Kentucky's K-12 Digital Readiness

January 2025

The teaching, learning, and administrative processes of Kentucky's 172 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 **+42%** over the past 24 months* while maintaining industry leading uptime.
January 2023 - January 2025

Greater than **1 megabit** per second (Mbps) bandwidth per student available through statewide fiber network service.

98.8% of students have internet access for school work beyond school campus

96.5% of students report internet access at home

81% of teachers rate the speed of Internet at school as Average or Above Average
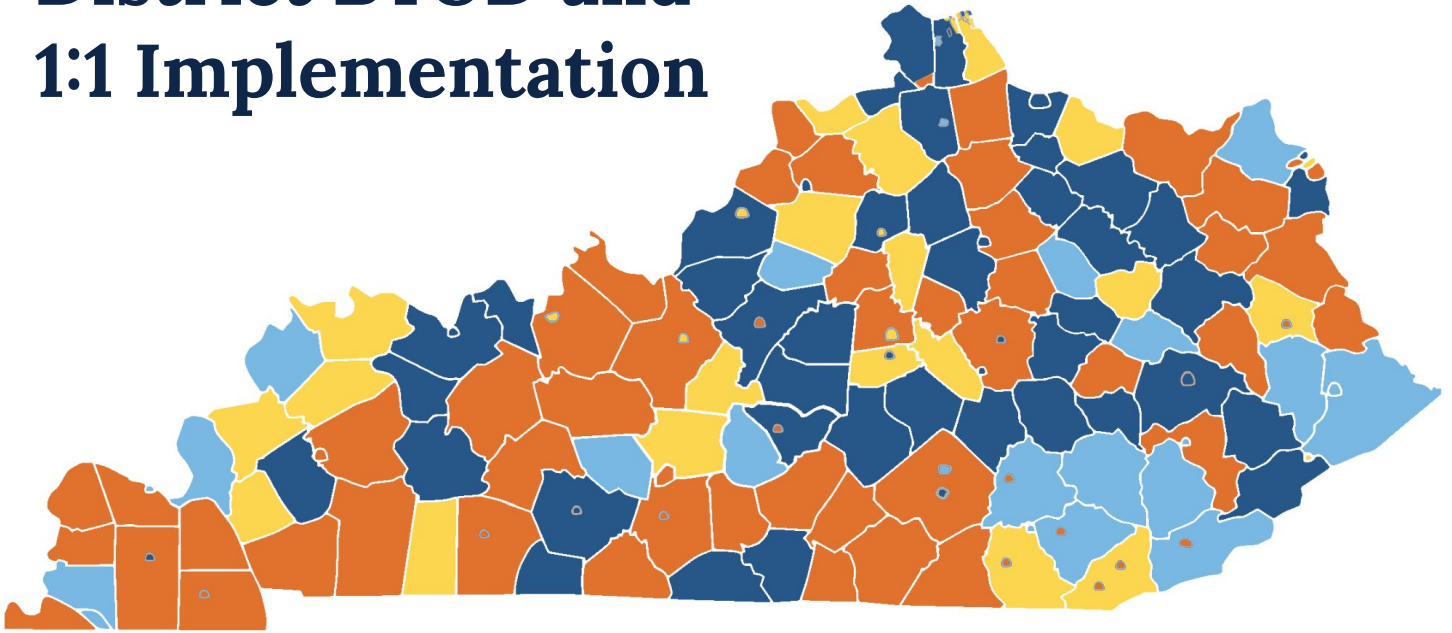
.6 to 1
Student to digital device ratio
That's better than 1 device per student

Down **.01** compared to last school year

976,132
Student Instructional Devices

1,126,838
Student and Staff Devices

District BYOD and 1:1 Implementation

33% — 57 Districts with both BYOD and 1:1

18% — 31 Districts with 1:1 only
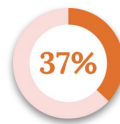
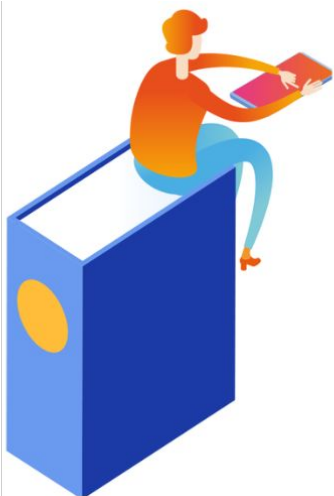**37%** — 63 Districts with BYOD only

13% — 23 Districts without BYOD or 1:1

100% of schools provide Wi-Fi access to students.

Of these, **99.5%** 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

57%

of 6th-12th grade students find experts online to answer questions about new skills or interests.

72%

of 6th-12th grade students are asked to post and/ or share their work online.

Digital Designer

84%
of 6th-12th grade students use technology to demonstrate knowledge by creating videos, slide presentations, art, music, podcasts, etc.

75%
of 6th-12th grade students are asked to do a virtual lab or online experiment.

23,036
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.

83%
of 6th-12th grade students are asked to collaborate using online documents.

71%
of 6th-12th grade students are asked to participate in online discussions with classmates.

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.

93% of teachers feel comfortable teaching digital citizenship strategies and behaviors to their students.

74% of 6th-12th grade students report they know how to protect their personal data and maintain privacy when online.

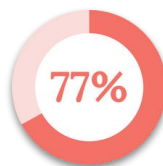**98%** of districts report having a strategic plan for teaching digital citizenship skills.

80% of 3rd-12th grade students report they know how to be safe when using online and digital tools.
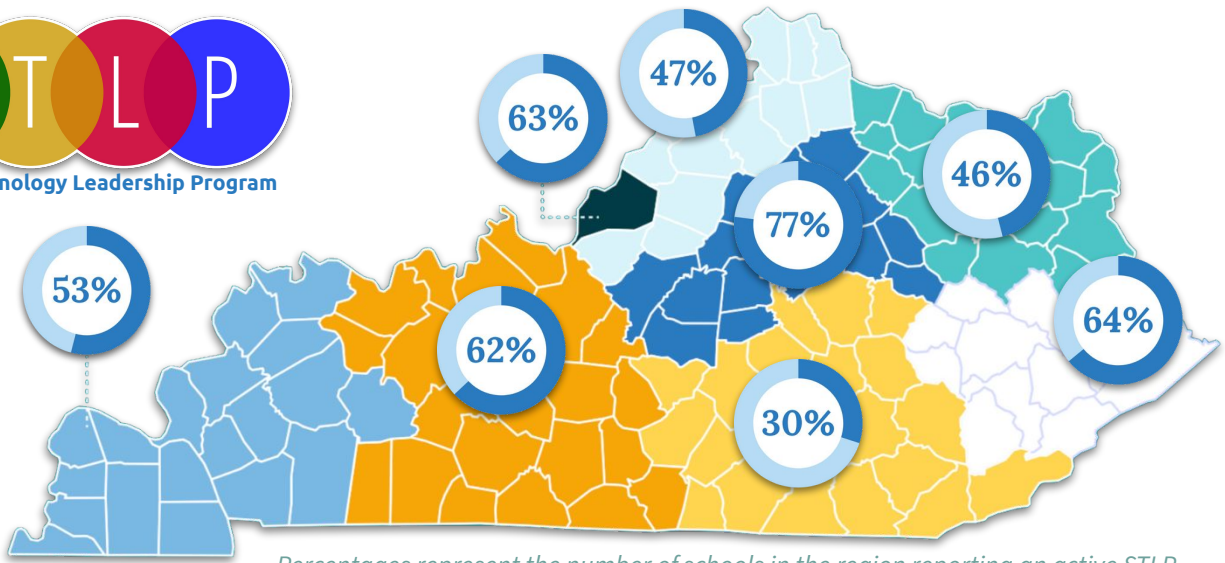
STLP
Student Technology Leadership Program

63% 47% 46% 53% 77% 62% 64% 30%

Greater than **50,000** students from **784** schools in **133** districts

**77%** program integrated into content

23% 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.
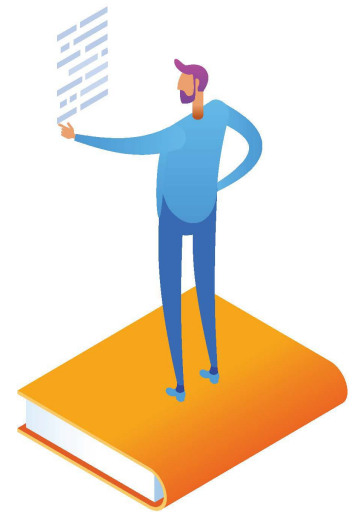
How are Kentucky's teachers frequently engaging with students for instructional purposes?

89% of teachers have students use a digital device (Chromebook, laptop, etc.) for learning at least weekly

90% of teachers create online lessons for students to access digital content that supports learning

74% of teachers provide digital feedback to students for the purpose of improving content mastery
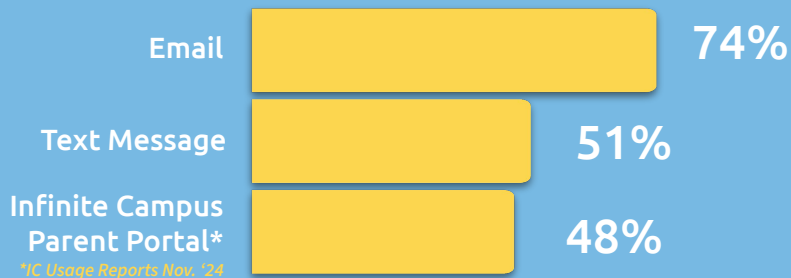
94% of teachers utilize standards-aligned videos as part of student digital learning experiences
Of these, 51% are created by the teacher.
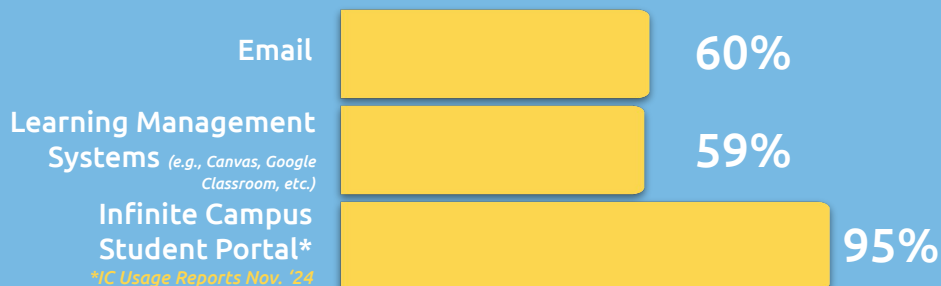
Digital Communicator

Kentucky's Educators Use a Variety of Ways to Stay Connected with Students and Their Families About Student Performance and Classroom/School Activities

Digital tools used for communicating with families

Email	74%
Text Message	51%
Infinite Campus Parent Portal* *IC Usage Reports Nov. '24*	48%

Digital tools used for communicating with students

Email	60%
Learning Management Systems *(e.g., Canvas, Google Classroom, etc.)*	59%
Infinite Campus Student Portal* *IC Usage Reports Nov. '24*	95%

82% of school administrators report using district or school social media accounts to communicate generalized information about school news and events.

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.

65% of teachers report using social media, blog posts, etc. as new ideas and improve digital teaching practices.

88% of teachers feel comfortable facilitating collaboration with students using digital tools.

89% of teachers in **81%** of Kentucky districts have access to a digital learning coach (DLC).

1,016 Library Media Specialists employed at the district or school level, **902** of which are not split or shared among schools.

Of these, **88%** report intentional collaboration and support of digital strategies for teaching and learning.

95% of teachers feel comfortable managing students who are using digital tools.

75% feel the effective use of digital tools increases student engagement in learning experiences.

Digitally Empowered School Leader

95% of school leadership feel the effective implementation of digital teaching and learning strategies is important to student success.

**95%** of school leadership feel they encourage teachers to try new things with technology.

82% of school leadership feel the administrative team is helping teachers incorporate the outcomes of effective digital teaching and learning in the school's Portrait of a Learner.

Tech Trends

715 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

81% Chrome
12% Windows
5% iOS
**<2%** Mac OS
<1% Android
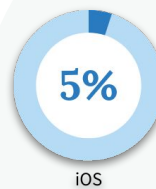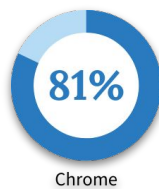
100% of districts are using Google Workspace & Microsoft 365 - for Education. At least **71%** of districts pay for premium licensing beyond the free offering.

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

Traditional vs. Mobile Devices

● Traditional Devices ● Mobile Devices
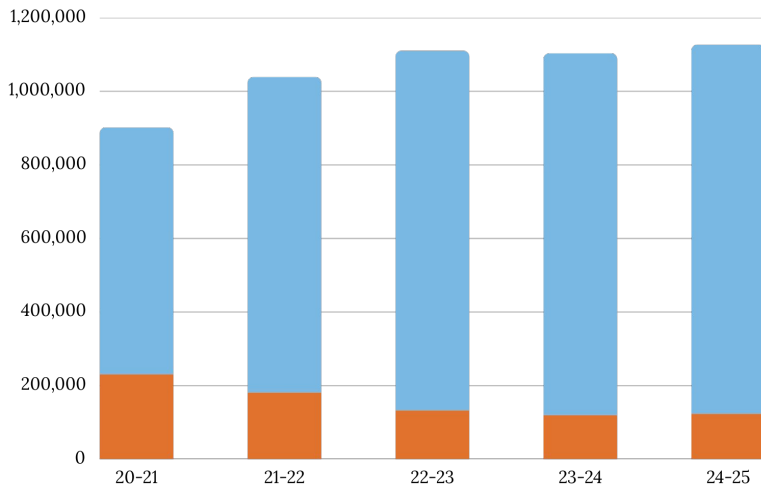
Online & Virtual Learning

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

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

Learning Management System

97% of districts sponsor a learning management system (LMS). The majority of adoption is with free cloud services.
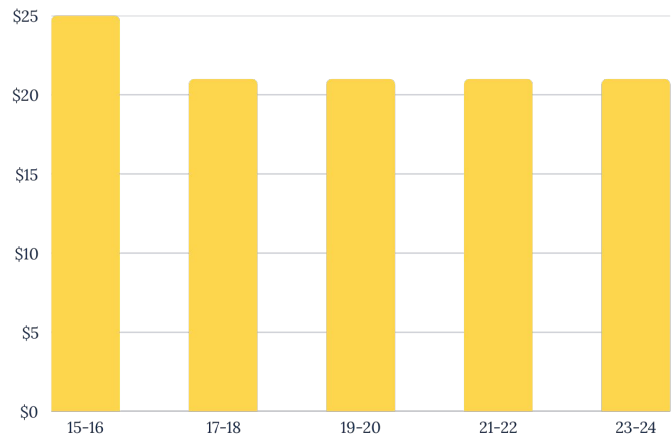
K-12 Online Assessment

In 2024, **486,000** 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

▮ School Year Per Student

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

Speak Up: tomorrow.org/projects/speakup/

Digital Driver's License: idrivedigital.com

KY Computer Science Report: education.ky.gov/districts/tech/Pages/KETS-2024-2030-Master-Plan-Appendix-A.aspx

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