To: Superintendents, Principals, CTE Directors

From: Jake Koressel, Computer Science Specialist
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Date: July 10, 2020

Subject: IC 20-30-5-23 - Computer Science Education

Background - IC 20-30-5-23

a) After June 30, 2021, each public high school, including each charter school, shall offer at least one (1) computer science course as a one (1) semester elective in the public high school's curriculum at least once each school year for high school students.
b) After June 30, 2021, each public school, including each charter school, shall include computer science in the public school's curriculum for students in kindergarten through grade 12.

Guidance

The following are guidance items in support of section (a):

Computer Science Courses

A complete list of high school courses that satisfy the requirements of IC 20-30-5-23, as well as high school course standards, can be found here. Detailed course descriptions can be found here.

Advanced Placement, International Baccalaureate, Cambridge International, and CTE

There are currently two Advanced Placement (AP) course offerings in computer science. Specific information about these courses can be found here. AP Computer Science exams qualify for the Indiana exam fee subsidy. There are also International Baccalaureate (IB) and Cambridge International (CI) computer science course options. Additionally, a variety of computer science courses qualify for CTE state funding. More information on computer science courses that qualify for CTE state funding can be found here.

Teacher Licensure

Although computer science courses must be taught by an appropriately licensed teacher, licensure requirements vary by course and grade level. Details can be found in the Indiana Assignment Code. Various licensing options are available including: computer education license addition, computer science license addition, career specialist license, and workplace specialist license.

The following are guidance items in support of section (b):

Computer Science Standards

Computer science standards for grade bands K-2, 3-5, and 6-8 were adopted by the State Board of Education in 2016. Please visit https://www.doe.in.gov/wf-stem/computer-science for more information regarding Indiana computer science standards.

0488 Computer Science

0488.K2, 0488.35, and 0488.68 course codes are now available for schools wishing to offer a standalone computer science course for students in grades K-2, 3-5, and/or 6-8, respectively. All corresponding grade band standards should be covered when implementing. While inclusion of computer science standards in the curriculum for students in grades K-8 is required, schools may decide between a standalone implementation, an integrated implementation, or a combination.

Assessment

The Indiana K-8 computer science standards are housed as part of the Indiana science standards and will be assessed on grades 4 and 6 ILEARN science assessments beginning in the 2018-2019 school year. For assessment blueprints, please visit https://www.doe.in.gov/assessment/ilearn-test-design. Click here to view item specifications.

It is important to note that the Indiana K-8 computer science standards are not intended to replace the appropriate grade level science standards, but should be taught in addition to the science standards.

Guidance in support of sections (a) and (b):

Professional Development

A variety of computer science professional development opportunities are available to Indiana educators of all grade levels. For a list of these opportunities, please visit https://www.doe.in.gov/wf-stem/cspd. This list is continuously updated as new opportunities become available.

Resources

The Computer Science Implementation Toolkit and Computer Science Curriculum and Resource Guide may be helpful as schools/districts plan their computer science initiatives. Additional resources and information can be found here.

If you have any questions, please contact IDOE Computer Science Specialist Jake Koressel at jkoressel@doe.in.gov.