

Technology Plan
McCracken County Public Schools
Paducah, Kentucky



<http://www.mccrackencountyschools.net>

Creation Date: December 20, 2012

As per the SLD: The technology plan creation date is the month and year the technology plan was written, not the date when you began to develop or draft it. The SLD defines the creation date as the date it first contained all five required elements in sufficient detail to support the services requested on your Form 470. The creation date must be prior to the date the Form 470(s) is posted.

Plan Start Date: July 1, 2013

Plan Expiration Date: June 30, 2016

Acknowledgments

District Technology Staff

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Deidre Saxton, Network Support Coordinator
Carl Wells, Telecommunications Technician
Heather Schwingler, District Technician
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Additional District Contributors

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School Staff Members

Donna Turner, McCracken County High
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Executive Summary

Describe the achievements and improvements the district expects to make with respect to:

- 1) Increased student achievement in curriculum subject areas and technology literacy.

The activities included in the 2013-2016 Technology Plan are expected to bring about an overall increase in student achievement. The increase will be evident across multiple student performance measures including (but not limited to): MAP, EXPLORE, PLAN, ACT, KPREP. Regarding technology literacy, the plan will result in no less than 80% of eighth grade students demonstrating the targeted skills. These results will support the District's current mission of, "Graduating every student college/career ready." All students will continue to be exposed to Internet safety lessons annually.

- 2) Teachers use technology tools for innovative and effective teaching and learning.

Teachers will continue to enhance instruction by learning new ways to utilize their MacBook teacher station and their interactive (Mimio) boards. A variety of PD activities and professional learning community opportunities will continue to be afforded to every teacher. The effectiveness of the technology use will be measured through increased in student engagement, as well as a documented increase in student achievement.

- 3) Enhanced communication between the district and parents and the larger community.

The plan provides specific activities to enhance communication between the district, parents, and the larger community. The creation of and maintaining of up-to-date teacher web pages will provide information; while providing a venue to initiate communication between the classroom and the various stakeholders.

Planning Process and Methodology

In this section include a description of the following:

- 1) The technology planning and plan-writing process.

The technology planning and writing took place after a district-wide needs assessment. The needs assessment was part of a new Comprehensive District Improvement Planning Process (CDIP). The survey data was used to help identify technology needs. Each school, as well as the District, then completed a “self-assessment.” These self-assessments were also used to identify areas where the new technology plan could address needs that exist across the district.

- 2) The exercises undertaken to accomplish the task of revising the plan and the role that committee members, as whole, play in that process.

The revision of the plan is used to directly support the findings and activities of the CDIP in order to provide for a systematic effort to make needed improvements across the District. Committee members reviewed the previous Technology Plan, and shared in the review and discussion of the self-assessment results to help craft the overall needs for the new plan.

- 3) The frequency with which the plan is evaluated.

The plan will be evaluated in conjunction with the review and analysis of student achievement data. Outside of student achievement data, all activities will be reviewed at least annually.

- 4) Person(s) responsible for reviewing and revising the plan.

The plan will be reviewed and revised as needed by the members identified in the “Acknowledgements” section of the Technology Plan.

Also include a discussion of the “expiring” (previous year’s) plan in terms of:

- 1) Which goals were met.

All prior goals were met with the exception of one. Some of the goals have changed to meet ongoing needs.

- 2) Which goals were not met and/or had unanticipated outcomes.

The telephone system was not updated in the previous plan in preparation for the new McCracken County High School. The construction of the school was delayed by one year.

- 3) Goals that remain to be accomplished.

There continues to be ongoing training to improve technology integration particularly regarding the high school 1:1 initiative.

- 4) Goals that are no longer relevant.

Not applicable.

- 5) Needs that emerged as a result evaluation of the previous plan.

Not applicable.

Current Technology and Resources

Assess your current technology and technical staff resources to ensure successful and effective uses of technology. Be sure to include a discussion of the following:

- 1) Technologies already in place (e.g. network, phones, security systems, hardware, software, etc.).

Network:

The district's core router is a Nortel 8600; which supports 46 switches. The district's server solution is virtualized. The district's network traffic is monitored and filtered with a Lightspeed Systems content-filtering appliance.

To support the district's 1:1 laptop initiative of 2,000+ MacBooks in the high schools, MacPros are used as servers with a additional 3 Raids. 2 Enterasys HiPath controllers manage approximately 150 wireless N access points. 2 Nortel 8180 controllers manage 150 wireless N access points.

Telecommunications includes a Nortel CS1000 system with the original software. This system supports over 600 handsets, and a Call Pilot voicemail system.

There are approximately 130 security cameras throughout the district.

Resources include approximately 1,600 PC workstations, 2,500 MacBooks, 60 iMacs, 120 iPads, 240 thin client workstations, 480 LCD projectors, 350 interactive boards, and 170 large screen plasma monitors.

- 2) The condition of current technologies (i.e. bandwidth, age, capacity to utilize network and software resources), what works well, what doesn't work well, and maintenance processes and procedures.

The network runs across a 1 Gb intranet. The router is approximately 250mb and is often the "chokepoint" of the network. The 1:1 has provided thousands of workstations that are currently less than five years old. The PC workstations are primarily from the state's Instructional Device Upgrade Project; however, there have been upgrades to the RAM in a high number of these workstations.

Procedures allow for anyone in the district to pick up any phone inside the district and dial H-E-L-P to reach the technology help desk. Email accounts allow for staff and students to submit problems through email if they prefer. All issues may be emailed to tech.support@mccracken.kyschools.us.

The department is supported by stipends for a Technology Support Coordinator and a Network Support Coordinator. The district also benefits from having a district technician with a background in phone systems. Each school has a stipend position for a School Technology Coordinator.

- 3) Accessibility of technology for learners – where are systems located (labs, classroom workstations, mobile carts) – and steps taken to ensure that all students, including those in high-poverty and high-need schools, have access to technology?

Technology is located throughout the District. There are two to three PC computer labs in each of the six elementary schools. Each of the three middle schools has three to five PC computer labs. The three high schools are supported by a 1:1 MacBook initiative that provides each high school student with a MacBook. The initiative has also led to the purchase of MacBook for all teachers K-12 throughout the District. ERate funds help to ensure that high-poverty schools are well equipped with the technology they need to effectively enhance instruction.

Curriculum and Instructional Integration Goals

Goal 1

There will be an increase in the percentage of graduates who are college/career ready.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Online ACT Software	More students will reach the various college benchmark scores on the ACT.	Annual ACT results	August, 2013 through June, 2016	Melanie Jarvis, District Assessment Coordinator	ESS Funds Exceptional Children Funds District Technology Funds District Instructional Funds Title Funds
MAP Assessment	There will be continued increase in the percentage of students making a year's academic growth.	MAP results comparing growth from Spring-to-Spring and from Fall-to-Spring	August, 2013 Through June 2016	Melanie Jarvis, District Assessment Coordinator	ESS Funds Exceptional Children Funds District Technology Funds District Instructional Funds Title Funds
Open Campus Program Online Curriculum	More students will earn the credits needed to	Decrease in the number of high school dropouts	August, 2013 Through	Russ Tilford, Director of Pupil Personnel	ESS Funds Exceptional

	graduate.		June 2016		Children Funds District Technology Funds District Instructional Funds Title Funds
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Goal 2

There will be an increase in use and effectiveness of teacher webpages

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
All teachers and schools will create and maintain an up-to-date webpage.	Students and parents will be more informed about issues related to the class and school.	Student and parent survey results.	August 2013 Through June 2016	Molly Goodman, District Director of Public Relations	No cost.

Curriculum and Instructional Integration Goals and Evaluation Narrative

The plan must have clear goals and a specific implementation plan detailing how technology will be integrated into curriculum and daily instructional practice. This includes a description of:

- 1) Development and utilization of innovative strategies for the delivery of specialized or rigorous academic courses and curricula through the use of technology, including distance-learning technologies.

Teachers will utilize their district-issued laptops to use instructional sites like edmodo to expand the learning environment outside of the traditional classroom setting. The 1:1 high school laptop initiative will continue to provide students the environment to extend learning activities beyond the constraints of the classroom and bell schedule.

- 2) How these goals for using advanced technology to improve student academic achievement align with the Kentucky Program of Studies and Core Academic Standards.

The utilization of teacher webpages will provide necessary and relevant information about classes for students and parents. By having access to KCAS and District Pacing Guides, parents will be able to better partner with teachers through an increased understanding of the content being taught. MAP results will be used to help teachers provide prescriptive remediation plans for students based on weakness correlated with the Kentucky Core Academic Standards.

- 3) The evaluation process that enables the district to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise. Describe the indicators and accountability measures that will be used to evaluate the extent to which activities are effective in integrating technology into the curricula and instruction and enable students to meet challenging state academic standards.

Assessment results, as well as dropout rates, will be examined multiple times throughout each year. The assessment results will include such data as: EXPLORE, PLAN, ACT, KPREP, district-created common assessments, and three rounds of MAP benchmark testing. Frequent data analysis will provide teachers the information needed to make informed instructional decisions.

- 4) The process for gathering and using data from indicators listed above and what actions will be taken if expected results are not met. With whom will the data be shared? You may also include in an appendix any tool or survey being used, as well as results of the periodic (longitudinal) evaluation data showing the level of implementation or growth.

Data from the indicators listed above will be shared and discussed among the entire district leadership team as well as the Board of Education. If the desired results are not attained, educators will examine all aspects of the activity to determine how best to move forward to reach the desired goals in the future.

Student Technology Literacy Goals

Link to the Program of Studies and the Kentucky Core Academic Standards:

<http://www.education.ky.gov/kde/instructional+resources/curriculum+documents+and+resources/program+of+studies/default.htm>

Goal 1

No less than 80% of students will demonstrate technology and information literacy skills by the end of 8th grade.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Collaborative planning between library media specialists and technology integration specialist	A variety of student work opportunities will be planned to ensure that students have attained the required technology and information literacy skills	Evidence for each student will exist that illustrates the acquisition of required information and literacy skills.	August 2013 Through June 2016	District Technology Integration Specialist Curriculum Specialists	Professional Development Funds RTTT Funds
All students will participate in Internet Safety lessons	All students	Lesson plans will indicate participation by all students	January 2013 Through May 2016	District Technology Integration Specialist Curriculum Specialists	No Cost

Student Technology Literacy Goals and Evaluation Narrative

The plan must include an evaluation process that enables the district to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise. In this narrative provide a description of:

- 1) How the steps and activities being implemented assure that students are meeting the expectation of technology literacy by the 8th grade.

A bank of activities will be created that may be used by all teachers to provide multiple opportunities for students to create 21st century student work. A scoring guide will be included to be used to determine if a student's compilation of student work equates to mastery of technology and information literacy skills.

- 2) How the goals support the enhancement of students' 21st Century Skills of critical thinking, communication, collaboration and creativity.

Each of the above-listed areas will have activities created for teachers to utilize with all students providing students the opportunity to demonstrate technology and information literacy skills.

- 3) The instructional materials or electronic resources needed to support strategies.

Students will be able to complete activities outside of the classroom setting using the resources at their disposal; although all students will have the opportunity to complete their activities while at school. Activities will be used to enhance the regular classroom instruction, yet flexibility will be available as to when and where the activities will be completed.

- 4) The process for gathering and using data from indicators listed above and what actions will be taken if expected results are not met. With whom will the data be shared? You may also include in an appendix any tool or survey being used, as well as results of the periodic (longitudinal) evaluation data showing the level of implementation or growth.

Each middle school will identify a team that will evaluate each student's attainment of the technology and information literacy skills. The data will be shared with the entire district leadership team. If the desired results are not met, a group of educators will review the bank of activities and rubric. They will survey teachers and students, and develop a revision to the plan to ensure that future students will attain the skills. A list of deficient skills will be shared with the high school to for follow up opportunities for students to attain these skills.

Staff Training/Professional Development Goals

Goal 1

Teachers will be trained, and have ongoing support, to effectively use instructional technologies to enhance instruction.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
New teachers will attend a summer PD to learn how to effectively use their classroom technology	Teachers will use their classroom technology to increase student engagement	Various assessment results and school walkthrough data. All new teachers will demonstrate proficiency on teacher standard 6.	August 2013 Through June 2016	District Technology Integration Specialist Curriculum Specialists	Title II Part A Title I PD
Technology Integration Specialist will be utilized to coach the technology integration efforts of new teachers.	Teachers will use their classroom technology to increase student engagement	Various assessment results and school walkthrough data. All new teachers will demonstrate proficiency on teacher standard 6.	August 2013 Through June 2016	Tina Hayes, Director of Elementary Instruction Curriculum Specialists	Title II Part A Title I PD
Technology Integration Specialist will be utilized to coach the technology integration efforts the Middle Schools in MCPS.	Teachers will use their classroom technology to increase student engagement	Various assessment results and school walkthrough data. All new teachers will demonstrate proficiency on teacher standard 6.	August 2013 Through June 2016	Melanie Jarvis Director of Middle School Instruction Curriculum Specialists	Title II Part A Title I PD
Technology Integration Specialist will be utilized to coach the	Teachers will use their classroom technology to increase student	Various assessment results and school walkthrough data. All new teachers	August 2013 Through June 2016	Heath Cartwright District Technology Coordinator	PD

technology integration efforts at McCracken County High School.	engagement	will demonstrate proficiency on teacher standard 6.			
CIITS Trainer will train teachers on utilization.	Teachers will increase the use of CIITS to create and house assessments	CIITS assessments will increase in number and participants	January, 2013 through June, 2016	District Technology Integration Specialist Curriculum Specialists	RTTT Title II Part A

Staff Training/Professional Development Goals and Evaluation Narrative

The plan must include an evaluation process that enables the district to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise. In this narrative provide a description of:

- 1) The current level of ability of staff to utilize technology and the increases in competencies sought through professional development activities.

All teachers currently use classroom technologies to enhance instruction. Additional PD will provide teachers with additional strategies to increase the engagement of students leading to an increase in student achievement.

- 2) The topic(s) and nature of the training to be made available to staff.

All teachers will be provided additional training on MacBooks, as well as the “mimio” interactive whiteboard solution.

- 3) The methods to be used to provide the training (e.g. just in time, after school/summer workshops, train-the-trainer, off-site training, conferences, etc.) and the procedures to document training.

Trainings will utilize PD sign in and evaluation sheets. They will be offered in the summer for new teachers, and throughout the year with follow-up sessions for new teachers and sessions for returning teachers. Teachers will also receive ongoing support during planning period and after school meetings.

- 4) Connections between training to be offered and the curriculum goals of the district.

Trainings will lead to an increase in student engagement. The increase in student engagement will lead to an increase in student achievement as measured by various academic assessments.

- 5) Training opportunities for technical staff.

Technical staff members will have monthly meetings where they will each share out tips and strategies that their colleagues can use to become more effective and efficient.

- 6) Indicators and accountability measures that will be used to evaluate the extent to which PD activities are effective in promoting integration of technology into the curricula and instruction, enhance the ability of teachers to teach, and enable students to meet challenging state academic standards.

The primary indicators used to measure PD activities will be walkthrough data that is collected at each school, documentation from school principals about the percentage of teachers proficient in standard 6, and various student assessment results.

Technology Goals

Goal 1

Telephone system software will be upgraded in preparation for the software and hardware to be included in the system in new McCracken County High School currently under construction.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Upgrade the Nortel CS1000 Software	Classroom communication will be stable when teachers begin working in the new high school currently under construction.	When the new high school opens, all phones will work without issues. Tech support for anything related to the phones will be resolved quickly due to the advanced time to learn the new software.	January 2013 Through June 2013	Carl Wells, Telecommunications Technician	KETS Various funds associated with construction.
Purchase handsets and VoIP licenses for all additional handsets needed in MCHS and across the district.	Classroom communication will be stable in MCHS and across the district.	When the new high school opens, all phones will work without issues.	January 2013 Through June 2013	Carl Wells, Telecommunications Technician	KETS Various funds associated with construction.

Goal 2

Utilize E-Rate Priority II Funding to refresh internal connections at Farley Elementary School.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Upgrade switches and access points at Farley Elementary School.	Access for educational objectives will be more stable and expeditious.	The technology Help Desk will receive fewer work tickets related to network issues at Farley Elementary School.	March 2013 Through August 2013	Deidre Saxton, District Network Technician	KETS

Technology Goals and Evaluation Narrative

The plan must include an evaluation process that enables the district to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise. In this narrative describe:

- 1) How the activities identified above will support the district's vision for an up to date, technology-rich educational environment.

Communication and utilization of network capabilities will be increased through upgrades to the phone system and network equipment.

- 2) The technical standards used to ensure compatibility of interconnected systems.

KETS architectural standards will be adhered to. The KETS Field Service Representative will be consulted about each of these network activities to ensure compatibility.

- 3) Technology needed to maintain or enhance the current instructional environment.

A reliable wireless network is critical to instructional objectives that rely more each year on mobile devices.

- 4) The indicators and accountability measures that will be used to evaluate the extent to which technology deployment and support activities are effective in promoting integration of technology into the curricula and instruction, enhance the ability of teachers to teach, and enable students to meet challenging state academic standards.

Indicators and accountability measures will include survey information, help desk records, and discussions with administrators, teachers, and students. Student assessment results will also be reviewed to determine correlations between technology upgrades and student achievement.

**School Year: 2013-2016
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)
Online ACT Software						District Instruction
Measures of Academic Progress (MAP Benchmark Testing)						\$90,000 District General Fund
Open Campus Online Curriculum						\$30,000 Title I
Technology and Information Literacy Skills Collaborative Planning						\$1,800 PD RTTT
New Teacher Technology Training		\$1,000				
Returning Teacher Technology Training		\$2,000				
District Technology Integration Specialist: CIITS Trainer						\$65,000 RT3 Title II Part A
Telephone System Software Upgrade						\$110,000 MCHS Construction
Upgrade Switches and A.P.'s Farley Elementary School			TBD		\$45,000	
TOTAL		\$3,000			\$45,000	\$296,800