

Standing at the Forefront of Cybersecurity

Developing a Community-Based Accreditation Model

Dr. Talisa Jackson



an affiliate of ANSI

- **Mission**: To strengthen workforce quality by improving the credentialing system, ensuring its ongoing relevance, and preparing employers, workers, educators, and governments to use it effectively.
- **Vision:** A labor market which relies on the relevance, quality, and value of workforce credentials for opportunities, growth, and development.



The Dilemma

- Growing demand for cybersecurity talent vs. program completion gap
- Skills gap: Need for more hands-on and soft skills experience
- Clinics are growing (universities + community organizations) but vary widely in structure, quality, and outcomes
- No standardized framework for quality and consistency across cybersecurity clinics



Purpose of this Accreditation Model

- Establish consistent, high-quality learning experiences in clinics
- Validate competencies
- Support learner readiness for real-world roles
- Enable employer confidence in clinic-trained candidates



Literature Review

Identified 113 potential sources --> 44 relevant

Focus Group

Conducted at 4 National CyberWatch regional summits Attendees included students, clinic directors, faculty

Peer Review Panel

Certification bodies, faculty, competency-based education experts, adaptors of current cyber clinics, cybersecurity professionals

Internal Review

Internal review by Workcred team

Pilot

Next Steps: pilot and community feedback

Stakeholder Engagement

Focus groups

 National CyberWatch Center regional summits (Southwest, Southeast, Mid-Atlantic, Midwest) with faculty, students, and clinic leaders

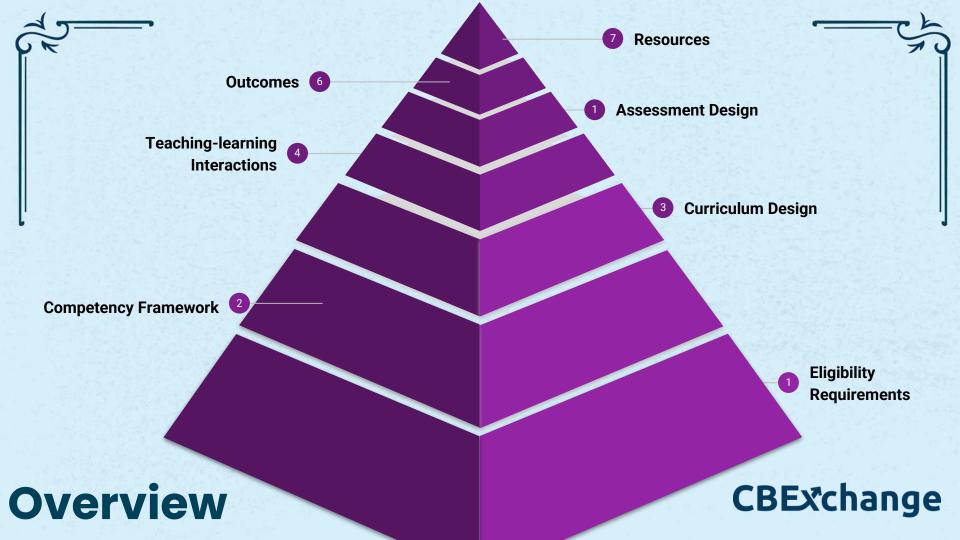
Peer review panel

 CBE experts, certification bodies, and adopters of clinics (7 members, recruited via invitation + referrals)

Stakeholder input explored

- Gaps in existing evaluation frameworks
- Role of competencies in predicting readiness & success
- Strategies to ensure reliable, valid assessments
- Barriers & solutions for education/training initiatives





Eligibility Requirements for Admissions

01	Identify and document how the eligibility criteria for admissions have been validated.
02	Develop an application process that includes an assessment of eligibility requirements for admission.
03	Establish and provide guidance to learners who are not admitted into a cyber clinic.





01	Have a documented plan for learners achieving mastery, as defined by the clinic.
02	Use a job task analyses and nationally recognized frameworks for alignment achieving mastery of competencies.
03	Include employability, management, and technical competencies.





01	Be work-based, focused and centered around real-world experiential learning with clients in the community.
02	Document how the curriculum enables the learner to move toward mastery competency.
03	Provide documentation of job task analyses and the use of any nationally recognized frameworks.
04	Document the process to determine the frequency of job task analyses in collaboration with subject-matter experts.



Teaching-learning interactions

01	Have active learner-centered teaching strategies based on adult learning theory.
02	Document how they guide learners in applying real-world contexts.
03	Document how they identify and provide intervention to learners who are not progressing according to the curriculum design.





01	Use a validated assessment tool to assess competencies prior to enrollment and at completion of the clinic.
02	Competency-based assessments must be based on job task analyses.
03	Use competency-based formative assessments throughout the clinical experience on an ongoing, systematic basis.





01	Track internal outcomes to share with clinical facilitators.	
02	Clinics must track external outcomes.	

Internal outcomes may be learner skill progression, learner satisfaction of the program, and completion rates of the program.

External outcomes may be employment rates, community partner satisfaction, and recognition of competencies by employers.





01	Have financial resources to design and implement the program.
02	Have facilities and equipment conducive to implementing curriculum design and assessment.
03	Have sufficient personnel available with the necessary competence to perform necessary functions.
04	Provide training for staff who do not meet the established job description criteria.





01	Establish formal community partnerships.
02	Have policies and procedures for addressing confidentiality and security that are compliant with NIST 800-171.
03	Have policies and procedures for addressing liability.
04	Document the responsibilities and qualifications of clinic personnel.
05	Have a legally enforceable agreement covering outsourced work.

Impact

- Cyber clinics extend learning beyond the classroom to support local communities by serving the following:
 - Schools
 - Nonprofits
 - Small and local businesses
- Provides learners with authentic, supervised experience in real-world contexts
- Model offers a blueprint for other sectors exploring competency-based, experiential learning models that integrate community impact with workforce readiness.

Reflect and Share

- Where in your organization or partnerships could a competency-based model like this make a difference?
- What barriers or opportunities do you see?



Applying the Model Beyond Cybersecurity

- Competency Frameworks: How are essential skills and mastery levels defined in your programs?
- Assessment Design: How do you validate learners' readiness for real-world application?
- Community Connection: How might experiential learning engage local partners or employers in your sector?
- Quality Assurance: What mechanisms ensure consistent delivery and reliable outcomes across programs or sites?



Learn more or get involved!

