

Technology Plan
Mercer County Public Schools
Harrodsburg, Kentucky



<http://www.mercer.kyschools.us>

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Acknowledgments

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Additional District Contributors:

Dennis Davis, Superintendent
Nate Bordeaux, Instructional Supervisor

Other:

District Advisory Committee Members

Students:

Unnamed Student, MCIS
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Unnamed Student, MCSHS

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Executive Summary

Our district technology committee has made every effort to align this technology plan with the [Kentucky Master Plan for Education Technology](#) and the [Standards](#) developed by the [International Society for Technology in Education \(ISTE\)](#) in collaboration with the [Milken Exchange on Education Technology](#).

This plan conveys the details of our vision, goals, and objectives that support the Mercer County School District's Comprehensive Improvement Plan. Through this plan we hope to guide our schools in using technology to empower the learning community. Like a journey, technology planning is long-term and continuous. We will continue to expand and revise this plan annually as we implement a technology-rich environment for our students, staff, and community.

District Mission Statement, Beliefs, and Vision:

Mission:

Mercer County Schools promote excellence in a positive academic, social and extra-curricular environment, emphasizing equity, diversity, safety and respect.

Beliefs:

- All students can be successful
- Collaboration is essential for learning
- Creativity is learning; Learning is creativity
- Learning begins at home and continues at school and in the community
- All students must come prepared to learn with parental support
- Learning is a life-long process

Vision:

Students will possess life-long skills which will prepare them to be constant learners who are successful in continuing education, pursuing career options, and transitioning to adult life.

Technology Strategy:

The Mercer County School District will implement and assess comprehensive state-of-the-art technology for instruction, management, administration, and leadership.

Planning Process and Methodology

The Mercer County School District's District Technology Committee is composed of members of our "District Advisory Committee" made up of school board members, district staff, parents, students, and community members. This committee works with our school district superintendent and school board on items such as our district budget, district improvement plan, district calendar and more.

The Technology planning process includes evaluation methods designed around the identified strategies and activities per individual goal areas found throughout this plan. The District Advisory Committee, Superintendent, and board of education are held accountable to ensure that the evaluation criterion is met.

Monitoring and evaluation of the technology plan is continuous as we seek improvement, address changes and needs - planned and unplanned at the building, district, and state level. This regular cycle of evaluation / implementation / evaluation has been established to assure adequate resources are available to support the instructional and administrative functions of the Mercer County School District.

School technology committees meet throughout the year to review technology plans for completion and/or revision of the planned activities, necessary budget adjustments, creation of new activities, and review of current and future goals for supporting the district vision, belief statements, and principles. Revisions become a part of the district technology plan.

An annual "Technology Readiness" inventory of hardware provides an accurate account of the age and number of workstations in the district. In addition, this data is used to plan and budget for adjustments of current and future instructional and management needs by students, teachers, and administrators.

Regular monitoring of bandwidth within the district and from the district to the state ensures that network resources are available to all students and staff.

Current Technology and Resources

The Mercer County Public School District currently has a workstation base of nearly 1,000 workstations, plus more than 1,800 Chrome devices, (Chromebooks and Chromeboxes) and additional legacy tablet devices such as iPads, iPad mini's, and a server base of approximately six file servers. Some workstations and servers are currently utilizing virtualization platforms to be cost and energy efficient. Our network backbone is made up of Extreme Networks layer 2 and 3 switches in building level wiring closets. Our District Technology Office hub site is connected via a 10 gigabit fiber optic backbone with data / voice lines to all of our remote school / office sites. Our phone system is made up of a PBX type switch utilizing PRI lines for optimized efficiency and management. We have a mix of Voice over IP (VoIP,) digital, and analog handsets throughout our district.

Our technology staff is made up of three full-time district technology staff members and building level part-time technology staff members including: webmasters, technicians, school technology coordinators and Student Technology Leadership Program (STLP) staff. Technology staff members respond to the District Technology Help Desk Ticket system to address needs and issues as reported by teachers and staff throughout our school district. Our critical infrastructure components are monitored regularly and report critical outages to district level technology staff members.

Our technology infrastructure is annually evaluated for needed upgrades and replacements. Staff professional development and trainings are offered on a regular basis including instructional software applications, productivity applications, assessment tools, school information systems, and other trainings as requested.

Curriculum and Instructional Integration Goals

The Mercer County School District will ensure that technology is integrated using a variety of strategies and tools to enhance the K-12 curriculum according to state guidelines, [The National Educational Technology Standards for Students \(NETS\)](#) and the district's Student Technology Standards.

Goal 1

District Staff will increase the use of technology from basic to proficient levels as an authentic instructional tool.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Teachers will increase their use of student response systems to provide on-going assessment.	Increase student engagement. Provide instant feedback to student. Allow teachers to assess more frequently to determine student learning.	Teacher needs assessment, Student survey assessment, observation, teacher lesson plans	Quarterly	District Technology Staff, Principals, Teachers	N/A
Teachers will increase their use of interactive classroom components in the classroom	Increase student engagement	Teacher needs assessment, Student survey assessment, observation, teacher lesson plans	Quarterly	District Technology Staff, Principals, Teachers	N/A

Goal 2

Technology will be integrated into the classroom to engage students in learning to master proficiency skills in reading and math.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
The district will purchase research-based instructional software in reading and math.	Increase student learning in Math and Reading	Purchase Order, Software data elements and measures	July 2018 - June 2020	District Technology Staff, Instructional Supervisor, Superintendent	General Funds
Teachers will increase their frequent use of technology for classroom projects that focus on analyzing information (manipulate, organize, filter, sort, display, or graph data) from 7.2% to 30%	Increase student learning and understand of math	Teacher needs assessment, student survey assessment, observation, and teacher lesson plans	July 2018 - June 2020	District Technology Staff, Instructional Supervisor, Principals	N/A

Student Technology Literacy Goals

The Mercer County School District will implement and assess a curriculum for students that will integrate technology in an engaged learning environment while meeting local, state, and national standards of excellence in a legal and ethical manner for the promotion of digital citizenship and technology leadership.

Goal 1

8th -12th Grade students will achieve the proficient level in technology literacy based on ISTE NETS (International Society for Technology in Education - National Educational Technology Standards for Students

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
A continuum of technology skills will be developed for each grade level through Grade 12.	Increase student technology literacy skills by providing teachers with a framework for teaching skills	Continuum delivered to schools digitally; notebook of activities delivered to schools digitally	Quarterly	District Technology Staff	N/A
Teachers will implement grades K-12 continuum of technology skills with students	Increase student technology literacy skills by providing teachers with a framework for teaching skills	Observations, Surveys, Walk-throughs, teacher lesson plans	Quarterly	District Technology Staff, Principals, Teachers	NA
Teachers will assess grade K-12 students based on the district continuum of technology skills.	Increase student technology literacy skills by providing teachers with a framework for teaching skills	Observations, Surveys, Walk-throughs, teacher lesson plans	Quarterly	District Technology Staff, Principals, Teachers	NA

Goal 2

Students will use technology to develop 21st Century Learning Skills.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
MCIS, KMS, and MCSH will have an active STLP Program, with grade 4-12 STLP students participating in local, regional, and state competitions.	Increase student technology literacy skills	Observations, Number of Students participating in STLP program, Number of projects submitted to Regional / State STLP showcase	Annually	District Technology Staff, School STLP Coordinators	Local Funds SBDM Funds General Funds
Teachers will increase the frequent usage of technology activities with students from 15% to 40% that promote higher-order thinking skills.	Increase student technology literacy skills; promote higher-order thinking and problem solving skills.	Teacher needs assessment, student survey assessment, walk through data, teacher lesson plans, and classroom observations	Annually	District Technology Staff, Principals, Teachers	N /A

Staff Training/Professional Development Goals

The Mercer County School District will provide a staff development program to facilitate and evaluate the relevant use of technology with the highest standards of professionalism and training in order to empower our staff to embrace technology as a tool that can be utilized effectively across the curriculum.

Goal 1

Teachers will participate in ongoing, job-embedded technology professional learning.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Increase the participation of teachers in on-going and job-embedded professional learning	Provide teachers with tools to engage students, use technology to increase student learning.	Sign-in sheets from after school professional learning, activity log from job-embedded professional learning, Teacher Needs assessment, Student survey assessment	July 2018 - June 2020	District Technology Staff, Instructional Supervisor	Title IIA

Goal 2

Teachers will participate in online professional learning opportunities.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
The district will develop a district instructional technology website containing professional learning information, idea sharing and resource sharing.	Provide teachers with readily accessible information and tools to use with students to increase learning and engagement.	Site developed, stats of site usage	July 2018 - June 2020	District Technology Staff, Instructional Supervisor	N/A

Goal 3

Technology Staff will participate in ongoing, job-embedded technology professional development and training.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Technology Staff will participate in trainings to increase knowledge, skill set, and implementation of the latest Microsoft Windows Operating System and Google G-Suite through Regional	Increase tools and knowledge to implement new and improved services and technologies.	Survey assessment, observation, sign-in sheets from workshop along with feedback sheets.	July 2018 - June 2020	Director of Technology	KETS and General Funds

Training Sessions at CKATC, KySTE, ISTE, and other KETS Training Providers.					
Technology Staff will participate in trainings to increase knowledge, skill set, and implementation of the latest version of Windows Server and Workstation Virtualization through Regional Training Sessions at CKATC, KySTE, ISTE, and other KETS Training Providers.	Increase tools and knowledge to implement new and improved services and technologies.	Survey assessment, observation, sign-in sheets from workshop along with feedback sheets.	July 2018 - June 2020	Director of Technology	KETS and General Funds

Technology Vision and Goals

The Mercer County School District will provide 21st century technology that will empower the learning community to become information-literate critical thinkers and achieve lifelong learning goals in their personal, educational, and workplace environment. The district will maintain and upgrade a state-of-the-art network infrastructure to provide global communications and information literacy for schools and administration with sufficient technical support to extend, further develop, and keep the network operational.

Goal 1

To integrate sustained voice, video and data networks capable of providing appropriate bandwidth and quality communications to all district technology resources at the school, district, and state and national levels.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Monitor and assess the bandwidth requirements to optimize the performance of our Local Area Network for voice, video, and data networks.	Sustained and increased speed and quality of access to all district technology resources	Ping tests, "KETS View" MRTG charts, packet capture utilities, and other Network monitoring tools	Daily, weekly, monthly intervals	Director of Technology, Network Technicians, Contracted Service Providers	KETS Funds, Local Funds, ERate Funds
Evaluate and upgrade network cabling needs in our district according to state guidelines	Sustained and increased speed and quality of access to all district technology resources	KETS Building and Wiring checklists, KETS New Construction checklist	Monthly intervals	Director of Technology, Network Technicians, Contracted Service Providers	KETS Funds, Local Funds, ERate Funds

Goal 2

Update and implement a comprehensive district technology plan for the effective integration of technology that will provide appropriate guidelines for acquisition, training, and support for staff, students, and the community.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Recommend technology plan be incorporated into each school's Comprehensive School Improvement Plan with input from all stakeholders.	An effective and comprehensive District Technology Plan	Review School Technology Plans	Annually	Director of Technology	N/A
Update the District Technology Plan annually based upon evaluation data, research, and committee review.	An effective and comprehensive District Technology Plan	Technology Plan Modification & Updates	Annually	Director of Technology	N/A
Promote community outreach through a variety of offerings including, but not limited to, "open lab" nights and / or training classes. Some may be coordinated with our Adult Educ. Ctr.	An effective and comprehensive District Technology Plan	Evaluation / Scheduling forms	Semi-Annually	Director of Technology	Local / Adult Education funding & grants

Budget Summary
School Year: 2018-2019
Annual Budget Summary

Acquired Technologies and Professional Development	Ed Tech Competitive Title IID	Ed Tech Formula Title IID	E-Rate	NCLB/other than Title IID	KETS	Other (Specify)
Communications						\$37,000 Local
Infrastructure					\$35,000	
Workstations					\$30,000	
Interactive Classroom Components					\$5,000	
Instructional Software						
Online Instructional Software						
Productivity Software						
Professional Development						
Student Technology Leadership Program						\$3,000 Local
Staffing						\$105,000 Local
TOTAL					\$70,000	\$145,000

Budget Summary
School Year: 2019-2020
Annual Budget Summary

Acquired Technologies and Professional Development	Ed Tech Competitive Title IID	Ed Tech Formula Title IID	E-Rate	NCLB/other than Title IID	KETS	Other (Specify)
Communications						\$37,000 Local
Infrastructure					\$35,000	
Workstations					\$30,000	
Interactive Classroom Components					\$5,000	
Instructional Software						
Online Instructional Software						
Productivity Software						
Professional Development						
Student Technology Leadership Program						\$3,000 Local
Staffing						\$105,000 Local
TOTAL					\$70,000	\$145,000