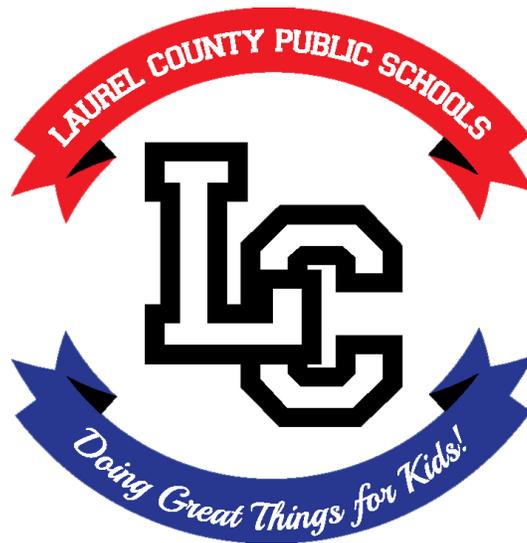


2018-2019 Technology Plan
Laurel County School District
London, Kentucky



<http://www.laurel.kyschools.us>

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Acknowledgments

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Executive Summary

The Laurel County District Technology Plan seeks to provide a reliable, feature-rich technology environment for all Laurel County users. This Plan seeks to provide access to relevant instructional technologies and exposure to emergent technologies that support the curriculum and increase student achievement. Students will have access to technology and peripherals that will promote 21st Century learning skills.

The goal of the Laurel County School System (LCSS) is to create lifelong learners and users of technology who effectively access, utilize, and integrate technology that extends beyond the classroom and prepares students for both post-secondary and career readiness. Students will have the opportunity to develop the skills to become productive digital citizens as well as 21st century learners as they make the transition of employing technology from a personal role to functioning professionally in a digital society.

The Laurel County School District Technology Plan addresses parent and community involvement via the electronic dissemination of information, including, but not limited to, district initiatives, district and school educational objectives and initiatives, academic and sporting events, and items and issues of community interest. The use of a District Calling System, District/School websites, and social media platforms are utilized to keep the community informed of issues and events concerning the school system.

Planning Process and Methodology

Based on input and insight from those listed in the acknowledgements, school and community leaders and members of the Laurel County BOE, this plan is formulated, reviewed and updated on a yearly basis by the Information Technology Department of the Laurel County School District as part of the Laurel County School District Comprehensive Improvement Plan.

As evidence of plan importance and compliance, Laurel County Schools can cite the completion of several previous initiatives outlined in prior year's plans.

1. Set up a Google Domain allowing students and staff access to GSuite and Google Apps For Education (GAFE).
2. Integrated Chromebooks as part of our mobile devices.
3. Established an online Virtual Academy through Blackboard and other instructional software.
4. Piloted a Science, Technology, Engineering, and Math (STEM) initiative curriculum in 3 elementary schools.
5. Replaced aging servers to virtual servers to support data storage and sharing.
6. Through the use of mobile devices and apps, every classroom can now have access to student voting systems.

There are initiatives begun over previous years that are ongoing, which include:

1. The implementation of a teacher voice enhancement system in classrooms. Of the 648 classrooms, 350 now have teacher voice enhancement implemented.
2. Replacement of aging computers with newer state of the art PCs, both staff and student workstations.
3. Provide Professional Development to all new Staff on the use and integration of the *Smart Classroom*.
4. Process to replace aging projectors, whereby a replacement projector was more cost effective than replacement bulbs for the old projectors.
5. Continue to update the wireless network as well as add additional access points and switches.

Goals Not Met:

1. The completion of voice enhancement systems in every classroom.
2. The increase to 150k of bandwidth per student has not been implemented at the state level at this time. We continue to work toward this goal.

Needs that emerged after evaluating previous plans:

1. Due to evolving technology, we need to devise a strategy to replace aging Smart Boards.
2. As additional mobile devices are added to our network, the need for bandwidth and wireless access points has increased.
3. To create a more sustainable, cost effective, environment the LCSS has made a commitment of moving from the current 1.27 students per computer ratio, to a 4 to 1 students per computer ratio.

Current Technology and Resources

Laurel County Schools (P-12) provides equity in access for all students. Classrooms enhance instruction with interactive whiteboard technologies and other electronic instructional devices to stimulate and engage students. Laurel County School District offers a wide array of feature-rich educational software and instructional applications to meet the needs of a student population with individualized, prescriptive learning. Current setup places technology in classrooms, stationary labs, mobile cart labs, and mobile device labs. Hardware includes 1700 staff machines, 3,376 student machines, 1572 iPads, 678 Chromebooks, 648 Smart Classrooms (including Smartboards, projectors, and document cameras) at 18 sites, 3500 Voice Enhancement Systems, and 400 Voting Systems. All Laurel County teachers receive training in the use of these devices to enhance instruction. To augment student learning, Laurel County has made a commitment of a 4 to1 students per computer ratio.

The next phase is to continue to petition the state for additional bandwidth reaching 150k per student from our current access level of 120k per student. With the addition of mobile devices, this increase is necessary as more students and staff are online simultaneously throughout the instructional day.

As more students access our network, the Laurel County School District takes student safety very seriously and strives to make the access of online educational materials as safe as possible by the use of student monitoring and filtering software. The district recently upgraded to the newer filtering software, LightSpeed, which was provided by KDE. To further support student safety and school security, all schools within the district have video security systems monitoring all parts of each building. Each camera is accessible at both the individual school as well as at the district level.

Laurel County technology support departments makes every effort to ensure that all technology is working and available for use by the students and staff at all times. Technology maintenance issues are addressed through the submission of an information technology (IT) Request work orders, which are responded to by technology staff in a timely fashion. Time sensitive or emergency situations are handled immediately to prevent any disruption of service. Technology staff attend annual professional conferences, webinars, and receive specialized training in a variety of areas in order to stay current in the field.

Curriculum and Instructional Integration Goals

Goal 1

Improve the academic performance of all students.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Acquisition and renewal of subscriptions to online core content and instructional enhancement software.	Enrich the instructional experience of all students; provide remediation opportunities with access to online core content software programs. Meet the assessment Management and reporting needs of teachers and administrators. To provide student assessment data to teachers to help facilitate instructional planning.	Comparison of NAV and EOC test scores. Improve school wide test scores on state assessment.	On-going	Denise Griebel Tharon Hurley Barney Paslick	Title I KETS Gen Fund Grant

Goal 2

Increase efficiency by ensuring the district has adequate technical resources to support the educational needs of children and business needs of schools.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Monitor usage of the district's wide area network (WAN). Continue to request increase in bandwidth from the state in order to meet new demands as more wireless devices are added.	Students will have access to adequate bandwidth to participate in instructional activities which require connectivity.	When the district's bandwidth usage does not max out to capacity during the instructional day and the needs of all connectivity issues are met.	On-going	CIO	KETS GEN FUND
Continue to ensure that vital functions of the district can continue in the event of a disaster. This plan includes remote-site daily backup of critical data, and system restore.	Critical student data will be kept secure to avoid interruption of instruction that would occur if the data were lost.	Continuation of plan.	On-going	CIO	GEN FUND KETS
Continue utilizing System Center	Imaging and Inventory system which allows for faster, up to date computer images. Allows for remote access to push software.	Speed of Its ability to reimage and restore system images	On Going	Brian Gilliam Shane McCowan	GEN FUND KETS
Maintain Apple devices via the use of (MDM), console, Airwatch. Maintain Chrome devices via the GSuite Domain.	Monitor and maintain software, apps, and users districtwide for all Apple and Chrome devices	Airwatch and Gsuite user accounts; profiles, and assignment groups.	Ongoing	Barney Paslick, CIO Shane McCowan, Network Engineer; Karen Jones, TIS	GEN FUND KETS

Goal 3

Implementation of mobile devices and instructional apps.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Annually update the District policy and AUP on the use of mobile devices. Allow teachers to access personal mobile devices on our network for instructional purposes.	Enable our teachers students to access and utilize more emergent mobile technologies thus, improving student academic achievement.	Student/Teacher surveys; observation by the Technology Department; student test scores.	Ongoing	Barney Paslick, CIO. Karen Jones, Technology Integration Specialist	KETS Gen Fund
Continue to purchase Chrome books as a less expensive mobile device and allowing access to G-Suite and other GAFE.	Enable teachers and students to utilize emergent mobile technologies thus, improving student academic achievement. Allow students and teachers to go paperless and access online storage and file sharing capabilities through GAFE and G-Suite.	Report of G-Suite usage and single sign on usage through Google's reporting features.	2017	Barney Paslick, CIO Wendy Stamper, Technician Karen Jones, TIS	Gen Fund KETS

Curriculum and Instructional Integration Goals – Evaluation

An ongoing process to evaluate the effectiveness of technology applications and hardware exists in the district. Some information is gleaned by use of a tool similar to the state technology assessment tool. Leadership at both the school and district level perform regular walk-thru in schools and classrooms to monitor the instruction and use of technology by the teachers and the students. The expectation is present that technology be integrated into instruction. Evaluation and monitoring of specific technology components is handled by the use of several software tools and reporting applications that maintain a database of issues and resolutions. Laurel County uses Dell Open Manage, System Center, AirWatch MDM, and other packages to help evaluate and monitor the use of technology in the classroom. If expected results are not met, goals will be re-evaluated to determine the best method of success.

Student Technology Literacy Goals

The Kentucky Board of Education has adopted specific Technology and Information Literacy Skills to provide a critical link in school to employment or post-secondary education. The primary goal is for all Kentucky students to become contributing citizens in a competitive global economy by responsibly using appropriate technology to communicate, solve problems, access, manage, integrate, evaluate, and create information. In addition, students will be able to make useful connections from technology integration throughout the curriculum in order to apply technology literacy skills in the real world.

Goal 1

Improve the technology literacy of all students.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
A Technology and Information literacy Skills education program encompassing digital citizenship, cyberbullying, and appropriate online behavior will be taught in grades 6-8. Students will also be introduced to software applications including Word, PowerPoint, and Excel.	Students will gain both an awareness and understanding of the importance of Internet Safety including digital citizenship, cyberbullying, and appropriate online behavior. Students will learn with the use of technology comes responsibility. Students will learn the social and legal ramifications as well as consequences that comes with the	Student course grades; AUP signed forms on file.	Yearly; grades 6-8.	School Principal	Gen Fund KETS

	<p>misuse or abuse of technology. Students will learn to utilize technology for real world settings as opposed to just social media.</p>				
<p>Provide a CTE pathway at the secondary level enabling students to pursue a specialized Technology and Information Skill set in order to prepare for careers and skills for the 21st Century.</p>	<p>Students are offered various CTE career paths at the Center for Innovation including access to a CTE center specializing in Allied Health Science, Biomedical Science, Engineering Technology, Industrial Maintenance Technology, and Media Technology. In addition, students can pursue Microsoft Certifications via Microsoft's IT Academy.</p>	<p>Course Enrollment numbers; ACT WorkKeys; KOSSA; CFI Enrollment; Number of Microsoft student certifications issued;</p>	<p>Yearly</p>	<p>School Principal</p>	<p>Gen Fund KETS</p>
<p>Provide access to online virtual learning (Blackboard, Odysseyware, Edgenuity, Study Island, Renaissance Learning, iReady, GSuite) Pearson, and Holt environments and cloud storage platforms.</p>	<p>Increase college and career readiness.</p>	<p>Google reports of usage System Center Reports</p>	<p>Ongoing</p>	<p>Barney Paslick Karen Jones Wendy Stamper Brian Gilliam</p>	

Student Technology Literacy Goals – Evaluation

Evaluating and monitoring the progress of technology literacy goals is an ongoing process that exists in the district. A Technology and Information literacy Skills education program is a required course all three years in the district Middle Schools. Moreover, the student progress toward meeting college and career readiness is monitored by the district. As needs change and arise, the district Secondary Curriculum Director, the Deputy Superintendent, the Chief Academic Officer, and the Superintendent evaluate the curriculum and the course offerings to ensure that both student needs and academic standards are met. Monitoring is done via observations, conferencing, and monitoring student data from KOSSA tests, ACT WorkKeys and the number of Microsoft student certifications issued.

Staff Training/Professional Development Goals

As the effective use of technology as an instructional tool is a component of the LCSS Certified Evaluation Plan, the district has established an extensive training program for teachers to enhance teaching and learning. Training models used are individual instruction, train the trainer, small group trainings, workshops, webinars and conferences. These trainings occur during the summer, after school during the school year, and on other scheduled Professional Development days. Teachers also receive on-site educational technology training from in-house Technology Integration Specialist. This specialist provides a plethora of trainings geared toward helping teachers effectively integrate technology.

Technical Staff are also provided opportunities for PD via webinars, workshops, conferences, and off-site training to receive specialized certification. All trainings and Professional Development opportunities are aligned to the goals and curriculum of the district and are planned for in the district's Consolidated Planning process.

Goal 1

Provide Professional Development in the area of Technology.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide PD on a variety of both new and previously acquired educational, software, webhosting management, mobile devices and instructional apps and how best to integrate technology into instruction.	Enhance instruction; provide professional growth in the areas of the most up to date educational software and technologies; provide teachers the skills necessary to become technology proficient so that they may in turn integrate technology across the curriculum in order to produce	Lesson plans; workshop/conference attendance data; student work; teacher web-pages; school websites.	On-going	Barney Paslick, CIO Karen Jones, Technology Integration Specialist, Denise Griebel, Deputy Superintendent	KETS Gen Fund

	21 st century learners.				
Provide PD opportunities for the District TIS.	Enable a train the trainer model to be in place for the district.	Workshop and conference attendance	On-going	Karen Jones, Technology Integration Specialist	Gen Fund KETS
Purchase 10 licenses to an online Technology specific PD program, TEQ PD	Provide more opportunities for HS Media Specialists and Technology staff to receive specialized Technology webinars and trainings.	Webinar certificates of attendance	2017	Barney Paslick, Karen Jones, Wendy Stamper, MS/HS Media Specialists	Tech Gen Fund

Goal 2

All teachers hired within the LCSS will receive Professional Development training on utilizing and implementing the Smart Classroom

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Both Introductory and Advanced training will be provided to teachers in the area of the “Smart” Classroom, which includes the utilization and integration of the interactive white board, projector, wireless slate, and voice enhancement systems.	Produce teachers who can effectively use the technology within their classrooms in order to engage students and teach to a variety of learning styles utilizing multiple intelligences.	PD Rosters	On-going	Karen Jones, Technology Integration Specialist	Gen Fund

Staff Training/Professional Development Goals – Evaluation

An ongoing process to evaluate the effectiveness of technology usage exists in the district. Some information is gleaned by use of a tool similar to the state technology assessment tool. Leadership at both the school and district level perform regular walkthrus in schools and classrooms to monitor the instruction and use of technology by the teachers and the students.

Monitoring of the Professional Development of staff is handled through surveys and electronic tools for collection of PD requests, trainings and outcomes and also with the use of the state's CIITS PD registration and tracking program.

School leadership is also given opportunities during the year to present to the district leadership and the Laurel County Board of Education, evaluations of instructional value, and level of usability they experience with technology in their schools as well as suggestions for improvement or enhancement to the current technology implementation.

Training models used are individual instruction, train the trainer, small group trainings, workshops, webinars and conferences. These trainings occur during the summer, after school during the school year, and on other scheduled Professional Development days. Teachers also receive on-site educational technology training from in-house Technology Integration Specialist. This specialist provides a plethora of trainings geared toward helping teachers effectively integrate technology.

Technical Staff are also provided opportunities for PD via webinars, workshops, conferences, and off-site training to receive specialized certification. All trainings and Professional Development opportunities are aligned to the goals and curriculum of the district and are planned for in the district's Consolidated Planning process.

Technology Goals

The Laurel County District seeks to provide a reliable, feature-rich technology environment for all Laurel County users providing access to relevant instructional technologies and exposure to emergent technologies in order to enhance and support the curriculum and increase student achievement. Students will have exposure and access to technology and peripherals that will engage them in 21st Century learning skills.

Goal 1

Continued upgrade and integrate voice, video and data networks capable of providing high level communication resources at the school, district, state, and national levels allowing easy communication between teacher, student, parent and community members.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Additions to and repair of building data infrastructure to support the additional PCs and other network instructional devices	Less down time. Higher Speed to access network resources	Enhanced time on instructional devices by Students and teachers	On-Going	Barney Paslick, CIO Shane McCowan, Network Engineer Brian Gilliam, Technician	KETS Gen Fund
Voice service and cabling will be upgraded and maintained in every school to support all instructional processes and communications between schools,	Through the use of a reliable voice system, teachers will be able to maintain better contact with parents and the community and district staff will be able to	Measured through the use of maintenance logs and the work order programs currently in place for voice	On-Going	Barney Paslick, CIO	Gen Fund KETS

parents, and administration and to help provide a more secure environment for all students and staff.	maintain better communications with teachers.	maintenance			
Continue to add additional wireless access points as more mobile devices are added to the network.	More reliable and faster access for students and staff to access data.	Measured through Maintenance logs.	Ongoing	Barney Paslick, CIO Shane McCowan, Network Engineer Brian Gilliam, Technician	Gen Fund KETS

Technology Goals – Evaluation

An ongoing process to evaluate the effectiveness of technology applications and hardware exists in the district. Some information is gleaned by use of a tool similar to the state technology assessment tool. Leadership at both the school and district level perform regular walk-thru in schools and classrooms to monitor the instruction and use of technology by the teachers and the students.

Evaluation and monitoring of specific technology components is handled by the use of several software tools and reporting applications that maintain a database of issues and resolutions. Laurel County uses Dell Open Manage, System Center, Apple MDM, and other packages to help evaluate and monitor the use of technology in the classroom.

As part of the District Improvement Plan, technology is also monitored during the year. School leadership is also given opportunities during the year to present to the Laurel County Board of Education, evaluations of instructional value, and level of usability they experience with technology in their schools as well as suggestions for improvement or enhancement to the current technology implementation.

Budget Summary

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

Acquired Technologies and Professional Development	KETS	TITLE I	TECH GEN. FUND
Acquisition and renewal of subscriptions to online supplemental . . . content and instructional enhancement software		\$17,500.	\$56,135.
Monitor usage of the district's wide area network (WAN).			\$500.
Continue to ensure that vital functions of the district can continue in the event of a disaster.	\$8000.		
System Center Software for device management and imaging			\$50,023.
Airwatch. MDM to Maintain Apple devices			\$17000..
Purchase Chrome books	\$204000.	13000.	
Technology and Information literacy Skills education			\$4000
Provide ongoing professional development for teachers			\$60,000.
Provide PD opportunities for the District TIS.			\$550.
Additions to and repair of building data infrastructure	\$18000		\$8000.
Voice Enhancement Technology	\$3000.		
Increase Wireless Density	\$10,000		\$10,000
TOTAL	\$ 243,000.	\$30,500.00	\$ 189,208.

Budget Summary – Narrative

Attachments/Appendices (Optional)