

DISTRICT TECHNOLOGY PLAN

DISTRICT NAME Mercer County Schools

LOCATION Harrodsburg, KY

PLAN YEAR(S) 2022-2023



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Planning Team

District Staff	
Jerome Gallt, Director of Technology	
Michael Filson, Technician	
John Barrington, Technician (retiring June 30, 2022)	
Building Staff	
Nekita Johnson, MCES Principal	(vacant), MCES Library Media Specialist
Karen Pridey, MCIS STC	Karen Pridey, MCIS Library Media Specialist
Leslee Stewart, KMS STC	Leslee Stewart, KMS Library Media Specialist
Kristin Cheney, MCSH STC	Kim Helton, MCSH Library Media Specialist
Additional District Contributors	
Jason Booher, Superintendent	
Jason McAllister, Chief Academic Officer	
Amber Minor, Finance Officer	
Students	
Other	

Previous Plan Evaluation

In this section include a discussion of the “expiring” (*previous year’s*) plan using the prompts below. Attempt to limit your narrative to the space provided.

What goals were met?

Our district was able to install over 40 interactive multi-touch OneScreen display panels to replace overhead projectors at MCSH used by teachers in classrooms. All Elementary (and Intermediate) students are now using their own accounts as opposed to shared school accounts for logging in to Chromebooks via Clever badges. All students have assigned Chromebook devices, and we are working towards implementing a sustainable 1:1 environment with funding sources and usage rotation plans in place. All Mercer Faculty, Staff, and Students utilize Google Drive for cloud storage. All Mercer Staff have access to Hapara for overseeing student Chromebook usage. Our district was able to create and hire a District Instructional Technology Coach position. Our district upgraded its Google Workspace for Education licensing from Fundamentals to Standard to increase security and monitoring.

Goals that were not met or didn’t have the expected outcomes?

Our district was not able to create STLP groups at the school level, so we do not currently have student assistance with troubleshooting and maintenance of technology equipment.

Areas of improvement?

Data from different sources (G Suite, Illuminate, Clever,) all indicate more usage by staff of usage of digital tools for classroom instruction. Data shows a definite increase in the number of Google Classrooms used as well as the number of posts made by teachers.

Areas/goals that are no longer relevant?

N/A

Needs that emerged after evaluation of the previous plan?

More directed funding on replacement plans of teacher and student workstations need to be established and followed to ensure that these devices remain effective for use in instruction and do not become out of date and hinder instruction and productivity.

The need for more student feedback using an effective system at regular intervals.

New Plan Preview

This is a high-level overview or executive summary of the plan as a whole. Attempt to limit your narrative to the space provided below.

[See [Technology Planning section of KETS Master Plan](#) for more information]

How did you and the planning team decide on the goals for this plan?

Feedback was gathered through informal methods to guide the decisions listed here, as well as the goals and commentary included in CSIPs and the CDIP.

In 2020, we wrote a long term plan that expires July 2022. We used that plan as a guide to make this plan, making adjustments as necessary based on current needs and evaluations.

Briefly discuss the major activities slated for implementation and how these activities will advance curriculum and instruction integration, student technology literacy, professional development, & technology infrastructure.

Mercer Co. Schools will continue to provide both the infrastructure and personal hardware to provide adequate, reliable access to digital learning tools and collaboration. In addition, by working with the schools, we will identify needs for resources and coursework that can be delivered and accessed online throughout our network. We will also provide as many of those resources as possible available to as many students as possible while off the Mercer Co. Schools' network. With the increased usage of digital resources, we wish to reduce our printing costs and use of materials and plan to do so using available resource management tools. All of this increase will also provide Mercer Co. Schools a chance to demonstrate via data the number and type of support requests and efforts needed to sustain such a system.

Student Voice

Personalized student learning allows students to develop deeper learning competencies including critical thinking, using knowledge and information to solve complex problems, collaboration, and communication. Capturing student input about their access to opportunities that build these competencies is key to effective technology planning. Please answer the questions in the space provided below.

Do you currently have a method to collect student responses about the digital learning environment? If so, which tool (ex: BrightBytes, Speak Up, survey created by you or the district, other)?

We have no formal process to collect student voice, however high school students were consulted informally, and anecdotal information was collected from teachers.

If you have a method to collect student voice for this purpose, reference specific data points from the collection that were useful in developing strategies for this new plan.

KETS Master Plan Areas of Emphasis

Connected to the Future Ready Framework

The Future Ready Framework identifies seven Gears to assist districts in developing a roadmap for student success through personalized student learning and collaborative leadership. The KETS Master Plan has identified 37 Areas of Emphasis connected to the Future Ready Framework and are categorized as either 1) *Areas of Acceleration (AA)* or 2) *Areas of Improvement (AI)*. The “areas of acceleration” are considered big wins, successes, and major milestones of the KETS are identified for continuation work. The “areas of improvement” address emerging areas based upon growth or decline metrics, research, needs assessments, and reporting by Kentucky school districts.

Use the Areas of Emphasis and Future Ready Framework as a lens to analyze current trends, initiatives, needs and goals of your district. Link the work of this new plan identified by your planning team to the Gears and Areas of Emphasis of the KETS Master Plan on the following pages. There is no expectation to address all 37 Areas of Emphasis of the KETS Master Plan. Any strategy that involves Erate, please include in the Budget & Resources gear. If your district has lease agreements (i.e.; device, fiber, etc.), be prepared to reference the quantity during the final submission process.



Robust Infrastructure & Ecosystem

Future Ready Gear

KETS GUIDING PRINCIPLE – A robust infrastructure is one that delivers the device, network and support needs of staff and students to create personalized learning environments using digital tools and resources.

Areas of Emphasis: Areas of Acceleration (AA)  /Areas of Improvement (AI) 



AA-1: Continue to provide nation’s first, fastest, highest quality, and most reliable internet access to 100% of Kentucky’s public schools



AA-2: Continue to ensure equity and standardization for delivery of device, network, data and support creating best in class staff and student digital experiences AND provide a system of shared/brokered/managed services maintaining low infrastructure costs and providing support structures promoting the use of personalized learning environments



AA-3: Continue to create a culture of digital connectedness through all-the-time, everywhere, always-on digital opportunity and access with emphasis on dense Wi-Fi throughout schools (*also including home access, Wi-Fi buses, school and classroom Wi-Fi, etc.*)



AA-4: Continue to encourage the use of instructional programs and administrative processes requiring cloud-based services



AI-1: Improve ease of access for student and staff through continued progress toward 1:1 student to computer ratio utilizing increased amounts of mobile devices (*fewer traditional computer labs*)

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-1	Fiber will be leased from a third party vendor in order to provide network access to the Harlow Education Center for the board of education and Day Treatment / Mercer Central schools.	Director of Technology, Vendor Partner	Ongoing	General Funds	\$ 10,000 per year	Evidence of working fiber / Internet connection for voice and data.
AA-2	Monitor and improve wireless capabilities to insure uptime and successful technology usage. Improve reporting and monitoring of usage.	Director of Technology, Vendor Partner	Thru July 1, 2023	Erate KETS General Fund School-based Other	\$5000/yr.	Helpdesk tickets related to wireless issues will decrease. Reports from Extreme Wireless Console will show fewer bandwidth and “overuse” issues.
AA-2	Provide and support District Technicians to provide technical support to all district buildings	Director of Technology	Ongoing	General Funds	\$ 80,000 / yr.	Metrics in HelpDesk Ticketing system showing completed and resolved tickets. Monitoring the quantity of replacement parts installed.
AA-2	Provide and support STC positions in each building	Director of Technology, Principals	Ongoing	General Funds	\$ 25,000 / yr.	agendas / minutes of SBDM meetings.
AA-3	Continue replacing Extreme switches throughout the district (covered under warranty) that have been having Power-over-Ethernet (POE) failures resulting in Wifi issues.	Technology Staff, Vendor Partner	By August, 2022	Warranty replacements; no funding required	\$ 0	Switch stack inventory spreadsheet will show dates when switches have been replaced.
AA-4	Implement a new cloud-based bus routing system for increased	Directors of Technology &	Thru July 1, 2023	General Funds	\$ 7000 / yr.	System will be installed and fewer bus routes will be needed, resulting in lower

	efficiency.	Transportation, Vendor Partner				transportation costs.
AI-1	Increase the number of Chromebook / Chrome OS devices at Elementary, Intermediate, Middle, and High Schools by replacing Windows machines.	Director of Technology, Staff, STC's, Principals	Thru July 1, 2023	General Funds SBDM Funds KETS Covid Funds	\$50,000 per school per year.	Data collected from tools such as Google Workspace for Education and others will indicate improvement.
AI-1	Improve the system used to inventory Chrome devices to ensure accurate numbers of retired and functional devices.	Technology Staff, School STCs.	By September, 2022	General Funds	\$ 2000 for additional summer help	Devices in the Google Workspace for Education console will accurately reflect the number of devices that have been retired or are provisioned.



Data Security, Safety & Privacy

Future Ready Gear

KETS GUIDING PRINCIPLE – Security, safety and privacy of student data is a cornerstone of digital learning. Policies and procedures are enacted at the state, district and school levels that work in conjunction for this purpose. Student data are then utilized by data fluent educators for improved decision-making leading to increased learning for students.

Areas of Emphasis: Areas of Acceleration (AA)  /Areas of Improvement (AI) 

 **AA-1:** Continue to support districts in securely accessing and managing key student and administrative data sets through improved user experiences, refined data collection processes, continuously updated policies and practices regarding student data security, and timely access to data sets that improve the depth and efficiency of student learning (*Infinite Campus, Early Warning, MUNIS, eTranscripts, School Report Card*)

 **AA-2:** Continue to identify key aspects of data security regularly to build upon the current systems, procedures and policies to remain a leader in mitigating emerging threats (*acceptable use policies, firewall updates, data privacy studies, digital citizenship, content filtering*)

 **AA-3:** Continue to utilize adoption metrics or trending data for planning purposes that allow EdTech leaders to identify what’s working and what’s not working based upon data quality and evaluate current systems and solutions to determine effectiveness and future direction (*annual auditors, TELL survey, Technology Activity Report, Digital Readiness, Data Quality Study, Data Quality Campaign, BrightBytes, SpeakUp*)



AA-4: Continue to migrate key administrative and student data sets to secure cloud-based services that allow anywhere, anytime secure access for the improvement of student learning (*Infinite Campus, Early Warning, School Report Card, MUNIS*)



AA-5: Continue supporting teacher efforts in taking ownership of digital citizenship skills and education their student in the same skills to foster a secure digital learning environment



AI-1: Educate and support districts in the importance of personnel with duties related to student/staff data quality, security and privacy as well as bringing data privacy to the “radar screen” of teachers/staff (*The People Side of EdTech*)



AI-2: Kentucky K-12 Data systems are first-class but we need to do much better with district using the data available to them as well as providing visual data analytic tools allowing the data to be better understood and more interesting to the average person who does not have a technology and data background

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-1	Create restricted accounts for long-term subs that allow access to IC student information and Google Classroom resources.	Director of Technology, DPP	Ongoing	None	\$ 0	No teacher credentials will be given to/used by substitute teachers.
AA-2	Update policies and procedures for network access, data security, and Chromebook replacement fees to reflect emerging threats and price changes.	Director of Technology, Technology Staff, STC’s, Principals	Thru July 1, 2023	None	\$ 0	New policies and procedures will be adopted by staff and approved by the Board of Education.
AA-4	Increase usage of cloud based resources for more reliable access and ease of use (Ex. Clever, etc.)	Director of Technology, Instructional Technology Coach, Chief Academic Officer, Principals	Thru July 1, 2023	General Fund SBDM Funds	\$ 5,000 / yr.	Available teacher and student resources via the cloud will increase.

AA-4	Provide support for district systems including, but not limited to MUNIS, Infinite Campus, Illuminate, Destiny, Clever, Lynx, etc.	District Technology Office, DPP, Finance Dept. Instruction Dept.	Thru July 1, 2023	N/A	N/A	N/A
AA-4	Provide a solution for content filtering and bandwidth shaping (Lightspeed)	District Technology Office Staff	Thru July 1, 2023	General Funds KETS	\$ 7,500	Teachers and students will be able to access necessary resources while maintaining student digital safety.



Budget & Resources

Future Ready Gear

KETS GUIDING PRINCIPLE – The Master Plan, as well as district and school technology plans, are aligned to the vision of 21st century skills for students and staff. Revenue streams are aligned to account for the recurring and nonrecurring total cost of ownership to support the 21st century learning environment in a manner that reflects good stewardship of tax dollars to include devices, infrastructure, support, data and human services.

- Areas of Emphasis: Areas of Acceleration (AA)  /Areas of Improvement (AI) 
-  **AA-1:** Continue to maximize local and state education technology expenditures through a system of shared/brokered/managed services
 -  **AA-2:** Continue use of long-term planning strategies that allow for continuity of initiatives and systems (*ex. Accounting for cost of ownership over the lifespan of equipment so monies are allocated for repairs/upgrades*)
 -  **AA-3:** Continue to leverage all available state and federal funding opportunities to address required basic cost of living increases, previous budget cuts of basic services, projected growth by districts (*e.g. Internet consumption*) while maximizing education technology programs and initiatives (*Technology Need, E-rate*)
 -  **AI-1:** Make districts aware of position/roles requiring technology-related duties in support of technology and instruction (*The People side of K-12 EdTech*)
 -  **AI-2:** Make districts aware of how to reduce expenditures on printing/print services (*both in consolidated contract pricing as well as shifting from paper to digital experiences*)



AI-3: Evaluate the need and explore new contracts that drive costs down for statewide summative online assessment, learning management systems, printing services and interim based assessments



AI-4: See an increased percentage of districts examining which education technology investments are or are not being maximized

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
A1-1	Provide reports on a regular basis of Technology Projects and Helpdesk Tickets to stakeholders	Director of Technology, District Technology Office Staff	Thru July 1, 2023	General Fund	\$ 500	Data and reports will be published and / or delivered on a regular schedule as requested
A1-2	Increase use of print management tools (PaperCut) to reduce cost and improve effectiveness	Director of Technology, STC's, Principals, Finance Department	Thru July 1, 2023	General Fund, SBDM Funds	\$ 20,000 / yr.	Data will show decreases in usage of paper copies.
AA-2	Plan for Security System upgrades and maintenance	Director of Technology, DPP, Principals, Superintendent	Thru July 1, 2023	General Fun, SBDM Funds, Safe-School Funds	\$ 75,000 / yr.	Number of cameras and access control units will increase and coverage of external doors and high traffic areas will improve
AA-2	Plan for phone system maintenance and upgrades	Director of Technology, staff	Thru July 1, 2023	General Fund, KETS Funds	\$ 10,000 / yr.	The number of sites using integrated VOIP system will increase
AA-3	Continue to purchase E-Rate eligible items to maintain and improve our network infrastructure	Director of Technology, District Technology Staff	Thru July 1, 2023	E-Rate, General Funds	varies per year	Review of E-Rate Budget



Partnerships

Future Ready Gear

KETS GUIDING PRINCIPLE – Connecting students and educators to the local and global community is a key factor to student success. The Master Plan will continue to provide opportunities for trusted relationships to build those connections as well as increase communication and transparency with shareholders, including families, districts, vendors, regional education collaboratives, postsecondary institutions and business/industry, in support of student learning and preparation beyond K-12.

Areas of Emphasis: Areas of Acceleration (AA)  /Areas of Improvement (AI) 

 **AA-1:** Continue to build trusted relationships with shareholders (families, districts, partners) that will reduce risk as well as increase transparency and communication (*districts, vendors, higher-education, regional cooperatives*)

 **AA-2:** Continue to utilize avenues of communication with shareholders allowing pertinent information and dialog to further student learning efforts (*Webcasts, BrightBytes, Technology Activity Report, KETS Service Desk, Office of Education Accountability studies, independent studies, etc.*)

 **AA-3:** Continue to utilize tools engaging postsecondary institutions, community members, districts and families in student learning and life after K-12 (*eTranscripts, School Report Card and Dashboard tool, Infinite Campus parent and student portal, KDE Open House, Digital Readiness Survey*)

 **AI-1:** Partner with postsecondary pre-service teacher and principal programs to provide support in candidate preparation

 **AI-2:** Encourage postsecondary institutions to host STLP events and /or more fully maximize the opportunity to showcase the university and its programs while students are on campus

 **AI-3:** Build relationships with charter schools to determine policies and procedures related to architecture/design, systems security and privacy, services and reporting requirements

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-2	Maintain and upgrade district website	District Technology Office Staff, Instructional Technology Coach	Thru July 1, 2023	General Fund	\$ 15,000	A new website design and content will be readily available
AA-1	Keep district social media accounts up to date with pertinent information	District Technology Staff, Public Relations / Communications Staff	Thru July 1, 2023	N/A	N/A	Followers, interaction analytics of posts



Digital Curriculum, Instruction & Assessment

Future Ready Gear

KETS GUIDING PRINCIPLE – A digital learning experience is fostered by a teacher or coach with the use of rich digital instructional materials that are vetted to the rigor of Kentucky Academic Standards. A robust digital environment provides students with the opportunity to assess their own learning/progress.

Areas of Emphasis: Areas of Acceleration (AA)  /Areas of Improvement (AI) 

 **AA-1:** Continue to provide access to instruction digital content which further aligns to the Kentucky Digital Learning Guidelines

 **AA-2:** Continue providing opportunities for students to demonstrate learning connected to and through technology (*empowering students through technology with STLP, IT Academy, etc.*)

 **AA-3:** Continue to finalize and partner with Career and Technical Education (CTE) to promote Kentucky approved K-12 Computer Science Standards and Technology/Digital Literacy Content Standards (*based on International Society for Technology in Education standards*) for ALL students

-  **AA-4:** Continue providing access to online assessment tools that allow teachers and administrators to assess student learning, provide timely feedback to students and make curriculum decisions (*online formative assessment tools, interim based assessments, and summative assessments*)
-  **AA-5:** Continue to provide districts/classrooms access to digital instructional materials through an equitable of robust digital experience
-  **AI-1:** Identify digital content and tools (curriculum, instruction and assessment) designed to have the highest impact and value (e.g. is the technology making or not making an instructional and learning difference?), including frequency of use by teachers and students
-  **AI-2:** Create a closer connection with Career and Technical Education to expand information technology and computer science career pathway offerings specifically related to computer programming/coding and increase exams available through IT Academy
-  **AI-3:** Play a vital role in implementation of summative online assessment and school report card and dashboard tool of the new assessment and accountability system

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-5	All new technologies purchased will need to have a training component included.	Instruction Department, District Technology Office Staff, School Principals and SBDM's	Thru July 1, 2023	District / School Funding	varies	100% of all new technologies purchased will come with a training component; increased teacher usage of new technology for instruction.
AA-2	District will provide funds to support STLP in the schools, including stipends for coaches, transportation to events, and other costs as needed	Director of Technology, Principals	Thru July 1, 2023	General Funds, SBMD Funds	\$ 20,000	Evidence of student participation in STLP events
AA-3	Continue to develop timelines and lesson ideas for students based on the ISTE Student Standards	Instructional Technology Coach, STC's	Thru July 1, 2023	N/A	N/A	Google shared site / drive will be shared with information on technology skills and lessons for teachers to use

A1-3	Work with the DAC and BAC's to improve confidence of Online testing and reduce fears of technical failure	DAC, BAC's, District Technology Staff	Thru July 1, 2023	General Fund	N/A	Successful completion of Online testing with limited to no use of backup paper and pencil options
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Personalized Professional Learning
Future Ready Gear

KETS GUIDING PRINCIPLE – Digital learning expands the access to quality strategies and experiences for educators beyond the traditional methods of professional development. A culture of digital collaboration, workflow and relationships allows educators to build skill sets and instructional best practices with colleagues globally. This approach of increased access and flexibility for professional learning ultimately leads to greater success for students.

Areas of Emphasis: Areas of Acceleration (AA)  /Areas of Improvement (AI) 

 **AA-1:** Continue building a culture of digital collaboration and connected digital relationships that allow administrators to support and encourage the use of digital tools by staff for professional learning.

 **AI-1:** Provide district with guidance and support to determine crucial learning needs of teachers resulting in more professional learning opportunities related to digital learning tools

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-1	District Instructional Technology Coach	Director of Technology, Chief Academic Officer	2022-2023 and Ongoing	CARES, General Funds, Title IV, Part A	\$ 50,000	Evaluation of

AA-1	School level Digital Learning Coaches, extra duty positions	Director of Technology, Chief Academic Officer	Thru July 1, 2023	CARES, General Funds, Title IV, Part A	\$ 25,000	Hiring and evaluation of DLC's
AI-1	Continue the usage of digital tools and connected educators to provide opportunities for professional development and digital learning	Chief Academic Officer, Principals, Instructional Technology Coach	Thru July 1, 2023	General Fund	\$ 10,000 / yr.	Attendance at events will increase



Use of Space & Time

Future Ready Gear

KETS GUIDING PRINCIPLE – The personalized learning environment for students requires reimagining the use of school space and time. Virtual instruction, cloud-based learning tools, digital instructional material, digital collaboration, digital workflows and digital relationships, etc., assist in providing the vehicle for anywhere, anytime learning.

Areas of Emphasis: Areas of Acceleration (AA)  /Areas of Improvement (AI) 

 **AA-1:** Continue to provide guidance, support and resources for districts in the development and application of high quality online/virtual coursework as well as implementation of learning management systems

 **AI-1:** Educate and support districts in the implementation and facilitation of digital learning tools and portable technologies that foster anywhere, anytime access for staff and students

DISTRICT TECHNOLOGY PLAN

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-1	Continue to support resources for all schools in the use of Online / Virtual coursework and curriculum	Chief Academic Officer, District Technology Staff	Thru July 1, 2023	General Fund SBDM Funds	\$ 50,000	Student completion of coursework along with graduation rates will indicate success
A1-1	Develop a list of technology tools for teachers to integrate into their lessons	Chief Academic Officer, DLC's	Thru July 1, 2023	N/A	N/A	Google Shared Drives as well as other Google Classroom resources will be shared with information on technology skills and lessons for teachers to use

[Mercer County Board of Education Request for Approval – 05/19/2022](#)