National Cybersecurity Training & Education Center (NCyTE)

Dr. Kathi Hiyane-Brown, President
Corrine Sande, PI/Director, NCyTE Center/CS/CIS
Janice Walker, Special Projects Director, Cybersecurity Grants
Whatcom Community College
September 2021

Washington STEM Education Innovation Alliance
About NCyTE

• National Science Foundation funded center for cybersecurity education for over 10 years

• Mission: Increase the quantity and quality of the cybersecurity workforce throughout the nation

• National in scope

• 317 member institutions - community/tech colleges (160), universities (81), high schools(76)

• Located at Whatcom Community College, Bellingham, WA

• URL: www.ncyte.net
NCyTE Center Goals

Synthesized from supporting grants:

• **Goal 1** - Expand cybersecurity education pathways and program diversity to meet the nation’s cybersecurity needs of tomorrow.

• **Goal 2**: Develop and deploy leading-edge cybersecurity curriculum.

• **Goal 3**: Cultivate industry engagement and career opportunities.

• **Goal 4**: Disseminate efforts to improve current and future directions of cybersecurity education in the U.S.
All Impact - WCC and NCyTE – Helping other institutions
Importance to the nation and region

• 500,000+ cybersecurity job postings nationally
• Demand vastly exceeds supply
• Washington State: 10,000 job openings
• Supply of workers very low
• Cybersecurity program graduates needed to secure national and local infrastructure, data, assets, etc.
• Cyberseek.org can provide detailed workforce gap statistics by metropolitan areas and other
Example pathways - the CIS/Cybersecurity program at Whatcom

- **AAS-T Cybersecurity**
  - Transfer to WWU
  - Enroll in BAS IT Networking Cybersecurity at WCC
  - Employment

- **AAS-T Computer Information Systems**
  - Enroll in BAS IT Networking Cybersecurity at WCC
  - Employment

- **IT related degree from a community college in Washington State**
  - Enroll in BAS IT Networking Cybersecurity at WCC
NCyTE Impacts to community and state

- Model educational pathways (2-year to 4-year degrees) in various states of western U.S.
- Support federal programs that establish and update cybersecurity education standards such as the NSA’s Center for Academic Excellence (CAE) program;
- Solutions to evolving industry skill requirements and needs in cybersecurity education;
- CAE impact research study estimates across WCC student, graduate and operations spending between 2012 and 2019, CAE designation has contributed toward a cumulated $16.3 million in earnings and 948 new jobs in Whatcom County
Other activities

• Pathway models and curriculum
  • New College Board approved AP CSP: Cybersecurity course
  • CTE instructor training
• Resources to update, improve and introduce cybersecurity across curriculum
• Credit equivalencies for military occupation specialties
• Outreach to underserved and underrepresented populations
• Support industry connections and events
• Leadership development and mentoring for faculty; faculty academies and bootcamps
Q&A

NCyTE.net

Contact: Corrinne Sande, PI/Director
csande@whatcom.edu