Instructional Supports and Content Sharing

Focus on Computer Science Standards

John Wiseman (614) 728-7589
John.wiseman@education.ohio.gov
In Ohio, each child is *challenged, prepared and empowered.*

**Vision**
In Ohio, each child is *challenged* to discover and learn, *prepared* to pursue a fulfilling post-high school path and *empowered* to become a resilient, lifelong learner who contributes to society.

**Four Learning Domains**
- **Foundational Knowledge & Skills**
  - Literacy, numeracy and technology
- **Well-Rounded Content**
  - Social studies, sciences, languages, health, arts, physical education, etc.
- **Leadership & Reasoning**
  - Problem-solving, design thinking, creativity, information analytics
- **Social-Emotional Learning**
  - Self-awareness & management, social awareness, relationship skills, responsible decision-making

**One Goal**
Ohio will increase annually the percentage of its high school graduates who, one year after graduation, are:
- Enrolled and succeeding in a post-high school learning experience, including an adult career-technical education program, an apprenticeship and/or a two-year or four-year college program;
- Serving in a military branch;
- Earning a living wage; or
- Engaged in a meaningful, self-sustaining vocation.

**Three Core Principles**
- **Equity**
- **Partnerships**
- **Quality Schools**

**10 Priority Strategies**
1. Highly effective teachers & leaders
2. Principal support
3. Teacher & instructional support
4. Standards reflect all learning domains
5. Assessments gauge all learning domains
6. Accountability system honors all learning domains
7. Meet needs of whole child
8. Expand quality early learning
9. Develop literacy skills
10. Transform high school/provide more paths to graduation
Cyber and Other CS Workforce Needs

ZipRecruiter Reports **20,266 Networking Jobs** in the Ohio Area

ZipRecruiter Reports **29,404 Programmer Jobs** in the Ohio Area

Heatmap from cyberseek.org
What is computer science?

Logical reasoning, computing systems, networks and the internet, data and analysis, algorithms and programming, impacts of computing, and structured problem solving skills applicable in many contexts from science and engineering to the humanities and business.
Computer Science to Satisfy Graduation Requirements

Resources
Link
Computer Science to Satisfy Graduation Requirements for Mathematics

Permits credit in computer science to satisfy the mathematics curriculum requirement for high school graduation.

The course must address high school mathematics standards and focus on the study of, or usage of, algorithms for problem solving.
Computer Science to Satisfy Graduation Requirements for Algebra 2/Math 3

Permits credit in Advanced Computer Science to satisfy the Algebra 2/Math 3 or its equivalent mathematics curriculum requirement for high school graduation.
Computer Science to Satisfy an Advanced Science Requirement

Permits credit in advanced computer science to satisfy an advanced science curriculum requirement for high school graduation*

*This excludes biology and life science.
Using Coding Courses to Satisfy Foreign (World) Language

If a school district makes foreign language an additional graduation requirement, a student may apply one unit of instruction in computer coding to satisfy one unit of foreign language.
Computer Science Licensure Requirements

Stipulates the requirements in licensure to teach computer science
Licensure for Computer Science

1. Hold a full teaching license in computer science
Licensure for Computer Science

Hold computer technology endorsement and pass the computer science Ohio Assessments for Educators (OAE exam)

OAE #054 (December 2019)
Licensure for Computer Science

Hold a full teaching license in any area and add on computer science through a supplemental pathway (OAC 3301-24-14), which includes passing the computer science OAE exam.
2019-2020 and 2020-2021

• Hold a valid educator license in grades 7 through 12
• Prior to teaching the course, the individual completes a professional development program
  – Approved by the district superintendent or school principal
  – Provides content knowledge specific to the course the individual will teach
Educator Funding Available

$1.5 million available for educator preparation funding in Fiscal Years 2020 and 2021.

– Currently licensed teachers
– Reimbursement of pedagogy coursework
– Content testing fees necessary to teach computer science.

HB 166
Strengthening Ohio’s Math Pathways

Computer science as an interdisciplinary course

Data science as an interdisciplinary course
Strengthening Ohio’s Math Pathways

Taught by:
- Math Teachers with a computer science supplemental
- Math teachers
- Computer science teachers

Delivered as:
- A single math course
- A single computer science course
- A series of Algebra and computer science courses
# Industry-Recognized Credentials

Explore Career Fields

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[Image of icons and logos related to each career field]

[Ohio Department of Education logo]
Industry-Recognized Credentials

• $8 million each year for credential reimbursement.

• Schools must notify students when their career-tech course can conclude with an industry-recognized credential.

• Requires schools to pay the cost of credential exam.
Industry-Recognized Credentials Initiative

Provides $12.5 million each year to pay schools $1,250 for each student who earns a qualifying credential

Incentivizes schools to establish qualifying credentialing programs, with $4.5 million in each fiscal year designated for this purpose
Share your learning community with us!
#MyOhioClassroom

Celebrate educators!
#OhioLovesTeachers