

K-8 Embedded Standards

The Arkansas Computer Science and Computing Standards for Grades K-8 provide an introduction to computing concepts which are to be embedded across content areas and are intended to support existing classroom learning activities. The standards support critical thinking through the essential skills of computational thinking and algorithmic problem solving. The course strands, content clusters, and content standards are to be taught in an integrated manner, not in isolation. Integration of basic computer science skills and knowledge through practical classroom experiences promote connections to all subject areas and to the real world. When appropriate, educators should determine and implement the most beneficial student collaboration strategies (e.g., pairs, small group, whole group) for optimal learning. Formal assessment of these standards is not required.

Coding Block Standards

The Coding Block for Grades 7 or 8 is designed to be taught during a standalone block of time for a minimum of four continuous weeks. Students will examine how to formulate algorithms in addition to creating, analyzing, testing, and debugging computer programs in order to solve real-world problems. Students are required to use a text-based programming language to accomplish these tasks. These standards are not to be embedded in activities spread out over multiple courses, but within a dedicated course section.

Schools are to ensure that every student receives instruction necessary to meet these standards in either their 7th or 8th grade year. Schools may choose the implementation mechanism that works best for their school and students. Options for implementation include, but are not limited to:

- The standards within this block taught as a module within any course or specified period of time during the student's 7th or 8th grade year
- The standards within this block taught as part of a high school level programming course for which the school has received approval to offer to 7th or 8th graders

The teacher of record for the Coding Block for Grades 7 or 8 must hold an Arkansas Educator's License in any content area, which allows them to instruct students of the grade level who are taking the block. Though the licensure is open to any content area, it is the responsibility of the school and teacher of record to ensure that the individual providing the instruction has the requisite knowledge needed to teach the block.

Implementation of the Arkansas Computer Science and Computing Standards for Grades K-8 and Coding Block for Grades 7 and 8 begins during the 2021-2022 school year.

Standards under consideration for adoption include:

- Computer Science and Computing Practices
- Arkansas Computer Science and Computing K-4 Standards
- Arkansas Computer Science and Computing 5-8 Standards
- Coding Block for Grades 7 or 8

ADE is specifically requesting that the SBE adopt all portions of the documents except the teacher clarification notes. The teacher clarification notes follow the standard[s] to which they apply and are indicated by the word "NOTE."