

Technology

2018

SECONDARY TECHNOLOGY STA IN SEVENTH-DAY ADVENTIS

OFFICE OF EDUCATION North American Division Seventh-day Adventist Church

Cross-Curricular Technology Standards

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. As goals for student learning, standards inform the development of curriculum, the implementation of instruction, and assessment for student learning. The Adventist worldview accepts the Bible as the standard by which everything else is measured. Key concepts emerge from a biblical worldview that can be used as a lens for curriculum development. — The Core of Adventist Education Curriculum

OUR GOAL

The goal of Seventh-day Adventist education is about more than quality teachers providing innovative instruction. Adventist education aims to provide student learning infused with Christian faith and an Adventist worldview. To achieve this goal Seventh-day Adventist standards for grades 9-12 subjects have been carefully developed to embody Seventh-day Adventist beliefs and to prepare students for life-long learning, equipping them for earthly service and heavenly citizenship. An education of this kind imparts strong academic knowledge and a clear picture of Christ and His love for mankind. These standards focus on what students should know, understand and be able to do. They will be a useful tool for teachers in developing lessons and ensure a thorough preparation for college or university when fully implemented across the curriculum.

Seventh-day Adventist Secondary Standards:

- 1. Provide clear expectations for student learning and accountability.
- 2. Provide an essential user-friendly tool for developing instruction.
- 3. Transform textbooks from curriculum guide to a resource for instruction.
- 4. Provide for a complete and uniform Adventist secondary curriculum.
- 5. Have been developed exclusively by Seventh-day Adventist educators.
- 6. Have been aligned with the goals of Journey to Excellence.
- 7. Have been developed using 2017 US Department of Education Technology Plan, NAD standards and International Society for Technology in Education (ISTE) standards.

RATIONALE

The development of Cross-Curricular Technology Standards for Secondary Learners in Seventhday Adventist Schools recognizes that technology is a gateway for personalized learning environments, connecting learners beyond the classroom walls. The standards acknowledge that today's students are social learners who leverage technology to deepen learning. They seek to ensure that the beliefs and values of our Adventist Christian faith are integrated across the curriculum.

Technology compliments effective teaching and learning; however, if technology is just used as a tool for delivering passive content, such as an e-textbook, it diminishes the potential to empower learners and close prevailing opportunity gaps.

The standards are intended to assist students to reflect God's image as

- Digital Citizen
- Enabled Learner
- Purposeful Communicator
- Global Collaborator
- Creative Developer

Technology gives us the ability to convert information and links learners to the world making learning limitless. These carefully developed technology standards are a practical tool to assist teachers in focusing their instruction so that students achieve competence and are engaged successfully. By utilizing technology for productive purposes and in an ethical manner, we foster the balanced development of the whole person to prepare them for earthly service and heavenly citizenship.

"True education means more than the pursual of a certain course of study. It means more than a preparation for the life that now is. It has to do with the whole being, and with the whole period of existence possible to man. [...] In the highest sense, the work of education and the work of redemption are one..." — Ellen White, Education, p. 13, 30

CREDITS

The following resources were referenced in developing Cross-Curricular Technology Standards for Secondary Learners in Seventh-day Adventist Schools: Digital Citizenship Defined: Teach The 9 Elements To Enhance Students' Safety, Creativity, and Empathy; iNACOL's National Standards for Quality Online Teaching: Reimagining the Role of Technology in Education: 2017 National Education Technology Plan Update; Association of American Colleges & Universities' Global Learning; Adventist Education Secondary Computer Education Standards; ISTE Standards for Students; NAD's 2016 Elementary Technology Standards; Calvin?; Harvard Business Review article, How to Prepare the Next Generation for Jobs in the A.I. Economy; Academy Advanced Standards; Education and Career News' articles. How Interoperability Is Shaping the Classrooms of the Future, and Six Key Trends in Education Technology, and Technology Isn't Just Modernizing Schools It's Personalizing Them. and Weighing in on Technology and Personalized Education.

STANDARDS CODING

The standards have been coded so that educators can easily refer to them in their curriculum, instruction, assessment and professional development activities. The coding system that precedes each standard uses the following system of abbreviation in letters and numbers. All are identified with T-Technology (T.9-12.DC.1). The second part of the code refers to the grade level (T.9-12.DC.1). The third part of the code refers to the particular Technology domain (T.9-12.DC.1), with DC standing for Digital Citizen. The fourth part of the code refers to a particular skill within the domain (T.9-12.DC.1).

JOURNEY TO EXCELLENCE

The technology standards correlate with the four stages of the Adventist curriculum development process (Purpose, Plan, Practice, Product) which align with the four stages of Journey to Excellence.

DIGITAL CITIZEN

As responsible digital citizens, learners exhibit safe, ethical and informed use of technology in a Christ-like manner. Learners develop good technological habits while avoiding unnecessary traps. Learners have the opportunity to develop a wide range of skills, literacies, and abilities that extend beyond the classroom. Learners:

- T.9-12.DC.1 Exercise responsible Christ-like behavior when using technology.
- T.9-12.DC.2 Demonstrate respect for diversity as Jesus modeled.
- T.9-12.DC.3 Practice safe, legal, and ethical use of information and technology.
- T.9-12.DC.4 Cultivate and manage their digital identity and reputation recognizing the permanence of the digital footprint.
- T.9-12.DC.5 Develop strategies to appropriately handle cyber-bullying.
- T.9-12.DC.6 Understand and comply with legal responsibilities in regard to copyright when using and sharing intellectual property.
- T.9-12.DC.7 Practice self-control and time-management.
- T.9-12.DC.8 Protect personal data to maintain digital privacy and personal security.

ENABLED LEARNER

Learners leverage technology to take ownership of their learning and develop academically, socially and spiritually. This may be facilitated through critical thinking, data analysis, agency, goal-setting, and problem solving. Learners:

- T.9-12.EL.1 Employ appropriate technology in service to the church and community.
- T.9-12.EL.2 Use technology as a tool to engage in creative, productive, life-long learning.
- T.9-12.EL.3 Understand the primary functions of technology and be able to transfer those skills to explore new technologies.
- T.9-12.EL.4 Seek feedback from peers, teachers, experts and online tools to critique and improve their work.
- T.9-12.EL.5 Set personal learning goals using various technological methods and demonstrate understanding in a variety of ways.
- T.9-12.EL.6 Evaluate the validity, viewpoint and relevance of information gathered.
- T.9-12.EL.7 Dissect information into separate parts, extract vital data, develop models to problem solve and test prototypes.

PURPOSEFUL COMMUNICATOR

Learners articulate ideas and questions in clear and creative ways by using tools appropriate for the desired outcome, while maintaining a Christ-like approach. All communications reflect ethical and focused messages. Learners:

- T.9-12.PC.1 Select effective platforms and tools for reaching preferred goals from a Christian perspective.
- T.9-12.PC.2 Share complex ideas with clarity and purpose.
- T.9-12.PC.3 Communicate logically using appropriate language.
- T.9-12.PC.4 Publish or present material that tailors the information and medium for desired audiences.
- T.9-12.PC.5 Use a variety of media and formats within digital environments to communicate ideas with authentic audiences and engage in faith-based activities.
- T.9-12.PC.6 Establish meaningful networks with peers and others.
- T.9-12.PC.7 Utilize technology to support reflective listening.

GLOBAL COLLABORATOR

Learners utilize technology to broaden and enrich their learning experiences through meaningful collaboration with peers and world community. Collaboration is a reflection of the way people solve problems, and technology tools help learners connect with others. Learners develop skills to navigate global challenges by examining issues and problems through multiple viewpoints. While using technology, learners:

- T.9-12.GC.1 Engage a global audience to share the Gospel.
- T.9-12.GC.2 Establish meaningful connections with a broader community to strengthen and expand their learning experiences.
- T.9-12.GC.3 Communicate complex ideas effectively to diverse audiences.
- T.9-12.GC.4 Develop a greater understanding of how human organizations and actions impact global systems.
- T.9-12.GC.5 Articulate their own values in a cross-cultural setting.
- T.9-12.GC.6 Collaborate to work with others to investigate solutions.

CREATIVE DEVELOPER

While using a variety of technologies, learners become innovative designers creating unique, relevant and/or imaginative solutions. Encouraging creativity is pivotal in sharing Christian perspectives through productions. Learners:

- T.9-12.CD.1 Create original media productions.
- T.9-12.CD.2 Produce, edit and responsibly remix digital resources.
- T.9-12.CD.3 Understand terminology, basic structure and process of coding.
- T.9-12.CD.4 Use algorithmic thinking to develop and evaluate automated solutions.
- T.9-12.CD.5 Identify and implement a targeted design process for developing concepts, testing theories and solving authentic problems.
- T.9-12.CD.6 Recognize design as part of a cyclical process that includes development, testing and refinement.
- T.9-12.CD.7 Appreciate ambiguity, perseverance and the ability to troubleshoot open-ended problems.

DEVELOPMENT COMMITTEE MEMBERS

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A JOURNEY TO EXCELLENCE

