17$ ,  $9 + 8 = 17$ ,  $17 - 8 = 9$ , and  $17 - 9 = 8$ .

(2.6) **Patterns, relationships, and algebraic thinking.** The student uses patterns to describe relationships and make predictions.

The student is expected to:

- (A) generate a list of paired numbers based on a real-life situation such as number of tricycles related to number of wheels;
- (B) identify patterns in a list of related number pairs based on a real-life situation and extend the list; and
- (C) identify, describe, and extend repeating and additive patterns to make predictions and solve problems.

(2.7) **Geometry and spatial reasoning.** The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two- and three-dimensional geometric figures or both.

The student is expected to:

- (A) describe attributes (the number of vertices, faces, edges, sides) of two- and three-dimensional geometric figures such as circles, polygons, spheres, cones, cylinders, prisms, and pyramids, etc.;
- (B) use attributes to describe how 2 two-dimensional figures or 2 three-dimensional geometric figures are alike or different; and
- (C) cut two-dimensional geometric figures apart and identify the new geometric figures formed.

(2.8) **Geometry and spatial reasoning.** The student recognizes that a line can be used to represent a set of numbers and its properties.

The student is expected to use whole numbers to locate and name points on a number line.

(2.9) **Measurement.** The student directly compares the attributes of length, area, weight/mass, and capacity, and uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length, area, capacity, and weight/mass. The student recognizes and uses models that approximate standard units (from both SI, also known as metric, and customary systems) of length, weight/mass, capacity, and time.

The student is expected to:

- (A) identify concrete models that approximate standard units of length and use them to measure length;
- (B) select a non-standard unit of measure such as square tiles to determine the area of a two-dimensional surface;
- (C) select a non-standard unit of measure such as a bathroom cup or a jar to determine the capacity of a given container; and
- (D) select a non-standard unit of measure such as beans or marbles to determine the weight/mass of a given object.

(2.10) **Measurement.** The student uses standard tools to estimate and measure time and temperature (in degrees Fahrenheit).

The student is expected to:

- (A) read a thermometer to gather data;
- (B) read and write times shown on analog and digital clocks using five-minute increments; and
- (C) describe activities that take approximately one second, one minute, and one hour.

(2.11) **Probability and statistics.** The student organizes data to make it useful for interpreting information.

The student is expected to:

- (A) construct picture graphs and bar-type graphs;
- (B) draw conclusions and answer questions based on picture graphs and bar-type graphs; and
- (C) use data to describe events as more likely or less likely such as drawing a certain color crayon from a bag of seven red crayons and three green crayons.

(2.12) **Underlying processes and mathematical tools.** The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school.

The student is expected to:

- (A) identify the mathematics in everyday situations;
- (B) solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;
- (C) select or develop an appropriate problem-solving plan or strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem; and
- (D) use tools such as real objects, manipulatives, and technology to solve problems.

(2.13) **Underlying processes and mathematical tools.** The student communicates about Grade 2 mathematics using informal language.

The student is expected to:

- (A) explain and record observations using objects, words, pictures, numbers, and technology; and
- (B) relate informal language to mathematical language and symbols.

(2.14) **Underlying processes and mathematical tools.** The student uses logical reasoning.

The student is expected to justify his or her thinking using objects, words, pictures, numbers, and technology.

## §112.4. Science, Grade 2.

### (a) Introduction.

(1) In Grade 2, the study of science includes planning and conducting simple classroom and field investigations to help students develop the skills of making measurements using standard and non-standard units, using common tools such as rulers and clocks to collect information, classifying and sequencing objects and events, and identifying patterns. Students also use computers and information technology tools to support their investigations.

(2) As students learn science skills, they identify components and processes of the natural world including the water cycle and the use of resources. They observe melting and evaporation, weathering, and the pushing and pulling of objects as examples of change. In addition, students distinguish between characteristics of living organisms and nonliving objects, compare lifelong needs of plants and animals, understand how living organisms depend on their environments, and identify functions of parts of plants and animals.

(3) Science is a way of learning about the natural world. Students should know how science has built a vast body of changing and increasing knowledge described by physical, mathematical, and conceptual models, and also should know that science may not answer all questions.

(4) A system is a collection of cycles, structures, and processes that interact. Students should understand a whole in terms of its components and how these components relate to each other and to the whole. All systems have basic properties that can be described in terms of space, time, energy, and matter. Change and constancy occur in systems and can be observed and measured as patterns. These patterns help to predict what will happen next and can change over time.

(5) Investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations, and that methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems work. They have limitations and based on new discoveries are constantly being modified to more closely reflect the natural world.

### (b) Knowledge and skills.

(1) Scientific processes. The student conducts classroom and field investigations following home and school safety procedures. The student is expected to:

(A) demonstrate safe practices during classroom and field investigations; and

(B) learn how to use and conserve resources and dispose of materials.

(2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to:

- (A) ask questions about organisms, objects, and events;
- (B) plan and conduct simple descriptive investigations;
- (C) compare results of investigations with what students and scientists know about the world;
- (D) gather information using simple equipment and tools to extend the senses;
- (E) construct reasonable explanations and draw conclusions using information and prior knowledge; and
- (F) communicate explanations about investigations.

(3) Scientific processes. The student knows that information and critical thinking are used in making decisions. The student is expected to:

- (A) make decisions using information;
- (B) discuss and justify the merits of decisions; and
- (C) explain a problem in his/her own words and identify a task and solution related to the problem.

(4) Scientific processes. The student uses age-appropriate tools and models to verify that organisms and objects and parts of organisms and objects can be observed, described, and measured. The student is expected to:

- (A) collect information using tools including rulers, meter sticks, measuring cups, clocks, hand lenses, computers, thermometers, and balances; and
- (B) measure and compare organisms and objects and parts of organisms and objects, using standard and non-standard units.

(5) Science concepts. The student knows that organisms, objects, and events have properties and patterns. The student is expected to:

- (A) classify and sequence organisms, objects, and events based on properties and patterns; and
- (B) identify, predict, replicate, and create patterns including those seen in charts, graphs, and numbers.

(6) Science concepts. The student knows that systems have parts and are composed of organisms and objects. The student is expected to:

(A) manipulate, predict, and identify parts that, when separated from the whole, may result in the part or the whole not working, such as flashlights without batteries and plants without leaves;

(B) manipulate, predict, and identify parts that, when put together, can do things they cannot do by themselves, such as a guitar and guitar strings;

(C) observe and record the functions of plant parts; and

(D) observe and record the functions of animal parts.

(7) Science concepts. The student knows that many types of change occur. The student is expected to:

(A) observe, measure, record, analyze, predict, and illustrate changes in size, mass, temperature, color, position, quantity, sound, and movement;

(B) identify, predict, and test uses of heat to cause change such as melting and evaporation;

(C) demonstrate a change in the motion of an object by giving the object a push or a pull; and

(D) observe, measure, and record changes in weather, the night sky, and seasons.

(8) Science concepts. The student distinguishes between living organisms and nonliving objects. The student is expected to:

(A) identify characteristics of living organisms; and

(B) identify characteristics of nonliving objects.

(9) Science concepts. The student knows that living organisms have basic needs. The student is expected to:

(A) identify the external characteristics of different kinds of plants and animals that allow their needs to be met; and

(B) compare and give examples of the ways living organisms depend on each other and on their environments.

(10) Science concepts. The student knows that the natural world includes rocks, soil, water, and gases of the atmosphere. The student is expected to:

(A) describe and illustrate the water cycle; and

(B) identify uses of natural resources.

## **§113.4. Social Studies, Grade 2.**

### **(a) Introduction.**

(1) In Grade 2, students focus on a study of their local community by examining the impact of significant individuals and events on the history of the community as well as on the state and nation. Students begin to develop the concepts of time and chronology by measuring calendar time by days, weeks, months, and years. The relationship between the physical environment and human activities is introduced as are the concepts of consumers and producers. Students identify functions of government as well as services provided by the local government. Students continue to acquire knowledge of important customs, symbols, and celebrations that represent American beliefs and principles. Students identify the significance of works of art in the local community and explain how technological innovations have changed transportation and communication. Students communicate what they have learned in written, oral, and visual forms.

(2) To support the teaching of the essential knowledge and skills, the use of a variety of rich material such as biographies; folktales, myths, and legends; and poetry, songs, and artworks is encouraged. Selections may include the legend of the bluebonnet. Motivating resources are also 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 geography and social studies skills strands 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.

(4) 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, §28.002(h).

### **(b) Knowledge and skills.**

(1) History. The student understands the historical significance of landmarks and celebrations in the community, state, and nation. The student is expected to:

(A) explain the significance of various community, state, and national celebrations such as Memorial Day, Independence Day, and Thanksgiving; and

(B) identify and explain the significance of various community, state, and national landmarks such as the county courthouse and state and national capitol buildings.

(2) History. The student understands the concepts of time and chronology. The student is expected to:

- (A) describe the order of events by using designations of time periods such as ancient times and modern times;
- (B) use vocabulary related to chronology, including past, present, and future;
- (C) create and interpret timelines; and
- (D) describe and measure calendar time by days, weeks, months, and years.

(3) History. The student understands how various sources provide information about the past. The student is expected to:

- (A) name several sources of information about a given period or event; and
- (B) compare various interpretations of the same time period using evidence such as photographs and interviews.

(4) History. The student understands how historical figures and ordinary people helped to shape our community, state, and nation. The student is expected to:

- (A) identify contributions of historical figures such as Henrietta King and Thurgood Marshall who have influenced the community, state, and nation;
- (B) identify historic figures such as Amelia Earhart and Robert Fulton who have exhibited a love of individualism and inventiveness; and
- (C) explain how local people and events have influenced local community history.

(5) Geography. The student uses simple geographic tools such as maps, globes, and photographs. The student is expected to:

- (A) use symbols, find locations, and determine directions on maps and globes; and
- (B) draw maps to show places and routes.

(6) Geography. The student understands the locations and characteristics of places and regions. The student is expected to:

- (A) identify major landforms and bodies of water, including continents and oceans, on maps and globes;
- (B) locate the community, Texas, the United States, and selected countries on maps and globes; and
- (C) compare information from different sources about places and regions.

(7) Geography. The student understands how physical characteristics of places and regions affect people's activities and settlement patterns. The student is expected to:

(A) describe how weather patterns, natural resources, seasonal patterns, and natural hazards affect activities and settlement patterns; and

(B) explain how people depend on the physical environment and its natural resources to satisfy their basic needs.

(8) Geography. The student understands how humans use and modify the physical environment. The student is expected to:

(A) identify ways in which people depend on the physical environment, including natural resources, to meet basic needs;

(B) identify ways in which people have modified the physical environment such as building roads, clearing land for urban development, and mining coal;

(C) identify consequences of human modification of the physical environment such as the use of irrigation to improve crop yields; and

(D) identify ways people can conserve and replenish natural resources.

(9) Economics. The student understands the importance of work. The student is expected to:

(A) explain how work provides income to purchase goods and services; and

(B) explain the choices people in the U.S. free enterprise system can make about earning, spending, and saving money, and where to live and work.

(10) Economics. The student understands the roles of producers and consumers in the production of goods and services. The student is expected to:

(A) distinguish between producing and consuming;

(B) identify ways in which people are both producers and consumers; and

(C) trace the development of a product from a natural resource to a finished product.

(11) Government. The student understands the purpose of governments. The student is expected to:

(A) identify functions of governments;

(B) identify some governmental services in the community such as libraries, schools, and parks and explain their value to the community; and

(C) describe how governments establish order, provide security, and manage conflict.

(12) Government. The student understands the role of public officials. The student is expected to:

- (A) compare the roles of public officials including mayor, governor, and president; and
- (B) identify ways that public officials are selected, including election and appointment to office.

(13) Citizenship. The student understands characteristics of good citizenship as exemplified by historic figures and ordinary people. The student is expected to:

- (A) identify characteristics of good citizenship such as a belief in justice, truth, equality, and responsibility for the common good;
- (B) identify historic figures such as Florence Nightingale, Paul Revere, and Sojourner Truth who have exemplified good citizenship; and
- (C) identify ordinary people who exemplify good citizenship.

(14) Citizenship. The student understands important customs, symbols, and celebrations that represent American beliefs and principles and contribute to our national identity. The student is expected to:

- (A) identify selected patriotic songs such as America the Beautiful;
- (B) identify selected symbols such as state and national birds and flowers and patriotic symbols such as the U.S. and Texas flags and Uncle Sam; and
- (C) explain how selected customs, symbols, and celebrations reflect an American love of individualism, inventiveness, and freedom.

(15) Culture. The student understands the significance of works of art in the local community. The student is expected to:

- (A) identify selected stories, poems, statues, paintings, and other examples of the local cultural heritage; and
- (B) explain the significance of selected stories, poems, statues, paintings, and other examples of the local cultural heritage.

(16) Science, technology, and society. The student understands how science and technology have affected life, past and present. The student is expected to:

- (A) describe how science and technology have changed communication, transportation, and recreation; and
- (B) explain how science and technology have changed the ways in which people meet basic needs.

(17) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:

- (A) obtain information about a topic using a variety of oral sources such as conversations, interviews, and music;
- (B) obtain information about a topic using a variety of visual sources such as pictures, graphics, television, maps, computer software, literature, reference sources, and artifacts;
- (C) use various parts of a source, including the table of contents, glossary, and index, as well as keyword computer searches, to locate information;
- (D) sequence and categorize information; and
- (E) interpret oral, visual, and print material by identifying the main idea, predicting, and comparing and contrasting.

(18) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:

- (A) express ideas orally based on knowledge and experiences; and
- (B) create written and visual material such as stories, poems, maps, and graphic organizers to express ideas.

(19) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:

- (A) use a problem-solving process 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; and
- (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.

## **§114.2. Languages Other Than English, Elementary.**

School districts are strongly encouraged to offer languages other than English in the elementary grades. For districts that offer languages in elementary, the essential knowledge and skills are those designated as Levels I and II - novice progress checkpoint, exploratory languages, and cultural and linguistic topics in Subchapter C of this chapter (relating to Texas Essential Knowledge and Skills for Languages Other Than English).

## **§115.4. Health Education, Grade 2.**

### (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) In Grade 2, students learn age-appropriate skills to help them stay healthy and safe. Students are taught, in a basic way, that there are external factors that influence our health, and that the students can take responsibility for protecting their health. Students are taught ways to communicate in a healthy way with friends, families, and classmates.

### (b) Knowledge and skills.

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

(A) explain actions an individual can take when not feeling well;

(B) describe and demonstrate personal health habits such as brushing and flossing teeth and exercise;

(C) identify food groups and describe the effects of eating too much sugar and fat such as knowing that sugar causes dental cavities;

(D) identify healthy and unhealthy food choices such as a healthy breakfast and snacks and fast food choices;

(E) define stress and describe healthy behaviors that reduce stress such as exercise;

(F) describe the importance of individual health maintenance activities such as regular medical and dental checkups; and

(G) describe how a healthy diet can help protect the body against some diseases.

(2) Health behaviors. The student understands that safe, unsafe, and/or harmful behaviors result in positive and negative consequences throughout the life span. The student is expected to:

(A) identify and describe the harmful effects of alcohol, tobacco, and other drugs on the body;

(B) identify ways to avoid deliberate and accidental injuries;

(C) explain the need to use protective equipment when engaging in certain recreational activities such as skateboarding, rollerblading, cycling, and swimming;

(D) explain the importance of avoiding dangerous substances;

(E) explain ways to avoid weapons and report the presence of weapons to an adult; and

(F) identify a trusted adult such as a parent, teacher, or law enforcement officer and identify ways to react when approached and made to feel uncomfortable or unsafe by another person/adult.

(3) Health information. The student understands the basic structures and functions of the human body and how they relate to personal health throughout the life span. The student is expected to:

(A) describe behaviors that protect the body structure and organs such as wearing a seat belt and wearing a bicycle helmet;

(B) identify the major organs of the body such as the heart, lungs, and brain and describe their primary function; and

(C) identify the major systems of the body.

(4) Health information. The student understands the difference between sickness and health in persons of all ages. The student is expected to:

(A) explain ways in which germs are transmitted, methods of preventing the spread of germs, and the importance of immunization;

(B) identify causes of disease other than germs such as allergies and heart disease;

(C) explain how the body provides protection from disease; and

(D) apply practices to control spread of germs in daily life such as hand washing and skin care.

(5) Health information. The student recognizes factors that influence the health of an individual. The student is expected to:

(A) identify hazards in the environment that affect health and safety such as having loaded guns in the home and drinking untreated water;

(B) describe strategies for protecting the environment and the relationship between the environment and individual health such as air pollution and ultra-violet rays; and

(C) identify personal responsibilities as a family member in promoting and practicing health behaviors.

(6) Health information. The student understands how to recognize health information. The student is expected to:

(A) identify people who can provide health information; and

(B) identify various media that provide health information.

(7) Influencing factors. The student recognizes the influence of media and technology on personal health. The student is expected to:

(A) describe how the media can influence an individual's health choices such as television ads for fast foods and breakfast cereals; and

(B) discuss how personal health care products have been improved by technology such as sunblock and safety equipment.

(8) Influencing factors. The student understands how relationships influence personal health. The student is expected to:

(A) describe how friends can influence a person's health; and

(B) recognize unsafe requests made by friends such as playing in the street.

(9) Personal/interpersonal skills. The student comprehends the skills necessary for building and maintaining healthy relationships. The student is expected to:

(A) identify characteristics needed to be a responsible family member or friend;

(B) list and demonstrate good listening skills; and

(C) demonstrate refusal skills.

(10) Personal/interpersonal skills. The student understands healthy ways to communicate consideration and respect for self, family, friends, and others. The student is expected to:

(A) describe how to effectively communicate;

(B) express needs, wants, and emotions in healthy ways; and

(C) explain the benefits of practicing self-control.

(11) Personal/interpersonal skills. The student demonstrates critical-thinking, decision-making, goal-setting and problem-solving skills for making health-promoting decisions. The student is expected to:

(A) explain steps in the decision-making process and the importance of following the steps;

- (B) describe how personal-health decisions affect self and others;
- (C) list the steps and describe the importance of task completion and goal setting; and
- (D) explain why obtaining help, especially from parents/trusted adults, can be helpful when making decisions about personal health.

## §116.4. Physical Education, Grade 2.

### (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) Second grade students learn to demonstrate key elements of fundamental movement skills and mature form in locomotive skills. Students learn to describe the function of the heart, lungs, and bones as they relate to movement. Students are introduced to basic concepts of health promotion such as the relationship between a physically-active lifestyle and the health of the heart. Students learn to work in a group and demonstrate the basic elements of socially responsible conflict resolution.

### (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 independently in a large group while safely and quickly changing speed and direction;

(B) demonstrate skills of chasing, fleeing, and dodging to avoid or catch others;

(C) combine shapes, levels, and pathways into simple sequences;

(D) demonstrate mature form in walking, hopping, and skipping;

(E) demonstrate balance in symmetrical and non-symmetrical shapes from different basis of support;

(F) demonstrate a variety of relationships in dynamic movement situations such as under, over, behind, next to, through, right, left, up, or down;

(G) demonstrate simple stunts that exhibit personal agility such as jumping-one and two foot takeoffs and landing with good control;

(H) demonstrate smooth transition from one body part to the next in rolling activities such as side roll, log roll, balance/curl, and roll/balance in a new position;

(I) demonstrate control weight transfers such as feet to hands with controlled landing and feet to back;

(J) demonstrate the ability to mirror a partner;

(K) walk in time to a 4/4 underlying beat;

(L) perform rhythmical sequences such as simple folk, creative, and ribbon routines;

(M) jump a self-turned rope repeatedly; and

(N) demonstrate on cue key elements of hand dribble, foot dribble, kick and strike such as striking balloon or ball with hand.

(2) Movement. The student applies movement concepts and principles to the learning and development of motor skills. The student is expected to:

(A) recognize that attention to the feeling of movement is important in motor skill development; and

(B) identify similar movement concepts and terms in a variety of skills such as straddle position, ready position, and bending knees to absorb force.

(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; and

(D) lift and support his/her weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back, and legs such as hanging, hopping, and jumping.

(4) Physical activity and health. The student knows the benefits from involvement in daily physical activity and factors that affect physical performance. The student is expected to:

(A) identify how regular physical activity strengthens the heart, lungs, and muscular system;

(B) describe how the blood carries oxygen and nutrients through the body;

(C) identify foods that enhance a healthy heart;

(D) explain the need for foods as a source of nutrients that provide energy for physical activity;

(E) describe the negative effects of smoking on the lungs and the ability to exercise; and

(F) describe the need for rest and sleep in caring for the body.

(5) Physical activity and health. The student knows and applies safety practices associated with physical activities. The student is expected to:

(A) use equipment and space safely and properly;

(B) select and use appropriate protective equipment in preventing injuries such as helmets, elbow/knee pads, wrist guards, proper shoes, and clothing;

(C) list the effects the sun has on the body and describe protective measures such as sunscreen, hat, and long sleeves;

(D) list water safety rules and describe their importance;

(E) identify safe cycling and road practices; and

(F) describe appropriate reactions to emergency situations common to physical activity settings such as universal safety precautions and dialing 911.

(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) identify goals to be accomplished during simple games such as not getting tagged; and

(B) identify strategies in simple games and activities such as dodging to avoid being tagged.

(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) display good sportsmanship; and

(B) treat others with respect during play.

## §117.8. Art, Grade 2.

### (a) Introduction.

(1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students rely on their perceptions of the environment, developed through increasing visual awareness and sensitivity to surroundings, memory, imagination, and life experiences, as a source for creating artworks. They express their thoughts and ideas creatively, while challenging their imagination, fostering reflective thinking, and developing disciplined effort and problem-solving skills.

(2) By analyzing artistic styles and historical periods students develop respect for the traditions and contributions of diverse cultures. Students respond to and analyze artworks, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

### (b) Knowledge and skills.

(1) Perception. The student develops and organizes ideas from the environment. The student is expected to:

(A) identify variations in objects and subjects from the environment, using the senses; and

(B) identify art elements such as color, texture, form, line, and space and art principles such as emphasis, pattern, and rhythm.

(2) Creative expression/performance. The student expresses ideas through original artworks, using a variety of media with appropriate skill. The student is expected to:

(A) express ideas and feelings in artworks, using a variety of colors, forms, and lines;

(B) create effective compositions, using design elements and principles; and

(C) identify and practice skills necessary for producing drawings, paintings, prints, constructions, and modeled forms, using a variety of art materials.

(3) Historical/cultural heritage. The student demonstrates an understanding of art history and culture as records of human achievement. The student is expected to:

(A) identify stories and constructions in a variety of artworks;

(B) compare ways individuals and families are depicted in different artworks; and

(C) identify different kinds of jobs in art.

(4) Response/evaluation. The student makes informed judgments about personal artworks and the artworks of others. The student is expected to:

(A) define reasons for preferences in personal artworks; and

(B) identify ideas in original artworks, portfolios, and exhibitions by peers and artists.

## §117.9. Music, Grade 2.

### (a) Introduction.

(1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. In music, students develop their intellect and refine their emotions, understanding the cultural and creative nature of musical artistry and making connections among music, the other arts, technology, and other aspects of social life. Through creative performance, students apply the expressive technical skills of music and critical-thinking skills to evaluate multiple forms of problem solving.

(2) By reflecting on musical periods and styles, students understand music's role in history and are able to participate successfully in a diverse society. Students analyze and evaluate music, developing criteria for making critical judgments and informed choices.

### (b) Knowledge and skills.

(1) Perception. The student describes and analyzes musical sound and demonstrates musical artistry. The student is expected to:

- (A) identify instruments visually and aurally;
- (B) use music terminology to explain sounds and performances; and
- (C) identify music forms such as AB and ABA.

(2) Creative expression/performance. The student performs a varied repertoire of music. The student is expected to:

- (A) sing or play a classroom instrument independently or in groups; and
- (B) sing songs from diverse cultures and styles or play such songs on a musical instrument.

(3) Creative expression/performance. The student reads and writes music notation. The student is expected to:

- (A) read and write simple music notation, using a system (letters, numbers, syllables); and
- (B) read and write music that incorporates basic rhythmic patterns in simple meters.

(4) Creative expression/performance. The student creates and arranges music within specified guidelines. The student is expected to:

- (A) create rhythmic phrases; and

(B) create melodic phrases.

(5) Historical/cultural heritage. The student relates music to history, to society, and to culture. The student is expected to:

(A) identify music from various periods of history and culture;

(B) sing songs and play musical games from diverse cultures; and

(C) identify relationships between music and other subjects.

(6) Response/evaluation. The student responds to and evaluates music and musical performance. The student is expected to:

(A) distinguish between beat/rhythm, higher/lower, louder/softer, faster/slower, and same/different in musical performances; and

(B) show appropriate audience behavior during live performances.

## §117.10. Theatre, Grade 2.

### (a) Introduction.

(1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing knowledge and skills students are expected to acquire. Through perceptual studies, students increase their understanding of self and others and develop clear ideas about the world. Through a variety of theatrical experiences, students communicate in a dramatic form, make artistic choices, solve problems, build positive self-concepts, and relate interpersonally.

(2) Students increase their understanding of heritage and traditions through historical and cultural studies in theatre. Student response and evaluation promote thinking and further discriminating judgment, developing students who are appreciative and evaluative consumers of live theatre, film, television, and other technologies.

### (b) Knowledge and skills.

(1) Perception. 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) react to sensory experiences;

(B) expand spatial awareness in dramatic play, using expressive and rhythmic movement;

(C) participate in dramatic play, using actions, sounds, and dialogue; and

(D) role-play, imitate, and recreate dialogue.

(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) role-play in real life and imaginative situations through narrative pantomime, dramatic play, and story dramatization;

(C) create dramatizations of limited-action stories, using simple pantomime and puppetry; and

(D) dramatize poems and songs, using simple pantomime and puppetry.

(3) Creative expression/performance. The student applies design, directing, and theatre production concepts and skills. The student is expected to:

(A) select aspects of the environment for use in dramatic play;

- (B) adapt the environment for dramatic play, using simple materials;
- (C) plan dramatic play; and
- (D) cooperate and interact with others in dramatic play.

(4) Historical/cultural heritage. The student relates theatre to history, society, and culture. The student is expected to:

- (A) imitate life experiences from various historical periods in dramatic play; and
- (B) identify diverse cultural dimensions in dramatic play.

(5) Response/evaluation. The student responds to and evaluates theatre and theatrical performances. The student is expected to:

- (A) identify and apply appropriate audience behavior;
- (B) react to and begin to evaluate dramatic activities;
- (C) employ music, creative movement, and visual components in dramatic play; and
- (D) observe the performance of artists and identify theatrical vocations.

## §126.2. Technology Applications, Kindergarten-Grade 2.

### (a) Introduction.

(1) The technology applications curriculum has four strands: foundations, information acquisition, work in solving problems, and communication.

(2) Through the study of technology applications foundations, including technology-related terms, concepts, and data input strategies, students learn to make informed decisions about technologies and their applications. The efficient acquisition of information includes the identification of task requirements; the plan for using search strategies; and the use of technology to access, analyze, and evaluate the acquired information. By using technology as a tool that supports the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create a solution, and evaluate the results. Students communicate information in different formats and to diverse audiences. A variety of technologies will be used. Students will analyze and evaluate the results.

### (b) Knowledge and skills.

(1) Foundations. The student demonstrates knowledge and appropriate use of hardware components, software programs, and their connections. The student is expected to:

(A) use technology terminology appropriate to the task;

(B) start and exit programs as well as create, name, and save files; and

(C) use networking terminology such as on-line, network, or password and access remote equipment on a network such as a printer.

(2) Foundations. The student uses data input skills appropriate to the task. The student is expected to:

(A) use a variety of input devices such as mouse, keyboard, disk drive, modem, voice/sound recorder, scanner, digital video, CD-ROM, or touch screen;

(B) use proper keyboarding techniques such as correct hand and body positions and smooth and rhythmic keystroke patterns as grade-level appropriate;

(C) demonstrate touch keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys as grade-level appropriate;

(D) produce documents at the keyboard, proofread, and correct errors; and

(E) use language skills including capitalization, punctuation, spelling, word division, and use of numbers and symbols as grade-level appropriate.

(3) Foundations. The student complies with the laws and examines the issues regarding the use of technology in society. The student is expected to:

(A) follow acceptable use policies when using computers; and

(B) model respect of intellectual property by not illegally copying software or another individual's electronic work.

(4) Information acquisition. The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:

(A) apply keyword searches to acquire information; and

(B) select appropriate strategies to navigate and access information for research and resource sharing.

(5) Information acquisition. The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to:

(A) acquire information including text, audio, video, and graphics; and

(B) use on-line help.

(6) Information acquisition. The student evaluates the acquired electronic information. The student is expected to:

(A) determine the success of strategies used to acquire electronic information; and

(B) determine the usefulness and appropriateness of digital information.

(7) Solving problems. The student uses appropriate computer-based productivity tools to create and modify solutions to problems. The student is expected to:

(A) use software programs with audio, video, and graphics to enhance learning experiences; and

(B) use appropriate software, including the use of word processing and multimedia, to express ideas and solve problems.

(8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:

(A) use communication tools to participate in group projects; and

(B) use electronic tools and research skills to build a knowledge base regarding a topic, task, or assignment.

(9) Solving problems. The student uses technology applications to facilitate evaluation of work, both process and product. The student is expected to:

(A) use software features, such as on-line help, to evaluate work progress; and

(B) use software features, such as slide show previews, to evaluate final product.

(10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to:

(A) use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience; and

(B) use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays and printed materials.

(11) Communication. The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to:

(A) publish information in a variety of media including, but not limited to, printed copy or monitor display; and

(B) publish information in a variety of media including, but not limited to, stored files or video.

(12) Communication. The student uses technology applications to facilitate evaluation of communication, both process and product. The student is expected to:

(A) select representative products to be collected and stored in an electronic evaluation tool; and

(B) evaluate the product for relevance to the assignment or task.