



# Basic Course

2010

**SECONDARY COMPUTER EDUCATION STANDARDS  
IN SEVENTH-DAY ADVENTIST SCHOOLS**

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

# Computer Education Standards

## 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 national and state standards, Adventist curriculum guides, and standards compendiums from McRel and Ten Sigma.

## RATIONALE

*Secondary Computer Education Standards for Seventh-day Adventist Schools* seeks to ensure that the beliefs and values of our Adventist Christian faith are integrated into the curriculum. Instruction from this type of curriculum should help students learn to reflect God's image while developing proficiency in the content areas of computer technology areas through understanding, application, and evaluation. This kind of education imparts more than academic knowledge. It fosters the balanced development of the whole person to prepare them for earthly service and heavenly citizenship.

These carefully developed computer education standards are a practical tool to assist teachers in focusing their instruction so that students achieve competence and are engaged successfully in understanding and utilizing technology for productive purposes and in an ethical manner for various real life situations. These standards should help students grasp the opportunities technology provides for supporting the mission and ministry of the church. These standards also create meaningful connections for technology with other fields of learning. The intent of these standards is to focus on the essence of what students should learn, retain and apply to their lives.

Seventh-day Adventist secondary schools differ in size and resources which impacts the available resources for computer education. In all schools instruction should seek creative ways of expanding student experiences, include on-line education components.

## CREDITS

The following resources were referenced in developing *Secondary Foreign Language Standards for Seventh-day Adventist Schools*: a sampling of state (Florida, Louisiana, Michigan, Missouri, New York, Tennessee, Texas) and Canadian provincial standards (British Columbia, Nova Scotia, Saskatchewan), National Business Education Association, National Educational Technology Standards, International Society for Technology in Education, NAD Curriculum Guide for Business & Computer Education, McREL Compendium of Standards, and Journey to Excellence.

## STANDARDS CODING

The standards and essential learnings have been coded so that educators can easily refer to them in their curriculum, instruction, assessment, and professional development activities. The coding system begins with the course abbreviation in letters where the abbreviations are: COMP—Computer Technology—Basic, and CPTR—Computer Technology—Advanced. The first numeral (COMP.2.1) refers to the standard and the second numeral (COMP.2.1) refers to the subcategory under the standard.

## JOURNEY TO EXCELLENCE

When the standards on the next page have been met the instruction in this course will have also met some of the Goals and Essential Core Elements for the curriculum in Seventh-day Adventist schools listed in *Journey to Excellence*. The number (1.A) refers to the Goal and the letter (1.A) refers to the Essential Core Element that is met.

### COMPUTER TECHNOLOGY—BASIC

- |           |               |
|-----------|---------------|
| 1.B       | 6.A,B,C,D,E,F |
| 2.F       | 7.A,B,C,D,E   |
| 3.D       | 8.A,C,E,F,G   |
| 4.A,B,C,D | 10.A,B,C,E,F  |
| 5.C,D     |               |

### COMPUTER TECHNOLOGY—ADVANCED

- |             |               |
|-------------|---------------|
| 1.B         | 6.A,B,C,D,E,F |
| 2.F         | 7.A,B,C,D,E   |
| 3.D         | 8.A,C,E,F,G   |
| 4.A,B,C,D,E | 9.A,B,C,D     |
| 5.C,D       | 10.A,B,C,E,F  |

# Computer Education Standards— Basic Course

## **COURSE FOCUS [Apply the following for each content standard.]**

### **COMP.1 Identify SDA Christian principles and values in correlation with computer technology.**

- COMP.1.1 Recognize God's purpose in the dynamics of computer technology.
- COMP.1.2 Explore God's role in the social, economic, and spiritual areas of a technological society.
- COMP.1.3 Apply biblical principles of SDA Christian morality, integrity, and ethical behavior to all aspects of life.
- COMP.1.4 Develop an SDA Christian approach toward technological issues.

## **COURSE ABILITIES [Apply the following to each content standard.]**

### **COMP.2 Develop abilities in computer technology.**

- COMP.2.1 Develop critical and creative thinking skills (research, analysis, evaluation).
- COMP.2.2 Utilize cooperative learning (project-based activities).
- COMP.2.3 Practice self-management skills (individual responsibility, self-worth, sociability, etc.).
- COMP.2.4 Develop effective communication skills (speaking, writing, listening, using technology, etc.).
- COMP.2.5 Learn and utilize discernment skills (personal, recreational, time management, etc.).

### **COMP.3 Be able to apply ethically the knowledge and skills of computer technology.**

- COMP.3.1 Read, research, analyze, write, and present using technological resources.
- COMP.3.2 Identify concepts, capabilities, and limitations of technology.
- COMP.3.3 Demonstrate ability to apply technological concepts with integrity.
- COMP.3.4 Assess personal applications and potential career opportunities.
- COMP.3.5 Evaluate and apply media discernment skills (websites, games, music, etc.).

## **COURSE CONTENT: Literacy, Applications, Communication, Ethics**

### **COMP.4 Be able to understand history, common terms, and concepts and to utilize technological reasoning.**

- COMP.4.1 Recognize the historical influence of technological ideas.
- COMP.4.2 Identify key terms (gigabyte, RAM, CPU, ROM, monitor, etc.).
- COMP.4.3 Demonstrate understanding of basic concepts (trouble-shooting, file manipulation, virus protection, etc.).
- COMP.4.4 Compare and contrast different operating systems.
- COMP.4.5 Transfer current knowledge to the learning of new technologies.

### **COMP.5 Be able to manipulate data using appropriate software applications and technologies.**

- COMP.5.1 Select, validate, and effectively utilize appropriate technologies for the completion of specific tasks (email, FTP, Listserv, etc.).
- COMP.5.2 Use a variety of equipment and software to enter, process, display, and communicate information (word processing, spreadsheets, databases, presentations).
- COMP.5.3 Retrieve information from electronic research tools (CDs, DVDs, Internet, etc.).

### **COMP.6 Be able to communicate and work collaboratively utilizing computer technology.**

- COMP.6.1 Communicate ideas effectively to diverse audiences (presentations, letters, spreadsheets, etc.).
- COMP.6.2 Interact, collaborate, and publish with a variety of audiences (peers, experts, others).
- COMP.6.3 Develop cultural understanding and global awareness by engaging with learners of other cultures.
- COMP.6.4 Communicate information logically using acceptable language arts skills.

### **COMP.7 Be able to practice legal and ethical behavior in relation to technology.**

- COMP.7.1 Understand and practice safe, legal, and responsible use of information and technology.
- COMP.7.2 Demonstrate understanding of and compliance with the school's acceptable use policy.
- COMP.7.3 Comply with legal and SDA biblically-based ethical guidelines (privacy, plagiarism, piracy, spam, hacking, file sharing, etc.).

## DEVELOPMENT COMMITTEE MEMBERS

Jim Ingersoll	Southern Union Conference
Ian Kelly	Columbia Union Conference
Kathy Iwasa	Gem State Academy
Carolyn Jensen	Forest Lake Academy
Carla Nelsen	Battle Creek Academy
Bruce Wentzell	Sandy Lake Academy
Carol Woodburn-McDonald	Northeastern Academy

