

Commonwealth Alliance for Information Technology Education (CAITE)

Maryland Computing Education Summit
May 17, 2013

How CAITE began

What CAITE accomplished

What is next for CAITE

How CAITE began

1999

IT
Workforce
shortage

MD, NY,
PA, IN IT
Programs

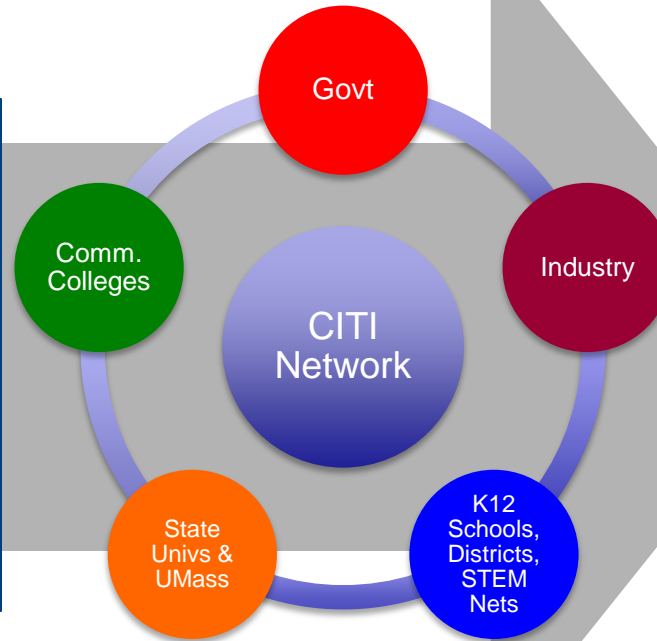
HE CS
Program
Review



Public/Private partnership
to promote IT education
across the curriculum and
respond to technology
workforce needs:
**Curriculum, PD,
Programs and regional
collaborations**

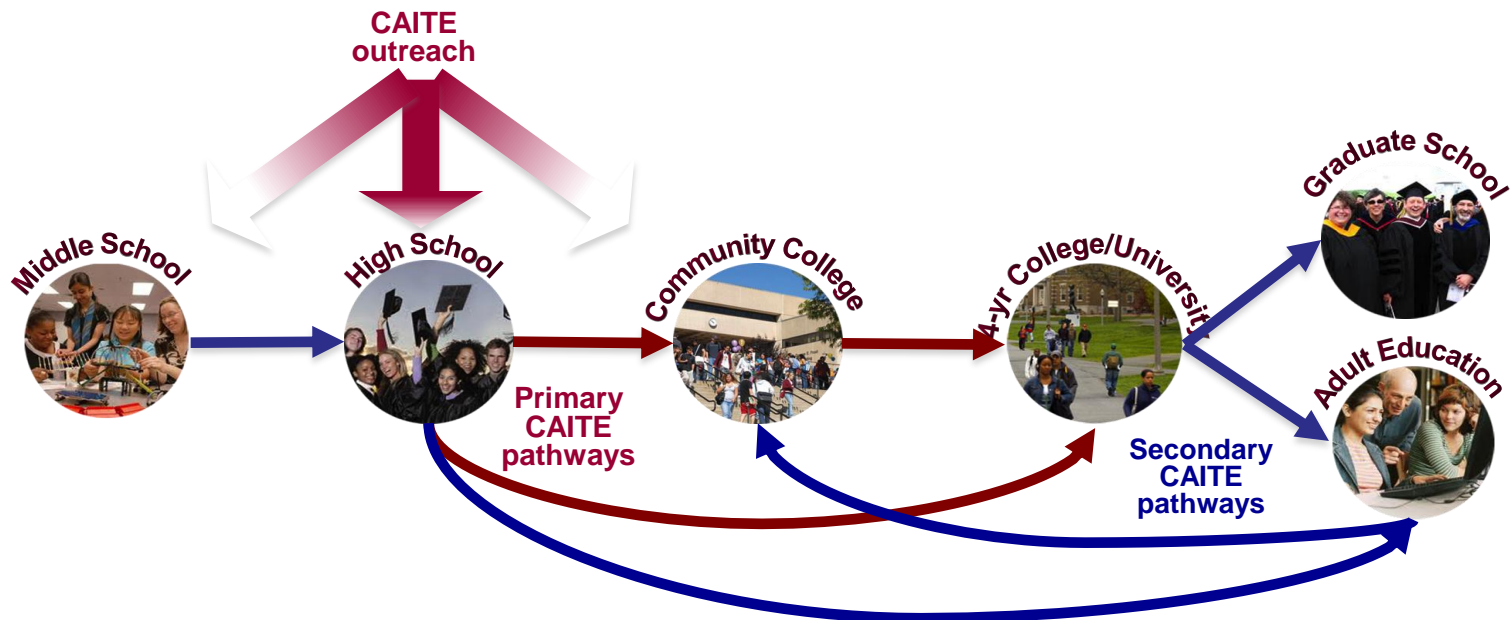
- 170 new/enhanced IT courses + new programs across all 29 HE campuses (indirectly 1000's students)
- 15 HE PD events, 10 K-12 teacher PD programs, 3 pre-service programs across 78 schools districts (indirectly 36,600 students)
- Statewide partnerships

2007



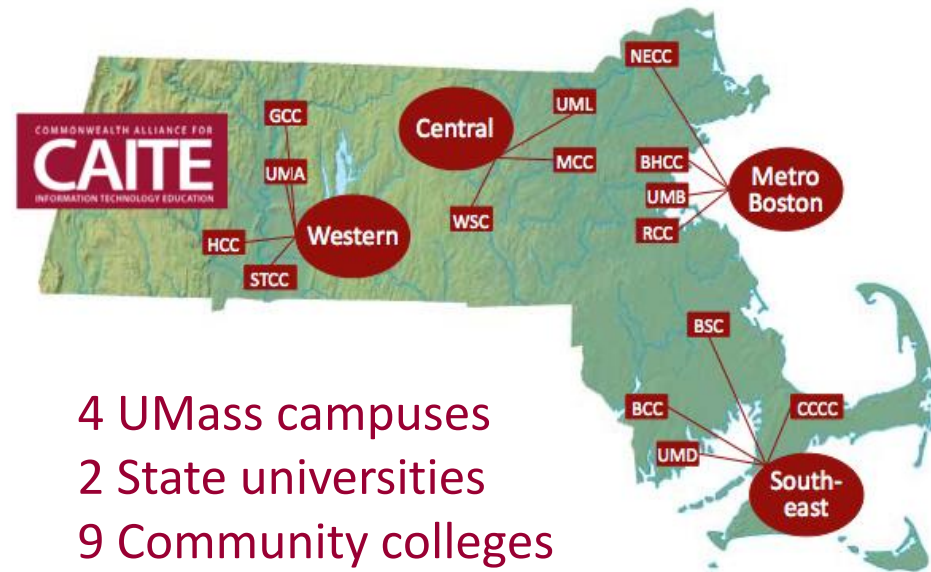
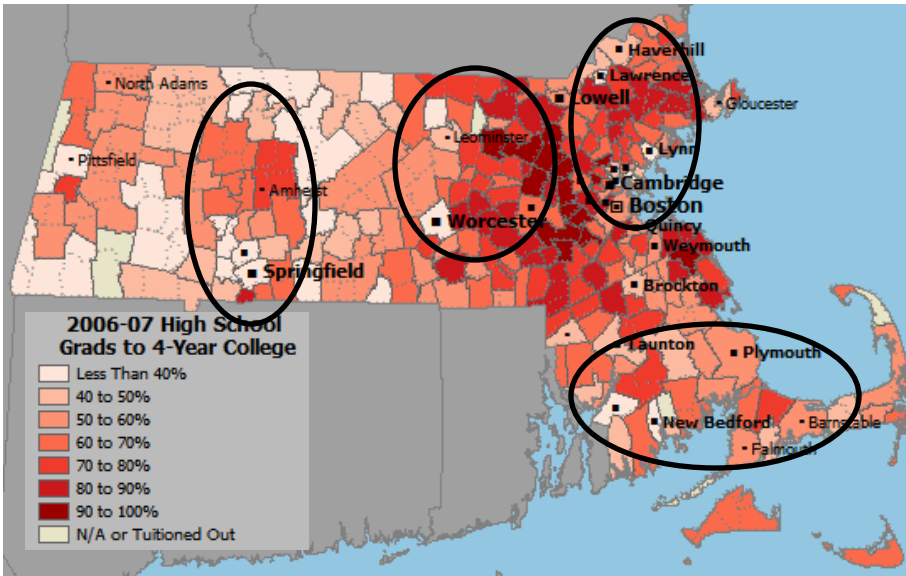
CAITE

- CAITE, with NSF BPC funding beginning in 2007:
 - addresses under-representation in IT education and the workforce
 - has a focus on women and URM groups and regions & residents not participating in the MA Innovation Economy via community colleges
 - has outreach programs supported by educational pathways
 - institutionalizes best practices statewide & nationally



Why?

- Reach into underserved communities and create pathways
- Community colleges as gateways



4 UMass campuses
2 State universities
9 Community colleges

CAITE Network & Activities

- Outreach

- Take IT campaign, CS Education Week, IT Career Days, Women's events, Robotics intros, Afterschool programs, clubs, Contests :programming, video, etc., Computer Camps, NCWIT Aspirations Awards

- Pathways

- Take IT website, Peer Mentoring, Transfer summits Dual-enrollment (iJava, etc., Curriculum alignment, Articulation agreements & Roadmaps, CC Days

- Professional Development

- Educator Workshops (iJava, media computation, Artbotics, robotics & sensors, CS unplugged), Capacity-Building Institute: Expanding Access to Computing, CSTA Mass. chapter support

- Policy

- CS Education Reform with MassCAN, TechHub, MTLC

CAITE Outreach Activities



CAITE Activity Summary

Type	# of activities	# of participants	regions involved
Professional development	37	1,049	All
Outreach	133	12,596	All
Pathways	67	1,240	All
TOTAL	237	14,885	

HS-CC/4YR and CC-4YR Pathways

■ Goals:

- Increase interest, enrollment and retention
- Promote CC pathways, both transfer & CTE
- Increase the transfers to and retention in 4YR colleges

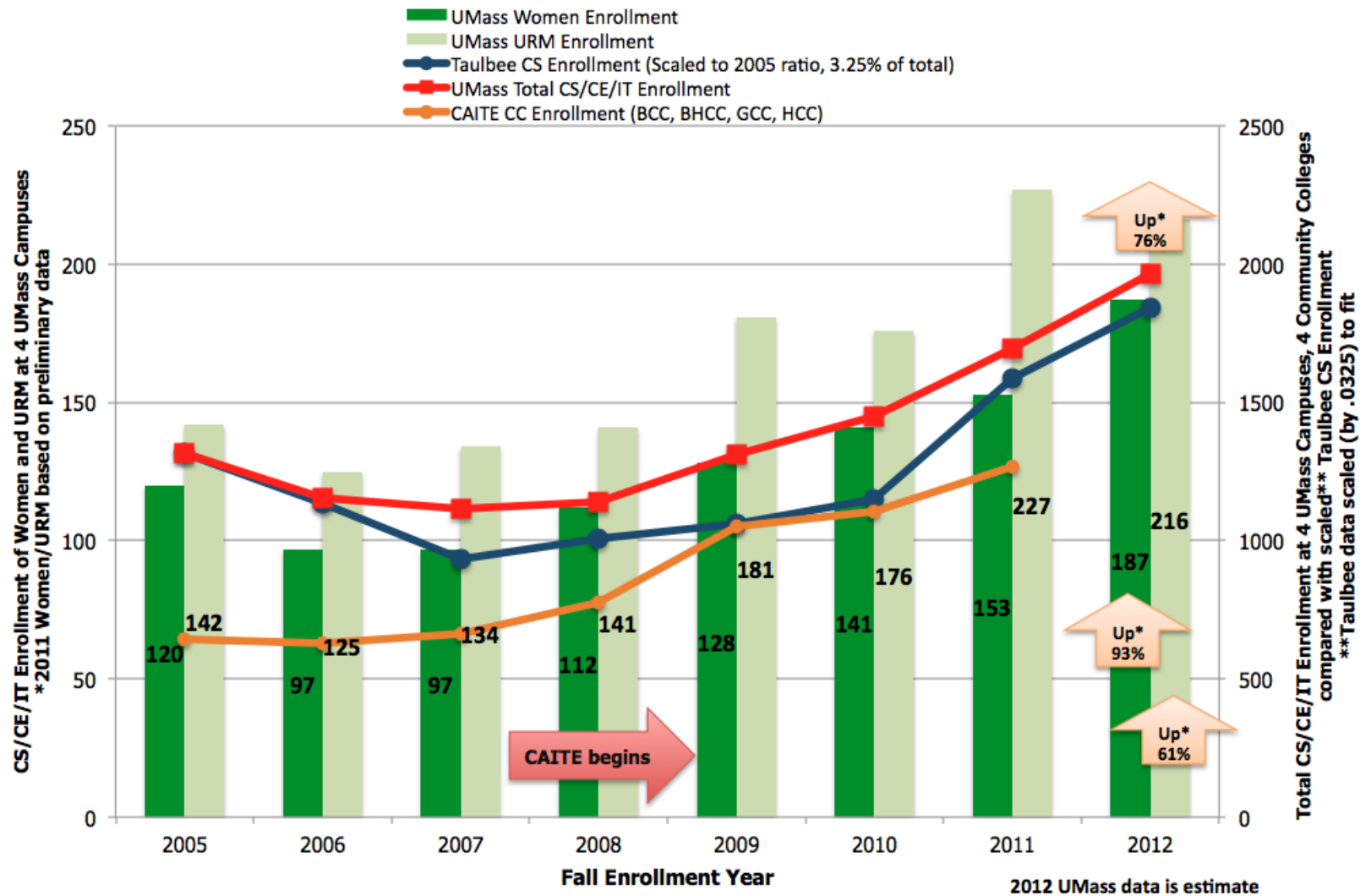
■ Strategies

- Outreach to underserved communities, using the CAITE network (career fairs, open houses, programming & other contests, ITforU.org)
- Develop pathway support infrastructure (advising, information, mentoring, targeted programs)
- Address articulation, alignment, program/course equivalency

CAITE's CC Pathway Successes

- CAITE is contributing to both growing and increasing diversity in enrollments.
 - The four-year campuses are seeing a significant increase in CS enrollments and diversity, due in part to an increase in transfer students. Female enrollment up 93% and URM enrollment up 61%
 - Computing-related associate degrees awarded to women is up 20% and to underrepresented minority students is up 35% at CAITE partner community colleges, while overall CAITE CC enrollment is up 95%
 - UMass enrollments are increasing at a greater rate than those at comparable institutions nationally.
 - Students in CAITE peer mentoring significantly outperformed other students.
 - Regional Transfer Summits have led to increased articulation, “roadmaps” and new transfer programs
 - UMass system institutionalization: CC Connection and ABLE4STEM

Enrollments



Keys to success

- Built on the existing CITI network
 - Committed partners (faculty, deans, administrators) at UMass, State U. and CC campuses
 - Collaborators in industry, government, other initiatives (BATEC, MGHPCC, TechHub, MassCAN, STEM Summit, etc.)
- Strong administrative team (Renee Fall, Cheryl Kiras, Zenobia Wingate)
- Collaborative External Evaluators (SageFox)
- Strong BPC, BPC-A, CE21 communities

What's next?

- ECEP – a national BPC-A
 - Combine GaComputes!, CAITE & partner with NCWIT, CSTA, STARS
- MA K12 CS Ed Policy
 - State-of-the-State report
 - MassCAN
 - CS standards
 - CS teacher licensure
 - HE entrance requirements
 - MS ECS-like course
- Renew/restructure CAITE



COMMONWEALTH ALLIANCE FOR
CAITE
INFORMATION TECHNOLOGY EDUCATION

