Effectively Delivering Networking and Cybersecurity Education in a Rural Environment

North Arkansas College (Northark) received an NSF grant for *Institutions New to ATE* to increase the number of skilled technicians who are trained in network technology with a security focus. The need to provide more skilled technicians to meet the emerging and increasing demand of local and regional industry has been documented by our Business and Industry Leadership Team (BILT). To accomplish this goal, Northark will:

Modify the Network/IT Curriculum:

infuse the existing AAS and Technical Certificates in Information Technology/
Network Systems Administration with cyber security components.

Expand Delivery:

add alternate modes of college program course delivery to high schools, businesses, and off-site centers - including locations in rural areas without access to comparable training - to create greater student access.

Upskill Northark faculty:

professional development will be provided using training opportunities that may include NSF-ATE Centers, credit coursework, and other opportunities.

Expand the Business-Industry Leadership Team:

BILT members are actively engaged in co-leading the IT/ Cyber program to identify market trends, forecast job needs, and update needed Knowledge, Skills, and Abilities. New members will be added who are content experts in the new curricular areas.

An Academic/Career Success Advisor is providing support to all students enrolled in the IT/Cyber program by providing wrap around academic and career advising and support.









Effectively Delivering Networking and Cybersecurity Education in a Rural Environment— <u>Progress to Date</u>

Modify the Network/IT Curriculum:

- · Revised Networking degree with a focus on security
- New stackable Certificate of Proficiency
- New internship course is now embedded in the IT/Cyber degree plans

Upskill Northark faculty:

- Newly accredited instructor will teach CISCO's A+ course in fall 2018.
- Another newly accredited instructor will teach CISCO's CCNA1 in fall 2018.
- Two staff recently completed training through the Convergence Technology Center's Summer Working Connections in IoT and in Big Data
- Two new instructors are completing Northark's Excellent Online Teacher training in prep to teach online Networking courses.



Cheryl Keymer, co-PI; Dr. Laura Berry, PI; Craig Cates, original PI; Rick Williams, co-PI



Expand the Business-Industry Leadership Team:

Three new BILT members have been added—one a cybersecurity expert.

Expand Delivery:

- Remote delivery of the Technical Certificate in Networking to Northark's Carroll County
 Center will begin in fall 2018
 - Microsoft OS & Advanced OS are being developed for online delivery during 2018-19
 - PC Repair A+ & Network Fundamentals
 (CCNA1) will be "beamed out" from the main campus with on-site equipment and support provided.
- Software, hardware, and networking resources for remote delivery between the main campus and the CCC are in place.
- Three students are currently enrolled at the CCC!

Training Cabinet at the Carroll
County Center