

4. Are there topics that should be eliminated or revised because they are not essential or no longer reflect current research or practices within the field? If so, please identify by grade level and student expectation number.


- Please see the comments attached to the TERESt atthedtheS(dent)-6.6 (i)menra04.cBDC 540he0

BD7 (w)2.7 (e ar)-6 (e)10.5 (hi)2.6 (t)-6.6 (t)-6.6 (i)2.6 (ng)10.6 (t)-6.6 (he)10.5 (s)-2 (t)4.3an936 rds I am referencing, but th
0.007 Tw (t087 0 Td[a]10.5 (nd 6 (heS(ul)2.6 (d be 1 -1.-m)-6 (o)10.5 (r)-5.9 (e ex)-2 (pl)2.7 (i)2.6 (c)-2 (i)2.6 (t)4.2 (i)2.6 (n
ai)2.6 (r)-6 (l)2.6 (4)TJ0.005 Tc 0.005 Tw 6.598 0 Td[v]-5 (e)BD404((r)-d490f1ic)-5 (a)BD.-lly6

Or seen as a course or standalone, so if you do not have this program, it does not relate, or seem important, when other items are required, or tested.

- There were also some indication that there is a disconnect between those who see tech apps as a way to teach and improve learning outcomes, more of learning strategies to engage and enhance learning, and those who see it as a fundamental set of skills attained to better equip them for Computer Science/ CTE type courses they may encounter in upper grades, or in the real world college/career.
- Next looking at the CSTA -CS Standards and seeing how they align to what we have written, since I am not finding anything related to NET(S), except older research <https://www.csteachers.org/page/standards>

Chapter 126. Texas Essential Knowledge and

 Number: 1 Author: Casey Phelps Date: 7/9/2021 11:35:00 AM

7 strands based on the updated ISTE standards: Empowered learner, Digital Citizen, Knowledge Constructor, Innovative Designer, Computational Thinker, Creative Communicator, and Global Collaborator, weave in the CSTA standards as well. Computing Systems, Networks and the Internet, Data and Analysis, Algorithms and Programming

(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.

(c) Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Number: 1 Author: Casey Phelps Date: 7/9/2021 11:05:00 AM
Creative Communicator: Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.

Number: 2 Author: Casey Phelps Date: 7/9/2021 9:47:00 AM
ISTE Standard 6b. Students create original works or responsibly repurpose or remix digital resources into new creations.

Number: 3 Author: Casey Phelps Date: 7/9/2021 10:46:00 AM
1A-AP-11 Decompose (break down) the steps needed to solve a problem into a precise sequence of instructions. (P3.2)

Number: 4 Author: Casey Phelps Date: 7/9/2021 10:46:00 AM
1A-AP-12 Develop plans that describe a program's sequence of events, goals, and expected outcomes. (P5.1, P7.2)

Number: 5 Author: Casey Phelps Date: 7/5/2021 6:12:00 PM
Global Collaborator: Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally
7a. Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.
7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
7c. Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.
7d. Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.

Number: 6 Author: Casey Phelps Date: 7/9/2021 10:47:00 AM
1A-IC-17 Work respectfully and responsibly with others online. (P2.1)

Number: 7 Author: Casey Phelps Date: 7/9/2021 11:13:00 AM
ISTE Standard 6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
ISTE Standard 6d. Students publish or present content that customizes the message and medium for their intended audiences.

Number: 8 Author: Casey Phelps Date: 7/9/2021 10:50:00 AM
Knowledge Constructor
Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.
3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

Number: 9 Author: Casey Phelps Date: 7/9/2021 11:29:00 AM
Innovative Designer
Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.
4a. Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
4b. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
4c. Students develop, test and refine prototypes as part of a cyclical design process.
4d. Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.
Computational Thinker
Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.
5a. Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
5b. Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.
5c. Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

Number: 1 Author: Casey Phelps Date: 7/9/2021 10:04:00 AM

1A-CS-02 Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware). (P7.2)

Number: 2 Author: Casey Phelps Date: 7/9/2021 10:06:00 AM

1A-DA-05 Store, copy, search, retrieve, modify, and delete information using a computing device and define the information stored as data. (P4.2)

Number: 3 Author: Casey Phelps Date: 7/9/2021 10:01:00 AM

1A-CS-01 Select and Operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use. (P1.1)

ISTE Standard Reference 6a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

Number: 4 Author: Casey Phelps Date: 7/9/2021 10:14:00 AM

1A-DA-05 Store, copy, search, retrieve, modify, and delete information using a computing device and define the information stored as data. (P4.2)

Number: 5 Author: Casey Phelps Date: 7/9/2021 11:20:00 AM

1A-AP-13 Give attribution when using the ideas and creations of others while developing programs. (P7.3)

1A-IC-17 Work respectfully and responsibly with others online. (P2.1)

1A-IC-18 Keep login information private, and log off of devices appropriately. (P7.3)

1A-NI-04 Explain what passwords are and why we use them, and use strong passwords to protect devices and information from unauthorized access. (P7.3)

- (I) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning; and
- (J) use the help feature online and in applications.

Source: The provisions of this §126.6 adopted to be effective September 26, 2011, 36 TexReg 6263.

Submitted by Casey Phelps

§126.7. Technology Applications, Grades 3-5, Beginning with School Year 2012-2013.

(a)

- (B) communicate effectively with multiple audiences using a variety of media and formats;
and
 - (C) read and discuss complex texts and analyze their ideas and arguments. (L.9-10.1) (L.9-10.2) (L.9-10.3) (L.9-10.4) (L.9-10.5) (L.9-10.6) (L.9-10.7) (L.9-10.8) (L.9-10.9) (L.9-10.10) (L.9-10.11) (L.9-10.12) (L.9-10.13) (L.9-10.14) (L.9-10.15) (L.9-10.16) (L.9-10.17) (L.9-10.18) (L.9-10.19) (L.9-10.20) (L.9-10.21) (L.9-10.22) (L.9-10.23) (L.9-10.24) (L.9-10.25) (L.9-10.26) (L.9-10.27) (L.9-10.28) (L.9-10.29) (L.9-10.30) (L.9-10.31) (L.9-10.32) (L.9-10.33) (L.9-10.34) (L.9-10.35) (L.9-10.36) (L.9-10.37) (L.9-10.38) (L.9-10.39) (L.9-10.40) (L.9-10.41) (L.9-10.42) (L.9-10.43) (L.9-10.44) (L.9-10.45) (L.9-10.46) (L.9-10.47) (L.9-10.48) (L.9-10.49) (L.9-10.50) (L.9-10.51) (L.9-10.52) (L.9-10.53) (L.9-10.54) (L.9-10.55) (L.9-10.56) (L.9-10.57) (L.9-10.58) (L.9-10.59) (L.9-10.60) (L.9-10.61) (L.9-10.62) (L.9-10.63) (L.9-10.64) (L.9-10.65) (L.9-10.66) (L.9-10.67) (L.9-10.68) (L.9-10.69) (L.9-10.70) (L.9-10.71) (L.9-10.72) (L.9-10.73) (L.9-10.74) (L.9-10.75) (L.9-10.76) (L.9-10.77) (L.9-10.78) (L.9-10.79) (L.9-10.80) (L.9-10.81) (L.9-10.82) (L.9-10.83) (L.9-10.84) (L.9-10.85) (L.9-10.86) (L.9-10.87) (L.9-10.88) (L.9-10.89) (L.9-10.90) (L.9-10.91) (L.9-10.92) (L.9-10.93) (L.9-10.94) (L.9-10.95) (L.9-10.96) (L.9-10.97) (L.9-10.98) (L.9-10.99) (L.9-10.100)
- (3) Research and information fluency. The student acquires, analyzes, and manages content from digital resources. The student is expected to:
- (A) create a research plan to guide inquiry;
 - (B) discuss and use various search strategies, including keyword(s)

- (D) understand and use software applications, including selecting and using software for a defined task;
- (E) identify, understand, and use hardware systems;
- (F) understand troubleshooting techniques such as restarting systems, checking power issues, resolving software compatibility, verifying network connectivity, connecting to remote resources, and modifying display properties;
- (G) implement effective file management strategies such as file naming conventions, location, backup, hierarchy, folder structure, file conversion, tags, labels, and emerging digital organizational strategies;
- (H) explain how changes in technology throughout history have impacted various areas of study;
- (I) explain the relevance of technology as it applies to college and career readiness, life-long learning, and daily living;
- (J) use a variety of local and remote input sources;
- (K) use keyboarding techniques and ergonomic strategies while building speed and accuracy;
- (L) create and edit files with productivity tools, including:
 - (i) a word processing document using digital typography standards such as page layout, font formatting, paragraph formatting, and list attributes;
 - (ii) a spreadsheet workbook using advanced computational and graphic components such as complex formulas, basic functions, data types, and chart generation;
 - (iii) a database by manipulating components such as defining fields, entering data, and designing layouts appropriate for reporting; and
 - (iv) a digital publication using relevant publication standards;
- (M) plan and create non-linear media projects using graphic design principles; and
- (N) integrate two or more technology tools to create a new digital product.

Source: The provisions of this §126.15 adopted to be effective September 26, 2011, 36 TexReg 6263.

§126.16. Technology Applications, Grade 8, Beginning with School Year 2013-14, Effective September 26, 2011, 36 TexReg 6263

- (1) Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge, generate new ideas, and create products. The student is expected to:
 - (A) identify, create, and use files in various formats, including text, raster and vector graphics, video, and audio files;
 - (B) create, present, and publish original works as a means of personal or group expression;
 - (C) explore complex systems or issues using models, simulations, and new technologies to develop hypotheses, modify input, and analyze results; and
 - (D) analyze trends and forecast possibilities.
- (2) Communication and collaboration. The student collaborates and communicates both locally and globally to reinforce and promote learning. The student is expected to:
 - (A) create and manage personal learning networks to

D-3.1(1) Trin s

- (4) Critical thinking, problem solving, and decision making. The student researches and evaluates projects using digital tools and resources. The student is expected to:
- (A)

pri