November 7, 2019

Using Secure Internet and Technology to Support Education in Prison
Agenda

*** Webinar will be recorded ***

- Introduction from Vera
- Current State and Lessons Learned from North Carolina, Iowa, and Wisconsin
- Q&A - For questions, please use the chat feature
Today’s Presenters

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The Vera Institute of Justice

Mission
To build and improve justice systems that ensure fairness, promote safety, and strengthen communities.

How We Work
Vera works in partnership with local, state, and national government officials to create change from within.

- **We study problems** that impede human dignity and justice.
- **We pilot solutions** that are at once transformative and achievable.
- **We engage diverse communities** in informed debate.
- **We harness the power of evidence** to drive effective policy and practice.
Vera and Postsecondary Education

- Second Chance Pell technical assistance
- Scaling up of quality higher education programs/systems
- Increase the participation of incarcerated and formerly incarcerated
- National campaign to restore Pell eligibility to incarcerated students
Reasons to Expand Access to Technology

- **equip faculty with technology-based instructional tools** (e.g., open educational resources, learning management systems) to enhance the classroom experience;

- **provide students with access** to academic library resources and online assessments (e.g., industry-recognized certification exams), to continue their education outside of class time and during lockdowns and to take courses that may not be available at their local facility (e.g., telepresence and online courses);

- **support an education continuum for incarcerated individuals** by aligning prison-based education programs with those in the community;

- **ease the reentry process by allowing incarcerated individuals to prepare for release** by applying for jobs, financial aid, and benefits; enrolling in college; and searching for and securing housing.

- **provide a comparable educational experience for incarcerated students** that they would find on college campuses including the ability to write academic essays, create reports and digital content, watch and listen to videos and podcasts, and complete homework.

Adapted from Michele Tolbert, *Educational Technology in Corrections 2015,* US Department of Education
Today’s presenters will discuss how their states are providing access to live internet sites, secure laptops in living units and classrooms, wifi access in living units and other digital tools. Some of websites they provide access to are:

- FAFSA - studentaid.ed.gov
- Legal research - Lexis Advance, West
- Law, Wisconsin Courts
- MATC Moodle
- Cengage
- Library Resources: Ebsco Host, Follett Destiny
- Job Center of Wisconsin
- Vocational sites: OSHA, MobyMax, Simutech, Mitchell Auto Repair
- College websites
- Aleks
- College Board
North Carolina: Business and Key Initiative Drivers

- 52 active prisons serving 100 counties
- State Policy requires all network services to be owned and operated under state control
- Staffing facilities became a significant challenge
- Portable technology eyed as a means of driving staff efficiency
- 2014 Medical staff moved to laptops for patient records, dispensing, and inventory over a wired network
- Correctional Officers begin using tablets for inmate rounds and logs – daily docking caused delays in data analysis and population related information
- Adult and Juvenile Offenders education services moving away from paper media to computer-based or on-line media.
North Carolina: Business and Key Initiative Drivers

- NC Prisons implements the College at Southeastern, the undergraduate school of Southeastern Baptist Theological Seminary over a wired network utilizing on-line student resources provided by the Wake Forest Campus. Wired network became difficult to scale as class size multiplied.

- Educational drivers are adult basic education, high school equivalency, English as a Second Language, correspondence courses, vocational education, and college credit classes in various disciplines (Pathways project).

- 2019 Prisons considers making Correctional Education and Entertainment Cloud services available to Inmates.
Road to WiFi Success in NC Prisons

- 2015 - First comprehensive WiFi networks implemented in Prison Hospitals and Facility Clinics to make the Medical Laptops truly mobile.

- 2017 – A new secure Inmate Network (iNet) was implemented in certain prisons to facilitate the Seminary School and other Inmate educational needs. iNet was physically separate from the departmental network and later found to be difficult to maintain and scale due to the rapid growth of iNet demands across the state.

- 2018 - WiFi begins to spread quickly across iNet, more classrooms and inmate work areas.

- 2019 – iNet is re-architected into logically separated and highly secure network based on several layers of security sensors.

- 2019 (August) – Two prisons equipped with WiFi on iNet with outsourced educational cloud services goes into production. Three more facilities pending.

- Current – Successful proof of concept Officer Safety system that shares same comprehensive WiFi infrastructure as iNet, Vendor Cloud Services, Departmental Staff Network, and Juvenile WiFi enabled educational services.
NC Prison WiFi System

- **Contractual Content Vendors** (Voice, Video, Music, Education)
- **Prison Industries** (Inmate Network Access)
- **Juvenile Offender Access** (Education)
- **Department Network** (Employee Network Access)
- **Officer Personal Safety Alarm/Tracking System**

**Logical Layer**

1. **CapWap Tunnel**
2. **WAN Fabric**
3. **Content Vendor**
4. **Perimeter FW**
5. **Local Institution Control Room**
6. **Server Farm**
7. **Production Data Network**
8. **Prison Industries**
9. **Juvenile Systems**

**Physical Layer**

- **DataCenter**
- **WLC**
- **Vendors**
- **Adult Corrections**
- **Juvenile**
- **Vendors**
- **Production Data Network**
- **Prison Industries**
- **Juvenile Systems**

**Local Institution Monitor Station**

**Juvenile Offender Access**

**Prison Industries**

**Department Network**

**Officer Personal Safety Alarm/Tracking System**

**Contractual Content Vendors**
NC: Key Security Infrastructure Functions

- Cisco ISE – security posturing/adds SCCM client (not shown)
- Offender client traffic uses non-routable IP’s separate WLANS for each tenant via AP’s
- Capwap Tunnel maintains separation of client traffic. The tunnel also nails up a dedicated path between the Cisco 4800-B AP and the WLC...nothing “slips” out of the tunnel.
- Client traffic exiting the Cisco WLC is still segmented based on WLAN.
- WLAN’s are mapped to VLAN’s, and VLAN’s are mapped to VRF’s. This equipment routes traffic according the VLAN and VRF membership.
- Barracuda Inline content filters for adult offenders and juvenile offenders are in place to prevent access to social media, webmail, adult content, etc. These devices also employ “white lists” that detail the URL’s and content that the offenders may have access to (if access to the internet resources are allowed for the clients).
- Cisco ASA Firewalls separates iNet and production networks. This firewall also allows traffic to iNet server and application resources based on tenancy as well as establishing VPN tunnels to content vendors (example: APDS). Allows access to the internet resources first scrubbed by the content filters (5)
Iowa: Level of Access

- Associate of Arts offered online
  - Cohort based program
  - 7-week courses – 6 start dates per year
  - Full-time students fall, spring and summer
- Started online at two local facilities
- Currently offering to 6 correctional facilities
- Computer Labs and Microsoft Surface Go’s
- Canvas LMS and Cengage Unlimited – eBook
Iowa: Drivers and Partnerships

- Long standing relationship with Iowa DOC
- Iowa Central only Second Chance school in IA
- Education traditionally funded through DOC
- Investment in personnel, firewall, technology and LMS
- Statewide network through DOC Central Office – white list –
Iowa: Challenges and Solutions

- Access to materials – GALE, Cengage & Canvas
- Access to Technology – provided by ICCC
- Course redesign – fit corrections education
- Director and Wardens key partners in start
- IT staff key in implementation
- Counselors and Education staff key in recruiting
Iowa: Benefits

- Degree and education obtainment
- Equal access – men’s and women’s facilities
- Cohort model allows multiple start dates throughout the year
Wisconsin: Level of Access Offered

- Students (and some Educational Staff) use Chrome operating system devices and some Windows PCs (when Chrome won’t meet the need) on a separate network primarily for offender use.

- Benefits of Chrome OS: lower purchase cost, more secure, less hacking, supportability, enterprise management using Google Management Console.

- Aligns with future direction of DOC and technology in general by using more internet-based resources and limiting use of locally installed software.

- Student access to the internet is controlled primarily through white list / black list.

- Limited use of web filtering by website category is tied to very specific needs like job search and some juvenile education programs.

- Additional access to locally hosted content through RACHEL (worldpossible.org).

- Student access limited to school, work and library.
Wisconsin: Behind the Scenes

- Chrome devices monitored and updated using Google Management Console
- Internet access secured and logged using Google Management Console – Chrome OS devices only, Web filtering software, and Firewalls
- Network monitored with alerts for equipment issues
- Network and desktop device support from, IT staff at DOC Central Office, a small number of IT staff doing weekly onsite visits / support, and ongoing assistance from maintenance staff located at the sites
Wisconsin: Internal and External Drivers

- Education Office built support from wardens by highlighting these internal drivers:
  - Widespread use of Keefe tablets reduced security resistance to education-focused laptop
  - Textbook and material cost (KEY: Facility budget pays for these materials!)
  - Homework is valuable, complicated and required better tools to complete outside of classtime
  - Secure access to internet could reduce staff time currently used to scan homework and communicate with online instructors
  - Secure laptops could make better use of limited classroom space
- Second Chance Pell partner (Milwaukee Area Technical College) drove new approaches to technology because of the use of a LMS to deliver instruction:
  - Sparked an initiative to reduce cost by adopting OER content
  - Led to creative approaches to support FAFSA applications at multiple sites
Key Takeaways and Considerations

- Technology and internet access can provide a way to enhance the educational experience of incarcerated students and faculty, assist with reentry, and reduce costs.
- Buy-in from corrections partners is critical, with ongoing communication between partners to ensure each party understands their responsibilities.
- What is your goal with the use of technology? Is it to enhance/supplement face-to-face instruction or replace it?
- How do you ensure access to high quality education with or without technology and internet access?
- What mechanisms are in place to help ensure security and what happens if security is breached?
- Where does liability live? With the college, corrections, or an external vendor?
Questions?

See Q&A in separate document