Technology Plan

Calloway District
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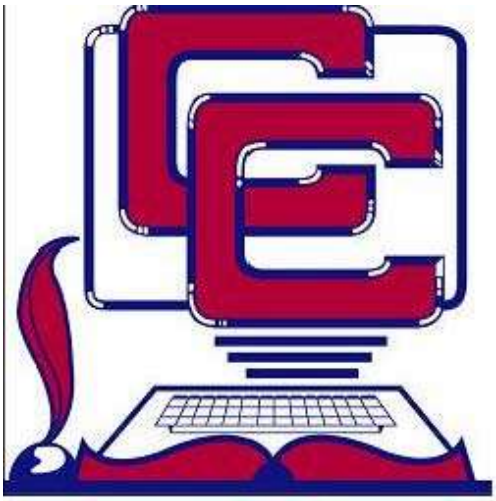

http://www.calloway.kyschools.us

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Acknowledgments

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Executive Summary

Vision Statement - "Successful – Now and Beyond"

Every student will be successful beyond his greatest expectations, now and in the future.

Mission Statement - "Learners for Life"

We, the Calloway County School Community, shall empower all students academically, socially, and personally to be lifelong learners capable of thinking, solving problems, and serving as responsible citizens ready to meet the challenges for tomorrow.

Our Vision and Mission Statements provide focus in the development of our Technology Plan which gives guidance regarding instructional use of technology in our schools. The primary focus of our Technology Plan is to provide a safe and reliable network environment and relevant classroom resources to support learning and academic growth. We strive to provide technology tools and resources to assist students on their road to academic proficiency and technology literacy to equip them for successful adult lives.

In order to achieve the technology plan goals, data from student technology assessments, periodic formative assessments, State academic assessments, along with teacher evaluation of daily classroom assignments and activities provide valuable feedback on growth and change over time along with specific areas of need. Students engage in instructional activities using technology in classroom curriculum and activities. Student assessment of technology literacy provides valuable guidance on tailoring classroom instruction to provide specific technology goals for staff professional development which are focused on the Technology Program of Studies and integration of technology into the curriculum. Classroom technology resources must be maintained and expanded to support and extend both student academic achievement and technology skill development and also expand teacher skills and competencies in utilizing appropriate technologies in the classroom. Technology skills assessments provide data for analyzing progress toward technology goals and help us make adjustments to improve and provide appropriate training and to select resources to support instruction. The Children's Internet Protection Act (CIPA) is a requirement for participation in the Universal Service Fund/eRate Program. New requirements from the Protecting Children in the 21st Century Act updated the CIPA requirements with more stringent requirements for education of minors including Cyberbullying awareness and response, Social Networking education. These are not new requirements but define and clarify the existing requirements. Another important goal of our technology plan is good communications with parents and stakeholders utilizing web resources, Infinite Campus portal technologies and e-mail.

The SpeakUp surveys provide insight into the direction we need to focus on to better serve the needs of our students and staff in an ever-changing world. The need to utilize the power and flexibility of mobile devices to supplement our traditional institutionally owned

and supported computing devices is pushing the limits of our current network. Increasing Wireless Network Access is a huge area of growing need. Historically, our wired infrastructure has been a key component in the provision of resources online and technology on desktops and in labs in support of instruction. With the advent of Bring Your Own Device/Technology (BYOD/BYOT) the increased demands for wireless service for our students and staff places additional pressure on our networks and density of signal is critical. This will be a major focus of planning and managing network resources well into the future. This officially started in Spring of 2007 ago with a Wireless Router and a limited number of Access Points in each school. In December 2010, a walk through the High School demonstrated how the need was growing much faster than our wireless network could support. Laptops, iPods, SmartPhones, eReaders, and other consumer grade devices were being brought to school and used in support of instruction. This prompted the addition of Guest Network Services and Transparent Proxy functionality to attempt to provide services to these personally owned devices that had a real, instructional purpose in our schools. This gave us a slightly better level of connectivity but is in no way adequate for the exponential growth of the wireless need we see growing by the day.

Besides connectivity, another challenge for our District is management of these BYOD/BYOT devices – both providing access and making sure the access provided is appropriate. Schools are charged with providing a safe and orderly learning environment for our students. Federal and State laws require blocking and filtering of unsuitable websites. Our current Guest Network and Transparent Proxy provide a cornerstone for management of wireless access by allowing fully, qualified District-owned devices full access to the secure, enterprise environment we have always supplied to our district-owned wired devices. A second level of access was provided starting in January, 2011 with the addition of the Guest Access to Internet directed through our CIPA compliant TMG Server with limited Special Access rules. A third level of access is being developed to allow access to District-owned non-enterprise/consumer grade devices (i.e., iPod Touch and other iOS devices) restricted with special access to approved sites. This third level will also allow greater access to District resources by wireless devices. This will be an area of growth as we move to a more fully functioning managed wireless network in our schools.

The 2012 Speak Up National Findings from Students and Parents focuses on Mapping a Personalized Learning Journey using Digital Learning in new and exciting ways to increase student achievement. This brings new challenges for adopting and adapting to a Digital world beyond what we could even imagine a few short years ago. This challenge pushes us to provide support and training for teachers who are learning to manage and leverage these new devices instructionally in their classrooms. The promise of these new resources and the capabilities they bring for supplementing District-owned devices for formative and summative assessment along with the utilization of data to customize instruction to specific student needs is a key to reaching academic excellence with every student.

Planning Process and Methodology

In January 2010, our District underwent an extensive examination by a team of Educators from AdvancedED and NCA CASI/SACS CASI which resulted in our District being granted District accreditation of all schools by the Southern Association of Colleges and Schools (SACS) as well as the Commission on International and Trans-Regional Accreditation (CITA). During this accreditation process all systems and processes were analyzed; commendations and required actions for improvement were presented to the Calloway Board of Education. This has resulted in a more specific plan with timelines for acquisition of specific hardware resources and replacement of aging workstations, professional development for staff on new and emerging technologies and integration of technology into curriculum. We are moving into our third year of implementing these changes in our schools.

Development

Our Technology Staff and School Technology Coordinators work closely together and meet frequently to review current status of network and systems district-wide and problem areas in specific schools. We discuss upcoming State and District initiatives and work on needs assessments, reporting, planning and professional development offerings. We employ a Train-the-Trainer model for professional development and the STCs and Technology staff participate in specific training and are responsible for targeting and providing appropriate professional development for school staff. We are implementing a online HelpDesk through our SharePoint Server which will provide a Knowledge base of valuable history of issues and notes regarding recommended troubleshooting steps and resolution of issues.

Implementation

All members of the Technology Planning committee share in the responsibility of implementing and supporting this plan in our schools and programs. School Technology Coordinators take a central role in training, planning and implementing new initiatives in their schools with Principals providing support, assistance with funding and guidance on an administrative level. The economic upheavals of the past few years have made it especially difficult to make plans and implement with frequent unexpected shortfalls and cuts in State funding. It has been an exceptionally trying time for supporting and following through on important initiatives.

District leadership has a role in reviewing specific programmatic requirements for federal and state programs they administer. District leadership must maintain close communication with technology leadership prior to budgeting and purchasing technology resources to ensure operational feasibility that adequate network and support resources exist and get them scheduled for implementation.

The first DRAFT of the Technology Plan for the 2012-2015 years was submitted to the District Planning Committee on December 15, 2011. Progress toward Goals and Projects was discussed along with eRate services and priorities, discount data forecast for eRate, and

timelines. The results of the Speak Up 2010 Survey were presented and briefly discussed. Simple Assessment results and analysis were presented with focus points for professional development and curriculum integration. Results of the KETS Technology Readiness Survey were shared and discussed. Priority Needs and School specific needs were discussed along with possible funding sources. The Final Draft was completed by a working committee and shared with Committee members electronically. The final 2012-2015 Technology Plan was presented to the Calloway County Board of Education at the June 14, 2012 Board Meeting. This is a living document that is revised from time to time throughout the next three years to provide for changes and adjustments in the plan required by new and emerging needs.

Evaluation

The Committee has a shared responsibility in the evaluation of the plan. The intent of the evaluation is to determine the most efficient uses of Technology within the curriculum and daily operations. The information gathered from surveys and assessments and will also evaluate progress toward implementation and feedback received from users at the school and district level.

We have used SpeakUp Surveys since 2007 to solicit input from Parents, Teachers, Students, Administrators and others. We can compare the results from our survey input to the National results of approximately 416,000 surveys for the Winter 2011 Survey window with representation from all 50 States. The results of these surveys were presented to Congress on April 24th and are frequently used to influence Federal laws and regulations that flow down to the schools; i.e., NCLB and Internet Safety. The data from our surveys is reviewed for establishing priorities and changes in direction for Calloway County Schools Technology planning.

We also utilized SimpleK12/Infosource online formative testing to determine growth in Technology Literacy based on the ISTE NETS-S standards over time. SimpleK12 also provides an assessment for teachers on integrating technology in the classroom based on the ISTE NETS-T Standards. These assessments are reviewed and provide focus for changes in curriculum for students and professional development for staff. The focus of InfoSource has shifted away from assessment of student and teacher technology literacy to Professional Development training for teachers on integrating technology into all parts of the curriculum and skill development in using various technologies instructionally for projects and curriculum assignments. We will be looking for a replacement to the assessment and student curriculum previously provided by SimpleK12/Infosource. We will investigate using the Assessment components of the Continuous Instructional Improvement Technology System (CIITS) and the item bank provided to build a customized technology literacy assessment to gauge progress toward ISTE NET-S goals for student literacy or another tool for assessing progress toward Technology Literacy goals.

Priority Needs and Goals

Priority Need	**Goal**
There is an increased need for technology resources that are efficient, reliable, robust and supportive for all instructional activities and administrative functions. Replacement and update of technology resources and addition of new and emerging technologies will be a continuous need. The advent of BYOD/BYOT, iOS and other consumer style devices will continue to grow and require density of signal, management of devices, security and professional development for staff.	Provide a safe and reliable technology infrastructure in all schools. This involves continual maintenance and upgrade of instructional devices, software, online resources, and refresh of network infrastructure to support instruction. Replace 1/6 of current workstations each year with support from all available funding sources. Add resources into our wireless network to manage and provide density of wireless coverage to handle the growing need for bandwidth. Provide professional development focused on instructional strategies required for a technology diverse BYOD/BYOT environment. Extended goal is to provide a technology-rich learning environment for all students and staff
Student Technology Literacy must be assessed in 8th Grade according to NCLB to assure students be prepared as 21st Century citizens. This requires skill-building starting in elementary grades and allows high school students to build on a strong foundation of skills before going on to post-secondary pursuits. State law mandates technology literacy for all graduating seniors starting with the Class of 2012.	Skill development of all students Primary through Grade 12 based on the Common Core Standards which provides for infusion of technology into all areas of the curriculum. Instruction starts with keyboarding and online academic resources beginning in Primary levels through increasingly complex skill development embedded into academic projects and research in secondary grades. Assessment of technology is reported upon exit at 8th grade as required by NCLB and 12th grade as mandated by State Law.

Common Core Standards and Unbridled Learning mandate the integration of Technology into the curriculum and online instructional delivery of content for anywhere, anytime access through portal technologies. Newly revised eRate requirements clarify and strengthen mandates of CIPA education regarding online behavior and interactions related to social networking and cyberbullying. Increasing the focus on Internet Safety and Productive Use of Web 2.0 tools and resources instructionally. Portal technologies for staff and students are needed to provide a safe environment for academic growth with technology skills embedded into the curriculum.	Use online instructional resources and provide secure access to district resources in a safe and secure environment. iSafe curriculum will be implemented in all schools. Guidance in utilizing SharePoint Server instructionally and use of Web 2.0 tools and resources (i.e., Wikis, blogs and discussion forums) with teacher guided and moderated use will provide students ability to interact and collaborate on instructional projects. Provide portal technologies to staff and students for academic growth, communications and access to Web 2.0 resources.
There is an inconsistent use of technology across the district resulting in the need to prepare teachers to meet and exceed the professional standards for teachers and prepare staff to implement the technology program of studies and embed technology into in curriculum for all students. The advent of Unbridled Learning in our schools renews focus on embedding technology into the Common Core Standard and appropriate professional development.	Provide professional development and opportunities for staff to gain skill in integrating technology into curriculum areas and utilize new technology resources for instruction. The Technology Program of Studies and Unbridled Learning provides guidance on strategies and embedding technology skills into curriculum is required for developing skills and proficiency in utilizing technology at all levels.
Telephone access for staff and teachers provides an important means of communication encouraging discussion and conferencing with parents and fosters a closer home to school relationship. There is a need to further develop web-based resources for communication of important information to the community at large and provide a secure and reliable online environment for parents to find resources and information pertinent to the academic growth of their children.	Provide telephone access to teachers and staff to notify and communicate important information to parents and community stakeholders in a timely manner. Provide Internet resources for publishing information of general interest to stakeholders and the community at large. Provide Intranet resources through portal technology for parents to keep up to date on academic growth and school progress. Provide Internet resources through SharePoint server to communicate general District information to all stakeholders.

Current Technology and Resources

Resources are allocated to all schools according to the Certified Average Daily Membership on the Superintendent's Attendance Report (SAAR) each year. eRate applications are submitted for shared services, such as Data Transmission Services, Local and Long Distance Telecommunications and Internal Connections according to school and district needs each year and reimbursements are tracked back to the account that purchased the services. Shared district services are allocated to all schools fairly and equitably.

Instructional Devices

Following is some of the pertinent data gathered for the Technology Tools Readiness Survey submitted in December, 2011.

1. Total Instructional Devices regardless of technical specifications:
    a. 407 Elementary Schools Instructional Devices
    b. 987 Middle and High Schools Instructional Devices
    c. 252 Classroom Teacher Instructional Devices
    d. 130 Administrators and other personnel Instructional Devices

2. Instructional Devices located in standard classrooms or labs or carried with students:
    a. Elementary Schools
        i. 52% standard classrooms
        ii. 48% fixed or mobile labs
        iii. Less than 1% are carried by and stay with students
    b. Middle and High Schools
        i. 23% standard classrooms 3 or less instructional devices
        ii. 77% labs 4 or more instructional devices
        iii. Less than 1% are carried by and stay with students

3. Total District Instructional Devices and percent that exceed the minimum standard defined by Kentucky Department of Education as modern and variable for some major educational applications.
    a. Total District Instructional Devices – 1709
    b. 61% meet or exceed minimum standards
    c. 16% are Mobile devices (Laptops or Tablets)

Infrastructure and WAN

Calloway County Board of Education is the hub site connected to the High School, Middle School and Preschool via gigabit fiber at full-duplex speed. The three elementary schools were recently upgraded to gigabit fiber connections. Calloway County is connected to the State by a 25 Mbps KEN Circuit. Each school has a Local area network. In 2007-2008, Calloway County Schools initiated an upgrade to the network in all sites through support of eRate Funding and an interest-free, 5-year lease/purchase contract with a KETS vendor. Maintenance and support continue to be a 6/30/2015 focus. This year we have applied for eRate funding for a network upgrade (Internal Connections) to take us to Gigabit to the desktop on the wired network. We implemented a RoamAbout Router in 2007-2008 with forty wireless access points scattered across our district. In January 2011 we added a core router and HiPath wireless Router to our wireless network on campus. We moved 46 RoamAbout wireless access points from campus locations to the three elementary schools and our Preschool to give them more density of signal. We concentrated our HiPath wireless access points on the campus and installed 32 wireless access points at locations across the campus which gives us a low density wireless presence. Current need at our Middle and High Schools on the campus is expanding with the addition of wireless carts of mini-laptops and advent of other wireless devices in these schools. Our Bus Garage is connected to our campus via a point-to-point secure network connection. Day Treatment and Laker Pride are connected via fiber to our instructional network resources. Maintenance is connected via fiber to provide environmental controls for all schools.

Current e-Rate requests include:

(a) A dedicated 1 GB link between each Elementary School and the Board Hub site providing for more bandwidth throughput to each elementary school. It also provides capability for running full duplex to the three elementary schools at either 1 Gbps or 10 Gbps per school for future expansion.

(b) A network upgrade on wired switches to take us to 1 Gbps switched ports to the desktop. This will also allow options to backbone fiber connectivity of either 1 Gbps or 10 Gbps depending on demand. It also provides capability for running full duplex to the three elementary schools at either 1 Gbps or 10 Gbps for future expansion.

(c) Upgrade our currently limited wireless infrastructure to provide higher density as demand increases for wireless coverage in the schools.

Technology Staff

The District Technology Coordinator is the Network Administrator and also handles all reporting and administrative roles. One Lead Technical Specialist has a higher level of responsibility for network functionality and server management. He and the District Technology Coordinator work closely together to plan implementations and expansion of services to the schools. Two additional Technical Support Specialists work under supervision of the Lead Technician and field technical support calls entered into the SharePoint HelpDesk site to serve the entire district. A half-time Secretary assists with daily office operations. The Library Media Specialist in each of the five schools is also the School Technology Coordinator and provides first level troubleshooting, instructional support

and professional development for technology initiatives in the schools. We are pleased that skill sets among the Technical Support Specialists complement and extend capabilities to include installation of Intelligent Classroom and Emerging Technology Resources, cabling, and various other maintenance and support duties for our technology infrastructure. Professional development for technical staff is provided through state conferences, periodic staff meetings and regional technical training sessions.

Instructional Staff–

STCs have a critical dual focus as both Instructional Leaders and first level Technical Support and meet periodically for staff development/train-the-trainer sessions as a district-wide group, to share technical and instructional information and plan initiatives and professional development opportunities for other staff members. They also participate in Regional TIS/TRT meetings and training opportunities. Specialized instructional technology professional development is provided to School Technology Coordinators and selected staff through state meetings, regional meetings, and professional conferences. The School Technology Coordinators and staff provide training in each school according to the needs of each school determined through surveys and individual needs assessment information collected each year through the Comprehensive School Improvement Plan process. For the last four years we have participated in the SpeakUp initiative which gives us data collected through a national initiative regarding instructional use of technology in our schools and feedback on student, staff, parent and administrator needs and opinions. We will continue the collection of information through this Survey opportunity again in the coming years.

Strategies and Activities employed to achieve goals:

- Make appropriate purchases of technology in compliance with the KETS Master Plan, school/district priorities, and needs of students.
- Wiring in all schools will continue to be maintained and upgraded to provide cable for network connectivity in to all instructional and administrative locations. Needs are increasing for wireless connectivity, Access Points, switches and other hardware will be purchased and installed as needs require.
- Network components currently provide 100 mbps switched speed to the desktop in all locations – we have requested eRate funding to upgrade network speed and connectivity to 1 Gbps speeds. We will continue to maintain and support our cable infrastructure and investigate product upgrades and service adjustments for maintaining a secure and robust network environment.
- Continue professional development in utilizing and maximizing instructional impact of technology resources in all classrooms with focus on embedding technology into curriculum will be priorities.
- Continue development of SharePoint Server resources and expansion of online instructional capabilities and utilization of Web 2.0 tools in classrooms. Utilize portal technologies to provide a safe and secure teaching/learning resource for staff and students.
- Local and long distance telephone service is provided in all instructional and administrative locations to provide timely and pertinent communication with parents and community. eRate provides relief and reimbursements based on Free- and Reduced-Lunch counts.

- Kentucky Education Network broadband connection between the District and State provides access to Internet, curriculum, research and web-based resources in all Schools. Limited bandwidth is a concern going forward with increasingly more instructional Resources and Assessments being cloud- or Internet-based.
- High speed Data Transmission Services connecting all district schools to the Board hub site provide high-speed connectivity for Internet, locally hosted streaming video, locally hosted Kentucky Student Information Services, e-mail, DNS and DHCP services. The campus is currently connected via fiber running full duplex Gbps speeds from hub to High School and Middle School. The new contract submitted to eRate provides an increase of bandwidth for the three elementary schools which is critical to the instructional capabilities for the elementary schools.
- In January 2012, we added a Core Switch with advanced routing technologies to our network and a wireless router to provide connectivity for wireless devices, both District-owned and personally owned wireless devices. Transparent Proxy service is an important addition to our network and allows us to control and monitor access to the Internet for both District and personally owned devices. It captures and routes network traffic through our CIPA compliant appliances to provide a safe and secure learning environment for our students. This is a challenging and growing area for development of our network and resource management. We have requested eRate funding to increase density of wireless signal in each school. This is a critical need currently on the campus and growing in our three elementary schools.

Evaluation

The Technology Plan follows the Comprehensive District Improvement Plan model with frequent review of the progress of implementation of various goals/strategies and impact of key initiatives on instruction and growth of students and staff. This is a continuous improvement model and not bounded by artificial boundaries of time but rather reviewed and refined over time. Frequent meetings and discussions of instructional and technical needs provide a picture of the current health and growth in the district as it developes. Each year the district goes through a very detailed and systematic analysis of where we started, where we have been, and where we are going in our movement toward Unbridled Learning.

Curriculum and Instructional Integration Goals

Use online instructional resources to provide Intranet portal access to district resources in a safe and secure environment. Guidance in utilizing SharePoint Server instructionally and use of Web 2.0 tools and resources (i.e., Wikis, blogs and discussion forums) with teacher guided and moderated use will provide students ability to interact and collaborate on projects. Portal technologies provide opportunities for staff and students to utilize Web 2.0 collaborative tools on challenging instructional projects.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide professional development on technology integration to support UNBRIDLED LEARNING and Common Core Standards instructionally using CIITS resources and Unbridled Learning.	Staff skill development in integration of technology in all areas of the curriculum using CIITS and Unbridled Learning.	Evidence of research based strategies and integration of technology in curriculum is evidenced in lesson plans and evident as observed in instructional walkthroughs.	6/30/2015	School Technology Coordinators, Principals, Teachers District Administrators,	KETS NonKETS General Fund Title II Part D
Attend local and state professional development activities to learn to implement research-based strategies and instructional techniques.	District will implement a learning environment focused on student achievement through UNBRIDLED LEARNING aligned curriculum, CIITS, etc.	Evidence of research based strategies and integration of technology in curriculum is evidenced in lesson plans and evident as observed in instructional walkthroughs.	6/30/2015	School Technology Coordinators, District Administrators, Principals, Teachers	KETS NonKETS General Fund NCLB Title II Part D
Research-based Strategies and Techniques --Teachers and administrators will attend local, state and national professional development activities to learn to implement research-based strategies and instructional technology techniques.	Staff skill development in utilizing research-based strategies and instructional technology techniques in all areas of the curriculum will be increased.	Evidence of research based strategies and integration of technology in curriculum is evidenced in lesson plans and evident as observed in instructional walkthroughs.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS PD General Fund NCLB Title II Part D

Internet Safety and Digital Citizenship for Internet use and strengthen skills in utilizing i-Safe Curriculum, KET Encyclomedia Streaming Video resources and other online resources	Focus attention on Internet Safety and Digital Citizenship. Utilize the online resources including i-Safe Curriculum , KET Encyclomedia for streaming video directly tied to the appropriate use of Internet for research and project development.	Evidence of research based strategies and integration of technology in curriculum is evidenced in lesson plans and evident as observed in instructional walkthroughs.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS General Fund Title II Part D
Differentiation of instruction --Professional development activities will include strategies to detect student preferred learning modality and provide guidance for designing differentiated instruction for all students including UDL.	Staff will demonstrate skill in providing differentiated instructional options for all students supporting integration of technology embedded in the curriculum.	Evidence of research based strategies and integration of technology in curriculum is evidenced in lesson plans and evident as observed in instructional walkthroughs.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS General Fund NCLB Title II Part D
Online resources and server-based software applications are selected by each school to address specific student academic needs. These include Renaissance Place, APlus, ExamView, STAR Reading, Study Island, MOBI Math, GOMath and AIMSWeb.	Student growth on academic content is measured and reported to staff for tailoring instruction to specific needs.	Disaggregation of Data is evident in lesson plans and schedules used to plan differentiated instruction to meet needs of students.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS General Fund NCLB Title II Part D
NWEA MAP formative Testing -- Testing windows are established three times per year to guage student progress over time. Data disaggregation provides important information regarding areas of strength and weakness critical to tailoring instruction for each student.	Testing windows are established three times per year to guage student progress over time. Data disaggregation provides important information regarding areas of strength and weakness critical to tailoring instruction for each student.	Disaggregation of Data is evident in lesson plans and schedules used to plan differentiated instruction to meet needs of students.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	General Fund

Classrooms throughout the District have been retrofitted with Intelligent Classroom and Emerging Technology Resources including: Projectors, SmartBoards, Mimio, Whiteboard, Slates, Student Response Systems, Document Cameras, etc	Use and integration of technology is evident in lesson plans, observations, and instructional walkthroughs conducted by District Administrators.	Evidence of use and integration of technology in lesson plans, observations and instructional walkthroughs.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS General Fund NCLB Title II Part D
District-owned and Personally-owned iDevices (i.e., iPads, iPod Touchs, Kindle, SmartPhones, Mini-Computing Devices, etc.) are being utilized instructionally inside and outside of classrooms.	Teachers are working with students to utilize new technologies to support learning inside and outside of traditional classrooms. Formative Assessment, data collection, collaboration and research capabilities extend the learning and academic achievement of students.	Evidence of use and integration of technology in lesson plans, observations and instructional walkthroughs.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS General Fund NCLB Title II Part D
Utilization of Video Capture and digital imaging for projects and research adds a visual dimension to academic assignments.	Students present research and findings in new and exciting digitized project, another example of differentiation of instruction for students.	Evidence of use and integration of technology in lesson plans, observations and instructional walkthroughs.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS General Fund NCLB Title II Part D
SharePoint Server provides resources for developing online classroom environments available to students and staff in a secure Portal environment.	Students and teachers interact in a learning environment utilizing resources and Web 2.0 tools and utilities providing opportunities for immediate feedback, collaboration and discussion.	Evidence of utilization in lesson plans, resulting in student access for feedback, collaboration and discussion.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS General Fund NCLB Title II Part D

Curriculum and Instructional Integration Goals – Evaluation

Great effort has been made to incorporate more technology tools and upgraded devices into our schools. District-wide each school has been allocated local funds to update and add classroom resources such as workstations, mounted projectors, document cameras, SMART Boards, Mimios, mobile technologies such as iPod Touch and mini-computing devices among other items. This provides staff and students with newer devices to better equip them for teaching and learning in a digital age.

Instructional Review and Walkthroughs are structured to observe instructional practices and strategies and collect data on best practices. The data is collected through SharePoint server and gives immediate feedback to both administrators/supervisors and instructional staff. This allows for mid-year modification and opportunities for growth in instructional techniques.

Student Technology Literacy Goals

Skill development of all students Primary through Grade 12 based on the Technology Program of Studies through integration into curriculum. Instruction starts with keyboarding and online academic resources beginning in Primary levels through increasingly complex skill development embedded into academic projects and research in secondary grades. Benchmarks provide guidance for instruction. Assessment of technology is reported upon exit at 8th grade as required by NCLB and 12th grade as mandated by State Law.

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

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Embed Technology skills into all content areas and align curriculum with the UNBRIDLED LEARNING Curriculum Documents and the Technology Program of Studies Expectations.	Teachers will incorporate technology skills development and productivity standards into instruction. CIITS will provide alignment of resources with curriculum to assist in selection and tailoring instruction to embed technology skills.	Evidence of use and integration of technology in lesson plans, observations and instructional walkthroughs.	6/30/2015	School Technology Coordinators,District Administrators, Principals, Teachers	KETS NonKETS Local All available funding sources
Acceptable Use Policy Training	Students receive yearly training on the revisions to the AUP.	Students and parents sign AUP Agreement allowing access to the Network and Internet.	6/30/2015	School Technology Coordinators, Principals, Teachers	KETS NonKETS Local Resources
Internet Safety --Training on the Internet Safety is a critical area of need for all students.	Students receive yearly training on iSafe Internet curriculum and practices in conjunction with the AUP training and frequent safe practices and reminders embedded in instructional content.	The iSafe e-Rate subscription services tracks and reports progress staff use of i Safe Internet curriculum resources presented to students. Threat Management Gateway monitors traffic and provides reports of user access.	6/30/2015	School Technology Coordinators, Principals, Teachers, Computer Lab Assistants	KETS NonKETS Local

Digital Citizenship – Teachers will incorporate the best practices of Digital Citizenship into 21st Century Classrooms.	Digital Citizenship is embedded into technology instructional content, projects, and practices.	Assessment will provide data to support progress toward goals of the ISTE NETS-S standards.	6/30/2015	School Technology Coordinators, Principals, Teachers, Computer Lab Assistants	KETS NonKETS Local
21st Century Classrooms and Web 2.0 Skills	SharePoint 2007 Server resources will be used to introduce Web 2.0 skills into classroom instruction.	Assessment will provide data to support progress toward goals of the ISTE NETS-S standards.	6/30/2015	School Technology Coordinators, Principals, Teachers	KETS NonKETS Local
Support for integrating technology within the curriculum will be provided through KET Encyclomedia, KYVL, Student Response Systems and other online instructional resources.	Professional Development to support these activities will be provided.	Staff integration of technology will be increased as evidenced by lesson plans and administrator observations. CIITS will provide alignment of resources with curriculum to assist in selection and tailoring instruction to embed technology skills.	6/30/2015	School Technology Coordinators, District Administrators, Principals, Teachers	KETS NCLB Title IID Local

Student Technology Literacy Goals – Evaluation

We are continuing our focus on Digital Citizenship elements for students and ISTE NET-S Standards. Technology Literacy Assessment for students at the Middle School and High School will be continued. This provides a measure of Technology Literacy that is very helpful in analyzing strengths and weaknesses of our instructional program from year to year. Historically, the highest scores are in Digital Citizenship and you can see consistent progression of scores from 8th to 10th to 12th grade. We used this as a measurement tool for Technology Literacy last year and have entered into a contract to continue through 6/30/2015. We are also initiating for the 2012-2013 school year, iSafe curriculum to monitor compliance with the new eRate requirements for curriculum and clarifications regarding proper use of Internet resources, and appropriate online behavior including interacting with other individuals on social networking sites, in chat rooms and cyberbullying awareness and response.

Staff Training/Professional Development Goals

Provide professional development and opportunities for staff to gain skill in integrating technology into curriculum areas and utilize new technology resources for instruction. The Technology Program of Studies provides guidance on strategies and embedding technology skills into curriculum is required for developing skills and proficiency in utilizing technology at all levels.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide professional development on technology integration to support the curriculum in all content areas using the UNBRIDLED LEARNING Curriculum and Technology Program of Studies.	Staff skill development in integration of technology in all areas of the curriculum using the Technology Program of Studies.	Evidence of PD activities on integration of technology and research-based strategies in schedules, lesson plans and school calendar. Administrative walkthroughs provide snapshots of instructional practices and reports are shared with individual staff members for personal growth.	6/30/2015	School Technology Coordinators, Principals, Teachers District Administrators,	KETS NonKETS Local Funds NCLB Title II Part D
Attend local and state professional development activities to learn to implement research-based strategies and instructional techniques.	District will implement a learning environment focused on student achievement through an aligned curriculum, UNBRIDLED LEARNING..	Evidence of PD activities on integration of technology and research-based strategies in schedules, lesson plans and school calendar.	6/30/2015	School Technology Coordinators, District Administrators, Principals, Teachers	KETS NonKETS Local Funds NCLB Title II Part D
Provide professional development on technology integration to support the curriculum in all content areas using the UNBRIDLED LEARNING Curriculum and Technology Program of Studies	Staff skill development in integration of technology in all areas of the curriculum using the Technology Program of Studies.	Evidence of PD activities on integration of technology and research-based strategies in schedules, lesson plans and school calendar. Administrative walkthroughs provide snapshots of instructional practices and reports are shared with individual staff.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS General Fund NCLB Title II Part D

Utilizing a Train-the-Trainer model for Professional Development School Technology Coordinators participate in the iSafe Curriculum resources focusing on Internet Safety and Digital Citizenship Training opportunities.	Focus attention on i-Safe Curriculum resources and Digital Citizenship.	Evidence of PD activities on i-Safe Curriculum resources, Digital Citizenship and research-based strategies in schedules, lesson plans and school calendar. Administrative walkthroughs provide snapshots of instructional practices and reports are shared with individual staff members for growth.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS PD General Fund Title II Part D NCLB
Utilizing a Train-the-Trainer model for Professional Development School Technology Coordinators Strengthen skills in utilizing i-Safe Curriculum resources, Digital Citizenship, KET Encyclomedia Streaming Video resources and other online resources	Utilize the i-Safe Curriculum, Digital Citizenship and KET Encyclomedia resources for streaming video directly tied to the curriculum and other online resources.	Evidence of PD activities on integration of technology utilizing i-Safe Curriculum resources, Digital Citizenship, KET Encyclomedia and research-based strategies in schedules, lesson plans and school calendar. Administrative walkthroughs provide snapshots of instructional practices and reports are shared with individual staff members for growth.	6/30/2015		
Research-based Strategies and Techniques --Teachers and administrators will attend local, state and national professional development activities to learn to implement research-based strategies and instructional technology techniques.	Staff skill development in integration of technology in all areas of the curriculum using the Technology Program of Studies and Unbridled Learning goals.	Evidence of PD activities on integration of technology and research-based strategies in schedules, lesson plans and school calendar. Administrative walkthroughs provide snapshots of instructional practices and reports are shared with individual staff members for growth.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS PD General Fund Title II Part D NCLB
Differentiation of instruction--Professional development activities focused on for all students will be provided for staff.	Staff skill development in integration of technology in all areas of the curriculum using the Technology Program of Studies	Evidence of PD activities on integration of technology and research-based strategies in schedules, lesson plans and school calendar.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS PD General Fund Title II Part D NCLB

Professional Development to train teachers to utilize school-specific Intelligent Classroom and Emerging Technology Resources must be made available to all teachers according to needs. "These resources include: Projectors, SmartBoards, Mimio, Whiteboard, Slates, Student Response Systems, Document Cameras, etc	Staff utilization of new Intelligent Classrooms and Emerging Technology resources instructionally with students.	Evidence of PD activities on integration of technology and research-based strategies in schedules, lesson plans and school calendar. Administrative walkthroughs provide snapshots of instructional practices and reports are shared with individual staff members for growth.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS PD General Fund Title II Part D NCLB
Professional Development to train teachers to utilize Continuous Instructional Improvement Technology System (CIITS).	Staff utilization of new CIITS resources to transform classroom practice by examining available State, Nationally normed and additional testing data. Constructing appropriate curriculum resources from available online resources and creating formative assessments to build student competency and build academic proficiency.	Evidence of PD activities on utilization of the CIITS resources to establish practices of continuous instructional improvement for all students. Administrative walkthroughs provide snapshots of instructional practices and reports are shared with individual staff members for growth.	6/30/2015	School Technology Coordinators, Principals, Teachers, District Administrators,	KETS NonKETS PD General Fund Title II Part D NCLB

Staff Training/Professional Development Goals – Evaluation

All schools develop their own school-level Professional Development Plans with opportunities for staff to grow in the education profession and get updated on their school's technology resources and initiatives. We utilize a train the trainer model for many of our PD offerings and continuous building on previous skills and competencies. Trainers are frequently the School Technology Coordinator who acts as a Technology Integration Specialist for the School. The purpose of continuous Technology professional development activities is to introduce new technologies implemented or continue development of skills on existing technologies in place to support instruction and student learning.

SharePoint Server provides resources to teachers and administrators providing access to shared resources and opportunities for growth of online learning environments, social-networking opportunities and collaboration in a safe and secure, district-owned resource. This resource also provides web resources and information for parents and the community at large and also for restricted instructional and Administrative functions in our District. Recently our Principals and District Administrators have been using the functionality of SharePoint Server on Instructional Rounds and Walkthroughs to monitor instructional practices in our classrooms. This gives immediate access to the data for both the individual teacher and collectively for the Administrators to assist in determining professional development offerings that will make the most impact on instructional practice in our schools. School Technology Coordinators and other stakeholders such as District Administrators, Program Coordinators, and teachers will continue working with SharePoint Server for many years. This has been a large undertaking for the district which requires constant updating of information while trying to learn and utilize more SharePoint features available within and outside of the district.

Technology Goals

Provide a safe and reliable technology infrastructure in all schools. This involves continual maintenance and upgrade of instructional devices, software, online resources, and network infrastructure to support instruction. Refresh of our workstations is a critical need and priority each year with support from all available funding sources. We are encouraging inclusion of personal devices as appropriate in school instructional practice. This will allow more personalization of learning experiences and increase the availability of technology resources for our students. This BYOD/BYOT outreach requires a much greater density of wireless access in schools and Professional Development to develop skills for utilizing these new devices instructionally. The extended goal is to increase instructional devices to achieve a one-to-one ratio. We will continue to support and implement new and emerging technologies in all classrooms.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Upgrade network hardware, software and infrastructure to 1 Gbps switched connectivity. Currently, our Internal LANs provide Switched 10/100 Network connectivity and wireless has been installed in all schools with low density of signal. The wireless resources must provide more signal strength for the growing BYOD/BYOT resources being brought to school by students and staff, as well as, District owned wireless resources in all Calloway County Schools.	Enhance instructional and administrative efficiency in classrooms and all areas of the School.	Monitoring and management of network functioning is an 6/30/2015 process.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF KETS NonKETS Local
Wiring in all schools will continue to be maintained and upgraded to provide cable for network connectivity to support speeds of 1 Gbps minimum in all locations and additional PoE support for Access Points and future devices requiring PoE resources.	Student learning will be increased due to utilization of online resources, web resources (Intranet and Internet), e-mail, DNS and DHCP.	Monitoring and management of network connectivity and need for additional cable is reported to support staff. Users report any problems they encounter in a timely manner.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF KETS NonKETS Local

High Speed Data lines utilizing 1 Gbps minimum for all school locations to provide connectivity for Internet, e-mail, DNS and DHCP services.	Allow access to online instructional resources and collaborative instructional projects. More efficient use of shared network and Internet resources by schools remote to the District Hub site.	Workstations can logon and access Internet and online resources.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF KETS NonKETS Local
High Speed Data Lines from the District Hub Site to the State and Internet maximizes impact of instructional resources. This is becoming an increasingly essential service with the advent of more online assessment and CIITS resources for instructional improvement.	High speed Internet and network server connections allow access to applications, online assessment and access to real-time instructional resources.	Workstations can logon and access Internet and online resources.	6/30/2015	School Technology Coordinators, District Administrators, Principals	USF Local KETS Non-KETS
V-Brick Cable TV and IP-based Video transmission to classrooms and streaming video of instructional content on demand in classrooms and via SharePoint Portal to home computers.	Cable TV and IP based network applications to broadcast professional development, content development, and public service announcements to students and parents on demand.	Workstations can logon and access Internet and online resources.	6/30/2015	School Technology Coordinators, District Administrators, Principals	Local KETS Non-KETS
Upgrade and refresh computers and related technology in all schools to support instruction and assessment continues to be a priority. A six year refresh cycle is recommended by the State. Replacement of 1/6 of our workstations is an ambitious goal but we will continue to take advantage of every opportunity and funding source to move closer to that goal.	Provide robust, efficient and up-to-date resources for classroom instruction and assessment. Students and staff increase effective instructional practices in classrooms and show academic growth through quality of projects and assignments, formative and summative evaluations.	Workstations have a six-year refresh in the Master Plan for Technology presented each year to the State Board of Education. District Assurances from the Consolidated Plan include a statement that adequate technology resources will be supplied for students and staff.	6/30/2015	School Technology Coordinators, District Administrators, Principals	USF Local KETS Non-KETS All funding sources
Virtualization Project – take three high-level servers, and create a fail-over cluster capable of handling the load for the district applications and storage. Add a iSCSI SAN, and additional resources to virtualize aging server-based applications from across the district to provide a safe secure, robust and reliable server base.	Provide a robust, efficient, and up to date resource for server based applications and storage. Management of the Virtualized fail-over cluster will reduce the support time and costs.	Monitoring and support of the virtualized environment will provide a a safe secure, robust and reliable server base and reduce or eliminate time lost and risk associated with loss of data.	6/30/2015	District Technology Coordinator, Lead Support Technician	Local KETS Non-KETS

Make appropriate purchases of technology in compliance with the KETS Master Plan, including evaluation of Intelligent Classroom resources, school/district priorities, and needs of all students.	Student learning will be increased as evidenced by formal and informal performance assessments in technology.	The Master Plan for Technology presented each year to the State Board of Education lists appropriate resources for classroom use. District Assurances from the Consolidated Plan include a statement that adequate technology resources will be supplied for students and staff.	6/30/2015	School Technology Coordinators, District Administrators, Principals	USF Local KETS Non-KETS
Appropriate purchase of servers and other technology resources to meet Federal, State and local requirements regarding Internet Safety and CIPA requirements.	Microsoft Threat Management Gateway and categorical blocking and filtering lists provide a safe and appropriate Internet environment for students and staff.	The Master Plan for Technology presented each year to the State Board of Education lists appropriate resources for use in schools. District Assurances from the Consolidated Plan include a statement that adequate technology resources will be supplied	6/30/2015.	District Technology Coordinator Technology Support Staff School Technology Coordinators	Local KETS Non-KETS
Planning and budgeting for an upgrade to Gigabit speed to the desktop will be developed considering funding from all available resources.	Student learning will be impacted by the increased speed on our network.	Bandwidth and speed are critical components of providing a reliable and robust network environment.	6/30/2015	District Technology Coordinator, Superintendent, Board of Education, Finance Officer	Local USF KETS NonKETS
Data Transmission Services between the District and State will be increased according to instructional needs as monitored and approved by the State who provide KEN circuits to provide adequate bandwidth for access to Internet and web-based resources in all Schools in Kentucky.	Increased bandwidth will have a positive effect on the instructional environment for research, project development, formative and summative assessment. Reliability and capability will expand the Internet and web-resources for classroom instruction.	The State KIDS/KDE staff monitors the health and status of the Data link and allocates additional resources to support instructional needs.	6/30/2015.	District Technology Coordinator, Technology Support Staff	State KEN Funding/Resource Allocation

Data Transmission Services between the District and Schools will be increased according to instructional needs to provide more bandwidth for access to Internet and web-based instructional resources in all Schools. Continued support for maintaining expanding bandwidth as the usage grows is a priority.	Increased bandwidth will have a positive effect on the instructional environment for research and project development. Reliability and capability will expand the Internet and web-resources for classroom instruction	The District Support staff continue to monitor the health and status of the Data links. When limits are approached, expansion of bandwidth to support instructional needs is a consideration for bidding for the eRate cycle.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF Local KETS Non-KETS
Policy regarding use of Personally owned devices will be revised in the AUP for Calloway County Schools. No personally owned devices will receive support from Technology Staff.	The AUP updated to address wireless access to guest network by personally owned devices.	The AUP will reflect the Personally owned devices policy.	6/30/2015.	District Technology Coordinator, School Technology Coordinator	Local KETS Non-KETS
Personal Devices will be allowed for expansion of instructional of resources in our District. They will be used in accordance with accepted instructional practice in our classrooms and libraries. These may include: iDevices, iPads, iPod Touchs, eReaders, and Smart-Phones.	Services will be provided to personally-owned devices through a guest wireless network access which is subject to blocking and filtering through CIPA compliant devices.	Students and Staff will be allowed to bring personally owned devices into our schools as allowed in our AUP. Guest access through the Wireless will allow access through CIPA compliant devices.	6/30/2015	District Technology Coordinator, Technology Support Staff, School Technology Coordinators	Local KETS Non-KETS
Wireless access will be provided for Personally-owned iDevices for limited resources through a separate guest wireless network.	Services will be provided to personally-owned devices through a guest wireless network access which is subject to blocking and filtering through CIPA compliant devices, currently Microsoft Threat Management Gateway.	Students and Staff will be allowed to bring personally owned devices into our schools as allowed in our AUP. Guest access through the Wireless will allow access through CIPA devices.	6/30/2015	District Technology Coordinator, Technology Support Staff, School Technology Coordinators	Local KETS Non-KETS
Services will be provided to Enterprise compliant District-owned mobile devices through a secure wireless network managed and held to the same high standards as those our enterprise secure network wired devices follow.	Services will be provided to district-owned devices through a secure wireless network access which is subject to blocking and filtering through CIPA compliant devices.	The District Support staff will monitor the health and status of the structure.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF Local, KETS Non-KETS

Services will be provided to District-owned consumer grade devices (i.e.,Kindle/Nook eReader and iOS devices) through a separate SSID secure wireless network managed secure network structure our wired devices follow.	Services will be provided to district-owned devices through a secure wireless network access which is subject to blocking and filtering through CIPA compliant devices.	The District Support staff will monitor the health and status of the structure.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF Local, KETS Non-KETS
Maintenance and support of network reliability of our current 100 mbps switched infrastructure to the desktop continues to be a priority. Upgrade to 1 Gbps to the desktop is a long-term goal.	Student learning will be increased due to better utilization of Internet resources, web resources.	The District Support staff will monitor the health and status of the structure.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF Local, KETS Non-KETS
Emerging Technologies will be added to classrooms according to each school's Wish List and resources. The individual schools Wish Lists are included in Appendix A of this plan.	Student learning will be increased due to better utilization of Internet resources, web resources.	The District Support staff will monitor the health and status of the structure.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF Local, KETS Non-KETS
SharePoint Server continues to be a resource for all staff and students through web-based, online and portal technologies for instruction, Web 2.0 interaction and administrative functioning.	Student learning will be increased due to better utilization of portal resources. District efficiency will be positively affected due to server resources availability for sharing and updating.	The District Support staff will monitor the health and status of the structure.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF Local, KETS Non-KETS
Technical Support Services will continue to install, troubleshoot, maintain and plan for expansion of the district owned resources and physical plant for support of instruction and administration of our schools. A SharePoint based Helpdesk is currently being piloted in schools for further expansion in the Fall.	Student learning will be increased due to better utilization and maintenance of district-owned resources. With more reliability and less down-time when troubles arise.	The District Support staff will monitor the health and status of the structure.	6/30/2015	District Technology Coordinator, Technology Support Staff	USF Local, KETS Non-KETS
Library resources were combined and upgraded to an online District hosted-	Student learning will be increased due to updated	The School Technology Coordinators and	6/30/2015	District Technology Coordinator, School	Local,

Destiny server for all five schools. This expands services to all students and staff on a 24x7 basis for access both inside and out of school hours through secure portal services.	Library Services Management software for library and school reference resources.	District Support staff will monitor the health and status of the server.		Technology Coordinator, , Technology Support Staff	
Appropriate School Nutrition services will be supported by selected software. Currently, this includes Lunchbox for POS and Reporting, Site Manager for processing applications and NutriKids for Menus and meal content.	Student learning will be increased due to better utilization of foodservice software and tracking of appropriate student meals.	The Foodservice Director and staff along with District Support staff will monitor the health and status of the services.	6/30/2015	District Technology Coordinator, Foodservice Director and staff, Technology Support Staff	Foodservice
Foodservice added "MySchoolBucks" functionality over the summer of 2011. Parents have the abilty to deposit funds into the school lunch account online for a small fee. This also allows parents to check the status of their account and review every meal the child consumes as well as any additional items the child purchases with deposited money.	Student learning will be increased due to better utilization of foodservice software and tracking of appropriate student meals.	The Foodservice Director and staff along with District Support staff will monitor the health and status of the services.	6/30/2015	District Technology Coordinator, Foodservice Director and staff, Technology Support Staff	Foodservice
SmartTemps Controllers were installed at each Foodservice Freezer to monitor and report any fluctuations in temperature that might indicate a problem.	Safety of food products served in cafeterias is highest priority and this program gives immediate alarms to proactively protect our students.	The Foodservice Director and staff along with District Support staff will monitor the health and status of the services.	6/30/2015	District Technology Coordinator, Foodservice Director and staff, Technology Support Staff	Foodservice
Environmental Controls to monitor heat/AC, humidity and equipment will be monitored and used to manage the proper functioning of these systems to achieve comfort and economy of resources.	Student learning will be increased due to better utilization of HVAC software and tracking to provide a comfortable learning environment.	The Maintenance Director and selected staff will monitor the health and status of the structure.	6/30/2015	District Technology Coordinator, Maintenance Director and staff, Technology Support Staff	Maintenance General Fund

Technology Goals – Evaluation

The alignment of curriculum to the Common Core Standards and Technology Program of Studies is a continuous process which will be monitored and adjusted over time. The addition of the Technology Program of Studies and the impact of the ISTE NETS-S and NETS-T standards for Student and Teacher technology use make it imperative for all teachers to become even more focused and skilled in integrating technology into all curriculum areas and teach specific skills to students in a systematic and planned fashion. This will take renewed dedication, focus, and training in every school and at every grade level to achieve. CIITS (SchoolNet) will link curriculum to resources and technology skills. Digital Citizenship and access to the iSafe curriculum

We have used SpeakUp from Project Tomorrow since 2008. These surveys collect data from Students, Teachers, Parents, Administrators and others. The data collected from Calloway County Stakeholders align closely with the results of surveys from the 330,000 other surveys collected from across the United States. In places where there are discrepancies, we look for reasons and ways to remediate and fill in gaps. The data provided gives information on trends and successes. The data is collected each winter and analyzed and reported to Congress in the Spring.

In 2008, two of our schools were selected as members of the SpeakUp 200 Schools list and in 2010 three of our schools were selected as members of the SpeakUp 200 schools list. Over 30,000 schools participate from across the country and almost 400,000 stakeholders participate. We are the only schools from Kentucky listed, quite an honor and a tribute to the parents, students, and educators of Calloway.

Provision of a reliable and robust network environment is its own test on a daily basis and we strive to keep disruption across the district caused by internal issues to a minimum. The use of technology resources to support instruction and academic growth in the classrooms provides students with skills and knowledge needed to grow be successful in the future. Our District network and resources are maintained and extended to the maximum in our classrooms and provide opportunities for learning in authentic learning situations. Formative assessment provides data and allows modification of instruction to meet the needs of individual students. Walkthroughs and observation of instructional practice provides opportunities for growth in techniques and strategies that are research-based best practices and proven to be effective.

Budget Summary – Year 1

School Year: 2012-2013
Annual Budget Summary

- List the professional development and technologies to be acquired during each year of the agency's plan.
- List all funding sources for recurring services, anticipated purchases, and professional development.
- Include the total of all technology resources to support the district's technology initiatives.
- Note: At least 25% of the funds allocated to an LEA through the *Title IID ED Tech Program* (Competitive and Non-Competitive), must be allocated for professional development activities.
- This information will be helpful in completing Item 25D on the E-Rate Form 471.

Acquired Technologies and Professional Development	Ed Tech Competitive Title IID	Ed Tech Formula Title IID		Local Funds	E-Rate	NCLB/other than Title IID	KETS	Other (Specify)
Professional Development							5000	
Hardware				175000	250000		64000	
Software				25000			25000	
Telecommunications – Voice Local and Long Distance, Cell Service				8000	18000			
Telecommunications – Fiber				12000	48000			
Technical Support and Salaries				150000				
Travel							2000	
TOTAL				370000	316000		96000	

Budget Summary – Year 2

School Year: 2013-2014
Annual Budget Summary

- List the professional development and technologies to be acquired during each year of the agency's plan.
- List all funding sources for recurring services, anticipated purchases, and professional development.
- Include the total of all technology resources to support the district's technology initiatives.
- This information will be helpful in completing Item 25D on the E-Rate Form 471.

Acquired Technologies and Professional Development	Ed Tech Competitive Title IID	Ed Tech Formula Title IID		Local Funds	E-Rate	NCLB/other than Title IID	KETS	Other (Specify)
Professional Development							5000	
Hardware				200000	250000		64000	
Software				25000			25000	
Telecommunications – Voice Local and Long Distance, Cell Service				8000	18000			
Telecommunications – Fiber				12000	48000			
Technical Support and Salaries				150000				
Travel							2000	
TOTAL				395000	316000		96000	

Budget Summary – Year 3

School Year: 2014-2015
Annual Budget Summary

- List the professional development and technologies to be acquired during each year of the agency's plan.
- List all funding sources for recurring services, anticipated purchases, and professional development.
- Include the total of all technology resources to support the district's technology initiatives.
- This information will be helpful in completing Item 25D on the E-Rate Form 471.

Acquired Technologies and Professional Development	Ed Tech Competitive Title IID	Ed Tech Formula Title IID		Local Funds	E-Rate	NCLB/other than Title IID	KETS	Other (Specify)
Professional Development							5000	
Hardware				200000	250000		64000	
Software				25000			25000	
Telecommunications – Voice Local and Long Distance, Cell Service				8000	18000			
Telecommunications – Fiber				12000	48000			
Technical Support and Salaries				150000				
Travel							2000	
TOTAL				395000	316000		96000	

Budget Summary – Narrative

The MUNIS Office of Education Technology (OET) Activity Report indicates over $615,000 spent on technology initiatives across the District in Fiscal Year 2011. Approximately $100,000 was spent from KETS funds and $536,000 from all other fund sources. Of the total funds spent on Technology, approximately $189,000 was spent on hardware including workstations, file servers, printers and Multimedia devices. Approximately $80,000 was spent on software and $66,500 was spent on Telco and Data Transmission Services. Salaries accounted for approximately $145,000 with the remainder for various other technology costs.

For Fiscal Year 2011, those fund sources specific to Technology and under the control of the District Technology Coordinator and Technology Planning Committee include:

EdTech Funds (State Offers of Assistance and District Match)

Funds received for the FY2012 funding year amounted to approximately $15/ADA in the first offer and are restricted according to the Master Plan for Technology. These funds are matched by the district and amounted to approximately $90,000 for the 2012 Fiscal Year. A second offer of approximately $8/ADA is expected in the Spring if there are no further budget cuts. Funding for FY2013 is expected to be $12/ADA first offer and $4/ADA second offer.

Universal Service Fund (eRate) Discounts

This federal government provides funding for specific eligible services and products. Discount rates are computed according to Free and Reduced Lunch applications and urban/rural designations according to federal guidelines. These discounts provide funding for telecommunications and selected internal connections – For Year 15 (FY 2012-2013) the shared discount rate for Calloway County Schools is 75%. The services and products purchased require district funds to pay the remaining 25% of costs through allowable district and school fund sources. 75% is the lowest Discount rate we have ever received and is unchanged from last year. The Free and Reduced Lunch count calculates the rate of discount. The Applications changed last year and though we have more charges in the Lunchroom than ever before, our ratios are down discount rate is down. The eRate program is currently entering its 15th year. We applied for funding for Priority One telecommunication services for Data Transmission Service linking the three elementary schools with the District Hub site and Local and Long Distance service for all school sites continues. Our new contract for fiber links to our three elementary schools will to move us from shared 1 Gbps bandwidth to dedicated 1 Gbps speed to each Elementary School. This improved access to the Internet and instructional resources for all elementary school students and staff and addresses a critical instructional need for our students and staff.

Other Funding Sources

These include local, state and federal funds awarded to Calloway County Schools and expended according to the Kentucky Department of Education Funding Matrix of allowable expenditures. Many projects and fund sources allow purchase of services and products that are eligible for discount through eRate. Other projects and fund sources allow for purchase of hardware and software for instructional technology, assistive technology, professional development and other technology related purposes. For this year, Superintendent Kennith Bargo has allocated $100,000 of Local Board funds to provide needed replacement/refresh of aging instructional devices and addition of emerging technologies and intelligent classroom resources in our schools. Our Board also continues support for three technical support specialists to serve the needs for technical support in classrooms across the district. The addition of local funds combined with other funding sources will be judiciously utilized to support and expand our technology resources and strengthen delivery of services to each classroom.

Attachments/Appendices (Optional)

Include any necessary attachments or appendices such as Procurement Plans, Technology Inventory, Evaluation reports, etc. Number each attachment consecutively and be sure to list them in the Table of Contents.

Appendix A

School Wish Lists

School Wish Lists – Each School maintains a separate focus and identity based on analysis of instructional needs of the students and staff of the individual school. All schools subscribe to the five goals of the Technology Plan but may have put different emphasis on them and have different ways of achieving those goals.

East Calloway Elementary

In FY 2011 and FY 2012 East Elementary purchased and implemented the following resources:

- 1 MiniComputer
- Projectors, mounts and cabling in instructional areas
- 10 iPod Touches (wish fulfilled by school funding initiatives)
- 25 Teacher workstations
- Short-Throw Projector
- Sony Bloggie "Flip" camera and accessories
- Bretford PowerSync Cart and 20iPod Touch
- 6 Computers donated by HP
- Replacement of Power Supplies on HP D530 Workstations
- 5 iPod Touch devices purchased with Wal-Mart Grant
- 18 MIMIO's with 9 wireless slates
- Document cameras for homeroom teachers

The Wish List for FY 2013 for East Calloway Elementary includes:

- 18 Workstations and Monitors for Computer Labs
- 2 MIMIOs with Wireless Slates
- 1 MacBook to run the iPod Touches more efficiently
- 15 iPads for Homeroom teachers and students

North Calloway Elementary

In FY 2011 and FY 2012 North Elementary purchased and implemented the following resources:

- 15 SmartBoards
- 12 Sets CPS Response Systems
- 72 Workstations for two labs
- 2 Projectors
- 5 Document cameras
- 2 CPS Student Response Systems (compatible with CIITS)
- 36 SMART Boards
- 35 Projector mounts with hardware and cables (mounted)
- 1 Dell MiniComputer
- 1 Dell Latitude Laptop
- 1 Canon Digital Camera

The Wish List for FY 2013 for East Calloway Elementary includes:

- Computer Lab Workstations
- CPS Student Response Systems (compatible with CIITS)

Southwest Calloway Elementary

In FY 2011 and FY 2012 Southwest Elementary purchased and implemented the following resources:

- 25 IPEVOevo document cameras
- 26 Mimio
- 24 Digital camera for each classroom
- 26 projectors
- 36 staff workstations

The Wish List for FY 2013 for East Calloway Elementary includes:

- 56 Flat Screen Monitors for the Computer Labs
- RAM for Labs, Student Computers and Teacher Workstations
- Laptop for use in Meetings and PD
- 21 Document Cameras for Homeroom Teachers
- 6 Digital Video Cameras – one per grade level

Calloway County Middle School

In FY 2011 and FY 2012, Calloway County Middle School purchased and implemented the following resources:

- 2 Classroom sets Mobile mini lab
- Classroom Wireless slates
- Classroom set iPod Touches and iPads
- Classroom Document cameras

The Wish List for FY 2013 for Calloway County Middle School includes:

- 30 Wireless Lab Workstations
- CPS Student Response Systems (compatible with CIITS)
- Wireless Access Points

Calloway County High School

This school recently conducted an upgrade of classroom speakers, added wireless slates, IPEVO P2V document cameras, and RAM to workstations in one computer lab. They also updated wireless access points in the building, purchased 10 iPod Touches and 16 mini-computing devices. An additional purchase of mini-computing devices is in process. Purchases were made using local and General Fund monies.

- Monochrome Laser Network Printer in each Classroom
- Rotation of Upgrading Workstations in LMC and Labs
- Upgrading Teacher and Administrator Workstations
- 1-to-1 Computing for students
- 40 New workstations for Library Media Center
- Continue Workstation Rotation in classrooms
- 2 Mini-labs of computers
- 4 Printers
- 2 iPads
- 1 Lenovo Touch Slate

The Wish List for FY 2013 for Calloway County High School includes:

- Continue Printer and Workstation replacement
- Continue upgrades to Intelligent Classrooms
- New and Emerging Technologies for Classrooms
- Additional Wireless Access Points

Appendix B

District-Wide Initiatives, Projects and Task Lists

Tasks completed FY2012:

- Replacement of ISA/iPRISM for CIPA compliant content filtering and web services with Microsoft Threat Management Gateway (TMG) July 2011
- Library Management Software upgrade – requires server (local-host) purchase and installation OR subscription to CLOUD based services Summer 2011
- Windows 7 Deployment on IDU and newer workstations Winter, 2011
- Purchase of Instructional sever and upgraded APlus Curriculum resources for all students in grades 2-12.
- Microsoft Threat Management Gateway by 6/30/2011
- Refine operation of SCCM for imaging workstations for deployment and upgrades Spring, 2012

Current Projects and New Task List going forward:

District-wide initiatives include on-going projects and tasks as well as current upgrades and installations of new products and devices. Some specific projects and tasks include:

- Maintenance and installation of technology equipment at all District Sites
    - Cleaning and maintenance of facilities, including: projectors, network switches, servers and Main Distribution Frame rooms to remove dust and prolong proper functioning quarterly.
    - Install/Repair wall molding for mounted projector cords, as needed
    - Maintenance and repair or expansion of cable plant, as needed
- Continuation of development of SharePoint Server capabilities including: Internet websites, Intranet (Portal) Team and Class sites, School Learning Kit and My Sites, and introduction of Web 2.0 tools, etc.
- Installation of additional Wireless Access Points and switches and other equipment
- Purchase of new workstations, intelligent classroom and other resources as selected by Principals and School Technology Coordinators according to current instructional needs in each school.
- KDE MUNIS Server move to Cloud Computing by 12/31/2012
- Implementation of PSST for Laser Printing MUNIS Reports, Checks and Purchase Orders by 9/30/2012
- Virtualization Project including movement of servers and services to new Fail-Over Cluster utilizing Microsoft Hyper-V technologies by 9/1/2012

    - Systems Center Configuration Manager – continuation and expansion of functionality
    - Instructional Server – A+ Upgrades
    - Follett Destiny Server
    - Staff and Student Home Folders
    - School Level Instructional Servers
- Examination and consideration of off-site backup of DPM for disaster recovery and redundancy related to Virtualization project.
- Data Protection Manager – continuation and upgrade as needed
- NWEA MAP Formative Testing Server and Testing environment maintenance and support
- KET Encyclomedia Local Host / Local Streaming Video Project
- Foodservice Technical Support
- Maintenance Technical Support
- RAM Upgrades on workstations
- Examination and consideration of desktop virtualization, including: N-computing or Microsoft MultiPoint Server
- Application services and maintenance of Programs and Servers
- Various KDE/KIDS and Federal reports including: Yearly Technology Readiness Survey, KETS Technology Planning Document update, eRate Program Applications and Management of Services, Infinite Campus, MUNIS, MUNIS Technology Activity Report, etc.
- KIDS Management Tasks including: Live@EDU, Active Directory User Management and Computer Management, miscellaneous server and services management tasks, etc.
- Meetings, Trainings and Conferences in support of Technology and Programs in our schools.
- Other project and tasks as yet undetermined that will come up from time to time.