

# Cybersecurity High School Innovations: A Path for Educators to Teach Cybersecurity Courses in their Schools

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# NCAE Cybersecurity Highschool Innovations Grant: Replicable Model - 10 CAEs represented across 7 states

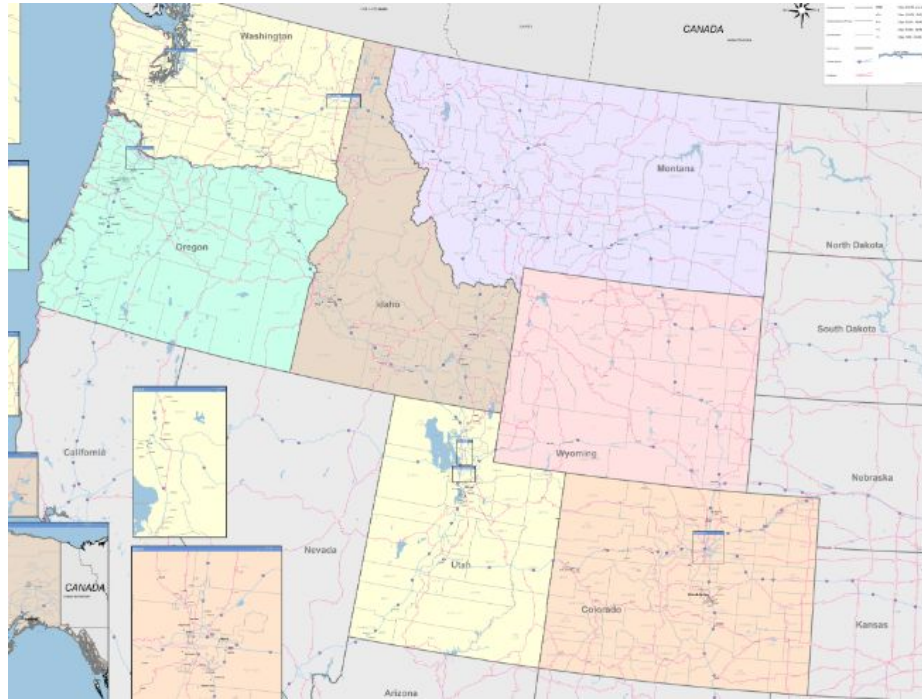


TABLE I  
GEOGRAPHIC DISTRIBUTION OF PARTICIPANTS BY YEAR OF CHI  
PROGRAM

<b>State</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>
<i>Arizona</i>			2
<i>Colorado</i>	10	11	6
<i>Connecticut</i>			1
<i>Georgia</i>			2
<i>Idaho</i>	4	3	2
<i>Nebraska</i>			2
<i>North Carolina</i>			1
<i>North Dakota</i>	2		8
<i>Oregon</i>		1	
<i>South Dakota</i>	3	7	8
<i>Washington</i>	5	7	5
<i>Montana</i>		1	
<i>Illinois</i>		1	
<i>South Carolina</i>			4
<i>Tennessee</i>			1
<i>Utah</i>			1
<b>Totals</b>	<b>24</b>	<b>31</b>	<b>44</b>

# CHI Educators and Developers Strategies



STRATEGIES FOR  
EFFECTIVE TEACHER  
PREPARATION



FOSTERING  
PROFESSIONAL  
DEVELOPMENT



RECOGNIZING AND  
SUPPORTING EDUCATORS



ENSURING CONDUCIVE  
GROWTH ENVIRONMENTS

- Replicable Model
- Address State Standards
- Cybersecurity curriculum resources
- Online flexibility + In-Person Summer Summit
- Career Focus in classroom
- Teacher support = student success
- Cybersecurity curriculum delivery
- Connect K-12 education to cyber workplace



- Classroom career assessment & guidance
- Three years of curriculum + model instructional
- Curriculum coaches
- Peer mentoring
- Aligned with state standards
- Professional Industry Connections



# The Educational Trifecta



# NICE Work role Alignment



The role of K12 educators in cybersecurity careers



Transformative learning experiences



Building a diverse, skilled workforce

# Embed Career Focus

1. Personalized Assessment
2. RING curriculum content
3. Invited speakers



# Program Structure

1. On-line synchronous and asynchronous Flexible Instruction
2. In-person Summer Summit
3. Diverse participant population
4. Supported Learning structure  
Hands-On Labs  
Student worker assistant  
Peer Mentoring

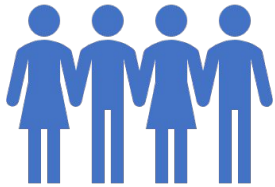


# 3 Year Model +

1. Curriculum  
Introduction to Cybersecurity  
Security Plus Certification  
Competitions: After School Resource
2. Summer Summits
3. CEU/PUD



# Diversity, Equity, Inclusion, and Accessibility



Addressing underserved groups



Advocacy in cybersecurity education

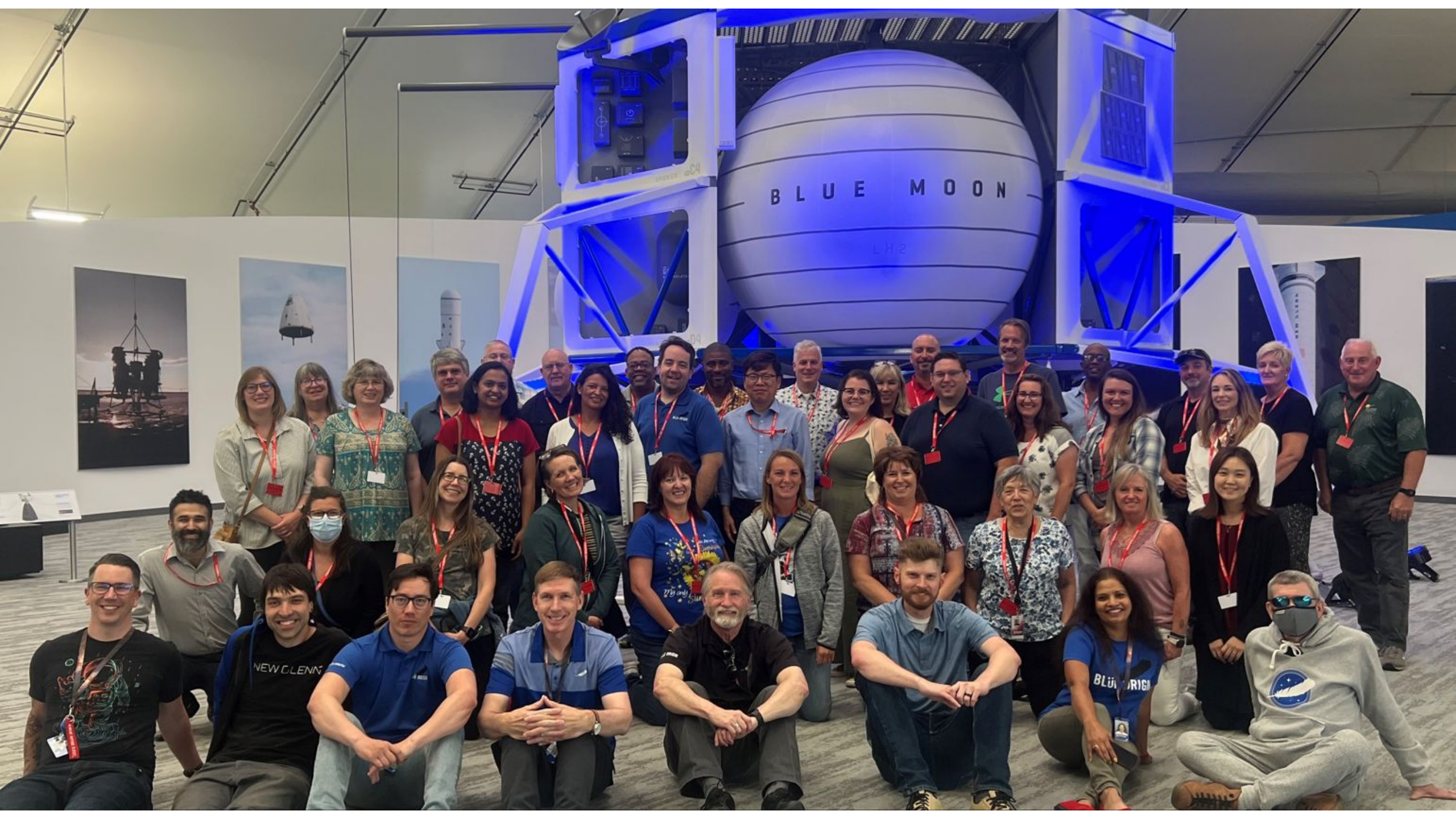


CHI's workplace connections

# Employer Engagement



and pictures  
of teachers





## Will Longman

### **2022 Industry Leadership of the Year**

Will Longman is the Chief Information Security Officer at [Blue Origin](#). Will has over 20 years of experience in successfully empowering organizations through strategic leadership and tactical excellence in security governance, risk management, and compliance programs.

Mr. Longman, a Navy veteran, worked as a high school vocational education teacher for four years before entering the industry cybersecurity sector. Upon hearing about Cybersecurity Highschool Innovations (CHI) volunteered, and with his team of cybersecurity professionals, developed a ten lesson high school curriculum for teachers using Phishing as the thread to support the NSA sponsored Cybersecurity High School Innovation Grant (H98230-21-1-0160).



# CLARK

# AWS Skill Center



# South Dakota Teacher Perspective



# 2024 Schedule

5 Week Schedule



## When & Where

5-Week Online Class:  
**June 10th - July 13th, 2024.**

In-person Summer Summit:  
**July 14th - July 17th, 2024**  
Tacoma, WA  
Fargo, ND  
Idaho Falls, ID

YEAR 1



## Intro to Cybersecurity

New to the Cybersecurity?

[Apply Here](#)

YEAR 2



## Security + Fundamentals

Previous CHI participants or experienced technology teacher?

[Apply Here](#)

YEAR 2/3



## Competitions

After school club content - competitions accelerate student success in your classroom.

[Apply Here](#)

# Comments / Challenges / Themes

- Labs in the high school
- Logistics of running labs
- Sequencing of material (placing social engineering first)
- Minimizing more challenging labs

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# Questions & Insights

- Let's delve deeper into the future of K12 cybersecurity education together!