

Kentucky's K-12 Digital Readiness January 2023

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. School fiber internet total usage increased +247% over the past 24 months while maintaining uptime of 99.98% for the reporting period of October 2020-October 2022

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

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 school 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, or 63%, with both BYOD and 1:1

52 Districts, or 30%, with 1:1 only

9 Districts, or 5%, with BYOD only

4 Districts, or 2%, 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.

Over 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. Area for improvement.

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.

Student Technology Leadership Program

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

70% program integrated into content

30% 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.

Connecting with parents.

Infinite Campus Parent Portal 47%

Email 88%

Phone or text 84%

Connecting with Students.

Infinite Campus Student Portal 94%

Email 54%

Learning Management Systems (e.g., Canvas, Google Classroom, MS Teams, etc.) 78%

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.

1034 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

79% Chrome

14% Windows

5% iOS

2% Mac OS

>1% Android

Totals may not equal 100% due to rounding

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

2018-2019

Traditional 331,734

Next Generation 421,180

2019-2020

Traditional 257,763

Next Generation 536,939

2020-2021

Traditional 230,806

Next Generation 671,160

2021-2022

Traditional 181,291

Next Generation 857,594

2022-2023

Traditional 132,857

Next Generation 977,494

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 through 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

School year 13 -14 \$15

School year 15-16 \$25

School year 17-18 \$21

School year 19-20 \$21
School year 21-22 \$21

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>