



Kentucky's digital and future ready students and teachers

We are headed towards 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.



438,388

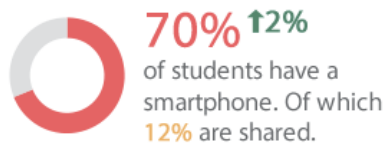
Student Instructional Devices

Access

Student access at school and at home helps us understand how "plugged in" learners are during the school day. Students without access to technology in school are less likely to engage in 21st century learning. Ease of access is a precursor to shifts in student outcomes.



78% - 89% of students have Internet access at home. Of whom, 93% have wireless Internet access.



70% ^{↑12%} of students have a smartphone. Of which 12% are shared.

100-150kbps

Bandwidth per student available through statewide fiber network service

Kentucky's Educational Network (KEN) usage increased

+70% YOY

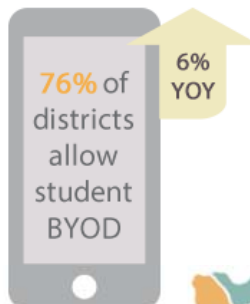
While maintaining uptime of

99.9688%

100% of schools provide Wifi access to students

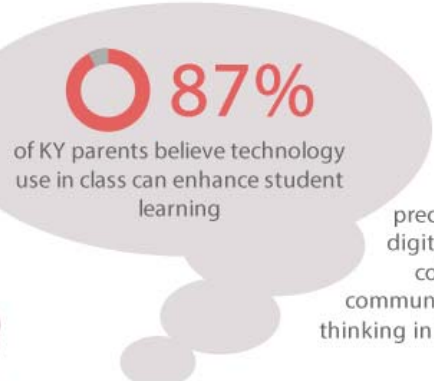
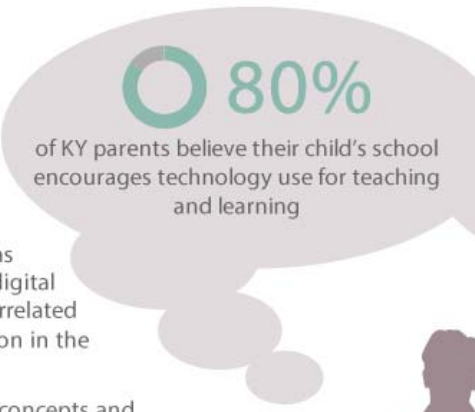


Of these, 82% (+20%) schools have implemented dense Wifi networks capable of supporting BYOD or 1:1 initiatives



- 82 Districts with BYOD only - 47% (76% total)
- 15 Districts with 1:1 only - 9% (38% total)
- 51 Districts with both BYOD and 1:1 - 29%
- 27 Districts without BYOD or 1:1 - 15%

Future Ready Student



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.



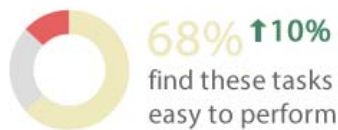
MULTIMEDIA SKILLS

Student reported ease of editing a photo



Only 13% reported never doing so

Student reported ease of recording and editing video



Only 11% said the task was impossible

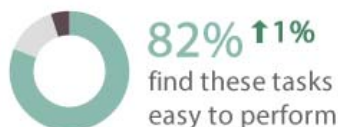
Student reported frequency of playing a game on a computer or phone



Only 4% reported never doing so

FOUNDATIONAL SKILLS

Student reported ease of sending an email



Only 5% said the task was impossible (+1%)

COLLABORATION & ONLINE SKILLS

Student reported ease of collaborating using online documents



9% said the task was impossible

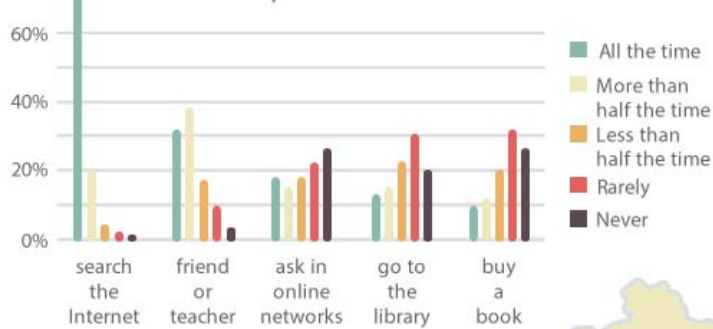
Student reported frequency of reading online content



15% said never



Student reported research methods



< KY IMAGINE ACADEMY />

21st Century Teacher

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



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.

MULTIMEDIA SKILLS

Ability to manipulate photos and record and edit audio or video



41% expressed interest in PD in this area (-8%)

ONLINE SKILLS

Essential skills for contributing to and collaborating on the Internet



45% expressed interest in PD in this area (+30%)

FOUNDATIONAL SKILLS

Basic computing skills - sending email and creating spreadsheets



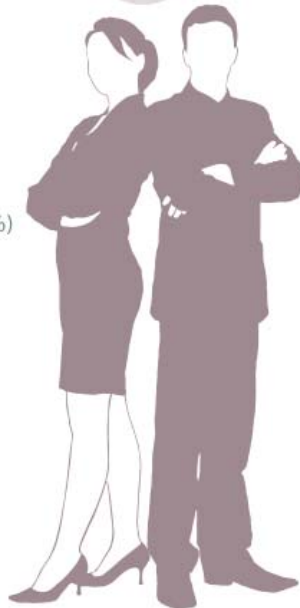
16% expressed interest in PD in this area (-1%)

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.

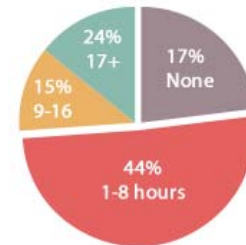
88% of these are encouraged to use technology and learning by school leaders



CONFIDENCE WITH TECHNOLOGY



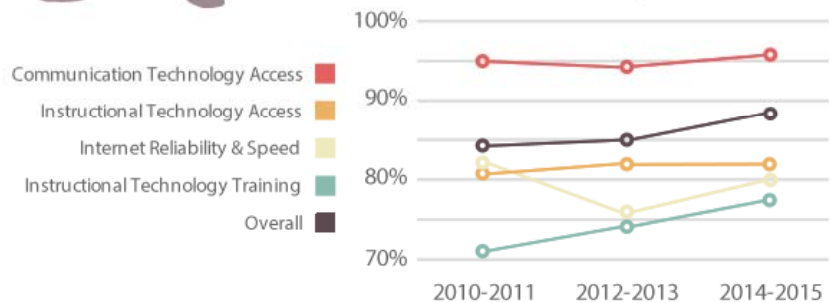
Teacher-reported hours spent per year participating in school-sponsored technology related PD



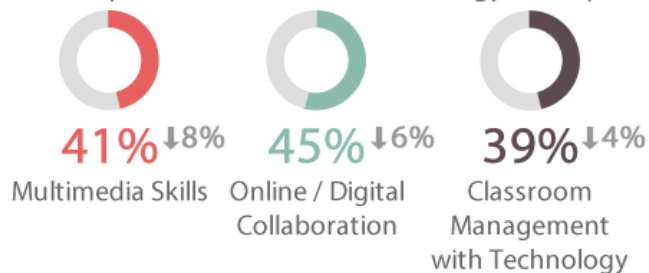
Of which, **76%** of teachers say the quality is average or above average

TELL Survey Results

Positive Responses

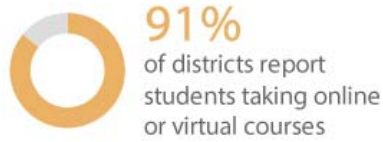


Most requested education technology PD topics



Tech Trends

ONLINE & VIRTUAL LEARNING



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

LEARNING MANAGEMENT SYSTEM



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

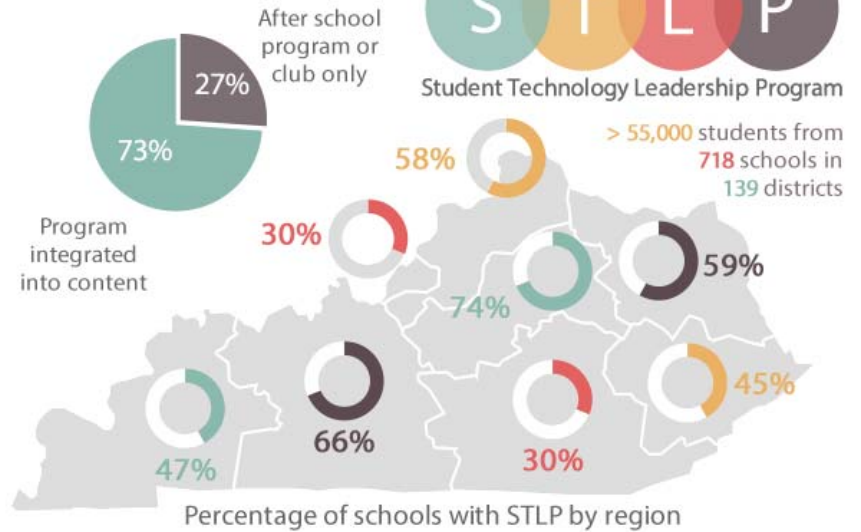
INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) & EDUCATOR DEVELOPMENT SUITE (EDS)



Over **317,500** Formative Assessments and **693,500** Lesson Plans have been created.

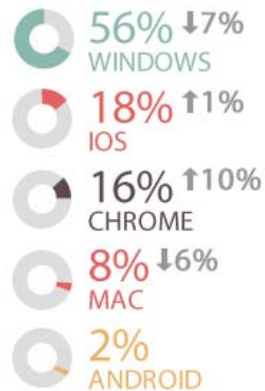
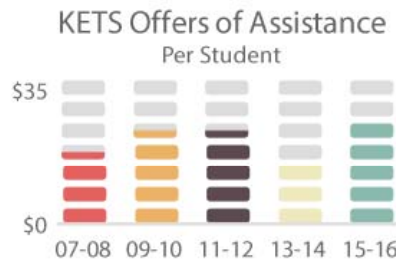
100% of all districts recorded Summative Evaluations. **98,329** observations recorded for **65%** of all teachers.

*For our 2017 infographic, we've presented subscript indicators for year-over-year changes to data where applicable. **GREEN** indicates favorable changes, **RED** unfavorable, and **GRAY** neutral.



Over **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 and districts were successfully mitigated.



2017
January



Sources

Kentucky Digital Readiness Report: http://applications.education.ky.gov/trs_reports/
 TELL Kentucky: <http://www.tellkentucky.org/results/25>
 BrightBytes: <http://brightbytes.net>
 Digital Driver's License (DDL): <http://iDriveDigital.com>
 Google Analytics
 Open House: <http://openhouse.education.ky.gov>

