DISTRICT TECHNOLOGY PLAN

DISTRICT NAME   Breathitt County

LOCATION   Jackson, KY

PLAN YEAR(S)   2020-2021

https://www.breathitt.k12.ky.us/

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Planning Team

District Staff [Recommended to include CIO/DTC, TIS/DLC, technician, finance officer, superintendent, academic officer, DAC, etc.]

William Noble - District Technology Coordinator	
Adrian Hudson - District Technician	
Byron Johnson - District Technician	

Building Staff [Recommended to included principals, LMS, STC, counselors, teachers, teaching assistants, etc.]

Rena Hamblin - BHS Media Specialist	
Jerry Smith - ATC Teacher	
Jeremy R. Hall - SES Principal	

Additional District Contributors [Recommended to include board members, SBDM members, program directors, etc.]

Susan Watts -DPP	Stacy McKnight - Finance Officer
Phillip Watts - Superintendent	
Mike Murphy - State Manager	

Students [Recommended to include middle and/or high school students]

Anna Watts	Emma McKnight
Emalee Watts	

Other [parents/community members, business and nonprofit leaders, etc.]

Previous Plan Evaluation

In this section include a discussion of the "expiring" *(previous year's)* plan using the prompts below. Attempt to limit your narrative to the space provided.

What goals were met?
The upgrade of our technology infrastructure, WAPS and Switches. The purchase of Instructional devices and reseeding 5,7,8,11 grades in chromebooks.

Goals that were not met or didn't have the expected outcomes?
We continue to grow and become better within the classroom with teachers implementing and integrating technology to support instruction, however this continues to be an area of emphasis.

Areas of improvement?
The improvement of user devices (interactive panels and student, staff machines)

Areas/goals that are no longer relevant?
None

Needs that emerged after evaluation of the previous plan?
More emphasis on Professional Development to assist educators.

New Plan Preview

This is a high-level overview or executive summary of the plan as a whole. Attempt to limit your narrative to the space provided below.
[See Technology Planning section of KETS Master Plan for more information]

How did you and the planning team decide on the goals for this plan?

Breathitt County School District established a technology committee. The committee will meet annually to discuss the existing technology and additional technology needs to the district schools. The needs will be prioritized based on discussions with faculty, staff, administrators and students. The committee will meet to analyze the needs and brainstorm solutions. From these meetings, the technology plan will address the technology goals.

Briefly discuss the major activities slated for implementation and how these activities will advance curriculum and instruction integration, student technology literacy, professional development, & technology infrastructure.

Over the last decade, Breathitt County Board of Education has made significant investments in educational technology in the belief that graduating students need to be able to understand and use technology to compete in the job markets of the 21st century. These investments, along with the items listed in our Technology Plan for 2020-2021, will allow the Breathitt County School System to develop a first-rate, high-speed wide area network capable of providing the tools that administrators, teachers, and students need to successfully complete their administrative and scholarly tasks. Providing an up-to-date responsive technical environment and the training and resources users need to employ technology thoughtfully is a never-ending task that begins with carefully considered plans. Breathitt County School District Technology Plan responds to the concerns and needs identified by this committee and provides the goals, strategies, budgets, and timelines.

The district technology goals are to:
- Increase student achievement in curriculum subject areas and technology literacy.
- Increase the Teachers' use of technology tools for innovative and effective teaching and learning.
- Improve communication between the district and parents and the community.

Mission Statement
Technology is an essential component of the mission of the Breathitt County Schools in that we are committed to ensuring that every student has the technology skills necessary to compete in the 21st century. Our basic goal is the integration of technology into our teaching, student learning and activities where appropriate. The Breathitt County Schools will:

- Prepare students to use technology for activities that are in accordance with state and national standards.
- Provide leadership in the development, implementation and assessment of technology for use in educational settings.

Given our mission, we expect the following of our faculty and students:

- The effective use of technology to support instruction; access, analyze, and incorporate data in program assessment; enhance professional growth and productivity; communicate and collaborate with colleagues, and students.

Student Voice

Personalized student learning allows students to develop deeper learning competencies including critical thinking, using knowledge and information to solve complex problems, collaboration, and communication. Capturing student input about their access to opportunities that build these competencies is key to effective technology planning. Please answer the questions in the space provided below.

Do you currently have a method to collect student responses about the digital learning environment? If so, which tool (ex: BrightBytes, Speak Up, survey created by you or the district, other)?
AdvancED

If you have a method to collect student voice for this purpose, reference specific data points from the collection that were useful in developing strategies for this new plan.

Students (7-12) were asked several questions on the student inventory survey about digital learning and digital tools.

36% used digital learning in all of their classes and 39% used digital learning in at least half of their classes.

72% of students felt they had the necessary technology in all of their classes to be successful in school.

KETS Master Plan Areas of Emphasis

Connected to the Future Ready Framework

The Future Ready Framework identifies seven Gears to assist districts in developing a roadmap for student success through personalized student learning and collaborative leadership. The KETS Master Plan has identified 37 Areas of Emphasis connected to the Future Ready Framework and are categorized as either *1) Areas of Acceleration (AA) or 2) Areas of Improvement (AI)*. The "areas of acceleration" are considered big wins, successes, and major milestones of the KETS are identified for continuation work. The "areas of improvement" address emerging areas based upon growth or decline metrics, research, needs assessments, and reporting by Kentucky school districts.

Use the Areas of Emphasis and Future Ready Framework as a lens to analyze current trends, initiatives, needs and goals of your district. Link the work of this new plan identified by your planning team to the Gears and Areas of Emphasis of the KETS Master Plan on the following pages. There is no expectation to address all 37 Areas of Emphasis of the KETS Master Plan. Any strategy that involves Erate, please include in the Budget & Resources gear. If your district has lease agreements (i.e.; device, fiber, etc.), be prepared to reference the quantity during the final submission process.

Robust Infrastructure & Ecosystem
Future Ready Gear

KETS GUIDING PRINCIPLE – A robust infrastructure is one that delivers the device, network and support needs of staff and students to create personalized learning environments using digital tools and resources.

Areas of Emphasis: Areas of Acceleration (AA) **AA** */Areas of Improvement (AI)* **AI**

AA-1: Continue to provide nation's first, fastest, highest quality, and most reliable internet access to 100% of Kentucky's public schools

AA-2: Continue to ensure equity and standardization for delivery of device, network, data and support creating best in class staff and student digital experiences AND provide a system of shared/brokered/managed services maintaining low infrastructure costs and providing support structures promoting the use of personalized learning environments

AA-3: Continue to create a culture of digital connectedness through all- the-time, everywhere, always on digital opportunity and access with emphasis on dense Wi-Fi throughout schools *(also including home access, Wi-Fi buses, school and classroom Wi-Fi, etc.)*

AA-4: Continue to encourage the use of instructional programs and administrative processes requiring cloud-based services

AI-1: Improve ease of access for student and staff through continued progress toward 1:1 student to computer ratio utilizing increased amounts of mobile devices *(fewer traditional computer labs)*

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-1	To maintain a high-speed connection to all schools.	CIO, Vendor Partner	Completed by Aug 1, 2022	General Fund USF – E-rate Federal –Title KETS	$50,000	Usage increases by 50% and devices connected increases by 20% per day.
AA-3	To replace/upgrade all networking equipment/and battery backups.	Tech Staff	Completed by Aug 1, 2025	USF – E-rate Federal –Title KETS General Fund	$350,000	Improved digital connectivity
AA-4	To maintain and reseed 1-1 chromebook devices for both classroom and home use	CIO, Tech Staff	Completed by Aug 1, 2022 .	KETS General Fund	$100,000 per year	100% of all students 3-12 have wi-fi enabled devices

Data Security, Safety & Privacy
Future Ready Gear

KETS GUIDING PRINCIPLE – Security, safety and privacy of student data is a cornerstone of digital learning. Policies and procedures are enacted at the state, district and school levels that work in conjunction for this purpose. Student data are then utilized by data fluent educators for improved decision-making leading to increased learning for students.

Areas of Emphasis: Areas of Acceleration (AA) 🟡 */Areas of Improvement (AI)* 🔵

🟡 **AA-1**: Continue to support districts in securely accessing and managing key student and administrative data sets through improved user experiences, refined data collection processes, continuously updated policies and practices regarding student data security, and timely access to data sets that improve the depth and efficiency of student learning *(Infinite Campus, Early Warning, MUNIS, eTranscripts, School Report Card)*

🟡 **AA-2**: Continue to identify key aspects of data security regularly to build upon the current systems, procedures and policies to remain a leader in mitigating emerging threats *(acceptable use policies, firewall updates, data privacy studies, digital citizenship, content filtering)*

🟡 **AA-3**: Continue to utilize adoption metrics or trending data for planning purposes that allow EdTech leaders to identify what's working and what's not working based upon data quality and evaluate current systems and solutions to determine effectiveness and future direction *(annual auditors, TELL survey, Technology Activity Report, Digital Readiness, Data Quality Study, Data Quality Campaign, BrightBytes, SpeakUp)*

🟡 **AA-4**: Continue to migrate key administrative and student data sets to secure cloud-based services that allow anywhere, anytime secure access for the improvement of student learning *(Infinite Campus, Early Warning, School Report Card, MUNIS)*

🟡 **AA-5**: Continue supporting teacher efforts in taking ownership of digital citizenship skills and education their student in the same skills to foster a secure digital learning environment

🔵 **AI-1**: Educate and support districts in the importance of personnel with duties related to student/staff data quality, security and privacy as well as bringing data privacy to the "radar screen" of teachers/staff *(The People Side of EdTech)*

🔵 **AI-2**: Kentucky K-12 Data systems are first-class but we need to do much better with district using the data available to them as well as providing visual data analytic tools allowing the data to be better understood and more interesting to the average person who does not have a technology and data background

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-2	To purchase/upgrade a Lightspeed Agent	Tech Staff	Completed by Aug 1, 2022	USF General Fund KETS	$5000	Promote community service relations and monitor appropriate use of the internet.
AA-4	Use of cloud based data sets such as Infinite Campus, School Report Card, MUNIS, Clever, School Messenger, etc.. to allow for anytime use of data to improve teacher/student performance	CIO	Completed by Aug 1, 2022	N/A	$0	Increased student monitoring, mentoring, and student improvement data.
AI-1	Upgrade to A3 Azure services for increased security	CIO	2020	General Fund KETS	$14,000	Decrease in number of suspicious emails and provide staff with SSPR
AI-1	All students and staff to complete DDL certificate to better educate on cyber threats and security	CIO, Tech Staff, Principals	2020	N/A	$0	Increase awareness of cyber threats

Budget & Resources
Future Ready Gear

Equity | Achievement | Integrity | Quality | Opportunity | Access

DISTRICT TECHNOLOGY PLAN

KETS GUIDING PRINCIPLE – The Master Plan, as well as district and school technology plans, are aligned to the vision of 21st century skills for students and staff. Revenue streams are aligned to account for the recurring and nonrecurring total cost of ownership to support the 21st century learning environment in a manner that reflects good stewardship of tax dollars to include devices, infrastructure, support, data and human services.

Areas of Emphasis: Areas of Acceleration (AA) 🔶 */Areas of Improvement (AI)* 🔷

🔶 **AA-1:** Continue to maximize local and state education technology expenditures through a system of shared/brokered/managed services

🔶 **AA-2:** Continue use of long-term planning strategies that allow for continuity of initiatives and systems (ex. *Accounting for cost of ownership over the lifespan of equipment so monies are allocated for repairs/upgrades*)

🔶 **AA-3:** Continue to leverage all available state and federal funding opportunities to address required basic cost of living increases, previous budget cuts of basic services, projected growth by districts (e.g. *Internet consumption*) while maximizing education technology programs and initiatives (*Technology Need, E-rate*)

🔷 **AI-1:** Make districts aware of position/roles requiring technology-related duties in support of technology and instruction (*The People side of K-12 EdTech*)

🔷 **AI-2:** Make districts aware of how to reduce expenditures on printing/print services (*both in consolidated contract pricing as well as shifting from paper to digital experiences*)

🔷 **AI-3:** Evaluate the need and explore new contracts that drive costs down for statewide summative online assessment, learning management systems, printing services and interim based assessments

🔷 **AI-4:** See an increased percentage of districts examining which education technology investments are or are not being maximized

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-1	Establish monthly budget meetings with Tech staff and finance officer to review and plan for current and future technology needs		2020	N/A	$0	Monthly meetings will support informed technology purchases for staff and board of education.
AI-1	Recruit and train school staff to assist in technology repairs and teacher assistance in each school	Tech Staff	2020	N/A	$0	Decrease in time of technology response and repairs in schools and classrooms. Decrease of schooldude tickets.
AI-2	Installation of Intelligent Classroom Equipment, 1-1, document cameras, software	Tech Staff Principals	2019-2022	KETS Title I General Fund	$100,000	Decrease of copy costs and increase the use of paperless platforms

Partnerships
Future Ready Gear

KETS GUIDING PRINCIPLE – Connecting students and educators to the local and global community is a key factor to student success. The Master Plan will continue to provide opportunities for trusted relationships to build those connections as well as increase communication and transparency with shareholders, including families, districts, vendors, regional education collaboratives, postsecondary institutions and business/industry, in support of student learning and preparation beyond K-12.

Areas of Emphasis: Areas of Acceleration (AA) /*Areas of Improvement (AI)*

AA-1: Continue to build trusted relationships with shareholders (families, districts, partners) that will reduce risk as well as increase transparency and communication *(districts, vendors, higher-education, regional cooperatives)*

AA-2: Continue to utilize avenues of communication with shareholders allowing pertinent information and dialog to further student learning efforts *(Webcasts, BrightBytes, Technology Activity Report, KETS Service Desk, Office of Education Accountability studies, independent studies, etc.)*

AA-3: Continue to utilize tools engaging postsecondary institutions, community members, districts and families in student learning and life after K-12 *(eTranscripts, School Report Card and Dashboard tool, Infinite Campus parent and student portal, KDE Open House, Digital Readiness Survey)*

AI-1: Partner with postsecondary pre-service teacher and principal programs to provide support in candidate preparation

AI-2: Encourage postsecondary institutions to host STLP events and /or more fully maximize the opportunity to showcase the university and its programs while students are on campus

AI-3: Build relationships with charter schools to determine policies and procedures related to architecture/design, systems security and privacy, services and reporting requirements

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-1	Increase effectiveness of district and school social media by streamline and developing a process of creating/maintaining accounts	All District and School Admin	2020-2021	Title 1 KETS General Fund	$1000	Fewer stakeholder complaints regarding communication
AA-1	Increase the number of accurate emails in infinite campus to allow easier communication from schools and district	School Admin	2020-2021	N/A	$0	Increased number of accurate email accounts and number of newsletters making it to recipients
AA-3	Increase the number of Campus Portal accounts by sending out communications to parents through multiple digital platforms	All District and School Admin	2020-2021	N/A	$0	Increased number of IC portal accounts

Digital Curriculum, Instruction & Assessment
Future Ready Gear

KETS GUIDING PRINCIPLE – A digital learning experience is fostered by a teacher or coach with the use of rich digital instructional materials that are vetted to the rigor of Kentucky Academic Standards. A robust digital environment provides students with the opportunity to assess their own learning/progress.

Areas of Emphasis: Areas of Acceleration (AA)   /Areas of Improvement (AI)

AA-1: Continue to provide access to instruction digital content which further aligns to the Kentucky Digital Learning Guidelines

AA-2: Continue providing opportunities for students to demonstrate learning connected to and through technology *(empowering students through technology with STLP, IT Academy, etc.)*

AA-3: Continue to finalize and partner with Career and Technical Education (CTE) to promote Kentucky approved K-12 Computer Science Standards and Technology/Digital Literacy Content Standards *(based on International Society for Technology in Education standards)* for ALL students

AA-4: Continue providing access to online assessment tools that allow teachers and administrators to assess student learning, provide timely feedback to students and make curriculum decisions *(online formative assessment tools, interim based assessments, and summative assessments)*

AA-5: Continue to provide districts/classrooms access to digital instructional materials through an equitable of robust digital experience

AI-1: Identify digital content and tools (curriculum, instruction and assessment) designed to have the highest impact and value (e.g. is the technology making or not making an instructional and learning difference?), including frequency of use by teachers and students

AI-2: Create a closer connection with Career and Technical Education to expand information technology and computer science career pathway offerings specifically related to computer programming/coding and increase exams available through IT Academy

AI-3: Play a vital role in implementation of summative online assessment and school report card and dashboard tool of the new assessment and accountability system

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-2	Increase the number of students participating in regional/state STLP competitions by advertising opportunities to classroom teachers and more students	Principals Teachers Tech Staff	2020-2021	General Fund	$2100	The three remaining schools will initiate a STLP program
AA-4	Implement MAP at K-2 grade level, and provide support to schools for touch devices	Principals Teachers Tech Staff	2019-20	Title 1	$3500	All students and staff will have the ability to test and get student data to support instruction
AA-1	Increase the efficiency of newly purchased curriculum (Great Minds,Eureka, and Edulastic) with effective online platform usage	Principals Teachers Tech Staff	2020-2021	General Fund	$400,000	Student usage and mastery reports provided by curriculum. Increased MAP/KPREP scores.

Personalized Professional Learning
Future Ready Gear

KETS GUIDING PRINCIPLE – Digital learning expands the access to quality strategies and experiences for educators beyond the traditional methods of professional development. A culture of digital collaboration, workflow and relationships allows educators to build skill sets and instructional best practices with colleagues globally. This approach of increased access and flexibility for professional learning ultimately leads to greater success for students.

Areas of Emphasis: Areas of Acceleration (AA) /*Areas of Improvement (AI)*

AA-1: Continue building a culture of digital collaboration and connected digital relationships that allow administrators to support and encourage the use of digital tools by staff for professional learning.

AI-1: Provide district with guidance and support to determine crucial learning needs of teachers resulting in more professional learning opportunities related to digital learning tools

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AI-1	Send tech staff to both KYSTE and state STLP events	Tech Staff	2020-2021	KETS General Fund Title 4	$2000	Attendance logs and calendars, debrief notes
AA-1	Provide time in staff meetings and PLC meetings for staff share out of technology use within the classroom	Principals Tech Staff	2020-2021	N/A	$0	Staff/PLC meeting agendas, increased technology use in the classroom
AA-1	Provide tech staff time to support teachers during staff meetings or professional development as needed	Principals Tech Staff	2020-2021	KETS General Fund Title 4	$1000	Staff/PD meeting agendas, increased technology use in the classroom
AA-1	Tech staff will attend and complete DataSeam training and Apple certification	Tech Staff	2020-2021	KETS Title 4	$20000	Staff will receive Apple certification and district will be provided research machines to support instruction
AI-1	Tech staff will support EdCamp for district and school staff during the school year to support continued growth of technology and education integration	CIO, Tech Staff	2020-2021	General Fund	$1000	Staff will be better supported and prepared to provide students with new technology and software to support instruction

Use of Space & Time
Future Ready Gear

KETS GUIDING PRINCIPLE – The personalized learning environment for students requires reimagining the use of school space and time. Virtual instruction, cloud-based learning tools, digital instructional material, digital collaboration, digital workflows and digital relationships, etc., assist in providing the vehicle for anywhere, anytime learning.

Areas of Emphasis: Areas of Acceleration (AA) 🔶 */Areas of Improvement (AI)* 🔵

🔶 **AA-1**: Continue to provide guidance, support and resources for districts in the development and application of high quality online/virtual coursework as well as implementation of learning management systems

🔵 **AI-1**: Educate and support districts in the implementation and facilitation of digital learning tools and portable technologies that foster anywhere, anytime access for staff and students

KETS AA or AI	Strategy	Person(s) Involved	Anticipated Timeframe	Anticipated Funding Source	Anticipated Funding Amount	How will you know this is successful? (including metrics)
AA-1	CTE students will be supported to further implement virtual learning with neighboring district in both technology and nursing pathways (google and blackboard)	CTE Teacher Principal Tech Staff	2020-2021	N/A	$0	Expansion of program with increased enrollments and new partnerships