

Kentucky's K-12 Digital Readiness


The teaching, learning, and administrative processes of Kentucky's 171 public school districts require a robust digital ecosystem now more than ever. To meet the teaching and learning demands of today and tomorrow, we believe this ecosystem should:

- Empower personalized learning experiences for students and staff
- Enable digital communications and collaboration models among all stakeholders
- Expand data enhanced decision making
- Ensure an experience that is protected through cutting edge privacy and security strategies




Digital Equity for Teaching and Learning

A digitally equitable learning environment requires a commitment to provide anywhere, anytime, always-on opportunity and access for students and staff. Strategies such as high speed fiber connectivity to every district, dense Wi-Fi coverage throughout buildings, 1:1 device assignment for students, and Bring Your Own Device (BYOD) policies for students and staff are being adopted across Kentucky to address the equity needs both on and beyond the school campus.




100% of Kentucky K-12 public schools and district offices are connected by the most reliable, highest speed and quality fiber internet services in the country.



School fiber internet total usage increased **+37.5%** over the past 24 months* while maintaining uptime of **99.96%**
**November 2021-November 2023*


Greater than **732 kilobytes** per second bandwidth per student available through statewide fiber network service.




98.5% of students have internet access for school work beyond school campus



95.5% of students report internet access at home



87% of students feel as though their school encourages technology use for learning**



85% of teachers rate the speed of Internet at their schools as Average or Above Average**

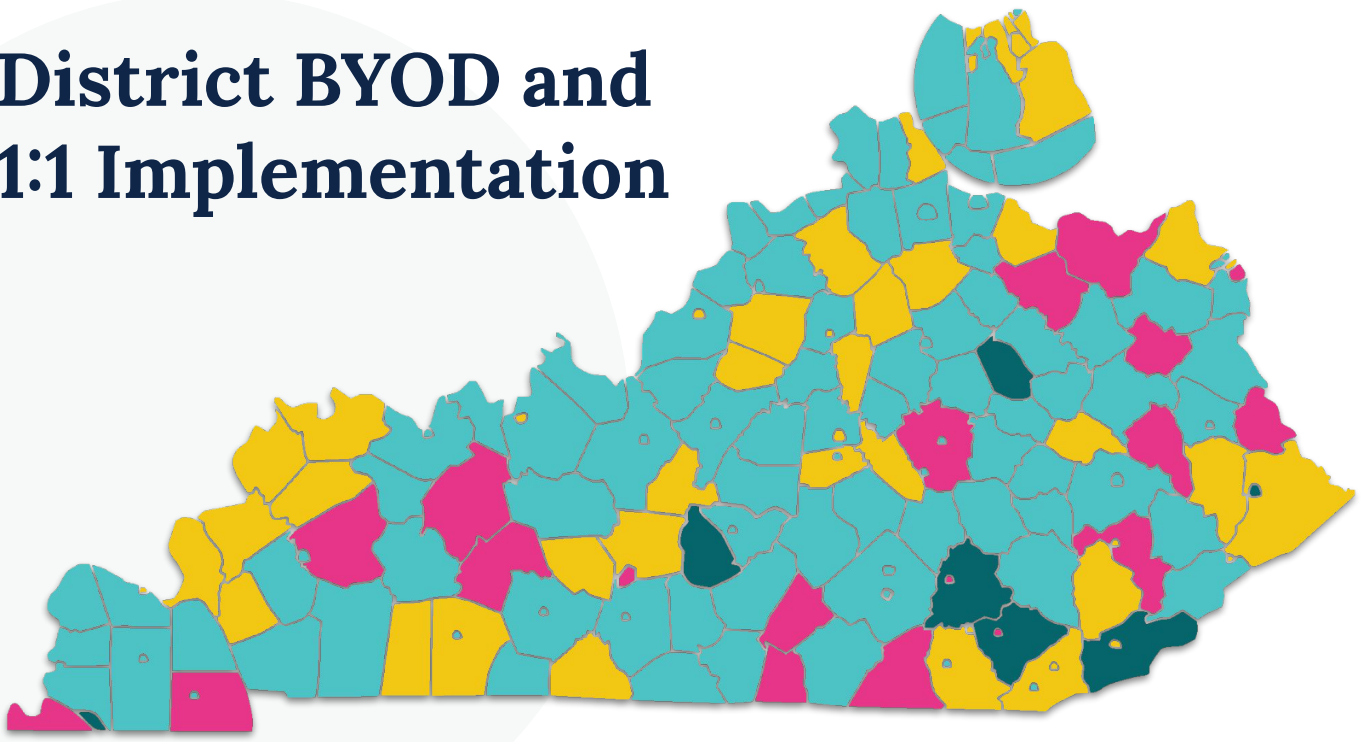
.61 to 1
Student to digital device ratio
That's better than 1 device per student

954,945
Student Instructional Devices

Down **.02** compared to
last school year

1,103,364
Student and Staff Devices

District BYOD and 1:1 Implementation



99 Districts with both BYOD and 1:1



47 Districts with 1:1 only



19 Districts with BYOD only



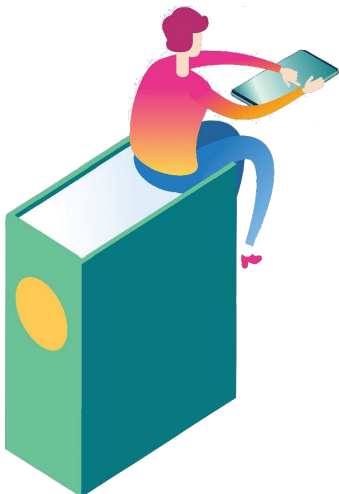
7 Districts without BYOD or 1:1



100% of schools provide Wi-Fi access to students. Of these, **99%** have implemented dense Wi-Fi networks capable of supporting BYOD or 1:1 initiatives

Digitally Empowered Learners

Strong digital skills derived from the Kentucky Academic Standards for Technology, such as utilizing shared digital workspaces, have been correlated with increased collaboration in the classroom. Students can think about concepts and interactions in more varied ways with the affordances of multimedia and multimodal representations.



Digital Communicator

68% of students are asked to write online regularly during the school year.**

69% of students are asked to post and/or share their work online.**

Digital Designer

88%

of students use technology to demonstrate knowledge by creating videos, slide presentations, art, music, podcasts, etc.**

78%

of students are asked to use digital tools to conduct experiments and/ or take measurements.**

22,345



unique students in grades 6-12 completing at least one computer science course offered by their school, ATC, or local CTE center.

Digital Collaborator

Developing a level of comfort with digital collaboration outside of school helps students be more successful when collaborating with classmates, teachers, and other experts.

85%

of students are asked to collaborate using online documents.**

68%

of students are asked to work with other classmates online.**

53%

of students in Kentucky utilize technology to engage with experts outside of the classroom**



Digital Citizen

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world; act and model in ways that are safe, legal and ethical.

87% of students say their teachers talk with them about how to act respectfully while online.**

71% of students say their classmates always or usually treat each other with respect when collaborating online.**

Less than 5.2% say their classmates never treat each other with respect.

AREA FOR IMPROVEMENT

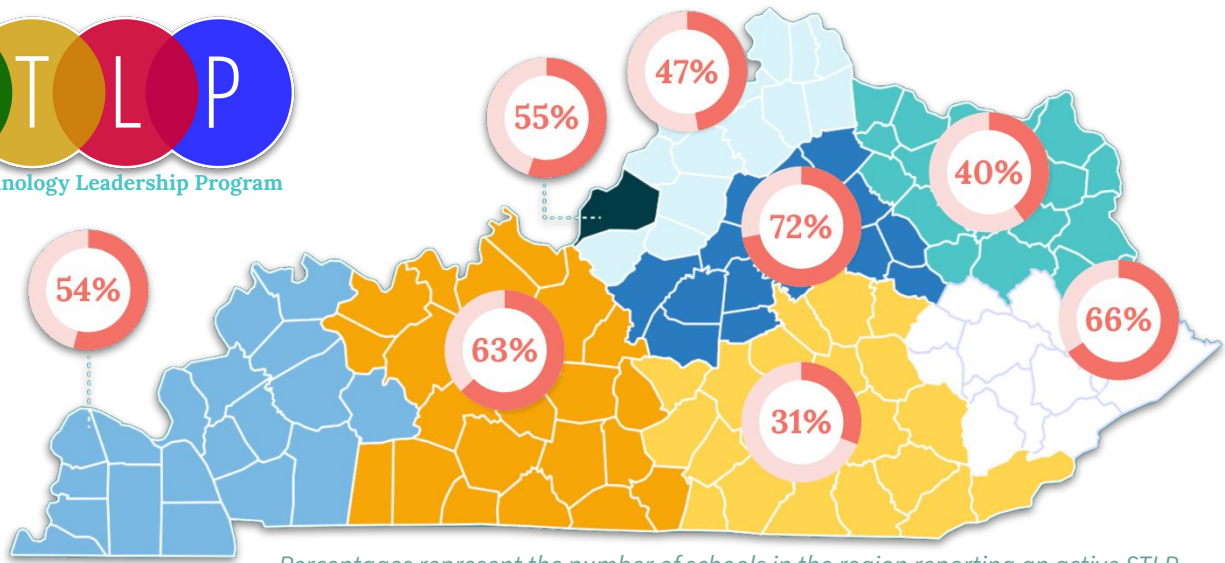
90% of students are easily able to find out if online content is trustworthy.**

96% of districts report having a strategic plan for teaching digital citizenship skills.



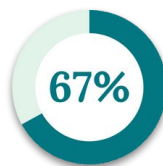


Student Technology Leadership Program



Percentages represent the number of schools in the region reporting an active STLP

Greater than **50,000** students from **754** schools in **132** districts



67% program integrated into content



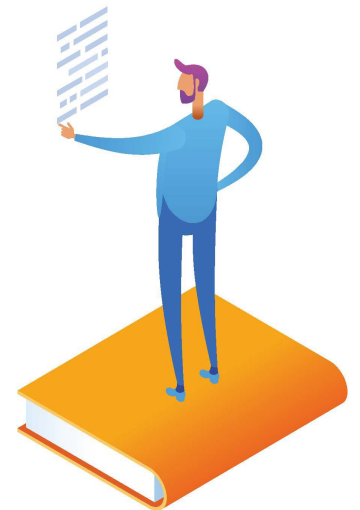
33% after school program or club only

Digitally Empowered Educators

Educators who are encouraged, recognized, and supported in the utilization of digital tools, more frequently create an environment of digital connectedness with students and families. This also aids in eliminating barriers to digital access and opportunity for students both on and beyond the school campus.

Digital Learning Designer

Educators design engaging, learner-centered digital learning experiences and environments enabled by high quality digital content and resources providing student voice, choice and path.



How are Kentucky's teachers frequently engaging with students for instructional purposes?



88% of teachers have students use a device for learning at least a few times weekly.**



75% of teachers create and utilize instructional videos, discussion board posts, use digital curriculum, or lead online learning experiences.**



81% of teachers create digital resources such as instructional videos, hyperdocs, choice boards.**

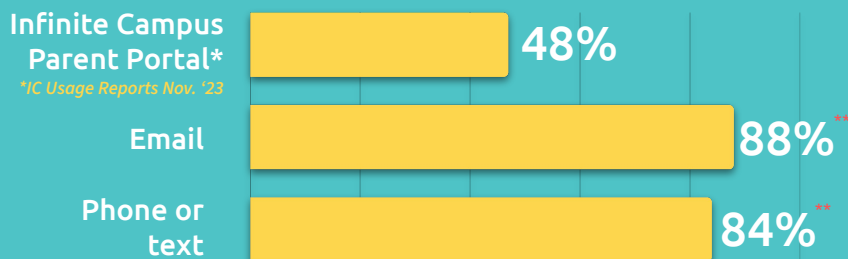


84% of teachers facilitate digital content usage by students through educational apps and websites.**

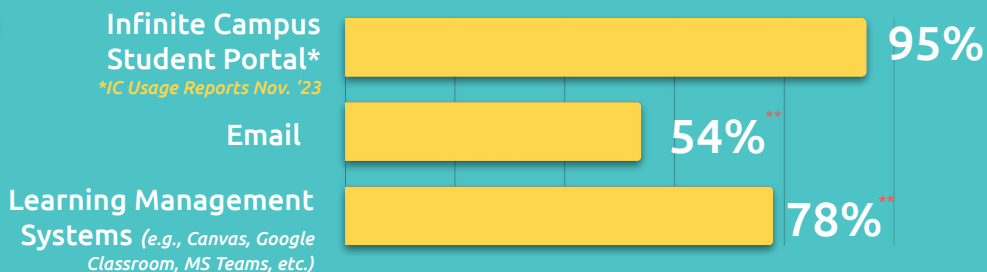
Digital Communicator

Kentucky's Educators Use a Variety of Ways to Stay Connected with Students and Their Families

Methods for connecting with Guardians



Methods for connecting with Students



94% say communicating with students in-person happens most frequently. **



KY is cited as a top 3 state in teachers accessing and using quality data to raise achievement for all students.

(Data Quality Campaign)

Digital Learning Collaborator

Educators are intentional to collaborate with peers, students, and experts outside the school to improve practice, discover and share resources and ideas, and solve problems.



71% of teachers report using social media, blog posts, etc. as new ideas and improve digital teaching practices. **



75% of teachers collaborate with other teachers to design learning experiences using technology. **



95%

of teachers in **86%** of Kentucky districts have access to a part or full-time digital learning coach (DLC).

1,059 Library Media Specialists employed at the district or school level, **946** of which are not split or shared among schools.

Of these, **89%** report intentional collaboration and support of digital strategies for teaching and learning.



92%

of teachers feel highly confident managing students who are using technology. **

79%

feel learning is more engaging when using technology. **

Digitally Empowered School Leader

81%

of school leadership feel learning is more engaging for our students when they're using technology. **

97%

of school leadership feel strongly that they encourage teachers to try new things with technology. **

92%

of school building leaders report regularly discussing technology during teacher evaluations. **

Tech Trends

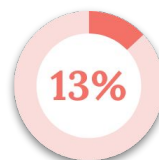
821 large-scale, organized network attacks aimed at denying internet access to all Kentucky schools and districts were successfully mitigated.

School Digital Device Footprint

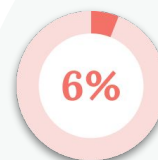
Totals may not equal 100% due to rounding



Chrome



Windows



iOS



Mac OS

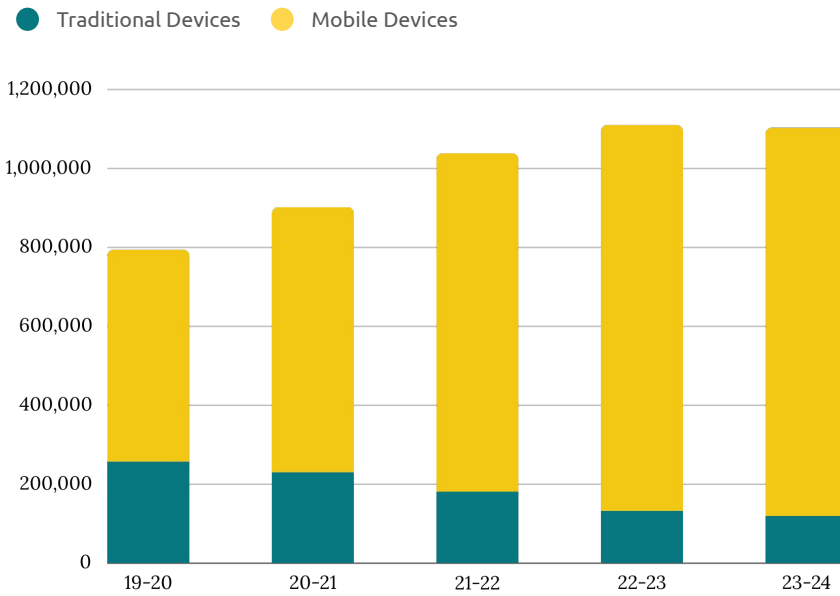


Android

97% of districts are using Google for Education. Of these, greater than **83%** integrated with Office 365 & Active Directory.

More than **137 Billion** unauthorized connection attempts against school networks are blocked annually by statewide security services.

Traditional vs. Mobile Devices



Online & Virtual Learning

88% of districts report students taking online or virtual courses. Of these, **76%** offer a full-time enrollment option.

52 districts offer online or virtual courses to students in other districts.

Learning Management System

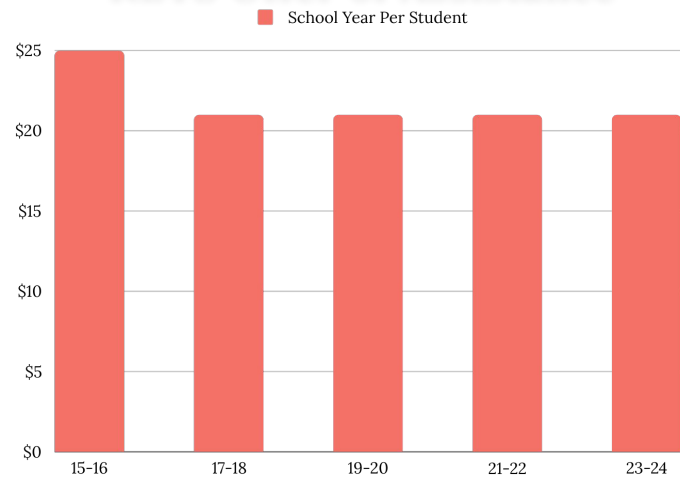
94% of districts sponsor a learning management system (LMS). The majority of adoption is with free cloud services.

K-12 Online Assessment

In 2023, **450,000** 3rd - 12th grade students in **100%** of Kentucky school districts successfully participated in high-stakes statewide testing, accounting for more than **1.7 million** testing sessions*.

*Includes Fall ACT, Spring ACT, CTE E-SESS, KSA

KETS Offer of Assistance



Sources

Kentucky Digital Readiness Report: applications.education.ky.gov/trs_reports/Default.aspx

Kentucky School Report Card Suite: education.ky.gov/Open-House/Pages/School-Report-Card-Suite.aspx

**BrightBytes: brightbytes.net - specific student and teacher feedback response data is representative from 12-18 months prior to this publication

Digital Driver's License: idrivedigital.com

KY Computer Science Report: education.ky.gov/districts/tech/Pages/KETS-2018---2024-Master-Plan---Appendix-A.aspx

Open House: education.ky.gov/Open-House/Pages/default.aspx

