

NCWIT AspireIT Capacity Building Roadmap

NCWIT AspireIT K-12 Outreach Program

The [NCWIT AspireIT Toolkit](#) is designed to assist individuals on the provider level implement computing programs in their community. Educators and other facilitators who want to create a CS experience can access the Toolkit and find everything they need to create a program.

For those who are not at this provider level or do not have the ability to implement computing programs on their own, they can get involved in other ways. This AspireIT Capacity Building Roadmap is designed to aid policy makers or those on the state-level to broaden the participation of CS in their community. Follow the roadmap below to learn about the state of CS in your state, discover how to talk about the importance of CS with others, find potential partners, and more. This list is a great first stop for you as you aim to make a change and advocate for the importance of computing education.

Understand Your State Policies

To better understand the state of Computer Science in your region, first identify the current policies surrounding K-12 education.

[Code.org's State Policy Break-Down](#)

- An interactive map that provides state-specific data on the computer science landscape.
- View your state's fact-sheet and learn how to take action in your state.

Learn How to Talk About the Importance of Computing

An important aspect of advocating for CS experiences is learning how to talk about the importance of computing with others. Below are resource collections to aid you in discussing this topic:

[NCWIT AspireIT Toolkit - Raise Awareness](#)

- Find research to show why computer science programming is important, how to engage underrepresented groups, and additional NCWIT resources to assist in creating meaningful programs.
- This collection in particular contains various K-12 resources specific to broadening the participation of girls, women, and other underrepresented populations in computing.

[Code.org's Nine Policy Ideas to Make CS Fundamental to K-12 Education](#)

- Code.org created a list of nine recommendations for building and sustaining a policy framework that broadens CS experiences.

- You can use these recommendations to consider how to talk about CS with key stakeholders and the state and policy-making level.
- Be sure to also check out Code.org’s [Rubric for Evaluation of Nine Policy Ideas](#) and their other [policy resources](#) for more detailed information.

[NCWIT’s Male Allies and Advocates Toolkit](#)

- This Toolkit is intended to support workplace efforts to engage male allies and advocates in diversity and inclusion initiatives. While it is geared towards the workforce, it can be applied to capacity building efforts and equip change leaders by:
 - Setting the stage for success and raising initial awareness.
 - Developing a plan of action for male advocacy efforts and evaluating success.

[More NCWIT Resources](#)

- Access hundreds of free resources that encourage cultural and environmental change, from the classroom to the boardroom. Based on social science theory and evidence, NCWIT resources provide practical tips and recommendations for change leaders to take effective action.

Identify Potential Partners

[CSforALL Member Directory](#)

- Have you contacted CSforALL Partners in your state? Check out the CSforALL member directory and sort by region to see if there are potential partners that can assist you with your efforts.
- Be sure to also utilize the various projects CSforALL is engaged with under the “Support Local Change” section of their [Projects and Programs page](#) for more ways to connect.

[National Girls Collaborative Project \(NGCP\)](#)

- Determine if there are any local NGCP collaboratives that serve and connect local girl-serving STEM programs.
- NGCP’s local collaboratives have a network of organizations and individuals working primarily to increase gender equity in STEM and coordinate to have wide-spread reach in the community.

[Charles Stewart Mott Foundation’s 50 State Afterschool Network](#)

- This national network fosters partnerships and policies to develop, support, and sustain high-quality opportunities for children and youth.
- Learn more about your state’s individual network and connect with the lead contact for more ways to get involved.

[Computer Science Teachers Association \(CSTA\) Chapters](#)

- CSTA is a community led by K-12 computer science teachers that shares the latest best practices in K-12 CS education and your local network is a great group to utilize for potential collaboration.
- CSTA's K-12 standards can be reviewed [here](#).

Find Programs in Your State Accomplishing Similar Work

[The Connector](#)

- A comprehensive directory of youth-serving STEAM providers across the country.
- Find quality local and online computing opportunities in your local community and consider volunteering or collaborating with the program leads.

[VolunteerMatch](#)

- Find volunteer and collaboration opportunities in your area specific to computing, technology, and education.

Local School Districts and Community-Based Organizations:

- Reach out to your local school districts to see if there are any pre-existing after-school programs utilizing computing concepts.
- Contact local Boys and Girls Clubs, YMCA, Girl Scouts, and 4-H chapters to see if they are interested in utilizing computing concepts in their offerings.
- If there are programs wanting to implement CS, support them by:
 - Sharing the [AspireIT Toolkit](#) to aid them in implementing computing programs with a focus on peer-mentorship, inclusivity, and hands-on engagement.
 - Sharing the resources about the importance of CS education outlined in this roadmap.
 - Volunteering to be a guest speaker or run a one day event or community engagement activity to increase interest in the community.

Learn How to Facilitate CS Concepts

[Google's CS First](#)

- With no CS experience required, CS First empowers every facilitator to teach computer science with tools and resources that are free of charge.
- Access teaching materials and live workshops to learn how to teach CS First

[AspireIT Toolkit "How-To" Guides](#)

- These guides provide an overview of each step of the process when it comes to hosting a computing program — program planning, lesson design, facilitation, and reflection — and will help you stay on track with every facet of your program.

[csteachingtips](#)

- A project that documents and disseminates effective computer science teaching practices.
- Over 150 CS teachers were interviewed to help develop over 1,300 tips and 11 “best-of” tip-sheets.

[EngageCSEdu](#)

- EngageCSEdu publishes high-quality, engaging, classroom-tested Open Educational Resources (OER’s) for computer science education with a focus on materials for introductory courses in computing.
- The collection will be useful to anyone who is teaching (or planning to teach) a computing course, from high school teachers, to experienced teachers looking for new ideas, to new instructors needing some expert guidance.

Share the AspireIT Toolkit with Others

Unable to create your own program? Share the [AspireIT Toolkit](#) with others to implement CS experiences in their communities.

- This [one-page flyer](#) outlines everything the AspireIT Toolkit has to offer.

Consider Hosting a State Summit

[Organize: Broadening Participation in Computing State Summit Toolkit](#)

Looking to organize something much larger in your state? Computing education state summits can help to develop and advance a state’s strategy for both expanding computing education access and for broadening participation in computing. In particular, summits can promote equity and democratize change efforts by giving voice to all stakeholders in a collaborative and action-oriented environment.

This Toolkit will help you define the purpose, create structure, and plan the logistics for your own summit, and help engage in follow-up efforts post-summit. It also provides practical resources that communicate the importance of BPC efforts and strategies that change leaders can apply to their efforts.