Technology Plan
McCracken County Public Schools
Paducah, Kentucky

http://www.mccrackencountyschools.net

Creation Date: December 15, 2011

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, 2012

Plan Expiration Date: June 30, 2013

Acknowledgments

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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 2012-2013 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 statement, "Focusing on Success for the Whole Child, Every Child."

    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 be afforded to every teacher. The effectiveness of the technology use will be measured through a documented increase in student engagement, as well as 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. The plan also provides for a video distribution system. This system will allow for regular broadcast streaming of events and news from the schools for internal and external stakeholders to view. This will help others to stay informed about what is going on in the schools.

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 being piloted in Kentucky by McCracken County and Elizabethtown Independent Schools. This process provided for the input from over 4,500 stakeholders as they completed various surveys. The survey data was used to help identify technology needs. Each school, as well as the District, then completed a "self assessment" to determine how well each was meeting five designated standards from AdvancED. 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 plan was not as much a revision as it was a fresh start with a new plan. With a new Comprehensive District Improvement Planning process taking place. The technology plan is being 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 plan, and shared in the review and discussion of the self assessment results to help craft the overall needs for the plan.

3) The frequency with which the plan is evaluated.

The plan will be evaluated frequently with much of the frequency being directly tied to the continual sources of new student achievement data. There will be between five and ten specific periods of time each year when various sources of student data are reviewed. 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. Graduating students will be replaced, and additional members may be added.

Also include a discussion of the "expiring" (previous year's) plan in terms of:

1) Which goals were met.

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

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

The district's T+L Conference is temporarily suspended.

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 storage solution is virtualized. The district's network traffic is monitored and filtered with a Lightspeed Systems proxy appliance.

To support the district's 1:1 2,000+ MacBooks in the high schools, MacPros are used as servers with a additional 6 Raids.   2 Enterasys HiPath controllers manage approximately 150 wireless N access points. A Nortel 8180 controller manages 75 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 2,000 PC workstations, 2,700 MacBooks, 60 iMacs, 50 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 was upgraded to a Gb in year? The router is a 100 mb and is often the "chokepoint" of the network. The 1:1 has provided thousands of workstations that are currently less than three years old. The PC workstations are primarily from the state's Instructional Device Upgrade Project.

Maintenance processes and procedures have been restructured over the past year with the addition of two new technicians. The new 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 have also been created for staff and students to submit problems through email if they prefer. All issues may be emailed to tech.support@mccracken.kyschools.us. The technology department has been restructured. The administrative assistant position was eliminated in favor of an additional technician. The department is also now 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.

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	January, 2012- May, 2013	Michael Ceglinski, Director of Secondary Instruction	ESS Funds GT Funds District Technology 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	March, 2012- May, 2013	Melanie Jarvis, District Assessment Coordinator	District General Fund
Open Campus Program Online Curriculum	More students will earn the credits needed to graduate.	Decrease in the number of high school dropouts	September, 2011- May, 2012	Russ Tilford, Director of Pupil Personnel	Title I Funds

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 will create and maintain an up-to-date webpage.	Students and parents will be more informed about issues related to the class.	Student and parent survey results.	September, 2011- September, 2013	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.	January, 2012- May, 2013	Mark Madison, District Technology Integration Specialist	Professional Development Funds

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

New teachers will be trained to effectively use their MacBook and interactive whiteboard 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.	May, 2012- July, 2013	Various and Mark Madison Instructional Coaches and Technology Integration Specialist	Title II Part D

Goal 2

Returning teachers will use classroom technologies to enhance instruction.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Ongoing PD opportunities will be provided to help returning teachers gain new skills.	Teachers will use their classroom technology to increase student engagement	Various assessment results and school walkthrough data. All teachers will demonstrate proficiency on teacher standard 6.	May, 2012- July, 2013	Various and Mark Madison Instructional Coaches and Technology Integration Specialist	Title II Part D

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 bi-weekly 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

A video distribution system will be implemented for access of broadcast video, storage and access of created video content, and a system to enhance the broadcast of media to internally and externally.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Implementation of VBrick Video Distribution	Video issues related to coaxial cabling problems will be eliminated	There will be reduction in help desk calls related to acquisition of video	June, 2012- August, 2012	Heath Cartwright, District Technology Coordinator	KETS

Goal 2

Telephone system software will be upgraded in preparation for the software 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	January, 2012- July, 2013	Carl Wells, Telecommunications Technician	KETS

	Upgrading one year early will allow technicians to learn software before new school opens.	due to the advanced time to learn the new software.			

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.

A video distribution system, will allow for video content to be used effectively and efficiently to enhance instruction.

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 video distribution system will enhance the instructional environment by providing a stable and state of the art solution for the use of video content in the classrooms.

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: 2012-2013
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						$3,500 GT $3,500 ESS
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
New Teacher Technology Training		$1,000				
Returning Teacher Technology Training		$2,000				
VBrick					$100,000	
Telephone System Software Upgrade					$20,000	
TOTAL		$3,000			$120,000	$128,800