



**Adventist Education**

A JOURNEY TO EXCELLENCE

# Elementary Technology

2016

**ELEMENTARY TECHNOLOGY STANDARDS  
IN SEVENTH-DAY ADVENTIST SCHOOLS**

**OFFICE OF EDUCATION** | North American Division Seventh-day Adventist Church

# Adventist Education Standards

Standards, what learners should know (content) and be able to do (skills), serve as the framework for curriculum development. Standards in NAD Seventh-day Adventist schools reflect the Adventist worldview across the K-12 curricula as well as the integration of national and provincial/state standards. The Adventist worldview accepts the Bible as the standard by which everything else is measured. Four key concepts emerge from a biblical worldview that can be used as a lens for curriculum development, as well as informing the essential questions and big ideas of any content area: Creation (What is God's intention?), Fall (How has God's purpose been distorted?), Redemption (How does God help us to respond?), and Re-creation (How can we be restored in the image of God?).

— THE CORE OF ADVENTIST EDUCATION CURRICULUM

“Of every Christian the Lord requires growth in efficiency and capability in every line...” (COL 330.4)

Technology is part of the delivery and practice in every subject area. The technology standards are intentionally designed to give students opportunities to learn about the digital world, to facilitate personalized inquiry, and to prepare for a life of service. The knowledge and skills will extend beyond the classroom to foster lifelong learning so that students can thrive in this changing global society and be contributing, productive citizens while preparing for Christ's return. The elementary technology standards support:

1. **DIGITAL LEARNING:** To use a range of relevant digital technologies to learn content and demonstrate understanding.
2. **DIGITAL FLUENCY:** To excel in current technology skills, operations, and vocabulary, in support of research, communication, and collaboration with a variety of digital resources.
3. **DIGITAL CITIZENSHIP:** To use digital technology responsibly to improve the online community by respecting self, others, and property.

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## STANDARDS CODING

The standards have been coded so that educators can easily refer to them in their curriculum, instruction, and assessment practices. The coding system that precedes each standard uses the following system of abbreviations:

- All are identified with **T**—Technology (**T.K-2.DL.1**).
- The second part of the code refers to the grade level (**T.K-2.DL.1**).
- The third part of the code refers to the particular technology domain (**T.K-2.DL.1**), with DL standing for Digital Learning.
- The fourth part of the code refers to a particular skill within the domain (**T.K-2.DL.1**).
- Following the standard is the name of the International Standards for Technology in Education (ISTE) primary domain correlation.

## CREDITS

The following resources were referenced in developing *Elementary Technology Standards for Seventh-day Adventist Schools*: International Standards for Technology in Education (ISTE); Computer Science Teachers Association (CSTA); state standards, including Washington and Michigan; NAD technology documents; and the Core of Adventist Education Curriculum.

## DEVELOPMENT COMMITTEE MEMBERS

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## 2016 ELEMENTARY TECHNOLOGY STANDARDS – DIGITAL LEARNING

| SKILL   | GRADES K-2   | GRADES 3-5  | GRADES 6-8   |
|---|--|---|--|
| <b>Essential Question:</b> How do digital technologies support the ways God designed us to learn?               |  | <b>Big Idea:</b> Digital technologies assist learners in thinking critically, communicating, collaborating, and creating.   |  |
| <b>Subject Integration:</b> Language Arts, Math, Social Studies, Bible  |  |   |  |
| <b>1</b>  | <b>T.K-2.DL.1</b> Explore and use teacher-selected software to create a product. (Creativity and Innovation-1)   | <b>T.3-5.DL.1</b> Use age-appropriate software to generate new ideas and create products. (Creativity and Innovation-1)   | <b>T.6-8.DL.1</b> Choose appropriate software to generate new ideas and create products. (Creativity and Innovation-1)   |
| <b>2</b>  | <b>T.K-2.DL.2</b> Use technology in multiple subjects to find answers to questions. (Critical Thinking-1; Critical thinking, Problem Solving, and Decision Making-4) | <b>T.3-5.DL.2</b> Use technology in multiple subjects to gather and organize data, draw conclusions, and solve problems. (Critical Thinking-1; Critical thinking, Problem Solving, and Decision Making-4) | <b>T.6-8.DL.2</b> Select and use technology in multiple subjects to gather, organize, and analyze data to draw conclusions, solve problems, make informed decisions, and/or propose solutions to an authentic audience. (Critical Thinking-1; Critical thinking, Problem Solving, and Decision Making-4) |
| <b>3</b>  | <b>T.K-2.DL.3</b> Play with technology and discuss observations. (Creativity and Innovation-1)   | <b>T.3-5.DL.3</b> Play with technology and document discoveries and reflections. (Creativity and Innovation-1)  | <b>T.6-8.DL.3</b> Play with technology and collaborate to present what is discovered. (Creativity and Innovation-1)  |
| <b>4</b>  | <b>T.K-2.DL.4</b> Discuss how technology can help solve a problem. (Critical Thinking, Problem Solving, and Decision Making-4)                                       | <b>T.3-5.DL.4</b> Demonstrate how technology can help find multiple solutions to a problem. (Critical Thinking, Problem Solving, and Decision Making-4)   | <b>T.6-8.DL.4</b> Analyze and evaluate how technology can help identify multiple solutions to a problem. (Critical Thinking, Problem Solving, and Decision Making-4)   |
| <b>5</b>  | <b>T.K-2.DL.5</b> Create a project using technology to serve the church and community. (Critical Thinking, Problem Solving, and Decision Making-4)                   | <b>T.3-5.DL.5</b> Create a project using technology to serve the church and community. (Critical Thinking, Problem Solving, and Decision Making-4)  | <b>T.6-8.DL.5</b> Create a project using technology to serve the church and community. (Critical Thinking, Problem Solving, and Decision Making-4)   |
| <b>Assessments:</b> Teacher formative assessment tools, Rubrics, Conferencing, Portfolios, Checklists, Products |  |   |  |

## 2016 ELEMENTARY TECHNOLOGY STANDARDS – DIGITAL FLUENCY

| SKILL   | GRADES K-2   | GRADES 3-5   | GRADES 6-8   |
|---|--|--|--|
| <b>Essential Question:</b> Why should we excel in the understanding and use of digital technology resources?    |  | <b>Big Idea:</b> The proficient use of digital technology provides us with the opportunity to develop academically, socially, and spiritually.   |  |
| <b>Subject Integration:</b> Math, Science, Language Arts, Bible   |  |  |  |
| <b>1</b>  | <b>T.K-2.DF.1</b> Use developmentally appropriate digital tools to communicate ideas with others. (Communication and Collaboration-2)  | <b>T.3-5.DF.1</b> Communicate ideas to multiple audiences within digital environments. (Communication and Collaboration-2)   | <b>T.6-8.DF.1</b> Use a variety of media and formats within digital environments to communicate ideas with authentic audiences and engage in faith-based activities. (Communication and Collaboration-2) |
| <b>2</b>  | <b>T.K-2.DF.2</b> Use teacher-selected Internet resources, programs, and applications to support personal and academic development. (Research and Information Fluency-3; Technology Operations and Concepts-6) | <b>T.3-5.DF.2</b> Use teacher-selected Internet resources, programs, and applications to support personal and academic development. (Research and Information Fluency-3; Technology Operations and Concepts-6) | <b>T.6-8.DF.2</b> Select appropriate Internet resources to acquire, produce, and share knowledge in all subjects. (Research and Information Fluency-3; Technology Operations and Concepts-6)             |
| <b>3</b>  | <b>T.K-2.DF.3</b> Know basic technological vocabulary and use a variety of age-appropriate hardware and software. (Technology Operations and Concepts-6)   | <b>T.3-5.DF.3</b> Demonstrate understanding of common technological vocabulary and use a variety of hardware and software. (Technology Operations and Concepts-6)  | <b>T.6-8.DF.3</b> Exhibit fluency in operations, concepts, and terminology across a wide variety of hardware and software. (Technology Operations and Concepts-6)  |
| <b>4</b>  | <b>T.K-2.DF.4</b> Develop basic troubleshooting skills to solve technology problems. (Technology Operations and Concepts-6)  | <b>T.3-5.DF.4</b> Use troubleshooting and adaptive skills to solve technology problems. (Technology Operations and Concepts-6)   | <b>T.6-8.DF.4</b> Troubleshoot technology problems by hypothesizing causes, discovering possible solutions, and sharing results with others. (Technology Operations and Concepts-6)                      |
| <b>5</b>  | <b>T.K-2.DF.5</b> Identify, match, and use computer keys through informal experiences. (Technology Operations and Concepts-6)  | <b>T.3-5.DF.5</b> Begin formal keyboard training and work toward correct touch typing technique. (Technology Operations and Concepts-6)  | <b>T.6-8.DF.5</b> Increase keyboarding speed and accuracy using correct touch typing technique. (Technology Operations and Concepts-6)   |
| <b>Assessments:</b> Teacher formative assessment tools, Rubrics, Conferencing, Portfolios, Checklists, Products |  |  |  |

## 2016 ELEMENTARY TECHNOLOGY STANDARDS – DIGITAL CITIZENSHIP

| SKILL  | GRADES K-2  | GRADES 3-5  | GRADES 6-8   |
|--|---|---|--|
| <b>Essential Question:</b> How can we be safe and responsible citizens in the online community while honoring God? |   | <b>Big Idea:</b> We honor God when we respect and collaborate with others while practicing personal safety in the global internet community.                              |  |
| <b>Subject Integration:</b> Bible, Language Arts, Social Studies   |   |   |  |
| <b>1</b>   | <b>T.K-2.DC.1</b> Recognize how a Christian uses technology as a responsible citizen. (Digital Citizenship-5)                                     | <b>T.3-5.DC.1</b> Discuss the role of a Christian as a responsible citizen in the online community. (Digital Citizenship-5)   | <b>T.6-8.DC.1</b> Practice and model being a responsible Christian in the online community. (Digital Citizenship-5)  |
| <b>2</b>   | <b>T.K-2.DC.2</b> Choose responsible ways to promote the Gospel with technology. (Communication and Collaboration-2; Digital Citizenship-5)       | <b>T.3-5.DC.2</b> Explore and engage in meaningful ways to promote the Gospel with technology. (Communication and Collaboration-2; Digital Citizenship-5)                 | <b>T.6-8.DC.2</b> Show respect for cultural diversity while using technology to engage a global audience to promote the Gospel. (Communication and Collaboration-2; Digital Citizenship-5)               |
| <b>3</b>   | <b>T.K-2.DC.3</b> Understand what personal information should not be shared online. (Digital Citizenship-5)                                       | <b>T.3-5.DC.3</b> Describe why certain personal information should not be shared online. (Digital Citizenship-5)  | <b>T.6-8.DC.3</b> Practice safe, legal, and responsible use of technology, recognizing the permanence of the digital footprint. (Digital Citizenship-5)  |
| <b>4</b>   | <b>T.K-2.DC.4</b> Use technology to communicate respectfully with others. (Communication and Collaboration-2; Digital Citizenship-5)              | <b>T.3-5.DC.4</b> Discuss netiquette and honor appropriate guidelines specific to various online activities and environments. (Digital Citizenship-5)                     | <b>T.6-8.DC.4</b> Compare and contrast positive and negative examples of communication on the Internet and demonstrate ways to appropriately handle cyberbullying. (Digital Citizenship-5)               |
| <b>5</b>   | <b>T.K-2.DC.5</b> Know the difference between finding, copying, and creating content. (Research and Information Fluency-3; Digital Citizenship-5) | <b>T.3-5.DC.5</b> Discuss the importance of copyright and demonstrate how to cite sources for original works. (Research and Information Fluency-3; Digital Citizenship-5) | <b>T.6-8.DC.5</b> Understand copyright and cite sources when referencing original works. (Research and Information Fluency-3; Digital Citizenship-5)   |
| <b>6</b>   | <i>(No level 6 skill for K-2)</i>   | <i>(No level 6 skill for 3-5)</i>   | <b>T.6-8.DC.6</b> Practice responsible stewardship as consumers and producers in an online global economy. (Critical Thinking, Problem-Solving, and Decision Making-4; Digital Citizenship-5)            |
| <b>7</b>   | <i>(No level 7 skill for K-2)</i>   | <i>(No level 7 skill for 3-5)</i>   | <b>T.6-8.DC.7</b> Understand the healthy benefits of time management and practice self-control when using technology. (Critical Thinking, Problem-Solving, and Decision Making-4; Digital Citizenship-5) |
| <b>8</b>   | <i>(No level 8 skill for K-2)</i>   | <i>(No level 8 skill for 3-5)</i>   | <b>T.6-8.DC.8</b> Determine responsible Internet security protocols. (Digital Citizenship-5)   |
| <b>Assessments:</b> Teacher formative assessment tools, Rubrics, Conferencing, Portfolios, Checklists, Products    |   |   |  |