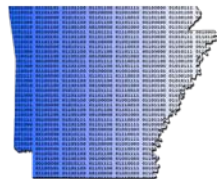# Status of Computer Science in Arkansas

Anthony Owen

Coordinator of Computer Science Education

June 17, 2015
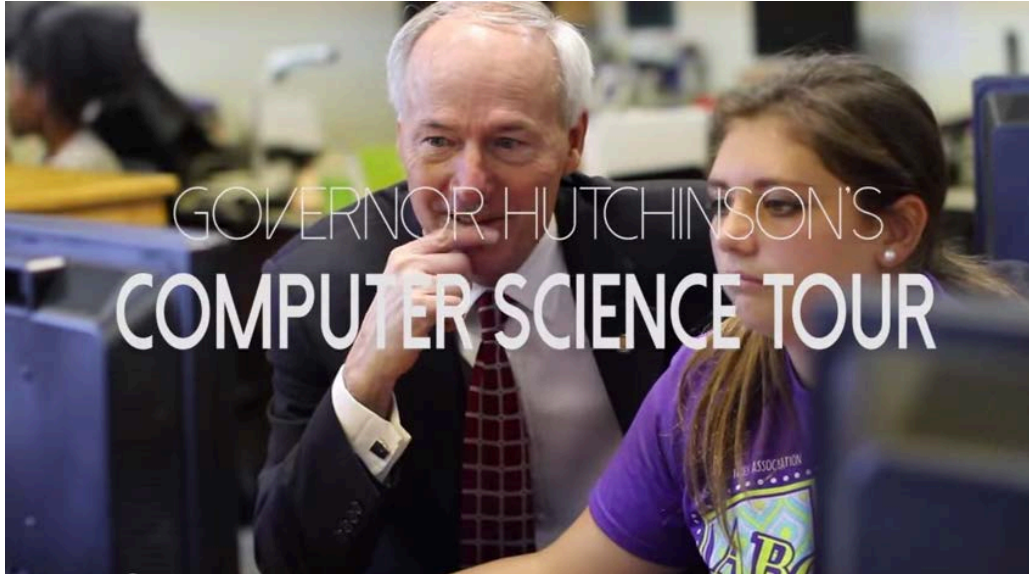
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Governor Asa Hutchinson's Tours

https://www.youtube.com/watch?v=HcInE5QMX-w

ADE Computer Science Webpage

- access other resources

http://www.arkansased.gov/divisions/learning-services/curriculum-and-instruction/computer-science

(http://goo.gl/j2Y8Sv)

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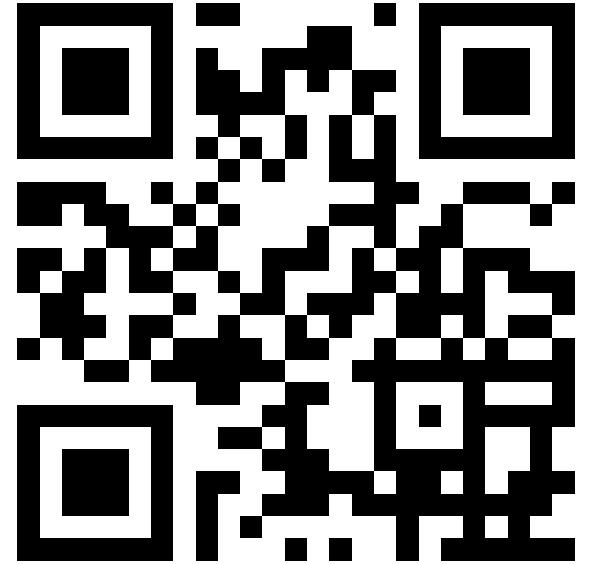A FRAMEWORK FOR DYNAMIC LEARNING

Computer Science FAQ

http://www.arkansased.gov/public/userfiles/Learning_Services/Curriculum%20and%20Instruction/Resource%20Mat/Computer%20Science/Computer_Science_Fact_Sheet_Final.pdf

http://goo.gl/7F4c66

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Computer Science FAQ

- Act 187 Requirement

- Licensure Update
  - Praxis Exam (See [Commissioner's Memo LIC-15-028](#))
  - [Alternative Licensure Plan for Computer Science](#)

- Professional Development
  - ESC Works
  - [STEM Center List](#)

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Computer Science FAQ

- Curriculum Framework Documents

- Resources – *You can use whatever your district says aligns to the curriculum frameworks!*

- Computer Science Flex Credit
  - substitutes for the requirement of a 4th math or 3rd science
  - great option for students but schools should help them choose wisely

Computer Science FAQ

Course [Course Code]	Approved Licensure Area	Credit to be awarded to the student	Area for the 38 Required Courses
Computer Science and Mathematics [439100]	Secondary Mathematics	4th Year Math Beyond Algebra II (Smart Core or Core)	1 of the 6 math, and 1 required computer science
Computer Science and Mathematics [460050]	ADE Computer Science	Computer Science Flex Credit	1 required computer science
Computer Science and Mathematics [460050]	Career and Technical Education (CTE) Business Education	Computer Science Flex Credit	1 required computer science
Essentials of Computer Programming [460020]	ADE Computer Science	Computer Science Flex Credit	1 required computer science
Essentials of Computer Programming [460020]	Career and Technical Education (CTE) Business Education	Computer Science Flex Credit	1 required computer science
College Board Advanced Placement (AP) Computer Science* [539080]	Secondary Mathematics (with current College Board approved training)	4th Year Math Beyond Algebra II (Smart Core or Core)	1 of the 6 math, and 1 required computer science 1 of 9 required CTE Units**
AP Computer Science* [560050]	Any Secondary Certification Area (with current College Board approved training)	Computer Science Flex Credit	1 required computer science, and 1 of 9 required CTE Units**
International Baccalaureate (IB) Computer Science* [539110]	Secondary Mathematics (with the approved IB training)	4th Year Math Beyond Algebra II (Smart Core or Core)	1 of the 6 math, and 1 required computer science 1 of 9 required CTE Units**
IB Computer Science* [560060]	Any Secondary Certification Area (with the approved IB training)	Computer Science Flex Credit	1 required computer science 1 of 9 required CTE Units**

*Refer to the ADE rules for AP and IB courses.
**Requires Arkansas Department of Career Education program approval

Computer Science FAQ

- The FAQ is not a static document

- It will be updated as new information is available

Arkansas Department of Education
Updated 05/26/2015
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Computer Science Licensure Assessment Reimbursement

- Commissioner's Memo - LIC-15-035
  - (http://goo.gl/8WZgL4)
- To be eligible:
  - Score at least 171 on Praxis™ Computer Science (5651)
  - Add Computer Science Endorsement to your AR License
  - Submit the Reimbursement Request (and other required) forms
  - All within 12 months

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Computer Science Task Force Update

- Monthly meetings of the full group
- Regular sub-committee meetings
  - PD and Training – Chair, Andy Mayes
  - Curriculum – Chair, Carl Frank
  - Awareness – Chair, Dave Wengel
  - Metrics – Chair, Bret Powell
  - Resources – Chair, Suzanne Mitchell

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Computer Science Task Force Update

- ADE's Computer Science webpage will begin announcing information regarding the CSTF.
  - meeting times, locations, agendas as they are decided
  - approved minutes from previous meetings
  - profile information on the members

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Computer Science Network

- in primary stage of development
- Linkedin - Arkansas Computer Science Network Page

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What Does This Mean For You?

CSTA Computational Thinking Standard for K-3

Understand how to arrange (sort) information into a useful order, such as sorting students by birth date, without using a computer.

Phonics and Word Recognition: CCSS.ELA-LITERACY.RF.1.3

Know and apply grade-level phonics and word analysis skills in decoding words.

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What Does This Mean For You?

CSTA Computational Thinking Standard for 3-6

Understand and use the basic steps in algorithmic problem-solving (e.g., problem statement and exploration, examination of sample instances, design, implementation, and testing).

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Code.org's Hour of Code

Resources for You

- www.arkansased.gov
- https://www.coursera.org/course/algo
- http://www.uiltexas.org/files/academics/Computer-Science-Sample-Test.pdf
- http://www.studytonight.com/data-structures/
- https://www.khanacademy.org/computing/computer-science/algorithms

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Q&A / Contact Information

Curriculum and Instruction Unit – Director Stacy Smith

ADE.candi@arkansas.gov

501-682-7442

Want to be added to the ADE Curriculum ListServ? If so, please send your name, e-mail address, and district name to ADE.candi@arkansas.gov

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