

KENTUCKY'S DIGITAL-AND FUTURE- READY STUDENTS AND TEACHERS

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 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.

1.1 to 1.3, 525,687 Student Instructional Devices, 100% of schools provide WI-Fi access to students. Of these, 95% (+13%) schools have implemented dense Wi-Fi networks capable of supporting BYOD or 1:1 initiatives. 100-150kbps Bandwidth per student available through statewide fiber network service.

ACCESS

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 at home are less likely to engage in 21st century learning skills. Ease of access is a precursor to the desired shifts, 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.

Kentucky's Educational Network (KEN) - school fiber Internet total usage increased in the past 24 months. While maintaining uptime of 99.9688%.

74%, up 4% of students have a smartphone. 11% of which are shared.

75% of districts allow student BYOD.

83%-90% of students have internet access at home; 89% of whom have wireless internet access (78% Broadband, 11% Cellular).

63 Districts with BYOD only – 36% (75% total)

19 Districts with 1:1 only – 11% (50% total)

68 Districts with both BYOD and 1:1 – 39%

25 Districts without BYOD or 1:1 – 14%

FUTURE READY STUDENT

82% of KY parents believe their child's school encourages technology and use teaching and learning. 87% of KY parents believe technology use in class can enhance student learning.

45% (down 2%) of students are allowed to use personal mobile devices in class for academic reasons.

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.

These skills are a precursor to the use of digital creativity, digital collaboration, digital communication and critical thinking in the classroom and while learning. Students can also personalize the use of their technology and leverage greater access to engage in anytime, anywhere learning on topics of their choice.

MULTIMEDIA SKILLS

Student reported ease of editing a photo.

67% find these tasks easy to perform. Only 9% reported never doing so.

Student reported ease of editing a video.

84% (up 14%) find these tasks easy to perform. Only 10% said the task was impossible.

Student-reported frequency of playing a game on a computer or phone.

92% at least once monthly. Only 4% reported never doing so.

COLLABORATION AND ONLINE SKILLS

Student-reported ease of collaborating using online documents.

73% find these task easy to perform. 7% said the task was impossible.

Student-reported frequency of reading online content.

68% at least once a week. 15% said never.

FOUNDATIONAL SKILLS

Student-reported ease of sending an email.

80% find these tasks easy to perform. Only 5% said the task was impossible (+1%)

KY IT ACADAMY

23,359 Certifications

84% High School and ATC Participation

59% Certification Pass Rate

29% Greater than Average

21ST Century Teacher

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 these skills when learning new online and multimedia skills.

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

90% (up 1%) of KY teachers believe technology enhances learning in their daily lives.

MULTIMEDIA SKILLS

Ability to manipulate photos and record and edit audio or video.

44% (up 1%) find these tasks easy to perform. 40% expressed interest in Professional

Development (PD) in this area (-8%)

ONLINE SKILLS

Essential skills for contributing to and collaborating (up1%) can use these skills. 45% expressed interest in PD in this area (up 30%)

FOUNDATIONAL SKILLS

Basic computing skills – sending email and creating spreadsheets.

69% (up 2%) find these tasks easy to perform. 15% expressed interest in PD in this area (down 1%).

4 of 5 teachers report having sufficient access to instructional technology, yet less than 2 in 5 have access to an integration specialist or learning coach. 90% of these are encouraged to use technology and learning by school leaders.

CONFIDENCE WITH TECHNOLOGY

74% can solve their own problems. 75% easily learn new technologies.

Teacher-reported hours spent per year participating in school-sponsored technology related PD.

43% - 1-8 hours

24% - 17

19% - 9-16

14% - None

78% of these teachers say the quality is average or above average

MOST REQUESTED EDUCATION TECHNOLOGY PD TOPICS

Multimedia skills 40% (down 1%)

Online/Digital Collaboration 54% (up 9%)

Online tools for critical thinking 38%

TECH TRENDS

ONLINE AND VIRTUAL LEARNING

90% of districts report students taking online or virtual courses.

Students grade 6-12 taking at least one online course are up 29%. Of these, 45% are girls, 55% boys.

LEARNING MANAGEMENT

79% (up 8%) of districts sponsor a learning management system (LMS).

The majority of adoption is with free cloud services. However, there is an upward trend toward paying for a solution.

48% (down 8%) Windows

29% (up 13%) Chrome

15% (down 3%) IOS
6% (down 2%) MAC
2% Android

STLP STUDENT TECHNOLOGY LEADERSHIP PROGRAM

After school program or club only – 24%
Program integrated into content – 76%

More than 55,000 students from 751 schools in 139 districts participate.

94% of districts are using Google Apps for Education. Of these, 79% have integrated with Office 365 and Active Directory.

SECURITY

More than 2 Billion unauthorized connection attempts against school networks were blocked by statewide security services since the start of the school year.

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

90% of districts report having a strategic plan for teaching digital citizenship skills.