



Oklahoma State Department of Education Wi-Fi Best Practices

OKLAHOMA CONNECT & LEARN INITIATIVE

THE GOAL

As part of the Oklahoma Connect & Learn Initiative, our state has adopted the FCC recommended connectivity goals for 2018, including Wi-Fi capable of supporting 1:1 learning in every classroom and learning area.

THE OPPORTUNITY

The E-rate program provides a \$150 per student budget over five years to school districts to upgrade their internal network. In Oklahoma, there is still \$27.1M remaining in E-rate Category 2 funds.

THE NEXT STEPS

1. Understand your available budget & E-rate eligibility.
2. Optimize your funds & upgrade with best practices.
3. Run successful procurement with your E-rate consultant and/or the Oklahoma Connect & Learn team.

BEST PRACTICES

ACCESS POINTS

- ▶ Minimum 802.11ac Wave 1 Access Points
- ▶ 1 per traditional classroom
- ▶ Special consideration must be given to:
 - Common areas, outdoor areas
 - High density vs. standard coverage in those common areas*
 - Low density example: Agricultural Building*
 - High density example: Gymnasium, Auditorium*
 - Building construction (external and internal)
 - Classroom size (library, SpecEd, traditional, band)
 - Site Survey\Pre-engineering\“Heat Map”

SWITCHES

- ▶ 1 Gbps copper ports + fiber expansion
- ▶ PoE with support for PoE+

STRUCTURED CABLING

- ▶ Copper needs to be Cat5e or greater
- ▶ New installs should be Cat6 or greater
- ▶ 10 GBps fiber between closets
- ▶ 10 Gbps fiber for WAN connections

QUESTIONS? GET IN TOUCH

Kurt Bernhardt

Executive Director of Education Technology
Oklahoma State Department of Education
Kurt.Bernhardt@sde.ok.gov

