The Expanding Computing Education Pathways (ECEP) Alliance seeks to increase the number and diversity of students in the K-16 educational pipeline to computing and computing-intensive degrees by supporting state-level computing education reforms.

CAITE and GeorgiaComputes! (BPC-Alliances 2007–2013) broadened participation in computing and expanded K12 and higher education pathways in Massachusetts and Georgia. ECEP now partners with experts, national organizers, and state leaders to transfer the success of state-specific strategies to California, South Carolina, and associate states and regions.

ECEP Alliance Highlights 2012–2013

- Created a multi-state community of leaders committed to state-level change in computing education
- Gathered 23 CS teacher-leaders from 15 states prior to CSTA Conference to make state action plans and try new teaching tools
- Trained 72 students and educators to use Artbotics and App Inventor for outreach at STARS Conference
- Trained 112 educators to design and organize sustainable summer computing camps at three workshops (in MA, CA, and SC)
- Developed Artbotics for LEGO Mindstorms

Pls & coPls: Mark Guzdial & Barbara Ericson (GaTech); Rick Adrion & Renee Fall (UMass Amherst)
Evaluators: SageFox Consulting Group
Website: www.ECEPalliance.org

Objectives

The Expanding Computing Education Pathways (ECEP) Alliance seeks to increase the number and diversity of students in the K-16 educational pipeline to computing and computing-intensive degrees by supporting state-level computing education reforms.
State Partner Highlights 2012–13

California
- Hired ECEP-CA coordinator
- Coordinated with ACCESS, a statewide network of CS education leaders
- Promoted CS education at the first annual California Department of Education STEM Symposium
- Participating in California Community College ICT Sector Consortia, focusing on articulation agreements

Georgia
- Piloted effort to increase number of black students who pass the AP CS exam in Georgia, resulting in a record 28 students passing in 2013
- Ran 12 summer computing camps and weekend workshops reaching more than 1,200 students
- Offered 5 prof. dev. opportunities, attended by 73 teachers
- Gathered 2- and 4-year college faculty and staff for the University System of Georgia Transfer Summit

Massachusetts
- Facilitated launch of CSTA-Western Mass. chapter
- Trained 171 teachers in 4 prof. dev. workshops
- Gathered CS professional development providers and state education dept. to share best practices and explore coordination
- Worked with MassCAN, a statewide partnership to make high-quality CS education available to all K12 students in Mass.

South Carolina
- Established a South Carolina Computing Education Steering Committee
- Organized 2-day Computing Education in South Carolina Summit; more than 100 attended
- Collaborated with IT-o-Logy, a multi-state initiative to grow the IT talent pipeline

Summary of Results/Outcomes

ECEP has formed a multi-state community of CS education reform leaders who share information, challenges, and promising strategies for promoting change and measuring impact. The network relies on regular meetings, a shared online resource, and experts and colleagues across the U.S. By adapting and testing interventions across states, we are learning what works where, and why—building a framework for a state-level model of computer science education reform.