

AGENCY OF EDUCATION

Barre, Vermont

TEAM: Research and Flexible Pathways

ITEM: Will the State Board of Education:

Approve the formal proposal made in June of 2017, for adoption of 2016 International Society for Technology in Education (ISTE) Student Standards for Education Technology as a framework for VT schools.

SECRETARY'S RECOMMENDED ACTION:

1. Recommend that SBE approve adoption of the 2016 ISTE Student Standards for Education Technology as a framework for Education Technology use in Vermont classrooms.

STATUTORY AUTHORITY:

16 V.S.A. § 164 (9) State Board; general powers and duties Implement and continually update standards for student performance in appropriate content areas.

16 V.S.A. § 165 (3) EQS

(B) instructional practices and curriculum leadership, content and coordination

(D) access to current technology

BACKGROUND INFORMATION:

POLICY IMPLICATIONS: The State Board of Education adopted the ISTE 2007 Student Standards in 2009. We now seek to adopt the updated version of these standards. No existing state policies, other than standards adoption, are affected.

EDUCATION IMPLICATIONS: This provides schools with a framework against which to measure their use of education technology in classrooms. These standards have been recognized and respected over the course of the last 20 years, the first standards having come out in 1997.

FISCAL IMPLICATIONS: None.

STAFF AVAILABLE: Peter Drescher, State Director of Educational Technology

ISTE STANDARDS FOR STUDENTS

1. Empowered Learner

Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. Students:

- articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.
- build networks and customize their learning environments in ways that support the learning process.
- use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.
- understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

2. Digital Citizen

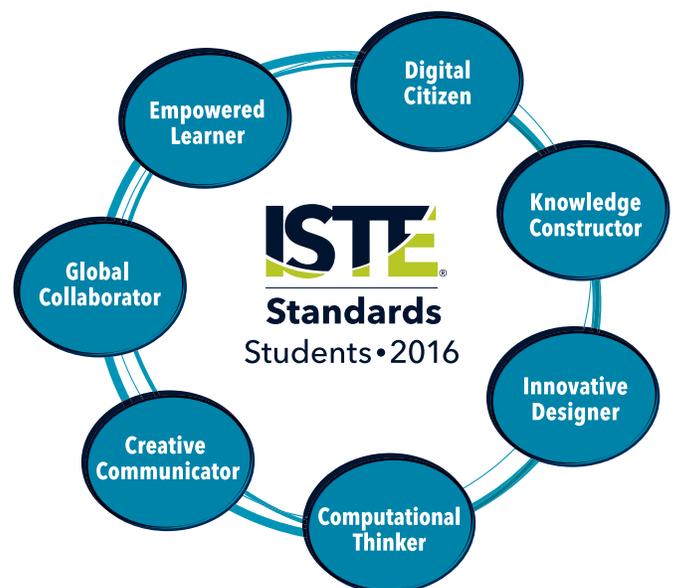
Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical. Students:

- cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.
- engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
- demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
- manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

3. 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. Students:

- plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
- evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
- curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
- build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.



4. Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students:

- a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
- b. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
- c. develop, test and refine prototypes as part of a cyclical design process.
- d. exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.

5. 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. Students:

- a. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
- b. 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.
- c. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.
- d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

6. 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. Students:

- a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
- b. create original works or responsibly repurpose or remix digital resources into new creations.
- c. communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
- d. publish or present content that customizes the message and medium for their intended audiences.

7. 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. Students:

- a. 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.
- b. use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
- c. contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.
- d. explore local and global issues and use collaborative technologies to work with others to investigate solutions.

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