

# The History of Education Technology

in Kentucky Schools		
Commonwealth Education	1992	Birth of Kentucky Education Technology Systems (KETS)  A direct result of the 1990 Kentucky Education Reform Act (KERA), KETS ensured basic and equitable anytime, anywhere, always-on access to instructional and administrative education technology services for all students, teachers and administrators.
Technology Assistance Team A Technology Assistance team was established in every geographic region of the state consisting of a KETS Engineer (KE) and an instructional leader. This team played a crucial role in establishing the awesome customer relationship that KDE has with districts today.	1993	1st Master Plan for Education Technology The first Master Plan addressed instructional challenges of the 90's and beyond, as educators prepared Kentucky schools for the great changes to come as the world entered into the digital age.
Student Technology Leadership Program (STLP) First in the nation to establish and provide a spotlight for students using technology to learn or help their school/community	Hi	First Microsoft Mail Implementation First in the nation to have email capabilities for all students, teachers and administrators
Model Districts Selected Eight model sites, strategically located across the state, selected to demonstrate how KETS would bring life to the vision of the Kentucky Education Reform Act (KERA)1	1994	Rollout of District Administrative System First in the nation to provide a local area network, Internet, and office productivity software to every district - Shelby County schools were the first pilot site in 1994-1995.
First KDE Website Created to provide enhanced communications to schools, districts, parents, researchers, other organizations and the general public	<b>)</b> < 1995	Every School District Connected to the Internet First in the nation to connect all school districts to the internet via
KETS Standardized on Ethernet Adopted the Ethernet networking standard over Token Ring as the primary standard for school and district technology networks due to Ethernet components being much more affordable		Federal E-rate Program  Kentucky was the best-positioned state in the nation to take advantage of this new federal funding opportunity because of the state and district
MUNIS a Common Financial System for Every District First in the nation to provide those applications deemed most critical: Accounts Payable, Personnel, Payroll, Budget, General Ledger, and Purchasing	1997	education technology plans and existing statewide education technology contracts for eligible components. Kentucky schools have received over \$545 million for telecommunication lines, Internet access and networking components since 1998 and remains among the top states in the nation in E-rate funds received. State level Erate reimbursements funnel to districts as KETS offers of assistance (where they are matched 1:1) to support district eligible Erate services thus creating a unique 3 to 4 bang for the dollar that assist districts' purchase of other instructional
Statewide Student Information System First in the nation to implement a common statewide student information system	<b>1998</b>	technologies.  Internet Safety and Security Measures (SB230) Internet content safety measures for every school
Statewide KETS Service Desk First in the nation to provide dedicated education technical assistance to all school districts		
Kentucky Virtual High School Launch Every Kentuckian seeking high school level coursework provided opportunity to enroll in for-credit, enrichment or college preparatory classes taught by Kentucky certified teachers and receive credit from their local high school; courses delivered online to schools, homes and other places with Internet access available anytime and anywheremeeting the needs of students	2000	KETS Phase 1 Completion  Provided a basic set of administrative and instructional education technology tools for every K-12 classroom, school and district office
	<b>2001</b>	<b>2001-2006 KETS Master Plan for Education Technology</b> The 2001 Master Plan kicked off Phase 2 of the KETS, building on the basic EdTech toolset and focusing on the ongoing costs of maintaining and incremental replacement, the people costs needed, and the concept and value of shared services.
Statewide Identity Management Service First in the nation to provide enterprise directory services to all schools and districts allowing secure access to the Internet and web-based instructional material	2004	
Statewide Software Update System Provided a uniform and timely method to download and distribute Microsoft software and security updates for all K-12 Windows	2005	First Statewide STLP Championship at Rupp Arena Started as statewide celebration and competition of student technology use - By 2017, attendance has grown to 14,000.
workstations and servers  Statewide AntiVirus System		Instructional Device Upgrade (IDU) Legislators appropriated \$50m to replace aging student and teacher workstations.
Provided antivirus licensing and management services for every district and school including all K-12 Windows and Apple computers and servers	' <b> </b>	Kentucky Information Highway (Version 2) Provided increased high-speed data and Internet capacity for every school and school district office
	2006	First KY EdTech Leaders Webcast Scott County Schools host KETS leadership for the first district EdTech leaders webcast. This is a monthly event that has continued for the past



#### The People Side of Education Technology

First in the nation study and tool that addressed the people side of K-12 education technology

#### Infinite Campus Migration to the Cloud

Partnered with Infinite Campus to add security, improve efficiency and reduce statewide costs by leveraging a private cloud environment for the Kentucky Student Information System

#### School Cloud Firewall

First in the nation to implement a complete cloud based firewall security service for every school district

#### William T. Nallia Award

KDE received the William T. Nallia award from the Kentucky Association of School Administrators that reflects a spirit of innovation and cutting-edge leadership while bringing higher levels of success to all children.

# Successful pilot of future KY K-12 voice/telephone communications via the cloud by KDE the agency, KSB and KSD.

#### EdScoop's EdTech Heroes Award

KDE received the Edtech Heroes Award as one of the top 25 states making a difference in "EdTech Heroes: 25 State Leaders Making a Difference," a project that highlights states that demonstrate innovative practices and leadership in harnessing technology to support education.

#### Largest Statewide MUNIS Disaster Recovery Test

Successful completion of first state-wide disaster recovery test of cloud-based KY K-12 financial services (MUNIS) used by all 173 districts.

#### KY K-12 Online Testing - High School End of Course

Highly successful first, large-scale "field test" of online testing in KY K-12.

A total of 131,442 test sessions were administered to 97,747 students representing 169 school districts. This included end of course assessments for grades 9 through 12 in Biology, Algebra II and English II.

#### KDE's KY K-12 edtech presentation to a US Congress committee in Washington DC; KY K-12 is the pioneer and overall national leader in most aspects of K-12 education technology

KDE was chosen by Chief Council of State School Officers (CCSSO) to present KY K-12 edtech successes over the past 25 years and to represent the other 49 states on recommended approaches to K-12 Cybersecurity.

### Statewide KETS Service Desk Reaches Milestone of

Reached major milestone of 250,000 service requests by our in-house, dedicated education technical assistance team to all school districts.

#### 2018 -2024 KETS Master Plan for Education Technology

This next phase of the Master Plan builds upon the successes of the previous plans back to 1992 and includes items KY K-12 continues to do well, areas to improve upon, and new items to be integrated. The studies, research, standards, governance and technology needs for the state and districts that play a critical role in executing the Master Plan are also identified.

#### KY K-12 Email Upgrade/Transition to Microsoft/Google Email

Based upon KY K-12 district edtech leaders, students and teachers feedback, added Gmail as a KY K-12 product standard to our existing KY K-12 e-mail standard of Microsoft Office365 e-mail for a better experience using Microsoft's Education tools and Google's G-Suite. 2/3rds of districts chose to upgrade to the most current version/design of Microsoft Office365 and 1/3rd of the districts chose to transition to Google's Gmail.

#### PBS Learning Media Launch

Created a new partnership between KET and PBS bringing more than 100k standards-aligned video resources free to Kentucky school districts.

#### **Data Visualization tools**

Enhanced the overall value and intuitiveness of the Student Information System (Infinite Campus) through use of interactive data visualizations created in Tableau to provide school and district administrators easier access to real-time actionable data. 2017

2018

#### Federal E-rate Rebate Program Maximized

\$50M applied for by KY K-12 for federal E-rate eligible products and services, which could lead up to \$120M in KY K-12 edtech buying power.

#### KY K-12 Online Testing - High School KPREP

Large scale online summative KPREP testing success of 180,000 tests for 90,000 of KY high school students that goes beyond the 2018 EOC test.

## School Safety (SB1) Anonymous Reporting Tools for Schools

Voice and digital anonymous reporting tools mandated in 2019 school safety legislation (SB1) is in place.

#### Kentucky Educator Certification and Ethics System RFI

Request for Information (RFI) in place to begin transition for the aging, unsupportable systems with a single, modern, cloud-based solution.

# Updated KY K-12 Internet Services Capabilities for all 173 KY K-12 Districts

Using a different approach, upgrade/replace the aged electronics in each of the 173 KY K-12 Internet hub sites in school districts, which helps all KY K-12 schools better connect to the existing KDE provided fibered on-ramp service to the Internet (aka, KIH3).

#### 2019 Making IT Happen Award

KETS leaders recognized for multiple years with the International Society for Technology in Education (ISTE) award honoring outstanding educators and leaders who demonstrate extraordinary commitment, leadership, courage and persistence in improving digital learning opportunities for students – (2009, 2011-2013, 2015, 2016, 2018, and 2019)

# New version of the KY K-12 School Report Card (SRC) for students and parents

New SRC has 4 components, with the primary focus of providing the data that the average KY K-12 student and parent is most interested in seeing/knowing in a format that is easily/quickly obtained (e.g., on a mobile app available on their smartphone/ laptop) and easily understandable to average person. Includes (a) providing a near real-time daily secure portal for students and parents to access their most current daily info (e.g., grades, academic assignments, class schedule, attendance) and (b) publically accessible annual snapshots of general data for the average student and parent. So far in calendar year 2019, (1) over 300,000 KY K-12 students and parents are using the secure portion of the SRC each month, (2) 42,000 students/parents/others (e.g. students/parents exploring a move to a new school, realtors, local school board members) have accessed the annual snapshots of general data, (3) 9,000 people have gone to the KY K-12 schools/districts summative test (KPREP) proficiency data and (4) 7,000 people (mainly researchers and media versus the average parent/student) have accessed a wide range of detailed raw de-identified KY K-12 data available in spreadsheets.

#### First KY Academic Standards for Computer Science

Adoption by KY Board of Education and approved by legislature. Marks the first time academic standards for computer science have been developed and redefines Computer Science education in Kentucky.

#### Technology Competencies as Minimum Graduation Requirement

Beginning for students entering high school in the fall of 2020, it is a requirement that they are able to demonstrate performance-based technology competencies in order to graduate.

#### Computer Science & IT Academy Launch

Creation of a joint venture within OET & CTE with the aim of supporting rigorous computer science professional learning for teachers as well as teacher and student course support in the demonstration of computer science standards and industry certification exam vouchers in ALL computer science courses and pathways.

2019

Office of Education Technology