Surfacing “C” in STEM
Policy: Shared Cause of Issues

Curriculum? Image?

Teacher? Students?

Policy

Parents? Schools?

Resources?
Policy Landscape: Layers of Complexity

- Federal
  - NCLB
    - ESL
    - Testing
    - HQT
    - State Plans for $
  - Perkins
  - America Competes
  - Etc.

- State
  - Grad Credits
  - University Admission
  - State Standards
  - Teacher Cert.

- Local
  - Resource Allocation
  - School Board Requirements
  - Etc.

- K-12 Classroom
Community Response: A New Level Of Engagement

Computing in the Core
Advocating for K-12 Computer Science Education
www.computinginthecore.org
Strategy for Reform

National Profile/Media

Federal Policy

CS Education Reform

Curriculum
Teachers
State/Local Policy
H. R. 5929

To provide grants to State educational agencies and institutions of higher education to strengthen elementary and secondary computer science education, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 29, 2010

Mr. Polis of Colorado introduced the following bill; which was referred to the Committee on Education and Labor

A BILL

To provide grants to State educational agencies and institutions of higher education to strengthen elementary and secondary computer science education, and for other purposes.
State/Local Policy: Engage Where We Can

- Political “covering fire” (Texas)
- State and Local Advocacy Tool Kit to get CSEA Introduced into the States
From Common Core to Next Generation Science Standards: A New Story

- Both of these efforts seek to define the "STEM" space from a standards perspective.
- Common Core = Math (and English Arts)
- NGSS = Science (and Engineering and "technology")
- Snowbird 2010:
  - Common Core ensconced by the States, minimal room for CS
- Snowbird 2012:
  - NGSS under development, some "computational thinking" but what’s there is lacking and confused
Community Response: Advocate Top Down and Bottom Up

• Community Letter to Achieve calling to address CS issues

• Coordinated by Computing in the Core, but broadened appeal:
  - John L. Hennessy, President, Stanford University
  - Maria Klawe, President, Harvey Mudd College
  - Linda Gojak, President, National Council of Teachers of Mathematics
  - Ioannis Miaoulis, President & Director, Museum of Science, Boston; Founder, National Center for Technological Literacy

• Achieve is developing final draft – time is now for pressure

• End game: Call attention to the need for CS and get enough “hooks” in the standards so we can argue that courses like the ones NSF has been funding can carry out the standards