The Expanding Computing Education Pathways (ECEP) Alliance seeks to increase the number and diversity of students in the pipeline to computing and computing-intensive degrees by promoting state-level computer science education reform. ECEP supports diverse state leadership teams to develop effective and replicable interventions to broaden participation in computing (BPC) and to create state-level infrastructure to foster equitable computing education policies.

23 ECEP States & U.S. Territories
Expanding Computing Education Pathways

Key Features of ECEP

- ECEP focuses on STATES as the unit of change by supporting systemic improvements in policy, organization, and data systems that lay the foundation for large-scale and sustainable advances in BPC.
- ECEP provides technical support to state leadership teams for BPC data analysis, goal setting and tracking, and policy design and implementation rather than engaging in direct student interventions.
- ECEP outcomes are grounded in systems change, an approach that focuses on policies and practices that are often codified in law, leading to policy based sustainability.
- ECEP requires cross-disciplinary collaboration at a systems level among diverse stakeholders representing the computing, education, and policy components of the entire CS education ecosystem.
Core Activities

- Catalyze and incubate diverse state leadership teams that keep BPC at the forefront in state level actions around Capacity for CS ed, Access to CS ed, Participation in CS ed, and Experiences of CS ed (CAPE).
- Provide coaching and technical assistance to state teams, advancing them through the ECEP 5-stage state change model, including CS education summits, developing goals and metrics for tracking longitudinal change in BPC, creating CS landscape reports, and supporting BPC data collection and dissemination.
- Connect state leaders to expertise, resources, and promising practices to help them advance BPC for students historically underrepresented in computing.

5-Stage Change Model

Build/utilize data infrastructure to provide evidence to inform strategic BPC efforts
Find your leader(s) & change agents
Understand the CS education landscape & identify the key issues/policies
Gather & organize your allies to establish goals & develop strategic plan
Get initial funding to support change

Examples of Equity Issues to Consider

Student Outcomes
How does instruction and learning differ across student subgroups? Do all students feel a sense of belonging in CS?
Student Enrollment
Which subgroups are underrepresented in CS courses? To what extent?
Course Offerings
Are CS courses offered in low-income schools at similar rates to other schools?
Teachers, Funding, Policies
Do districts in all areas have the resources to offer CS? To train and certify teachers?

CAPE

Experience of CS Education
Participation in CS Education
Access to CS Education
Capacity for CS Education

68 % of ECEP states that identify one or more priority K-12 populations to serve
83 % of ECEP states that have a landscape report or are developing one
115 # of core state leaders collaborating across ECEP

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