



NATIONAL CYBER WORKFORCE AND EDUCATION STRATEGY

TRANSFORMING PREK-12 CYBER EDUCATION

Educators are crucial to building the foundational skills, including cyber skills, necessary to enable a thriving society and workforce. The work of building cyber skills, however, cannot rest solely on the shoulders of educators. The National Cyber Workforce and Education Strategy calls for ecosystems of stakeholders to support educators in preparing a skilled cyber workforce and equipping every American with the foundational cyber skills needed to fully access all of the resources in our interconnected society.

The actions below are intended to spark ideas and are a starting point to realizing the transformations outlined in the Strategy.

EXPAND YOUR LOCAL ECOSYSTEM

Host or join a reception to connect with local businesses, postsecondary institutions, community and faith-based organizations, families, and government programs to discover resources available in your local area, share successes, convey needs, and expand your network of partners. Consider virtual events to reach stakeholders outside your local area or create an online community to keep your ecosystem informed of your activities and needs. Become familiar with other ecosystems and leverage their cyber knowledge and resources to support your efforts. Examples of active ecosystems are included in section 2.1.1 of the Strategy.

CONNECT WITH EDUCATION PARTNERS

Arrange regular meetings where educators and administrators in PreK-12, postsecondary, and informal education settings can share ideas, opportunities, and needs. Casual conversations can spark ideas for collaboration on grants, expanding the reach of programs, identifying work-based learning opportunities, or combining resources to improve outcomes. Two-year and four-year colleges can be valuable resources for curriculum development and professional development. There are more than 400 colleges and universities across America that are designated as Centers of Academic Excellence in Cybersecurity (CAE-C) that can provide low-cost and no-cost cyber curriculum and professional development resources to educators at all grade levels. Visit the [CAE Community website](#) to find institutions in your area.

ACCESS ONLINE CONTENT AND CURRICULA

Explore online libraries of cyber modules, courses, and programs in a range of learning modalities and levels. Search online for “cyber + [NICE](#),” “cyber + [NICCS](#),” or “cyber + [CSSIA](#)” to access federally-funded portals with free and low-cost cyber education content. Convene ecosystem stakeholders, share course content and request assistance from employers and cyber experts to help align the skills that are being taught with industry needs. Think of creative ways to teach cyber skills that engage populations underrepresented in cyber professions, such as through robotics, art, music, or community service. Administrators can facilitate joint planning sessions with cyber experts and across disciplines to design innovative and engaging competency-based learning experiences.

While the Strategy contains lines of effort for all stakeholders, some of the key lines of effort for educators include:

- 1.2.1 Promote the economic and societal benefits of foundational cyber skills.
- 2.1.4 Protect learners in safe and secure cyber learning environments.
- 2.2.2 Enhance applied cyber content in interdisciplinary education programs.
- 2.2.5 Expand innovative models for academic credit.
- 2.4.1 Enhance the cyber workforce talent pipeline in underrepresented communities.
- 3.2.1 Leverage community colleges to enhance cyber workforce diversity and better meet local workforce needs.