Kentucky Education Technology System DISTRICT TECHNOLOGY PLAN

DISTRICT NAME Mercer County Schools

LOCATION	Harrodsburg,	KΥ
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PLAN YEAR(S) 2020-2022



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Planning Team

District Staff	
Tim Berger, Director of Technology	
Michael Filson, Technician	
John Barrington, Technician	

Building Staff	
Stacy Charles, MCES STC	Greg Brown, MCES Library Media Specialist
Jay Anderson, MCIS STC	Karen Pridey, MCIS Library Media Specialist
Leslee Stewart, KMS STC	Leslee Stewart, KMS Library Media Specialist
Jerome Galt, MCSH STC	Kim Helton, MCSH Library Media Specialist

Additional District Contributors	
Dennis David, 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 install over 100 interactive multi-touch display panels to replace overhead projectors at MCES, MCIS, and KMS used by teachers in classrooms.

More elementary students are now using their own accounts as opposed to shared school accounts for logging in and using individual classroom and lab computers and Chromebooks.

All schools are working towards a 1:1 environment, and this has been reached at MCIS. All Mercer Faculty, Staff, and Students utilizes Google Drive for cloud storage.

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

Our district was not able to restore the District Instructional Technology Coach position which would help to provide individual and differentiated training and professional development.

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to be established and followed to ensure that these devices remain effective for use in instruction and do not become out of date and hinder instruction and productivity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 a full time District Instructional Technology Coach



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 <u>Technology Planning section of KETS Master Plan</u> 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 2018, we wrote a long term plan that expires July 2020. We used that plan as a guide to make this plan, making adjustments as necessary.

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. 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 effort 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 STLP students were consulted.

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) $\overset{\textcircled{}}{}$ /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 Al	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.	Director of Technology, Vendor Partner	Thru July 1, 2022	Erate KETS General Fund School-based Other	\$5000/yr.	Helpdesk tickets related to wireless issues will decrease.
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.
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	Increase number of Chromebook / Chrome OS devices at Elementary, Middle, and High Schools	Director of Technology, Staff, STC's, Principals	Thru July 1, 2022	General Funds SBDM Funds KETS	\$10,000 per school per year.	Data will show that the number of devices has increased; from usage tools such as Google G-Suite and others will indicate success.

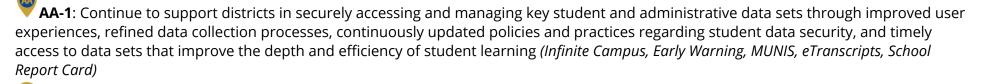




Data Security, Safety & Privacy Future Ready Gear

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) ^(W)/Areas of Improvement (AI)



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 Al	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-2	Update policies and procedures for network access and data security	Director of Technology, Technology Staff, STC's, Principals	Thru July 1, 2022	None	\$0	New policies and procedures will be adopted 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, 2022	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, Transfinder, etc.	District Technology Office, DPP, Finance Dept. Instruction Dept.	Thru July 1, 2022	N/A	N/A	N/A
AA-4	Provide a solution for content filtering and bandwidth shaping	District Technology Office Staff	Thru July 1, 2022	General Funds KETS	\$ 7,500	N/A





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) ^(W)/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 Al	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, 2022	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 to reduce cost and improve effectiveness	Director of Technology, STC's, Principals, Finance Department	Thru July 1, 2022	General Fund, SBDM Funds	\$ 20,000 / yr.	Data will show decrease in usage of paper and click counts
AA-2	Plan for Security System upgrades and maintenance	Dirctor of Technology, DPP, Principals, Superintend ent	Thru July 1, 2022	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, District Technology Staff	Thru July 1, 2022	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, 2022	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) ^(W)/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*)

Al-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 Al	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, Public Relations / Communicat ions Staff	Thru July 1, 2022	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 / Communicat ions Staff	Thru July 1, 2022	N/A	N/A	Followers, interaction analytics of posts

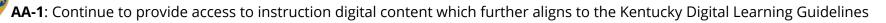




Digital Curriculum, Instruction & Assessment Future Ready Gear

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) ^(W)/Areas of Improvement (AI)



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 Al	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 purchased as well	Instruction Department, District Technology Office Staff, School Principals and SBDM's	Thru July 1, 2022	District / School Funding	varies	100% of all new technologies purchased will come with a training component
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, 2022	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, 2022	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 eliminate fears of failure	DAC, BAC's, District Technology Staff	Thru July 1, 2022	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) ^(W)/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.

Al-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 Al Strategy	Person(s)	Anticipated	Anticipated	Anticipated	How will you know this is	
Equity Achievement Integrity Quality Opportunity Access						

		Involved	Timeframe	Funding Source	Funding Amount	successful? (including metrics)
A1-1	District Instructional Technology Coach	Director of Technology, Chief Academic Officer	2020-2021 and Ongoing	CARES, General Funds, Title IV, Part A	\$ 50,000	Hiring and evaluation of full-time coach
A1-1	School level Digital Learning Coaches, extra duty positions	Director of Technology, Chief Academic Officer	Thru July 1, 2022	CARES, General Funds, Title IV, Part A	\$ 25,000	Hiring and evaluation of DLC's
AA-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, 2022	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) $\overset{\textcircled{}}{ ext{P}}$ /Areas of Improvement (AI) $\overset{\textcircled{}}{ ext{P}}$

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



KETS AA or Al	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, 2022	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, District Instructional Technology Coach, DLC's	Thru July 1, 2022	N/A	N/A	Google Shared Drive / Folders as well as other Online resources will be shared with information on technology skills and lessons for teachers to use

