Appendix A

ISTE Standards and Computer Science Standards: Working Together to Best Prepare Today’s Students

COMPUTER SCIENCE
- Data and Analysis
- Computing Systems
- Networks and the Internet
- Algorithms and Programming
- Impacts of Computing

CSTA K-12 Standards 2017

EDUCATION TECHNOLOGY
- Global Collaborator
- Creative Communicator
- Knowledge Constructor
- Innovator Designer
- Empowered Learner
- Digital Citizen

ISTE Standards for Students 2016

Computational Thinker

Learning to create technology
Learning to use technology
ISTE Standards and Computer Science Standards: Technology for Learning and Careers

Connecticut Standards

Academic Subjects

Cross-Disciplinary Standards

Connecticut Core Standards

Mathematics

Computer Science

Social Studies

Science

English Language Arts

Computer Science Teachers Association

CT Elementary and Secondary Social Studies Frameworks

Next Generation Science Standards

ISTE
The State Board of Education endorses the standards of the International Society for Technology in Education (ISTE) and the Computer Science Teachers Association (CSTA). While the two leverage similar terminology, given that both support current instructional best practices, they differ in significant ways.

The ISTE Standards for Students address how students learn, which includes — but does not depend on — the use of technology. The ISTE Standards define habits of mind and general competencies, which many organizations believe are critical for students to master for life in a digital world, rather than discrete content areas. Educators are encouraged to address the Standards across all academic areas, toward the goal of deepening and scaling learning. Teachers should assess student proficiency in the ISTE Standards as part of general coursework, ideally as part of longitudinal portfolios that demonstrate interdisciplinary mastery of digital learning skills.

The CSTA K–12 Standards provide a comprehensive set of K–12 standards in the academic subject of computer science. They are designed to provide a clear understanding of the principles and practices of computer science as an independent discipline. The standards provide academic coherence between coursework and the rapid growth of computing and technology in the modern world and address the need for an educated workforce that can build and manage technology for the benefit of society.

Schools' adoption of both the ISTE and CSTA Standards will help all students to understand and leverage technology for successful careers, lifelong learning, and citizenship in today’s digital world.

<table>
<thead>
<tr>
<th>ISTE Standards</th>
<th>NCSTA Standards</th>
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</thead>
<tbody>
<tr>
<td><strong>Standard Type</strong></td>
<td>Habits of Mind, General Competencies</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Deepen Learning Across All Subjects</td>
</tr>
<tr>
<td><strong>Applications</strong></td>
<td>All Subjects, Standards</td>
</tr>
<tr>
<td><strong>Used By</strong></td>
<td>All Students, Educators, and Leaders</td>
</tr>
<tr>
<td><strong>Assessment Type</strong></td>
<td>Cross-Disciplinary, Integrated</td>
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</tbody>
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