Technology Plan
Middlesboro Independent Schools
Middlesboro, Kentucky

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Superintendent

http://www.mboro.kyschools.us

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Acknowledgments

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Executive Summary

Mission Statement:

A relentless dedication to motivate and inspire student success.

Our Vision:

Where everyone matters.

This planning instrument guides and supports district goals and objectives for using technology to enable and enhance the learning environment.   Information technology and telecommunications are essential to providing a feature rich environment for learning, and for maintaining communication between schools, parents, and the community.

Middlesboro Independent Schools (MIS) is committed to providing students with opportunities, such as communications skills, differentiated learning, problem solving, collaboration, and creativity, which will maximize their potential.

The District strives to avail ourselves of all potential funding sources, as well as other resources to ensure the priorities established throughout the district are attained.

Our schools are making increased use of our district and school web presence to communicate news, calendars, school closings, and student achievement. The schools are using social media (i.e. Facebook) as well as OneCallNow to keep parents and the community informed of student achievements and other events within the district. Teachers are utilizing their personal class pages for information, class assignments, class content, communication, and student activities.

The Kentucky Education Technology System (KETS) Master Plan 2013-2018 outlines the standards that have been set for completion of this phase. Middlesboro Independent Schools is committed to meeting the requirements of the plan by making choices that will enhance learning within the district.

http://education.ky.gov/districts/tech/kmp/Pages/default.aspx

The National Education Technology Plan was also consulted in the writing of this plan
http://www.ed.gov/category/keywoard/national-education-technology-plan

Planning Process and Methodology

MIS continues to implement a district wide technology plan that will build guidelines for the growth and integration of 21st century classrooms. These guidelines include the acquisition of hardware and software, and the training and support of our staff, students, and the support from our parents and community. We look to take the following steps to implement this process in our

schools:

- Research the most effective technology in the classrooms.
- Research new technology that could aid teachers in the classrooms.
- Update the districts website to reflect the most current information.
- Disperse guidelines to staff regarding purchasing hardware and software rights and responsibilities.
- Update and have the Middlesboro Board of Education review Middlesboro Independent School District's Technology plan annually.

To be effective, technology planning must be an on-going process. With the previous technology plan MIS has met numerous goals, but we feel that we should continue to strive for more. As a district we take pride that each one of our classrooms is equipped with 21st Century equipment. However, with technology changing quickly, we know that we can never stop seeking the latest technology available for our teachers to use to enhance and engage our student's. Our current network equipment is aging and we need to look at possible means of upgrading our network infrastructure in the years to come.

Current Technology and Resources

MIS offers a wide variety of technology to expand and enrich the educational opportunities of our students. The listing that follows is current technology already installed:

- High-speed network (Nortel BayStack Switches)
- Wiring of all schools (fiber backbone)
- Wireless access in every classroom (Avaya 9100 Access Points)
- High-speed internet service
- Microsoft hosted email service
- Administrative servers, ePO server, Proxy server (LightSpeed), hosted Infinite Campus, hosted Munis, hosted Follett library
- Mixed Apple, Chome, and PC environment along with networked printers
- Three next generation classrooms containing: three Mondopads, 130 iPads, internet video conferencing capabilities
- 18 mobile ChromeBook labs
- SmartTechnology (Smartboards, projectors, Document Cameras, external speakers)
- Discovery Education (All teachers can project streaming educational videos to their Smartboards.)
- Software: Microsoft Office, McAfee, IXL, Accelerated Reading, Accelerated Math, Starfall, Lexia, Dreambox, BrainPOP, BrainPOP jr, Success Maker, Star Reading, Star Math, Study Island, Method Test Prep, Reading Plus

The school system realizes that technology is a very important learning tool for our students, so the district strives to keep current on all the technology needs of students, teachers, and administrators. The high-speed networking infrastructure allows students and teachers to utilize the Internet for research and projects seamlessly. We currently have a Director of Technology in charge of evaluating, maintaining, upgrading, and purchasing our technology. We have a technician that monitors the ticketing system and completes work orders on a daily basis. We are also blessed to have exceptional Media Specialists in each school to help with common technology issues. Training occurs as professional development or training by vendors.

Curriculum and Instructional Integration Goals

Goal 1

Middlesboro Independent Schools strives to provide the students and staff with state of the art equipment and tools to meet the needs of our end-users.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide high-speed internet and network connections (WAN and LAN) to each school.	Decreased latency as hardware is upgraded.	Bandwidth monitoring tool	7/1/17– 6/30/18	DTC District Technician	KETS Funding
Utilizing Chrome devices into the classroom.	The use of Tablet devices are utilized as a new way to engage students by utilizing a more hands-on approach to teaching with technology.	Proxy server, Active Directory, Google Admin Console	7/1/17– 6/30/18	DTC District Technician Classroom teachers	KETS Funds, Local Funding, Grants
Since students have access to the internet, safeguards are in place to monitor internet usage and restrict inappropriate sites, utilizing the proxy server.	These safeguards allow our students to a safe education, while still utilizing state of the art technology.	Proxy server, Active Directory, Google Admin Console	7/1/17– 6/30/18	DTC District Technician Classroom teachers	KETS Funds, Local Funding

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide Wireless Internet to the district via the WAN at each school.	Increased internet saturation and moving closer to a 1:1 student to computing device ratio.	Proxy server, Active Directory, Bandwidth monitoring tool	7/1/17– 6/30/18	DTC District Technician Classroom teachers	KETS Funds, Local Funding

Goal 2

Promote a technology-enhanced learning environment

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Teachers will integrate technology into their instruction.	Increase student engagement and attention during the lesson.	Teacher evaluations, walk through, and student's understanding of technology.	7/1/17– 6/30/18	Classroom Teachers Principal	General Fund Title I KETS
Ensure that all teachers have at least 2 internet accessible computers in the classroom.	Students will have access to technology at all times to use for research and as a learning tool.	Computer inventory	7/1/17– 6/30/18	DTC District Technician	General Fund Title I KETS
Search for funding to purchase additional technology for the classroom environment.	Bringing Classrooms into the 21st century for enhanced technology usage.	Monitor usage and acceptance and principal observation of technology	7/1/17– 6/30/18	DTC DAC Teachers	General Fund Title I KETS

PD will be made available regarding technology in the classroom.	Teachers will demonstrate their ability to use technology and integrate technology into their lessons.	Teacher attendance and use of 21st century technology.	7/1/17– 6/30/18	DTC District Technician PD Coordinator Teachers	General Fund Title I KETS Professional Development (state grant)

Curriculum and Instructional Integration Goals – Evaluation

MIS has been supplied with many different types of technology ranging from iMacs, iPads, ChromeBooks, ChromeBoxes, Windows machines, MondoPads, SmartBoards, document cameras, and Internet video conferencing, and many more, which are all integrated into the classroom. The District is also utilizing several software based programs which increase technology awareness: IXL, Accelerated Reading, Accelerated Math, Starfall, Lexia, Dreambox, BrainPOP, BrainPOP jr, Success Maker, Star Reading, Star Math, Reading Plus, Study Island, and Method Test Prep. Our teachers are using their 21st Century technology such as SmartBoards, Projectors, Document Cameras, Classroom Audio Systems, and computers everyday to enrich students learning experience and keep the students actively engaged in the lesson. MIS understands that technology is a building block to the future and students have realized this and are eager to learn.

Student Technology Literacy Goals

Goal 1
Student Technology Literacy Skills

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Students and their parents have to review and sign and Acceptable Use Policy before they are granted access to any computer on the Middlesboro network.	Students are able to utilize hardware and software that the school has in place as research and learning materials.	Proxy Server, Active Directory, Network Usage, Staff monitoring, Signed copies of AUP for both students and staff.	7/1/17– 6/30/18	DTC Media Specialists Principals Teachers	
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).	Open labs and mobile labs will be utilized for Project Based Learning Activities in each School. Flexible Library will be utilized.	Teacher Evaluation TPG Reviews Open Lab Schedules and the Student Work Produced Flexible Library Use (where available) and the Student Work Produced	7/1/17– 6/30/18	DTC District Technician Building Principals	No additional cost to district.
Media Specialists implement a plan to	Students will be trained on	Following the progress online for	7/1/17– 6/30/18	Media Specialists all buildings	

train students on internet safety.	cybersmartcurriculum.org	all students.			

Goal 2

Middlesboro Independent Schools will implement multiple evaluation tools to evaluate Technology Proficiency, for both students and faculty and staff.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Implement Digital Driver's License to assess proficiency of Middlesboro Independent Students in Digital Citizenship in 6 – 12 grade.	Middlesboro will have a tangible formative assessment for students that will allow the school to monitor the progress of the students and faculty and staff as they move toward technology proficiency.	Results of Assessment	7/1/17– 6/30/18	DTC District Technician Building Principals Media Specialists	Local Funds
Students will continue to be provided an e-mail account for proper use according to the district AUP policies, as a tool for the learning process at the appropriate level.	Students will have access to e-mail and will become familiar with the electronic communication skills and uses associated with this product as an education technology tool appropriate for their level in accordance	Active Directory monitors login activity and locks a user out when an excessive amount of bad logins are reached.	7/1/17– 6/30/18	DTC District Technician Principal Certified Staff	

	with the district AUP.				
Maintenance of computer and software updates to protect students from outside influences.	Students are able to utilize hardware and software that the school has in place as research and learning materials.	SUS, software updates performed by the DTC and vendors	7/1/17– 6/30/18	DTC District Technician	General Fund Title I KETS

Student Technology Literacy Goals – Evaluation

MIS utilize daily instruction, projects, online testing, along with school and home based assignments as a means to increase technology literacy. MIS offers several technology classes that students can enroll in to expand their knowledge of technology such as Computer repair hardware, Computer repair software, Cisco 1-4, and many more. Departmental faculty analyzes computer data from one testing period to another. If the proper results aren't met, then the students receive additional reinforcement with technology programs to assist with learning.

Staff Training/Professional Development Goals

Goal 1

Middlesboro Independent Schools offers quality professional development that will enable our teachers and support staff to integrate technology into their daily instruction.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide professional development to assist staff in meeting the state Teacher Technology Standards	Technology PD offerings will be designed around the needs of the staff. Teachers will integrate the technology modeled in the professional developments into their instruction.	Teacher Review Student Work Observations	7/1/17– 6/30/18	DTC District Technician Media Specialists Building Principals	Professional Development Funds
KYSTE Conference will have participants from the district.	Teachers will integrate the technology modeled in the professional developments into their instruction.	Teacher Review Student Work Observations	7/1/17– 6/30/18	DTC Media Specialists	Local Funds Professional Development Funds
Teachers have integrated software	These software packages are	Monitor teacher usage and	On Going	DTC District Technician	KETS funds, General funds and

into the classroom setting as a teaching aide (ex. Accelerated Math, Study Island, IXL, Lexia, Star Reading, Renaissance Place, etc.)	utilized as a supplemental teaching aide that allows the students to be exposed to different teaching mediums.	classroom performance		Teachers Administrative staff Finance Director	other possible grant funding

Staff Training/Professional Development Goals – Evaluation

Our district staff continues to grow in knowledge, understanding, and increased competency in the effective use of technology. MIS takes pride in the products we deploy into our educational environment. There is of course always room for growth and improvement; therefore, we try to tailor our professional development around those topics that will provide the most overall gain in their effective use of technology in education.

Our professional development days within the district are for all staff and we present to them new items that can be used to enhance the learning process for all students. Registration is required for professional development credit. Training opportunities are provided throughout the school year as well as during the summer months.

It is important that our technology training meets the needs of each of our building level improvement plans. Needs are communicated through our monthly administrative meetings. The Director of Technology attends these meetings to communicate the building level needs.

Technology Goals

Goal 1

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.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Monitor and assess the bandwidth requirements to optimize the performance of our Wide Area Network and Local Area Networks.	Student access will improve as wait time is minimized.	KETS view will be used to monitor bandwidth and ensure that traffic is at acceptable levels.	Monitor Daily 7/1/17 – 6/30/18	DTC	No additional cost to school.
The district will provide technology resources at a ratio that is at or better than that required by the KETS Standards.	Personnel and staff will have increased accessibility to technology resources.	Inventory; Active Directory Workstations Evaluated Annually in conjunction with the Technology Readiness Report.	7/1/17 – 6/30/18 Last Evaluated 01/2017	DTC District Technician	KETS Local Funds
Utilize technology to support the curriculum and improve student achievement with an emphasis on classroom	Teachers will integrate technology resources for inclusion in daily instruction. Instructional practice policies will guide	Lesson Plans, Walkthrough Assessments, Teacher Evaluations, Student Work	7/1/17– 6/30/18	DTC District Technician Media Specialists	No additional cost to school.

integration to facilitate implementation of the Kentucky Program of Studies, Common Core, the Learning Goals and Expectations, ISTE's National Educational Technology Standards for Students.	teachers in integration practice.	Instructional Practice Policies are evaluated annually by SBDM Councils. End of Course Data			
Teachers, administrators, and staff will have access to KETS standard equipment, network, and software.	Teachers, Library Media Specialists, and Administrators will meet technology evaluations standards.	Technology Course Grades Use of technology in the classroom Digital Driver's License Data	7/1/17– 6/30/18	DTC District Technician	No Cost
Evaluate and sustain multimedia equipment and peripherals in accordance with our 21st Century Classroom Initiative to create and maintain expansive programs that challenge all levels of learners.	All classrooms will utilize multimedia equipment and peripherals in daily instruction.	Inventory of Rooms Help Desk Ticketing System	7/1/17– 6/30/18	DTC District Technician	Local Funds KETS Funding
Provide and support e-mail accounts for staff and students. Students will utilize	Teachers and students will be trained to utilize this resource, and good	Lesson Plans, Walkthrough Assessments, Teacher	7/1/17– 6/30/18	DTC District Technician Media Specialists	No additional cost to district

district e-mail accounts to access and complete teacher assignments and to collaborate on classroom projects.	digital citizenship will be modeled and practiced as the collaborative tools are modeled in integrated instruction.	Evaluations, Student Work, Help Desk Ticketing System		Building Principals	

Goal 2

Acquire sufficient software and hardware through systematic planning and upgrading at the district and school building level to maintain an equitable, cost-effective technology base for our students and staff as outlined in the KETS Master Plan.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Principals will target students with poor attendance through telephone contacts with parents utilizing both current phone system and cellular service.	Improved attendance resulting in higher learning potential as evidenced by meeting State test goals	State Test Goals OneCallNow messenger	7/1/17– 6/30/18	DPP Building Principals	Telco portion – e-rate Local Funds
Provide district-wide equity and standardization with PC/Mac/Chrome compatible hardware and software that meets district and state guidelines.	Students will have the opportunity to learn/work from anywhere on our network seamlessly.	Inventory/KETS Guidelines	7/1/17– 6/30/18	DTC District Technician	KETS Funds Local Funds
Lightspeed Filtering	Lightspeed Web Filtering	Periodic Reports (i.e. proxy reports);	7/1/17– 6/30/18	DTC	Local Funds

					KETS Funds

Technology Goals – Evaluation

With the implementation of our dense wireless network, MIS has been able to deploy new technology into the classrooms. The BYOD trend has been embraced and nurtured at our district and will continue as we commit financial resources to building our wireless infrastructure.

Our continued commitment towards training in both the use of technology and tools available will enable teachers to develop a curriculum to prepare students for the 21st century. We train both the use of technology and effective core content integration.

Restructuring of current labs along with more up to date operating systems will support our student's learning at all skill levels from K thru 12 and prepare them for collaborative exercises within the district and with their continued education.

Technology has been implemented into each and every classroom to allow our students great exposure to different types of technologies that they don't usually have access to, which include multiple operating systems ranging from Chrome, Mac, and Windows. We have also moved to continuous online testing and retention programs to more effectively evaluate our student's comprehension of multiple subject areas.

Budget Summary

Note: duplicate this page for each year as needed (if a multiyear plan)

Acquired Technologies and Professional Development	E-Rate	KETS	Other (Specify)
Telco/Internet costs	$110,280.96		
Licenses District Wide (Munis, Microsoft, Infinite Campus, various curriculum software)		$46,000	General funds/Title 1 $100,000
Consumables for technology (Projectors, Smartboards, various repairs)			$50,000
TOTAL	$110,280.96	$46,000.00	$150,000.00

Budget Summary – Narrative

MIS will meet the E-Rate funding commitments for year 19 as requested using local funding from the general fund. MIS will use funds from each school's budget based on the amount of technology added.

To provide appropriate training we will continue to use various survey sources. MIS will continue to have technology PD days as well as make use of time during teachers planning periods to increase staff proficiency in the use and integration of technology in their classrooms.

The district must continue to use all monies available from sources outside the district such as Dataseam but also not be limited to just one source. We must continue to apply for grants that are related to technology. Our partnership with **Kentucky Educational Development Corporation** will continue to provide technology training and prepare our buildings for the future by providing training to our staff and installing and maintaining our network.

Attachments/Appendices (Optional)