

**Technology Plan
Grayson County Schools
Leitchfield, Kentucky**



www.graysoncountyschools.com

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Acknowledgments

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Table of Contents

EXECUTIVE SUMMARY	3
PLANNING PROCESS AND METHODOLOGY	4
CURRENT TECHNOLOGY AND RESOURCES	5
CURRICULUM AND INSTRUCTIONAL INTEGRATION GOALS	6
CURRICULUM AND INSTRUCTIONAL INTEGRATION GOALS – EVALUATION	8
STUDENT TECHNOLOGY LITERACY GOALS	9
STUDENT TECHNOLOGY LITERACY GOALS – EVALUATION	10
STAFF TRAINING/PROFESSIONAL DEVELOPMENT GOALS	11
STAFF TRAINING/PROFESSIONAL DEVELOPMENT GOALS – EVALUATION	13
TECHNOLOGY GOALS	14
TECHNOLOGY GOALS – EVALUATION	18
BUDGET SUMMARY	19

Executive Summary

We at Grayson County Schools envision technology as a tool that integrates and links all aspects of our school and community as well as aids in the development of our educational process. Technology ignites opportunities for learning, engages today's students as active learners and participants in their own education and prepares them for the demands of the 21st century.

By building and maintaining a strong infrastructure, as well as staying ahead of continually changing standards, the challenge is in advancing with the technology and education industry simultaneously. With the need of 500+ employees and 4,200 students, advances are being made to prepare students and staff to face the changing world and to be prepared for the challenges in the next decade and beyond. Further, the mission includes fostering the use of multimedia or online information (digital content) which offers many advantages including cost saving, increased efficiency improved accessibility, and enhancing learning opportunities in a format that engages today's web-savvy students.

Planning Process and Methodology

The technology plan is revisited and revised on a yearly basis. Continuous dialogue occurs between the Superintendent, Director of Technology, Principals, and others to set specific goals for the district. There are also site based technology committees that meet at the school level regularly to establish their goals and objectives to correlate with the District's vision. We are continually assessing our technology and professional development to ensure that we are staying inline with the standards for students and teachers.

Current Technology and Resources

Grayson County Schools has employed numerous technologies to remain on the forefront of 21st Century technology. We currently have over 1600 workstations, 700 iPads and 650 Chromebooks in our schools. We have seventeen fixed computer labs spread across our seven schools. In addition to those fixed labs, each school has a multiple iPad and Chromebook labs. Building-wide wireless network access is also available in all of our schools. During the 2012 school year, Grayson County Schools made this WiFi access in all of our schools available to student and staff personal devices. During the 2015 school year the WiFi equipment in all of our elementary, middle and high schools was upgraded showing a continued commitment to mobile learning.

Grayson County Schools is integrating more multimedia into the classroom by increasing the number of fixed data projectors in our facilities. Currently, 76% of our classrooms have mounted projectors and 18% of our classrooms have mobile projectors. Also, 58% of our rooms have mounted interactive whiteboards and Grayson County Schools has 74% of all classrooms equipped with document cameras.

Grayson County Schools core network, Internet connection and data center are located at Grayson County High School. All buildings on the GCHS campus are connected via 1 Gbs district owned fiber optic connections. All other schools are connected via 1 Gbs managed fiber optics. The Kentucky Department of Education supplies Grayson County Schools a high speed fiber optic Internet connection of 500 Mbs.

Grayson County Schools also invests in our technology initiatives by providing technical and instructional support. Each school has a curriculum coordinator to assist in delivering job embedded professional development. The district has both an Instructional Coach and a Technology Integration Specialist that provide services to all schools. The technology department is made up by the District Technology Coordinator, four assistants and a network administrator.

Curriculum and Instructional Integration Goals

We envision our schools using technology as a tool to further student achievement and for teachers to deliver instruction that requires higher level thinking skills from our students. We want to see our students using technology to increase their productivity, creativity and further their understanding of Kentucky Academic Standards across all content areas. We also want to use the technology to gather assessment data and make data-driven decisions based on assessment data.

Goal 1

Increase the use of technology by students as a tool for learning and skill building.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Expand the use of digital resources for immediate feedback	Students will be actively engaged in instruction. Teachers and students receive instant feedback of content learned.	Lesson Plans Observations PLC Data Analysis	2017-2018	Classroom Teachers Curriculum Coordinators	KETS + Local +IAL Grant
Mobile Device Labs and student BYOD devices will be expanded into more classrooms. Additional Chromebook outcome of one cart per grade level between 2nd-5th grade and nearly three per grade 6th-8th grade *BYOD Policy	Increase student technology use.	Observations Lesson Plans	2017-2018	Classroom Teachers School Technology Staff CIO Network Administrator	IAL Grant

Goal 2

Use technology resources effectively to support student learning.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Teachers will evaluate students using a variety of assessment tools (Google Forms, Kahoot, projects, presentations, collaborative tools)	Increase use of varied assessment strategies.	Formative assessments given periodically throughout the week Lesson Plans	2017-2018	Classroom Teachers	KETS + Local + No Cost
Teachers will use available resources such as BrainPop, PBS Learning Media, and Britannica Online Teachers will use technology more in the classroom	Teachers will use technology more in the classroom.	Teachers will use available resources Lesson Plans	2017-2018	Principals Classroom Teachers	KETS
Teachers will use Web 2.0 tools when preparing lessons(Google Suite, Office 365)	Teachers will have more effective instruction	Observations Evaluations Lesson Plans	2017-2018	Principals Classroom teachers	N/A

Curriculum and Instructional Integration Goals – Evaluation

Teachers will work to build a district technology infused lesson repository that will be shared across the district. Administrators will work to model appropriate technology use in their daily tasks and assignments. Teacher evaluations and walkthroughs will help Administrators evaluate strategies.

Student Technology Literacy Goals

Grayson County Schools follows the standards for technology established by the Kentucky Department of Education. The Kentucky Board of Education has endorsed the National Education Technology Standards (NETS) for Students as Kentucky's educational student technology standards. We will use the six categories of technology mastery, published by the International Society for Technology (ISTE), as guidelines for planning technology-based core content lessons.

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

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

Goal 1

Increase the use of technology by students as a tool for learning and skill building..

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Review the Kentucky Academic Standards that integrate technology standards and National Education Technology Standards (NETS-S) and crosswalk current pacing guides to verify they have been included.	Increase in student engagement in learning and technology literacy Pacing guides will be created for K-8 with 9-12 to be created the following year or Standards will be identified in current pacing guides and class syllabus	Classroom walk-throughs and The Simple Assessment Technology Test will be utilized	2017-2018	Curriculum Coordinators Classroom Teachers Technology Integration Specialist Instructional Supervisors	N/A
Continue to educate all students on Digital Citizenship. This will include the following nine components: (Digital Commerce, Digital Law, Digital Health and Wellness, Digital Rights and Responsibilities, Digital Etiquette, Digital Security, Digital Literacy, Digital Communications, Digital Access)	Increased awareness and self-monitoring of digital rights and responsibilities to become productive and Responsible users of digital technologies	Classroom Observations	2017-2018	Classroom Teachers Lab Teachers Library Media Specialists	N/A

Goal 2

Students will be able to select appropriate technology tools to complete tasks and will be proficient users of technology tools.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Students will use email and other collaborative services (ie. Google Classroom) to communicate with teachers and peers about assignments and school related topics as defined in the Acceptable Use Policy	Effective two-way communications between students and teachers	Filtering software to monitor violations of Acceptable Use Policy	2017-2018	Classroom Teachers	N/A

Student Technology Literacy Goals – Evaluation

Grayson County Schools assesses 5th, 8th and 11th grade students for technology proficiency in accordance with NCLB and to assess current methodology and strategy success. An increase towards normalcy by 10% per year is expected.

Staff Training/Professional Development Goals

A thriving learning community focuses on improving learning for all stakeholders. In order for staff members to create powerful learning experiences for their students, they need to be engaged in powerful learning experiences themselves. Grayson County Schools will encourage growth through professional development.

Goal 1

To develop professional development programs that addresses the needs and abilities of the teaching staff.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Teachers will be provided training in Microsoft Office 365, Google Apps for Education, Web Authoring, iPad touch, Smart Board Software, and any new programs with an emphasis on technology integration.	Staff will have improved technology skills and be more effective teachers	Professional development log	2017-2018	Technology Integration Specialist Curriculum Coordinators IT Assistants CIO	N/A
Provide professional development opportunities through after school training	Increased use of technology in classroom instruction and in student products and projects	Professional development log	2017-2018	Technology Integration Specialist Curriculum Coordinators IT Assistants CIO	N/A
#KyGoDigital project PDs	Staff will gain knowledge in how to use collaboration tools to improve efficiency and transparency			Technology Integration Specialist KDE Digital Coach/s	N/A

Goal 2

Staff will increase their use of technology in instruction so students can make good choices of technology tools.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Train teachers how to use and integrate the technology tools they have available.	Students will be actively engaged in instruction because of the use of technology and thus, core content knowledge will increase.	Walk Throughs, Student products and work, lesson plans	2017-2018	Technology Integration Specialist Curriculum Coordinators IT Assistants	N/A
Collaborate and assist the planning and integration of technology into daily instruction	Teachers will increase their use of technology	Professional Learning Community (PLC) meeting agenda, lesson plans	2017-2018	Technology Integration Specialist Curriculum Coordinators Classroom Teachers	N/A

Staff Training/Professional Development Goals –Evaluation

Technology committees at the school level help keep all staff and administration informed about instructional-technology initiatives across the district.

Teacher evaluations and walk-throughs will help Administrators evaluate staff training needs.

Technology Goals

Today, various forms of communication are imperative and are expected by parents to insure appropriate instruction for all students with as much transparency as possible.

We realize that technology must become an integral part of the teaching and learning process systematically joined with curriculum and instruction. It is our belief that student learning is improved with the use of computer technologies. We will strive to ensure that our students will have access to the technology that they need to be skilled problem solvers and to achieve the standards listed in the Kentucky Program of Studies and the International Society for Technology in Education (ISTE). The Internet, email, and curriculum enforcing software are tools that offer sources for research and communication that exceed the limitations of the traditional classroom. Such instruments of educational, professional, and personal growth must be made widely accessible to all students and staff.

Goal 1

Provide students and staff with a state of the art telecommunication infrastructure that is convenient and non-intrusive in nature to the learning environment. This infrastructure should allow access for/to convenient communication, information resources (Internet, curriculum based courseware, etc), and encourage distance based learning in a less restrictive environment to broaden the experiences of all students in a more inclusive manner

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Transition as many POTS lines as possible to our PRI, maintain long distance service available to classrooms, school offices, and administrative offices (increasing access where needed).	Telecommunications among students, guardians, staff, and emergency services will not be more readily available.	Parent feedback about accessibility when contacting the schools.	2017-2018	CIO	USF + General Funds
Maintain our existing Fiber Optic High Speed network	Students and staff will maintain existing services to the Internet and network resources including but not limited to: email, curriculum courseware, file sharing and printer services.	Network utilization will be monitored using link traffic reports	2017-2018	CIO Network Administrator	USF + General Funds

Replace phone systems at Caneyville and Clarkson Elementary Schools and configure the new systems as part of our newly consolidated platform.	Communication s between staff, guardians, and students can be more streamlined and cost efficient	Monitoring of PRI channel utilization		CIO Network Administrator	General Funds
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Goal 2

Provide a fast and reliable data infrastructure to promote learning in a virtual environment. This infrastructure will be flexible enough to reach all students and their individual needs without compromising the security and stability of the network, the data on the network, and the users that attach to the network.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Maintain maintenance agreements on wireless network controllers.	Reliability of the schools networks will increase and downtime will decrease as malfunctioning equipment can be replaced or serviced with greater ease.	TELL Survey	2017-2018	CIO Network Administrator	USF+KETS Funds
Maintain a fast, switched port for every workstation and available ports for anticipated growth.	All workstations will be allowed connection to a secure, high-speed data network to allow robust access to network services.	Personal Devices will continue to be allowed on the wireless network	2017-2018	CIO Network Administrator	USF + General Funds

Increase wireless density at GCHS and GCMS.	Mobile devices will have increased reliability, connection speed, and capacity.	Principal and teacher feedback	2017-2018		USF + General Funds
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Goal 3

Integrate Software /Resources to Increase Teacher Productivity

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Teacher WebPages, Google Classroom Invite Guardian, other digital solutions such as Remind 101 and Blogging.	Parent-teacher-student communication. Updated classroom information	Increase of classroom websites and teacher blogs.	2017-2018	Classroom Teachers	KETS

Goal 4

Provide adequate, equitable and appropriate access to technology for all students, teachers and administrators

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
K-5 Students will access technology in a lab/library media setting as well as the classroom to develop and or enhance technology skills	Practices on Information Communication , Productivity, Safety and Ethical/Social Issues, Research, Inquiry/Problem Solving and Innovation	Students will demonstrate technology proficiency on technology assessment at end of 5th grade year.	2017-2018	Computer Lab Teachers, Library Media Specialists	General Funds/Salaries
6-12 Students will access technology through a comprehensive course catalog and during core content classes	Practices on Information Communication , Productivity, Safety and Ethical/Social Issues, Research, Inquiry/Problem Solving and Innovation	Students will demonstrate technology proficiency on technology assessment at end of 8th and 11th grade year	2017-2018	Computer Lab Teachers, Library Media Specialists	General Funds/Salaries

Technology Goals – Evaluation

Grayson County students will be exposed to and become proficient in the use of various technologies to enhance their overall learning experience and equip them with 21st century skills. Communication will improve with community and parents via teacher websites, school website and online newsletters. Our students will have the schools network opened up to their personal devices to increase access. The increase access and direction in appropriate use of technology will foster their need to be independent learners and instill skills needed to thrive in a global economy.

Budget Summary

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

Acquired Technologies and Professional Development	Ed Tech Competitive Title IID	Ed Tech Formula Title IID	E-Rate	NCLB/other than Title IID	KETS	Other (Specify)
Gigabit Fiber Backbone			63,200			Local 9,400
Long Distance Service						Local 900
Local Phone Service			13,420			Local 30,000
Replace Phone System						Local 50,000
Wireless and Core Switch Maintenance			3850		1355	
Tech Staff						Local 347,086
Replace Outdated Student Workstations					92,000	Special Ed 10,000 Loc/Fraise 15,000
Replace Outdated Staff Workstations					30,000	Local 15,000
Infinite Campus					26,000	
Cloud Munis						Local 16,000
Wireless Upgrade			31,405			Local 5,540
Impero					6000	
Curriculum Coordinators						Title I 178,025 Rural/Low Income 50,225 SIG 27,350 Local 54,700
Webhosting					5000	
Technology Integration Specialist						IAL Grant 58,500
Chromebooks and Carts						IAL Grant 270,000
TOTAL			111,8756		160,3550	779,480

Budget Summary – Narrative

The technology budget comes from local funds, KETS funds, federal programs (i.e. Title I), and occasional grants. These funds are also supplemented through the budgets of individual schools and other departments. Likewise, the district depends heavily on the federal Universal Service Fund for assistance with funding telecommunication costs, Internet access, and internal connections on an annual basis. Specific funding needs have been cited in previous sections for the acquisition and maintenance of hardware and software, personnel, and for professional development. In addition to these items, the district also has a maintenance department that provides indirect support to the technology department by installing and maintaining electrical lines, air conditioning, construction of server closets, etc.