<u>Proposed Revisions</u>

Texas Essential Knowledge and Skills

Technology Applications, Kindergarten–Grade 2

Prepared by the State Board of Education TEKS Review Committees

November 2010

These documents have been formatted for consistency and ease of review.

Proposed additions are shown in green font with underlines and proposed deletions are shown in red font with strikethroughs.

Comments in the margin provide explanations for proposed changes. The following notations were used as part of the explanations:

CRS—information added or changed to align with College Readiness Standards

ER—information added, changed, or deleted based on expert reviewer feedback

MV—multiple viewpoints from within the committee

VA—information added, changed, or deleted to increase vertical alignment

21st—information updated to 21st century technology trends, applications, and uses

§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.~~

(1) The technology applications curriculum has six strands based on the National Educational Technology Standards (NETS•S) and Performance Indicators for Students developed by the International Society for Technology in Education: creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem solving, and decision making; digital citizenship; and technology operations and concepts.

Comment [A1]: To align with new strands.

~~(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.~~

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

(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.~~

(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, and models to enhance learning;

(D) create and execute steps to accomplish a task; and

(E) evaluate and modify steps to accomplish a task.

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

~~(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.~~

(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) ~~(8)(A)~~ use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally; ~~to participate in group projects; and~~

(B) develop cultural understanding by interacting with learners of multiple cultures in digital environments;

(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) 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.~~

(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; and

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

Comment [A1]: 21st- Updated strands

Comment [A2]: SEs 2A, 2B, 2C, 2D & 2E moved to SE 6 and updated to 21st century skills.

Comment [A3]: 21st, VA

Comment [A4]: 21st New strand

Comment [A5]: Informal Feedback

(C)~~(6)(B)~~ evaluate ~~determine~~ the usefulness ~~and appropriateness~~ of acquired digital ~~information~~ content.

~~(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.~~

(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, not known, and 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, and models.

~~(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.~~

(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) 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~~

Comment [A1]: 21st – Updated strands to include 21st century skills; CRS

Comment [A2]: 21st –Updated strands to include 21st century skills; CRS

Comment [A3]: 21st , CRS

(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, and collaboration;

(C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files;

(D)~~(2)(A)~~ use a variety of input, output, and storage devices ~~such as mouse, keyboard, disk drive, modem, voice/sound recorder, scanner, digital video, CD-ROM, or touch screen~~;

(E)~~(2)(B)~~ use proper keyboarding techniques such as ergonomically correct hand and body positions ~~and smooth and rhythmic keystroke patterns~~ as grade level appropriate. ~~;~~

(F)~~(2)(C)~~ demonstrate ~~touch~~ keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys as grade level appropriate; and

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

~~(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:~~

~~(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~~

Comment [A1]: 21st- Changed strand to reflect 21st century skills

Comment [A2]: ER 10-14-10

Comment [A3]: 21st - Updated strands to include 21st century skills

Comment [A4]: 21st - Updated strands to include 21st century skills

~~(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.~~