Kentucky Academic Standards for Computer Science

Kentucky Board of Education Meeting

August 2018

June 6, 2018
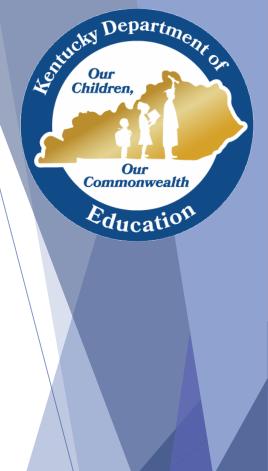
Standards and Regulation (cont.)

▸ **KRS 156:160** Promulgation of administrative regulations by the Kentucky Board of Education

- With the advice of the Local Superintendents Advisory Council (LSAC), the KBE shall promulgate administrative regulations establishing standards that public school districts shall meet in student, program, service and operational performance. These regulations shall comply with the expected outcomes for students and schools set forth in KRS 158:6451.

Standards and Regulation (cont.)

▸ **KRS 156:070** General powers and duties of the state board

- The Kentucky Board of Education shall have the management and control of the common schools and all programs operated in these schools, including interscholastic athletics, the Kentucky School for the Deaf, the Kentucky School for the Blind, and community education programs and services.

Standards and Regulation

▸ **704 KAR 3:590**. Kentucky Academic Standards for Computer Science (New Administrative Regulation)

Timeline

- **May 2017**
  - Invitations to writing team committee members were accepted.

- **July 2017**
  - July 13: first writing committee meeting with writing teams and oversight team to develop standards architecture and individual standards.

- **August 2017**
  - August 4: make-up meeting for those on the writing teams and oversight team that could not participate in the initial meeting.
  - August 24: computing business and industry feedback meeting.

- **October 2017**
  - October 12: second writing committee meeting with writing teams and oversight team to further develop individual standards.

Timeline (cont.)

- **December 2017**
  - Public comment period opened for feedback sought on proposed draft standards.
- **January 2018**
  - Public comment period closed for feedback sought on proposed draft standards.
  - January 12: virtual oversight team meetings to review and code public comments.
- **February 2018**
  - February 2: virtual writing team meetings to take the feedback from the oversight team, along with public comments, to revise the standards.
- **April 2018**
  - April 9: "K group" (Kentucky educational professional organizations and educational cooperatives) focus group to review revised standards.
  - Draft standards finalized based on feedback collected during focus group.

Writers' Vision

▶ The writing team envisioned standards that would afford students the opportunity to engage in critical thinking, computational thinking and problem-solving through computer science. The writing team wanted standards that would:

- initiate cross-curricular connections to enhance the understanding of computer science skills and concepts;

- establish a continuum of computer science competencies K-12;

- provide opportunities for ALL students to engage in computer science experiences and advanced coursework to prepare them for future success; and

- prepare students to address a critical workforce need related to computer science knowledge and skills.

The Architecture

- Organized into three components:
  - Grade Band
  - Core Concepts of Computer Science
  - Standard (number)

Grade Band   Concept   Standard (number)

H - NI - 03

E = Grades K-5	**ES**
M = Grades 6-8	**MS**
H = Grades 9-12	**HS**

Algorithms & Programming (AP)

Computing Systems (CS)

Data & Analysis (DA)

Impacts of Computing (IC)

Networks & the Internet (NI)

Standard number per concept