

Kentucky's K-12 Digital Readiness

We are headed toward greater and more meaningful digital interactions between family, school and community. We believe digital and future-ready foundations can:

- Help empower student personalized learning experiences and preparedness for college and the workforce
- Increase teacher productivity and digital workflows
- Enhance communications and invaluable collaboration models
- Expand data enhanced decision making, and provide a robust infrastructure for endless possibilities



Digitally Ready Learning Environments

Digital access at school and at home helps us understand how "plugged in" and "connected" our learners are during the school day and beyond. Students without access to technology in school and at home are less likely to engage in 21st century learning skills. Ease of access is a precursor to the desired shifts in student outcomes powered by digital tools and resources. Strategies such as 1:1 and Bring Your Own Device (BYOD) are being adopted across Kentucky to help meet this need.



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.

Greater than **332 kilobytes** per second bandwidth per student available through statewide fiber network service.



School fiber internet total usage increased **+247%** over the past 24 months* while maintaining uptime of

99.98% *October 2020-October 2022



98%

of students have internet access for school work beyond school campus



95%

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

.63 to 1

Student to digital device ratio
that's better than 1 device per student

Down **.04** compared to last school year

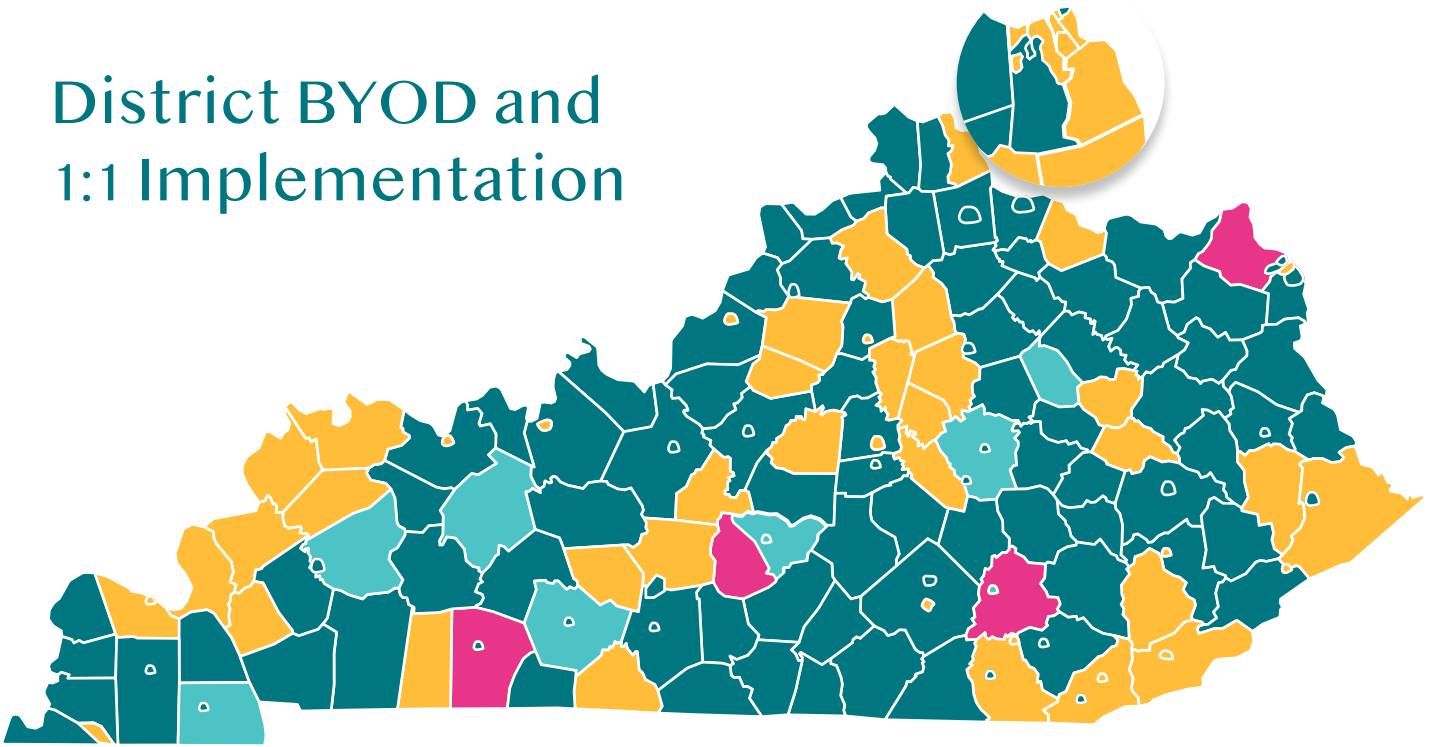
970,000

Student instructional devices

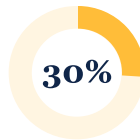
1,110,351

Student and staff devices

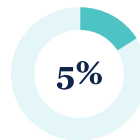
District BYOD and 1:1 Implementation



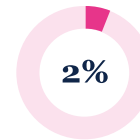
107 Districts with both BYOD and 1:1



52 Districts with 1:1 only



9 Districts with BYOD only



4 Districts without BYOD or 1:1



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

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

Digitally Empowered Learners

Strong online skills, such as confidence using 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. Students who have access to computers and the Internet are more likely to use technology more frequently and have better technology skills.



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.

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 student say their teachers talk with them about how to act respectfully while online.

71%

AREA FOR IMPROVEMENT

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.

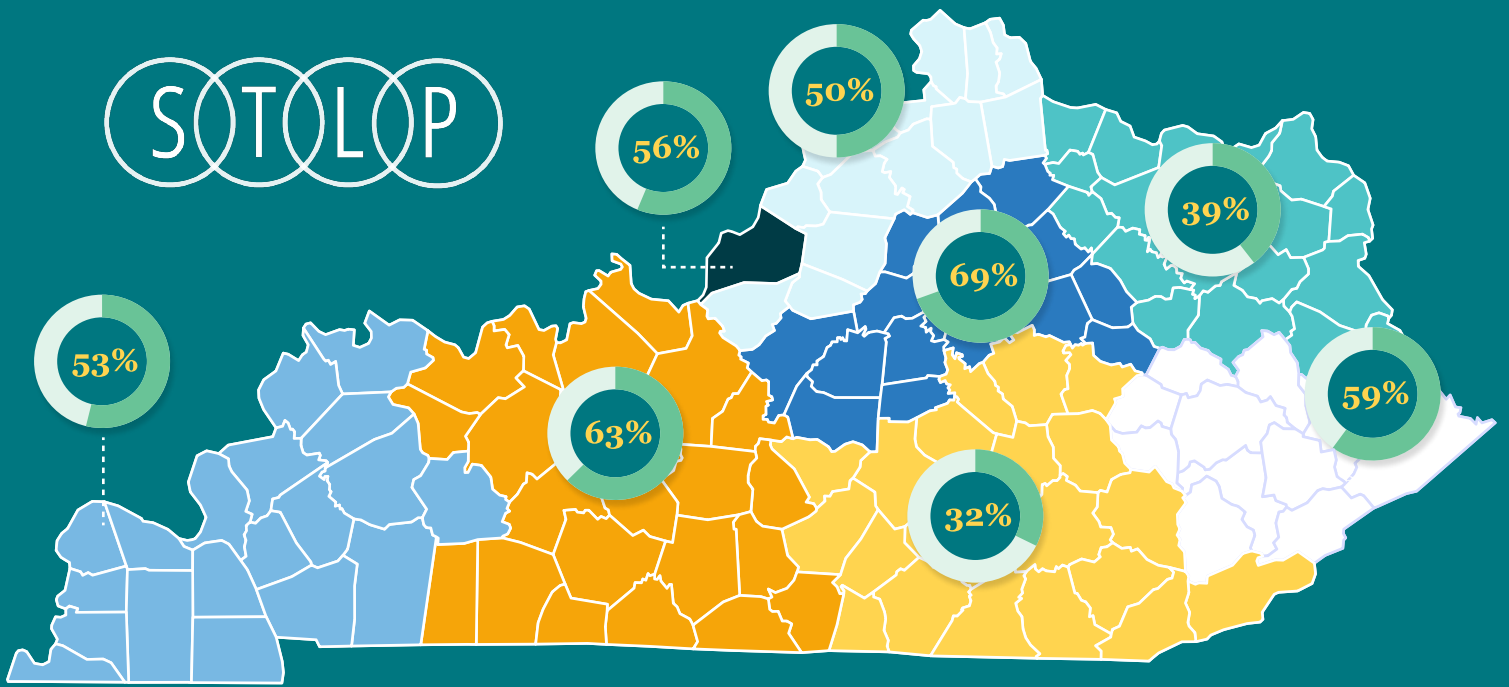
97%

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

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



SOTLOP



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

Greater than **50,000** students from **751** schools in **129** districts.



program integrated into content



after school program or club only

Digitally Empowered Educators

Teachers with strong foundational skills are able to handle administrative classroom tasks easily, including attendance and grading. Further, teachers who are confident in their ability to use foundational skills are often able to use them when learning new online and multimedia skills.

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.



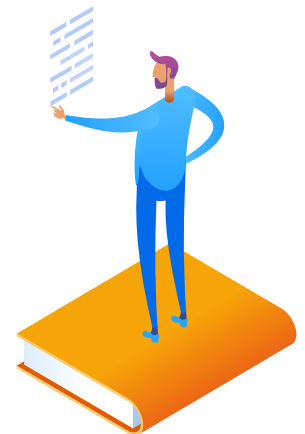
75% of teachers create and utilize instructional videos, discussion board posts, use digital curriculum, or lead online learning experiences.



81% of teachers create digital resources such as instructional videos, hyperdocs, choiceboards.



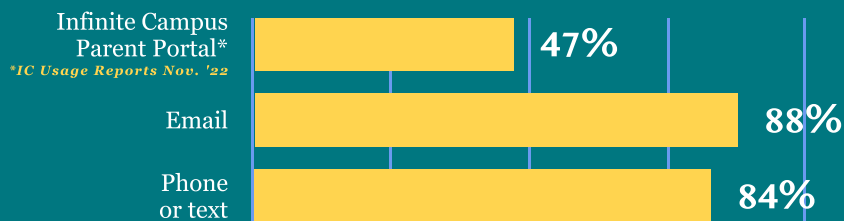
84% of teachers facilitate digital content usage by students through educational apps and websites.



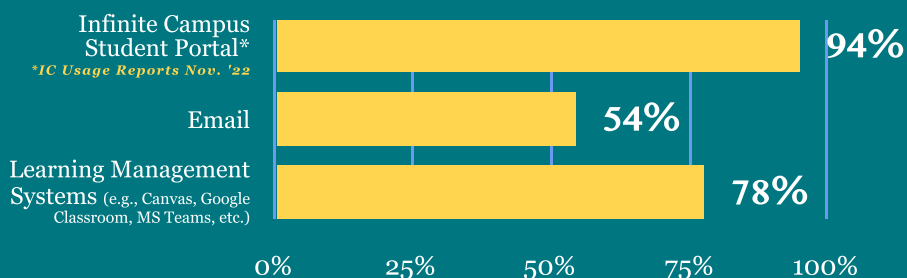
Digital Communicator

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

Methods for connecting with Parents



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 a means of informal professional learning to discover new ideas and improve digital teaching practices.



75%

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



97%

of teachers have access to a part or full-time digital learning coach (DLC).

Third year in a row with an increase in both full-time and part-time DLC roles and positions.

1,034 Library Media Specialists employed at the district or school level. Of these, **83%** 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

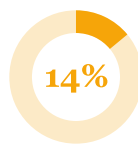
1,176 large-scale, organized network attacks aimed at denying internet access to all Kentucky schools and districts were successfully mitigated.

School Digital Device Footprint

Totals may not equal 100% due to rounding



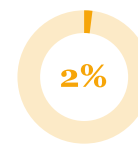
Chrome



Windows



iOS



Mac OS



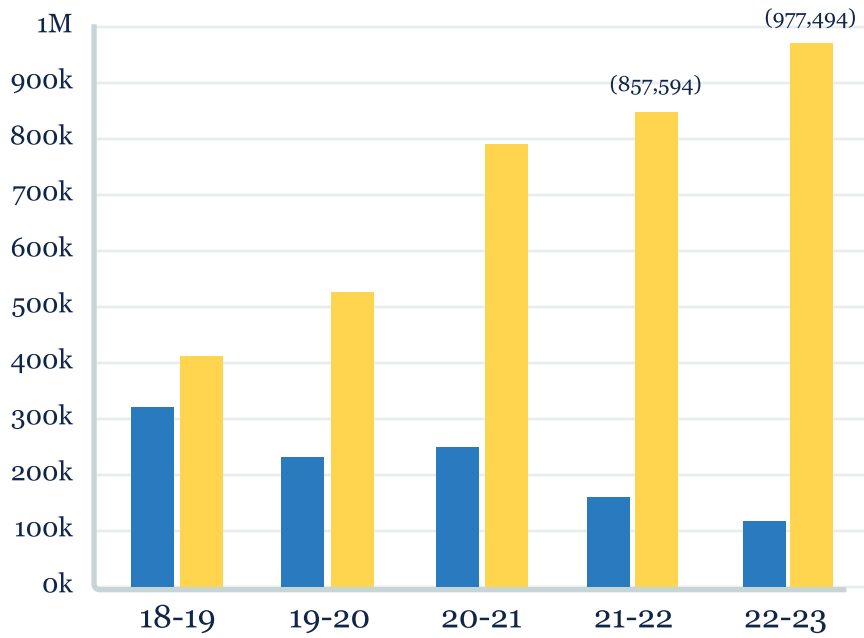
Android

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

More than **4 Billion** unauthorized connection attempts against school networks are blocked annually by statewide security services.

Traditional vs. Mobile/ Next Generation Devices

● Traditional Devices ● Mobile Next Gen Devices



Online & Virtual Learning

88% of districts report students taking online or virtual courses. Of these, **74%** offer a full-time enrollment option.

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

Learning Management System

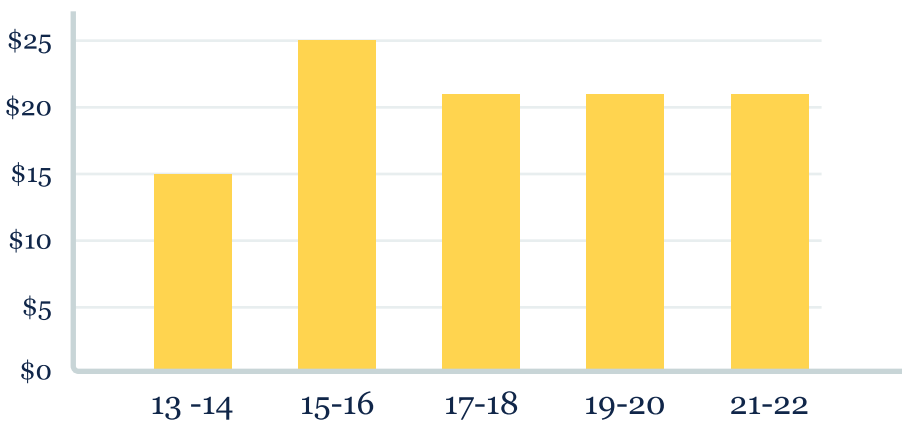
92% of districts sponsor a learning management system (LMS). The majority of adoption is with free cloud services. However, there is an upward trend toward paid solutions.

K-12 Online Assessment

In 2022, **405,182** 3rd - 12th grade students in **100%** of Kentucky school districts successfully participated in high-stakes statewide testing, accounting for more than **1.6 million** testing sessions - resulting in the largest and most successful online assessment efforts of its kind.

KETS Offer of Assistance

School Year Per Student



Sources

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

Kentucky School Report Card: <https://www.kyschoolreportcard.com>

BrightBytes: <http://brightbytes.net>

Digital Driver's License (DDL): <http://iDriveDigital.com>

Google Analytics

Open House: <http://openhouse.education.ky.gov>