

The ARC Project



Assessment Resources for Cybersecurity

Challenge:

Valid and reliable assessment is needed to:

- enable investigation of what does and does not work in the classroom,
- determine what and how well students are learning,
- serve as an integral part of our quest for rigorous and appropriate high school cybersecurity education.

Goal:

- To create a bank of cybersecurity assessment items based on the High School Cybersecurity Curriculum Guidelines.
- To pilot test the items with high school cybersecurity educators.

Award # 2117073

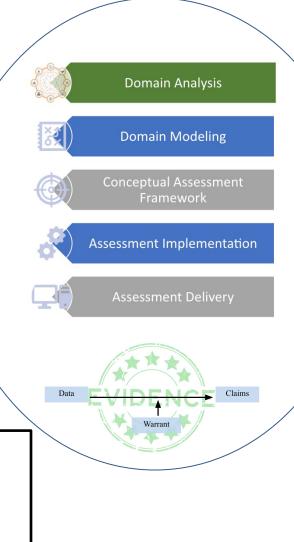
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Approach:

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- Evidence-Centered Design framework to design, develop, and deliver assessments that ensure consideration and collection of validity evidence from the onset of test design
- Results in a clearly articulated domain model, assessment design patterns, and assessment items

Broader Impact and Broader Participation:

- Sensitivity panel to ensure cultural and age relevance
- Pilot testing in a variety of school settings
- Classroom Impact to include Teach Cyber (~30,000 students), RING (2,800 students), Army JROTC Cyber (~5,800 students)
- Other potential impacts include educational research in cybersecurity, Praxis Teacher Test, Placement Student Tests