



# The History of Education Technology in Kentucky Schools

**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

**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

**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)

1994

**First KDE Website**  
 Created to provide enhanced communications to schools, districts, parents, researchers, other organizations and the general public

**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

**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

**Statewide Student Information System**  
 First in the nation to implement a common statewide student information system

**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 anywhere--meeting the needs of students

2000

**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 workstations and servers

**Statewide AntiVirus System**  
 Provided antivirus licensing and management services for every district and school including all K-12 Windows and Apple computers and servers

## 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.

## 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.

## First Microsoft Mail Implementation

First in the nation to have email capabilities for all students, teachers and administrators

## 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.

## Every School District Connected to the Internet

First in the nation to connect all school districts to the internet via high-speed network connections provided by the first Kentucky Information Highway Contract (KIH 1)

1995

## 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 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 E-rate reimbursements funnel to districts as KETS offers of assistance (where they are matched 1:1) to support district eligible E-rate services thus creating a unique 3 to 4 bang for the dollar that assist districts' purchase of other instructional technologies.

1998

## Internet Safety and Security Measures (SB230)

Internet content safety measures for every school

## KETS Phase 1 Completion

Provided a basic set of administrative and instructional education technology tools for every K-12 classroom, school and district office

## 2001-2006 KETS Master Plan for Education Technology

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.

2001

## 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.

2005

## Instructional Device Upgrade (IDU)

Legislators appropriated \$50m to replace aging student and teacher workstations.

## Kentucky Information Highway (Version 2)

Provided increased high-speed data and Internet capacity for every school and school district office

## 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 11 years.

2006

## KATC Becomes KySTE

Kentucky Association of Technology Coordinators became KySTE (Kentucky Society for Technology in Education) and hire first executive director

2007

## 2007-2012 KETS Master Plan for Education Technology

The 2007 Master Plan described how technology would be used to improve teaching and learning for all of Kentucky's children, building upon past successes and defining a path which enable all students to understand and leverage technology opportunities to realize their full potential while extending instruction beyond traditional school walls.

## KDE Open House

Launched as a "one-stop shop" for education data allowing schools, districts, parents, researchers and others access to key data on schools and districts

## Kentucky Student Information Mobile App

In partnership with Infinite Campus, launched the first student information system mobile app providing parents and students real time access to assignments, grades, attendance and more - The iOS app was introduced in 2011 and an Android version was available by 2012.

## Digital Driver's License for Digital Citizenship Launched

KETS created a partnership with the University of Kentucky's Digital Learning Design Lab to launch an app focused on helping students and teachers learn the nine elements of digital citizenship.

## First State Board Meeting Webcast

Kentucky Board of Education (KBE) began to webcast meetings with the first webcast conducted from the State Board Room at the Capital Plaza Tower in Frankfort.

2011

## 2013-2018 KETS Master Plan for Education Technology

The 2013 Master Plan closely aligned with the P-12 education strategic plan of the state and districts, and was further informed by relative studies, research, audit and survey results, and customer feedback. For the first time, the Master Plan was delivered in an online digital format.

## MUNIS Transition to the Cloud

First and largest in the nation to provision cloud based financial service for K-12 and any type of government organization

## BrightBytes Partnership

BrightBytes helped KDE and school districts better understand, through EdTech data, more about the usage and impact of digital tools and resources for students, teachers, and parents.

2013

## KETS Infographic

An accumulation of education technology data that visually presents important data trends

## Internet Safety and Content Management

Established statewide product standard for Internet content management service.

## Kentucky Information Highway (Version 3)

First in the nation to connect every school with high speed fiber and meet the national standard of 100kbps for every student

## Created a National Model with KY's First IT Academy

Now called Microsoft Imagine Academy, KETS established a new strategy for championing industry recognized IT student certifications.

2015

## Creation of OET's Digital Learning Coach Leadership Team

Designed to support districts through leadership & professional learning as well as resource identification and best practices for implementation of digital learning strategies.

## Government Technology Magazine's "Doers, Dreamers and Drivers" Award

KDE named one of Government Technology's Top 25 Doers, Dreamers and Drivers for 2016, for finding innovative ways to cut through public sector barriers to improve and maximize services to the state.

## STLP on KET's "Education Matters"

Filmed live at STLP state championship at Rupp Arena, the video highlighted the impact of KETS and instructional technology across Kentucky.

2016

## First Stilwell Award

KDE instituted the Stilwell Award for those outstanding partners who helped KDE fulfill their mission to the students and citizens of the state. William E. Stilwell, namesake of the KDE Technology Award, was named first recipient.

2008

## Cloud Email

First and largest statewide implementation of cloud based K-12 email for every student, teacher and administrator.

## KySTE Conference

KySTE moved its summer conference to the spring in the old Kentucky Teaching and Learning Conference (KTLC) timeslot (previously Kentucky Education Technology Conference/KETC).

2010

## First Online Statewide School Report Card

Kentucky first introduced an online school report card in 2012 that was recognized nationally by the Education Commission of the States as one of eight states with report cards that were accessible, informative and easily understood.

## First All State Superintendent Webcast

Commissioner held first All State Superintendent webcast from the State Board Room at the Capital Plaza Tower in Frankfort

## Paperless State Board Meetings

The Kentucky Board of Education (KBE) became totally digital for state board meetings.

## KDE Notify App

KDE and Northern Kentucky University launched KDE's first mobile app for iPhone, Android and Windows devices focused on the status of education technology services.

## Kentucky Virtual High School Grows

KDE shifts virtual high school experience from a state-ran model to a distributed partnership model (naming JCPS eSchool, BAVEL, and KET the original partners).

2012

## Data Quality Study

Partnered with Gartner to define best practices for collection and stewardship of education data

## Non-Traditional Instructional Time Legislation

All 173 public school districts became eligible to apply to conduct "non-traditional" student attendance days due to weather or other emergencies formerly known as the "Snow Bound Pilot." Approval provided the opportunity to conduct school through virtual or other non-traditional means on days that the district would have normally had to cancel school.

## Wireless Access on School Buses

Schools implemented wireless Internet access on school buses to give students access to education technology tools while commuting to and from school.

## eTranscripts

First state to use a common transcript and electronic process for college admissions statewide - All public high schools, and both public and private postsecondary schools participate.

## Recognized as a Top 3 State in Data Quality

KDE was recognized nationally by the Data Quality Campaign for best practices in data collection and use of educational data to improve student achievement.

## Single Sign On (SSO)

First in the country to provide the ability for every student and teacher to access Chromebooks and Google resources via their Office 365 credentials.

2014

## The People Side of Education Technology

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

2017

## 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 Service

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.

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