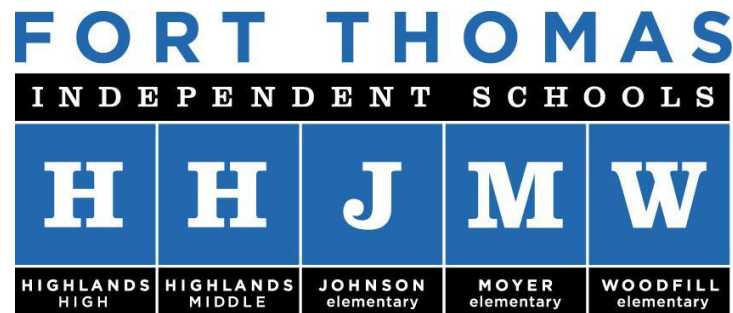


DISTRICT TECHNOLOGY PLAN

DISTRICT NAME Fort Thomas Independent Schools

LOCATION Fort Thomas, Kentucky

PLAN YEAR(S) 2019-2020



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

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Planning Team

District Staff [Recommended to include Director of Technology and Information/CIO/DTC, TIS/DLC, technician, finance officer, superintendent, academic officer, etc.]

Diana M McGhee, Director of Technology/CIO

Matthew Winkler, Network Administrator

Sommer Rosa, Director of Special Education

Jody Johnson, Digital Learning Coach

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

Laura Robinson, Moyer Elementary Library Media Specialist

Dr. Dawn Laber, Moyer Elementary Principal

Katie Leftin, Johnson Elementary Teacher

Kathleen Stewart, Highlands High School Teacher

Shelby Jones, Woodfill Elementary Teacher

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

Karen Allen, Board Member

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

Mason Opitz, High School Senior

Sarah Yu, 8th Grade Student

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

David Russell, Johnson/Highlands Middle/High Parent	Pam Schultz, Moyer Elementary Parent

Previous Plan Evaluation

When reviewing our previous Technology Plan, we find the following overarching goals still prevalent today.

- Improve student achievement and academic growth
- Enhance curriculum by helping teachers integrate technology to increase academic opportunities, both during and outside of the traditional school day
- Increase 21st century technology skills of all students and staff
- Maintain updated infrastructure to support learning with technology

To meet these overarching goals, our previous plan included activities and strategies in the following four areas.

- Curriculum and Instructional Integration Goals
- Student Technology Literacy Goals
- Staff Training/Professional Development Goals
- Technology Goals

Efforts will be made in this new plan to continue to work on goals not met with a comfortable level of success last year. Those items include, but are not limited to

- Revise technology skills continuum
- Improve technology professional development options for staff to include new and emerging technologies
- Create better data warehouses to avoid duplication of data

New Plan Preview

The Fort Thomas Independent Schools recognizes that our citizens are not isolated; they are members of a global society. To that end, we expect these citizens to use technology to access information, to communicate with other citizens, wherever they may be, to collaborate with others both within the school environment and within the global environment, and to construct knowledge derived from these activities.

The technology vision of the Fort Thomas Independent Schools, as stated in the District's Comprehensive Improvement Plan which references the District's current mission/vision statement, is to assure that our technology is utilized by teachers and students in transformative ways to enhance student achievement and to make real-world global connections.

The Fort Thomas Independent Schools expects teachers to become effective users of technology in order to provide an innovative, creative and user-friendly learning environment. Teachers should function as coaches, mentors, information managers, and, in general, as facilitators of knowledge. Teachers should have knowledge and skills to integrate these technologies in a manner that will address students' specific needs and learning styles.

Each school council, curriculum team, PTO and member of the Fort Thomas Board of Education will work collectively to create access to our system and strive for ways to ensure that the financial backing and planning is in place to keep the District's technology current.

The Fort Thomas Independent Schools realizes that technology is constantly evolving and changing. Software, hardware and other technologies should be acquired and maintained to ensure a modern learning environment so that our students can become productive members of the global society. A key to preparing students for 21st century success is equitable access to information and access to the tools necessary to address curricular goals.

The district technology committee has made every effort to align this technology plan with the Kentucky Master Plan for Education Technology and the National Educational Technology Standards developed by the International Society for Technology in Education (ISTE) as well as our District's Portrait of a Graduate vision (PoG).

This plan conveys the vision, goals and objectives that support the Fort Thomas Independent School District's Strategic Plan and Comprehensive Improvement Plan. This plan should help guide schools in using technology to empower the learning community. Every effort has been made to be visionary, flexible and open-minded. Like a journey, technology planning is long-term and continuous. The committee will continue to expand and revise this plan as a technology-rich environment is implemented for students, staff and community members. Each year, a committee will review the plan for necessary revisions. The plan will then be finalized, revised and submitted to the Board of Education at either the May or June meeting.

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.

Fort Thomas Independent Schools participated in the national Project Tomorrow Speak Up Survey during the 2017-2018 and 2018-2019 school years. In 2017-2018, we surveyed parents and teachers; in 2018-2019, we surveyed students in grades 3-12. Following are some survey results that were meaningful to Fort Thomas Independent Schools' Digital Conversion initiative.

2017-2018 Results - Parents (388 parents completed the survey, answering 33 questions)

Question: Besides having strong subject area knowledge (e.g. English, math, science, history) which of these college and workplace skills do you think are most important for students/youth to learn to be successful in the future?

- 91% - Critical thinking and problem solving skills
- 77% - Teamwork and collaboration skills
- 72% - Being creative and "thinking outside of the box"
- 67% - Effective communications through writing
- 63% - Effective communications through public speaking

***These results are consistent with the District's Portrait of a Graduate (PoG) initiative.*

Question: What do you think is the best way for your child to develop skills he/she will need to be successful in the future?

- 82% - Gain work experience through a job, internship or volunteering
- 64% - Participate in a team sport or academic group
- 63% - Use technology within his/her classes
- 62% - Work on group projects in class
- 60% - Participate in school leadership opportunities
- 59% - Participate in project-based learning experiences including creating and building things in makerspaces

Question: Digital citizenship is the set of norms of appropriate, responsible behavior with regard to technology use. Which of these types of digital citizenship do you think are most important for students to learn today?

- 91% - Knowing how to be safe online and use safeguards to protect our information and ourselves
- 82% - Understanding what are appropriate and inappropriate digital behaviors
- 76% - Learning how to protect one's self from the physical and psychological dangers of technology use
- 65% - Understanding ethical and lawful use of digital tools

- 60% - Knowing how to use, and how to learn to use, technology for learning purposes

Question: Who should have primary responsibility for teaching digital citizenship to students? (Check all that apply)

- 88% - Parent
- 80% - Classroom Teacher

Question: Do you have any concerns about the use of technology at your child's school? Check any of these that are concerns for you.

- 54% - Students are spending too much time on a computer screen at school
- 48% - Technology use varies from teacher to teacher
- 37% - Students use technology inappropriately

Question: Imagine you are designing a dream school for today's students. Which of these tools or strategies do you think holds the greatest potential for increasing student achievement and success?

- 55% - Dashboard or portal to track student academic progress over time (e.g. classes taken, course grades, test scores, absences) even if students change schools
- 49% - Chromebook or laptop for every student to use at school
- 49% - Tools to help students create media projects (e.g. video, audio)

2017-2018 Results - Teachers (86 teachers completed the survey, answering 32 questions)

Question: Many educators believe that the use of technology can benefit student learning. Which of these outcomes have you observed in your classroom?

As a result of how I have integrated technology within my classroom, my students are...

- 91% - Collaborating with other students more
- 75% - Communicating with his/her/my teacher more often
- 65% - Developing creativity skills
- 58% - Developing critical thinking and problem solving skills
- 58% - Learning in a way that fits my/his/her learning style

Question: Digital citizenship is the set of norms of appropriate, responsible behavior with regard to technology use. Which of these types of

digital citizenship do you think are most important for students to learn today?

- 74% - Appreciating that everyone has digital rights as well as responsibilities to the society at large
- 68% - Knowing how to be safe online and use safeguards to protect our information and ourselves
- 60% - Knowing how to use, and how to learn to use, technology for learning purposes

Question: How comfortable are you teaching good digital citizenship behaviors and strategies to students?

- 41% - Somewhat comfortable
- 33% - Very comfortable

Question: Imagine you are designing a dream school for today's students. Which of these tools or strategies do you think holds the greatest potential for increasing student achievement and success?

- 79% - Internet access anywhere at school
- 71% - Chromebook or laptop for every student to use at school
- 64% - Cloud-based communications and collaboration tools (e.g. Google Apps for Education, Microsoft Office 365)
- 64% - Online tools that help organize schoolwork and provide access to important information
- 64% - Tools to help students create media projects (e.g. video, audio)
- 61% - Dashboard or portal to track student academic progress over time even if students change schools
- 61% - Digital content (animations, simulations, online articles, and resources)

What we learned from the 2017-18 survey

- Parents and teachers agree about skills needed/addressed.
- A disconnect exists between parents/teachers on digital citizenship.
- Parents take responsibility in teaching digital citizenship skills.
- Parents have concerns about technology use.

2018-19 Results - Grades 3-5 Students (208 JES students, 276 MES students, 198 WES students)

Question: How often do you use technology at school to help you with learning?

- 70% of our elementary students chose "Every day"
- 27% of our elementary students chose "A few times a week"

Question: Imagine you are building a new school. Which of these things would you have in that school to help students learn? If you don't want it, just skip it.

- 68% of our elementary students chose "Digital learning games"
- 67% of our elementary students chose "Online tests or quizzes"
- 66% of our elementary students chose "Interactive whiteboards"
- 66% of our elementary students chose "Internet access anywhere at school"
- 65% of our elementary students chose "Chromebook or laptop for every student to use at school"

Question: What is your favorite way to read a book or story?

- 61% - Reading it as a printed book
- 21% - Reading it on a tablet or computer
- 10% - Having the story or book read to me by the computer

Question: Would you like to learn how to write programs to make computers do things, like in Scratch or Minecraft?

- 42% - No
- 34% - Yes
- 12% - I already do this myself
- 9% - I already do this at school

Question: Read these sentences. Mark the box if you agree with them. By using technology to help with my learning

- 51% - I work with my classmates more
- 25% - I talk to my teacher more
- 50% - My grades are better
- 62% - I am more creative
- 49% - I am a better thinker and problem solver
- 48% - I understand what we are learning in class better
- 45% - I have more control over how I learn things

- 55% - I get to learn at my own speed
- 37% - I finish more of my homework
- 43% - I like school more
- 37% - I share my ideas in class more
- 45% - I can go home and continue learning after school
- 8% - None of these

Question: A good digital citizen knows how to use technology in the right way and knows how to be safe online. Have you been taught how to be a good digital citizen?

- 92% - Yes
- 1% - No
- 7% - Not sure

2018-19 Results - Grades 6-12 Students (Only 254 students at the middle school and 119 students at the high school took the survey. The schools did not mandate that students take the survey. For this reason, we feel results from those two schools are not truly representative of the student body. We will make a more serious effort next year to survey these students.)

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)  / Areas of Improvement (AI) 



AA-1: Continue to provide fastest, highest quality and most reliable Internet access to Fort Thomas Independent Schools students and staff by creating a culture of digital connectedness through everywhere, always-on digital opportunity and access with emphasis on dense WiFi throughout schools (e.g. Digital Conversion initiative)



AA-2: Continue to ensure equity and standardization for delivery of digital experiences, providing support structures that promote personalized learning environments



AA-3: Continue to encourage the use of instructional programs and administrative processes requiring cloud-based services



AI-1: Provide additional support for technology troubleshooting in elementary schools



AI-2: Determine success of digital conversion initiative toward meeting Portrait of a Graduate (PoG) competencies

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 AA-2 AA-3	Continue to provide and support wireless access points in all classrooms and common areas, including dual access points in locations that currently do not have dual access points	Director of Technology and Information/ CIO Network Admin	7/1/2019-6/30/2020	Local KETS	\$175,000	Wireless saturation and coverage will increase
AA-1 AA-2 AA-3	Upgrade district server cluster with latest technology	Director of Technology and Information/ CIO Network Admin	7/1/2019-6/30/2020	Local KETS	\$50,000	Servers will be running most recent operating systems
AA-1 AA-2 AA-3	Continue to fund and support a 1:1 learning environment for all students	Director of Technology and Information/	7/1/2019-6/30/2020	Local KETS	At least \$250,000 a year to sustain	All students will have access to a learning device

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		CIO Superintendent Chief Financial Officer Board of Education			leases for purchasing devices as they need replacing	
AA-1	Create and document current infrastructure layout and an infrastructure refresh plan	Network Admin	7/1/2019-6/30/2020	N/A	N/A	Infrastructure layout will be accessible by multiple parties for planning purposes
AA-1	Create and document current device refresh schedule	Director of Technology and Information/ CIO	7/1/2019-6/30/2020	N/A	N/A	Current device refresh schedule will be accessible by multiple parties for planning purposes
AI-1	Continue to support student-run Help Desk at HMS and HHS	Director of Technology and Information/ CIO Assistant Superintendent for T&L	7/1/2019-6/30/2020	Local	\$60,000 annually for supervisor salary and/or equipment	Help Desk will remain integral part of digital conversion project

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		Principals				
AI-1	Create technology troubleshooting support system for elementary schools	Director of Technology and Information/ CIO Assistant Superintendent for T&L Principals	7/1/2019-6/30/2020	Local	N/A	Schools will be better equipped to help troubleshoot basic issues with student devices
AI-2	Determine method for assessing effectiveness of Digital Conversion, especially in early grades, toward PoG competencies	Director of Technology and Information/ CIO Assistant Superintendent for T&L Principals	7/1/2019-6/30/2020	Local	N/A	Method will be available for use by interested parties



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 identify key aspects of data security regularly to build upon current systems, procedures and policies to help in mitigating emerging threats (*responsible use policies, firewall updates, data privacy studies, digital citizenship, content filtering*)



AA-2: Continue to look for ways 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



AA-3: Continue supporting teacher efforts in taking ownership of digital citizenship skills and educating students in same skills to foster a secure digital learning environment through allocation of resources (*e.g. digital learning coaches and library media specialist positions*)



AI-1: Find additional ways to educate personnel regarding importance of security and privacy of student/staff data



AI-2: Do more to educate parents regarding appropriate digital citizenship skills and things parents can do at home to further educate children

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	Present Safety and Security measures to the Board of Education	Director of Technology/ CIO	Must be completed before August 31, each year	N/A	N/A	Board of Education meeting minutes will reflect presentation.
AA-3	Continue digital citizenship education in PK-12, increasing discussions with students about privacy/security and their "digital footprint"	Principals Digital Learning Coaches Library Media Specialists	7/1/2019-6/30/2020	N/A	N/A	Students will be better informed of importance of digital footprint
AA-1	Research current Internet filtering system to make sure it meets our needs, and - if not - research other options.	Director of Technology and Information/ CIO Network Administrator	7/1/2019-6/30/2020	N/A	\$10,500 annually for product; \$0 for research	All parties involved (parents, staff, students) will feel that the Internet filtering system meets our needs, both on and off site.
AI-1	Continue to review IC user groups and rights to ensure correct rights are assigned to correct employees	Director of Technology and Information/	7/1/2019-6/30/2020	N/A	N/A	Data will be better secure

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		CIO Assistant Superintend ent for Student Services				
AI-2	Find ways to better involve and thus educate parents toward teaching digital citizenship skills outside of school	Assistant Superintend ent for Student Services Assistant Superintend ent for Teaching and Learning Digital Learning Coaches	7/1/2019-6/30/2020	N/A	N/A	Parents will be better informed about digital citizenship obligations



Budget & Resources

Future Ready Gear

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 leverage all available state and federal funding opportunities to address required costs of technology-related services (e.g. telecommunication services, network equipment services)



AA-2: Continue use of long-term planning strategies that allow for continuity of initiatives and systems (e.g. accounting for costs of ownership over the lifespan of equipment so monies are allocated for repairs/upgrades)



AI-1: Assess district's positions/roles requiring technology-related duties in support of technology and instruction to make sure needs are being met (*The People side of K-12 EdTech*)



AI-2: Look for ways to reduce expenditures on printing/print services (both in consolidated contract pricing as well as shifting from paper to digital experiences)



AI-3: Improve systems that determine if investments are or are not being maximized (e.g. software expenses, online subscriptions, FTEF grant purchases)

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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	Continue to apply for eRate reimbursement funds	Director of Technology and Information/ CIO	Yearly	N/A	N/A	Reimbursement requests will be approved, and district will receive funds from federal program.
AA-1	Continue to preserve funds to be used for match in KETS funding to maximize technology purchases across the district	Chief Financial Officer	Yearly	Local Funds	\$67,000	KETS funds will be able to be matched each year.
AI-1	Increase number of technology department staff to match state-suggested <i>People Side of Technology</i> formula	Superintendent Board of Education	7/1/2019-6/30/2020	Local	\$80,000	Technology department will grow in number to match state-suggested formula of one technician to every 800 devices.
AI-2	Encourage personnel to reduce printing by printing to networked copiers	Principals	Yearly	Local Funds	\$52,800	Fewer copies will be printed; toner costs will reduce because local inkjet or LaserJet printers will be removed as they die.
AI-2	As LaserJet and Inkjet printers die, consider not replacing them	Director of Technology and Information/ CIO	Yearly	N/A	N/A	Number of local printers will decrease Toner expenses will decrease

		Principals				
AI-3	Analyze expenditures on tech services and cross reference with usage report	Director of Technology and Information/ CIO	Yearly	Local Funds	\$10,000	Duplication of programs will decrease. Usage will dictate renewals.



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, partners) that will 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 (*Infinite Campus, Schoology, Twitter, Facebook, Website*)



AA-3: Continue to utilize tools engaging postsecondary institutions, community members 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*)



AA-4: Partner with postsecondary pre-service teacher and principal programs to provide support in candidate preparation

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	Promote Launch initiatives within business/industry community and K12 classroom teachers, for both in-person opportunities and virtually hosted opportunities.	District and School Administrators Classroom Teachers Parents	Yearly	N/A	N/A	Increase in student interaction with business and industry reps.
AA-2	Continue to provide ability for employees to use social networking to promote district message	Director of Technology and Information/ CIO	Yearly	N/A	N/A	Employees will be able to use Twitter, Facebook and other social networking sites without worry of being blocked by Internet filtering software
AA-2	Continue to look for ways to improve district's website, making sure pages meet accessibility laws	Director of Technology and Information/ CIO	Yearly	Local	\$6,500 annual hosting fee	Pages will be full of information and accessible to all viewers
AA-2	Identify clear audience and purpose for each communication system (e.g. Schoology, IC messages, Twitter) and determine a consistent message from all	Director of Technology and Information/ CIO	Yearly	N/A	N/A	Decrease in parent and student contacts for information. As a district, determine what the preferred communication platforms (student driven: Seesaw,

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	schools (e.g. Classroom information should appear where? Sporting event info should appear where? Where do I go as a parent to get the most accurate, most up-to-date info? Where do I go as a student to get the most accurate, most up-to-date info?)	District Administrators				et al; teacher driven: Schoology...or something else) will be utilized by staff across schools.
AA-2	Ensure email addresses being used for communication are as correct as possible so people receive messages intended for them. (Schoology, Infinite Campus, Dojo, SeeSaw)	Director of Technology and Information/ CIO Individual School Personnel	Yearly	N/A	N/A	Emails are connecting to the correct parents via schoology and Infinite campus messenger.
AA-4	Continue to support pre-service teachers by allowing them to bring personal devices and attach to our network	Director of Technology and Information/ CIO Network Administrator	Yearly	N/A	N/A	Student teachers will have positive experience



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 instructional 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 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 classrooms access to digital instructional materials through an equitable, 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

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	Continue to provide access to instructional digital content which further aligns to the Kentucky Digital Learning Guidelines	Principals Teachers Digital Learning Coaches Superintendents	Yearly	Local	\$350,000	Stakeholders will have continued access to online learning platforms, opportunities to provide feedback through survey data.
AA-2	Expand makerspaces and STEAM opportunities in all schools	Principals Assistant Superintendent of Teaching and Learning	Yearly	Local Grants	\$25,000	Student involvement data will be reviewed looking for expanded opportunity for growth.
AA-2	Support STLP club at each school	Principals Director of Technology and Information/ CIO	Yearly	Local Stipends	\$125,000	STLP will continue to be promoted at all levels.
AA-2	Incorporate student soft	Assistant	Ongoing	N/A	N/A	Students will be better prepared to

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	skills into student technology skills (using technology as a tool to support speaking event, but not as speaking event, etc.)	Superintendent for Teaching and Learning Digital Learning Coaches				meet PoG competencies, particularly the Global Communicator competency.
AA-3	Integrate new Computer Science Standards as appropriate	Assistant Superintendent for Teaching and Learning Digital Learning Coaches Principals	7/1/2019-6/30/2020	N/A	N/A	Principals will foster awareness of the new computer science standards. Observation data would inform integration of standards as appropriate. Digital Learning Coaches coach teachers in strategies to teach new standards.
AA-4	Create ways for students to contribute to a digital repository of their own artifacts (digital portfolio)	Digital Learning Coaches	Yearly	N/A	N/A	Develop Schoology portfolios that allows students to document their work that addresses Portrait of a Graduate competencies.
AA-4	All secondary school staff support students in the creation and continuous updating of their Individual Learning Plans (ILP) through Naviance	School Counselors	Yearly	Local/School	\$11,548.94	Monitor Naviance data to ensure that students complete tasks appropriate to level. Create grade-level advisory groups at HHS to guide and audit student progress.

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AI-1	Create repository of digital tools being used in classrooms that includes POCs, privacy regulations, terms of service, costs, contract renewal dates, licenses, etc.	Director of Technology and Information/ CIO	Continuous	Local	\$10,000 (ClassLink portal now allows this)	Repository is kept updated as appropriate.
AI-1	Investigate purchasing new AMP module for Schoology to support common assessments	Director of Technology and Information/ CIO Assistant Superintendent for Teaching and Learning Digital Learning Coaches	7/1/2019-6/30/2020	Local	\$8,000	Use student data to show growth using the AMP module in Schoology to determine success.
AI-1	Incorporate student posting strategies such as THINK into regular classroom practice.	Digital Learning Coaches Teachers	Continuous	N/A	N/A	Instances of cyber bullying will, hopefully, decrease



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 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)
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.	Leadership Team	Continuous	N/A	N/A	District continues to foster an environment of learning for 1:1 technology in K-12. Teachers continue to be supported in learning and growing.
AI-1	Professional development and training that follow state and district PD design will allow for classroom integration of technology for improving and enhancing student learning in all content areas	Assistant Superintendent for Teaching and Learning Principals	Yearly	N/A	N/A	A checklist or timeline of specific skills per grade level or content area based on self-reflection and growth plans.
AI-1	All district teachers will complete a self-reflection of technology use for instruction and student engagement.	Principals Digital Learning Coaches	Yearly	NA	NA	Teachers will self-reflect and develop plan for growth in lesser developed areas using a district created reflection tool.
AI-1	District will provide support to the Library Media Specialists and	Digital Learning Coaches	Continuous	N/A	N/A	All elementary media specialists have the same time to work with technology regardless of size of

	teachers in using equipment in makerspaces to aid instruction.	Principals				school. Schools will foster opportunities for students and teachers at higher grade levels to collaborate with Library Media Specialists to utilize makerspaces to aid instruction.
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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 schools in the development and application of high quality online/virtual coursework as well as implementation of learning management systems



AA-2: Continue to provide support to schools in reimagining how school space can support personalized learning with technology (e.g. remove labs or restore labs as necessary, support areas that still needs labs - STEM, CADD)



AI-1: Educate about and support 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	Expand use of Learning Management System to better support online/virtual coursework	Director of Technology and Information/ CIO Assistant Superintendent for Teaching and Learning Digital Learning Coaches	7/1/2019-6/30/2020	Local	\$27,000	The number of online/virtual courses will increase.
AA-2	Work with Director of Facilities to find ways to better utilize Launch space with an online shared calendar	Director of Technology and Information/ CIO Assistant Superintendent for Teaching and Learning	7/1/2019-6/30/2020	N/A	\$4526.32	Users will be able to more easily schedule time in spaces at Launch

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		Director of Facilities				
AA-2	Continue to train teachers and students to use collaboration tools such as Office 365 and Google Drive	Digital Learning Coaches Teachers	7/1/2019-6/30/2020	N/A	N/A	Usage of these tools will increase
AA-2	Continue to train teachers and students about best ways to teach with 1:1 devices at all levels	Director of Technology and Information/ CIO Assistant Superintendent for Teaching and Learning Digital Learning Coaches	7/1/2019-6/30/2020	N/A	N/A	Technology integration will become more seamless
AI-1	Better educate teachers on current research of digital vs print resource/references	Digital Learning Coaches	7/1/2019-6/30/2020	N/A	N/A	Less copies made or text available in Schoology for all students so they have choice. Student inventory to determine best way to learn.

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AI-1	Examine possible ways to utilize our technology to continue instruction during severe weather days	Leadership Team	7/1/2019-6/30/2020	N/A	N/A	Use of Schoology and items available within.
AI-1	Work with City of Fort Thomas to encourage them to develop city-wide WiFi	Superintendent Director of Technology and Information/ CIO	7/1/2019-6/30/2020	N/A	N/A	Access to public WiFi across Fort Thomas will increase
AI-1	Begin to assess if students are learning better through digital conversion	Director of Technology and Information/ CIO Assistant Superintendent for Teaching and Learning Digital Learning Coaches	7/1/2019-6/30/2020	N/A	N/A	Need to add more student survey, interest inventory, parent feedback...

Current Technology and Resources

Servers and Transmission Infrastructure

Elementary Schools

The three elementary schools currently have 10/100/1000 BaseT Ethernet using Category 5, 5E, and 6 unshielded twisted pair (UTP) wiring. The elementary school networks are fed via Extreme switches running at 1 gbps. These network devices are centrally located in a wiring closet. Each elementary school network is connected to the Central Office local area network (LAN) via 20 gigabit single mode fiber optic cable. Each classroom has a minimum of four data ports, one voice port, and one video port. All elementary schools have 100% wireless coverage, using Extreme Networks wireless access points. All elementary schools have two wiring closets; Moyer Elementary has three. Woodfill has one server for the HVAC system. All other servers that formerly were housed at the elementary schools have been collapsed to the virtual server cluster in the District's Network Hub (now housed at Moyer).

Middle School

The middle school uses 10/100/1000 BaseT Ethernet over Category 5E and Category 6 UTP. The network is fed via Extreme switches running at 1 gbps that are located in two wiring closets, each serving half of the building. Connectivity to the Central Office LAN is achieved via 20 gigabit single mode fiber optic cable. Each classroom has a minimum of seven data ports, one voice port, and one video port. The middle school has 100% wireless coverage, using Extreme Networks wireless access points. The middle school has one server for the HVAC system. All other servers that formerly were housed at the schools have been collapsed to the virtual server cluster in the District's Network Hub (now housed at Moyer).

High School

The high school uses 10/100/1000 BaseT Ethernet over Category 5E UTP and Category 6. The network is fed via Extreme switches running at 1 gbps. Six wiring closets are connected using fiber optic cable. Connectivity to the Central Office LAN is achieved via 20 gigabit single mode fiber optic cables. Each classroom has a minimum of four data ports, one voice port, and one video port. The school is 100% wireless, using Extreme Networks wireless access points. The high school has one server for the HVAC system. All other servers that formerly were housed at the schools have been collapsed to the virtual server cluster in the District's Network Hub (now housed at Moyer).

District LAN

The District LAN is a 10/100/1000 BaseT Ethernet network using Category 5, 5E and Category 6 UTP wiring, segmented and distributed through the building using Extreme 1 gbps switches. The switches were installed to relieve network traffic congestion and to provide a solid backbone for the server farm. The efficient design allows for full bandwidth across the wide area network (WAN). Access to the Internet is achieved via an Extreme Switch, a Cisco router, and a 500 Mbps digital circuit. The central office is 100% wireless, using Extreme Networks wireless access points.

All schools are currently utilizing point-to-point digital data circuits. Point-to-point is a telecommunication service designed for cost-efficient data transmission for intermittent traffic between local area networks (LANs) and between endpoints in a wide area network (WAN). For most services, the network provides a permanent virtual circuit, which means that the network user sees a continuous, dedicated connection.

The server farm is composed of the following:

- 1 Dell NX 1950 with MD 3000, running Windows 2016
- 1 IBM X346, running Windows 2003
- 3 Dell R710, running Windows 2012R2
- 2 Dell 2950 with MD 3000 and MD 1000, running Windows 2012R2
- 1 Dell PowerEdge VRTX, running Windows 2012R2
- 3 Dell PowerEdge M520, running Windows 2012R2
- 1 Mac Pro 10.12
- 12 Mac Minis 10.12
- 1 Discover Video server for video playback

The District's KEN cabinet is housed at Moyer Elementary, and they hold the following:

- 2 IBM X3650
- 1 iBoss, Internet filtering appliance
- 1 HP Proliant DL360G7

In the summer of 2014, the TMG server was replaced with an iBoss server for Internet filtering. In the summer of 2015, the iBoss server was replaced with a Lightspeed server then in January 2017, the Lightspeed server was replaced with an iBoss server. The state blocks all traffic across port 80 except when it originates from a iBoss server. This allows all schools' Internet connectivity to come from one central location without the fear of intruders gaining access to each school via the current TCP port. The iBoss Server maintains a set of logs that monitor network traffic. The District also runs an enhanced proxy.

Wide Area Network (WAN)

The wide area network currently provides messaging capability and a point of entry to the Internet. All of the district's facilities are connected to the wide area network.

Inventory of Major Software Usage per Grade Level or Department

(listed alphabetically, not all inclusive)

Software	Purpose	Users
Absence Management by Frontline	Employee Absence Management	Employees
Adobe Creative Cloud	Creativity, Productivity	K-12 students Some employees
Apple iLife Suite	Creativity, Productivity	K-12 students Some employees
BrainPop	Blended Learning Tool	PK-12
ClassLink	SSO Tool	K-12 and Employees

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ConnectEd (Glencoe)	Curriculum Tool	Everyday Math, K-5 Wonders, K-5
Copia	Curriculum Tool	High School science
Discovery Education	Curriculum Tool	K-12 (Paid streaming service) HMS uses paid Science and Social Studies Tech Books
Discover Video	Cable in the Classroom	PK-12
Software	Purpose	Users
Edmentum (Plato/Study Island)	Curriculum Tool (Rtl)	9-12
Edmentum (Exact Path)	Curriculum Tool (Rtl)	6-8
Encyclopedia Britannica	Research Tool	K-12
Filewave	Mobile Device Manager	K-12
Follett Destiny	Library and Asset Management Tool	K-12
G Suite	File Storage, Collaboration	PK-12

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Infinite Campus	State-mandated Student Information System	PK-12
iTunes U	Digital Resources	6-12
KYVL	Kentucky Virtual Library	K-12
Learning.com	Digital Citizenship	6
Lockdown Browser by Respondus	Test Security Tool	6-12
Mathia by Carnegie Learning	Math	6-12
Microsoft 365	Email, File Storage, Collaboration, Productivity	PK-12 and Employees
Software	Purpose	Users
MUNIS	Financial Software	Finance Department
Naviance	Career Planning Tool	6-12
NaviGate Prepared	Safety/Security	Employees

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Nearpod	Interactive Tool	K-12 (not all grades/classes)
NoRed Ink	English Language Arts	6-8
Professional Development by Frontline	Professional Development Tracking	All Teachers
PITSCO	STEM Software/Modules	6-8
Reading Plus	Reading Intervention	6-8 (specific students)
Renaissance Learning	Academic Evaluation, ELA and Math	K-12
Schoology	Learning Management System	K-12
SchoolDude	Facility, Maintenance, Technology Work Order System	Employees
SchoolPointe	Web Hosting	K-12
Smart Notebook	Productivity	K-12 (not all teachers)

Software	Purpose	Users
Springboard Online	ELA Curriculum	6-8
Turnitin.com	ELA Curriculum/Plagiarism	6-12

Annual Technology Readiness Report

Each year, the Kentucky Department of Education releases a School Report Card (SRC) for all districts/schools. This report card includes information about technology readiness. The link for the Fort Thomas Independent Schools SRC is <https://www.kyschoolreportcard.com/organization/5562>