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.

### Key Features of ECEP

- **States as the Unit of Change**: 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.
- **Technical Support**: 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.
- **Systems Change**: 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.
- **Cross-Disciplinary Collaboration**: 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.

**23 ECEP States & U.S. Territories**

Expanding Computing Education Pathways

![Map of ECEP States and Territories](image-url)
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

Find your leader(s) & change agents
Build/ utilize data infrastructure to provide evidence to inform strategic BPC efforts
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

CAPE

Experience of CS Education

Participation in CS Education

Access to CS Education

Capacity for CS Education

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?

Capacity, Access, Participation, and Experience (CAPE)
A Framework for Examining Equity in CS Education

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

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