Technology Plan
Henry County Public Schools
New Castle, Kentucky

http://www.henry.kyschools.us

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Acknowledgments

District Technology Staff

Nikkol Bauer, Chief Information Officer

Merlyne Brewer, Technology Resource Teacher

Larry Jesse, IT Specialist

School Technology Coordinators

Robin Payton, Campbellsburg Elementary

Sarah Buckley, Eastern Elementary

Carrie Cox, Eastern Elementary

Kim Graves, New Castle Elementary

Sarah Buchanan, New Castle Elementary

Diane Wilson, Henry County Middle School

Steve Galyon, Henry County High School

District Administrators

Tim Abrams, Superintendent

Kricket McClure, Assistant Superintendent

Alyssa Wedding, Director of Instructional Support

Denise Perry, Director of Student Services

Tricia Hosey, Director of Special Education

Nikkol Bauer, Chief Information Officer

Principals

Mark Johnson, Campbellsburg Elementary

Sharon Bright, Eastern Elementary

Lane Morris, New Castle Elementary

Zach Woods, Henry County Middle School

Staci Hoene, Asst. Principal, Henry County Middle School

Jim Masters, Henry County High School

Shannon Sageser, Asst. Principal, Henry County High School

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Executive Summary

Henry County Public Schools believes that technology is an inextricable component of education. Technology tools and applications are increasingly used for a wide variety of educational purposes. Teachers and staff use productivity tools, student information systems, email and the Internet on a daily basis to perform their jobs. Email and online communication tools are being used to communicate with parents and colleagues. Paper-and-pencil tests are slowly being replaced by online formative assessments, providing for quicker results and giving teachers the ability to adjust instruction while it's occurring.

Just as teachers and staff cannot do their jobs without the use of technology, so should we expect this from our students. Our vision is to provide students with multiple opportunities to use a variety of technology tools to enhance their learning, create products that will be shared with a wide audience, and collaborate with peers/experts. Appropriate and proficient use of technology is a necessary skill for our students to become successful adults.

In order to meet the growing needs of education technology, HCPS has identified the following goals for the 2011-2012 school year. Activities designed to achieve these goals are outlined in the sections that follow.

- Adequate access to technology will be provided to meet the learning needs of all students, instructional planning/delivery needs of teachers, and educational goals of all staff.
- HCPS will sustain and improve, where needed, voice and data communications with the community and parents.
- Prior to entering high school, students will be technology literate as measured by a district and/or technology assessment.
- Teachers will integrate technology into their instructional practice resulting in increased student engagement and enhanced learning.
- Technology training and growth will be embedded into school and district professional development plans.

Planning Process / Methodology

District leaders and principals were consulted during the early stages of writing this plan. School Technology Coordinators were invited to contribute to the discussion. Goals and activities for this plan were written based upon this discussion. A draft of the plan was then provided to each STC, principal and district administrators for review and approval.

Technology Vision and Goals

Goal 1

Adequate access to technology will be provided to meet the learning needs of all students, instructional planning/delivery needs of teachers, and educational goals of all staff.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
1.1 Evaluate current distribution of computers for effective use and redistribute if necessary.	All students will have equitable and convenient access to computers to complete instructional assignments.	Inventory collection tool for Technology Readiness Survey	July 2011 June 2012	Principals District Tech	N/A
1.2 Provide mounted projectors in every classroom.	Teachers will be better equipped to integrate technology into instruction.	Number of newly installed projectors	July 2011 June 2012	Principals District Leadership	SBDM School Activity Funds District Local
1.3 Increase wireless access and plan for support of 802.11n.	Students will have access to network and Internet resources anywhere in the building and from personal devices.	Number of newly installed wireless access points.	July 2011 June 2012	District Tech	EdTech
1.4 Maintain at least a 3:1 student to computer ratio at the elementary schools.	All students will have equitable and convenient access to computers to complete instructional	Technology Readiness Survey	July 2011 June 2012	Principals District Leadership	SBDM School Activity Funds EdTech

	assignments.				District Local
1.5 Plan for 1:1 student to computer ratio at the middle and high schools.	All students will have 24/7 access to a computer at school and home for completion of instructional activities.	Completion of preparation activities, TBD.	July 2011 June 2012	District 1:1 Committee	Local EdTech

Goal 2

HCPS will sustain and improve, where needed, voice and data communications with the community and parents.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
2.1 Provide local telephone, long distance, and data services to each school and support building.	Facilitate communication between teachers and parents. Provide access to the Internet to students and teachers.	Monitor regularly to ensure services are functioning properly.	July 2011 June 2012	District Tech	Local USF discounts
2.2 Secure web hosting services for district, school, and teacher web pages.	Facilitate communication between teachers and parents.	Monitor web site hits.	July 2011 June 2012	District Tech	Local USF discounts
2.3 Encourage more frequent updates to teacher and school web pages.	Community members will be better informed on school/district activities.	Monitor updates to teacher and school pages.	July 2011 June 2012	Principals District Leadership	N/A
2.4 Upgrade	Network will be	Number of new	July 2011	District Tech	Local

network (wired and wireless) infrastructure.	able to support a greater amount of educational resources for use by students, teachers and staff.	switches, APs and other network devices.	June 2012		EdTech USF discounts

Student Technology Literacy Skills

Goal 1

Prior to entering high school, students will be technology literate as measured by a district and/or technology assessment.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
1.1 Incorporate student technology skills (NETS.S) within the curriculum.	Students will be better prepared to use technology tools as adults.	Review of curriculum maps and unit plans	July 2011 June 2012	Principals District Leadership	N/A
1.2 Refine 8th and 12th grade technology proficiency evaluation	Accurate reporting of technology proficiency	Results from evaluation	July 2011 June 2012	District Tech 8th and 12th Grade Teachers	
1.3 Provide instruction on elements of Digital Citizenship at each grade level.	Students will be able to use technology safely and appropriately.	Logs kept by teachers responsible for DC curriculum	July 2011 June 2012	Counselors Librarians Language Arts Teachers	N/A
1.4 Continue formal keyboarding program in the elementary schools.	Student writing composition and creation of digital products will be more efficient.	Keyboarding performance test results	July 2011 June 2012	Principals	EdTech Local
1.5 Increase STLP participation at each school in regional and/or state events.	Students will have the opportunity to apply skills in a competitive and real-world setting.	Number of students participating	July 2011 June 2012	Principals STLP Coordinators District Tech	NCLB Title IID Local

Integration of Technology into Curricula and Instruction

Goal 1

Teachers will integrate technology into their instructional practice resulting in increased student engagement and enhanced learning.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
1.1 Increase use of Moodle, teacher web pages, and/or Microsoft collaborative tools to deliver instruction.	Students will have increased access to course materials.	Monitor web sites	July 2011 June 2012	Principals District Tech	N/A
1.2 Incorporate technology into Thoughtful Ed strategies and other best practices.	Students will have greater exposure to use of technology for completing various tasks.	Teacher Standard 6 evaluation results	July 2011 June 2012	Principals District Leadership	N/A
1.3 Communicate with staff regularly, providing reminders of current resources and information on new resources.	Teachers will be better prepared to incorporate resources into instruction.	Documentation of communication	July 2011 June 2012	District Tech District Leadership Principals	N/A
1.4 Increase number of student products created with the use of technology.	Students will have greater exposure to use of technology for completing various tasks.	Posting of creation on web site?	July 2011 June 2012	Principals District Leadership	N/A

Staff Training/ Professional Development Goals

Goal 1

Technology training and growth will be embedded into school and district professional development plans.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
1.1 Incorporate technology integration strategies at each school within professional development days and/or early release days.	Teachers will be better prepared to use available technology for teaching and learning.	School PD plans	July 2011 June 2012	Principals District Leadership	N/A
1.2 Provide ongoing training and support for interactive tools such as slates and clickers.	Teachers will be better prepared to use available technology for teaching and learning.	Training sign-in sheets, TRT calendar	July 2011 June 2012	District Tech	N/A
1.3 Provide integration ideas for using Web 2.0 tools in the classroom.	Teachers will be better prepared to use available technology for teaching and learning.	Training sign-in sheets, TRT calendar	July 2011 June 2012	District Tech	N/A
1.4 Provide training on Microsoft collaborative tools.	Teachers will be better prepared to use available technology for	Training sign-in sheets, TRT calendar	July 2011 June 2012	District Tech	N/A

	teaching and learning.				
1.5 Support teacher participation from each school at state KySTE conferences.	Teachers will be kept abreast of new and emerging technology.	Registration confirmation	July 2011 June 2012	District Tech District Leadership	SBDM NCLB Title IID
1.6 Survey teachers on training needs for integrating technology in the classroom.	Trainings will target teachers' needs.	Survey results	July 2011 June 2012	District Tech Principals	N/A
1.7 Implement comprehensive professional development to support 1:1.	Teachers will be better prepared to implement laptops in their classroom.	Sign-in sheets, training agendas	July 2011 June 2012	District 1:1 Committee	TBD

Current Technology and Resources

Student Instructional Devices

As reported in the 2010 Technology Readiness Survey, HCPS has a total of 687 student instructional devices (desktop, laptop, and netbook computers). This gives us a district student-to-computer ratio of 2.89-to-1. However, the distribution of computers may or may not fit the needs of our students. A discrepancy exists among schools as evidenced by a range of ratios from 2.01-to-1 to 4.30-to-1. Our elementary schools have a much lower percentage of computers in classrooms as compared to state averages. HCPS should evaluate the current distribution of computers at all levels (classrooms versus labs) and make changes as needed.

Student Instructional Devices

School	Total	Meet Min. Standard (2.2 GHz)	Laptop	Windows 7	Office 2007	n-Computing	ADA	Student-Computer Ratio	Adjusted (n-Computing)
Campbellsburg	103	68 (66.0%)	29 (28.2%)	7	77	5	341.4	3.31	3.16
Eastern	64	57 (89.1%)	21 (32.8%)	11	57	60	222	3.47	1.79
New Castle	80	70 (87.5%)	38 (47.5%)	10	69	0	344.1	4.30	4.30
Henry Co. MS	129	94 (72.9%)	53 (41.1%)	9	92	35	452	3.50	2.76
Henry Co. HS	311	261 (83.9%)	125 (40.2%)	48	263	25	625.1	2.01	1.86
Totals	**687**	**550 (80.1%)**	**266 (38.7%)**	**85 (12.4%)**	**558 (81.2%)**	**125**	**1985**	**2.89**	**2.44**

Projectors and Interactive Technologies

HCPS believes that having convenient access to interactive technologies is one of the most effective ways to insure that technology is integrated into instruction. Providing mounted projectors and other technologies such as slates, clickers and document cameras helps to accomplish this goal. The numbers reported below are from the 2010 Technology Readiness Survey. Since then, several more projectors have been mounted at all schools. This plan includes the funding necessary to outfit the remaining existing classrooms with mounted projectors.

School	#of Mounted Projectors	% of Classrooms with Mounted	#of Mobile Projectors	# of Mounted Interactive Boards	# of Mobile Boards	# of Wireless Slates	# of Student Response Systems	# of Document Cameras
Campbellsburg	15	78.9%	3	0	1	15	2	3
Eastern	12	85.7%	2	2	0	6	3	3
New Castle	13	65.0%	2	3	0	2	1	1
Henry Co. MS	22	88.0%	2	0	1	4	1	6
Henry Co. HS	23	62.1%	11	0	1	3	3	2
Totals	**85**	**73.9%**	**20**	**5**	**3**	**30**	**10**	**15**

Student Home Access

Based on enrollment information, 77% of our students have access to a computer at home. 62% of our students have access to high-speed Internet. Many areas of Henry County still do not have access to high-speed Internet. However, with a majority of our students who have access to a computer and/or Internet from home, more could be done to extend learning outside the classroom. For students without this access, schools should investigate the possibility of allowing after-hours access to school computers.

School	% of Students with a computer at home	% of Students with a computer less than 5 years old	% of Students with Internet connection	% of Students with Dial-Up	% of Students with High-Speed
Campbellsburg	80%	59%	74%	5%	69%
Eastern	61%	45%	55%	8%	46%
New Castle	76%	60%	67%	6%	60%
Henry Co. MS	80%	62%	71%	8%	63%
Henry Co. HS	80%	59%	73%	9%	64%

Totals	**77%**	**58%**	**69%**	**7%**	**62%**

Network Infrastructure

Most of the network infrastructure (switches, routing, wireless router, wiring) is aging but performs adequately. With increasing demands on the network, updating to a 10/100/1000 switched environment will be necessary. Power-over-Ethernet will also be necessary as increase in wireless access grows and the possible change to Voice-over-IP. In order to support newer wireless technology and increasing bandwidth, a new router and wireless switch will be needed.

School	# of 10/100 switch ports	# of 10/100 POE switch ports	# of 10/100/1000 switch ports	# of 10/100/1000 POE switch ports	# of a/b/g APs
Campbellsburg	96	48	0	0	9
Eastern	48	0	48	48	7
New Castle	96	0	0	48	10
Henry Co. MS	144	0	96	48	11
Henry Co. HS	264	48	96	48	18
Totals	**648**	**96**	**240**	**192**	**55**

Software and Applications

Office XP and Office 2007, PAS/MAP, Aims Web, United Streaming, Cognitive Tutor, Education City, Brain Pop, Accelerated Reader, Follett, FitnessGram, LunchBox, Infinite Campus, STAR Math, Geometer's Sketchpad, SchoolCenter, media software (Pinnacle Studio, Flash, Photoshop, Final Cut Pro), preschool software (Earobics, Work Sampling Online), SchoolRecruiter, AutoDesk, special education software (Read180, ReadWriteGold, Boardmaker, Writing with Symbols, JAWS, iClasses), small amount of other instructional software.

Training and Professional Development

HCPS employs a full-time district Technology Resource Teacher to partially fulfill technology training and professional development. The TRT has been an invaluable resource for on-the-spot training and help. However, with the rapid growth of new technology resources and the changing needs of our students, a more comprehensive professional development program is needed. It is the hope of HCPS that embedding intentional use of technology into other professional development initiatives will help fulfill this need.

Evaluation

Technology Vision and Goals Evaluation Narrative

The Technology Readiness Survey, due around December 1 each year, provides the method for evaluating HCPS's ability to provide adequate access to technology. The results and analysis of this report are sent to district leadership, including principals. The district, school, and teacher web pages are monitored periodically and statistics are sent to principals and district leadership.

Student Technology Literacy Skills Evaluation Narrative

Results from the technology literacy evaluation for 8th and 12th grade students are obtained toward the end of the school year and shared with principals and district leadership. Logs from Digital Citizenship activities are submitted throughout the school year and an end report given to principals and district leadership. A periodic check of progress on the keyboarding program (Type to Learn 4) is shared with principals, school personnel, and district leadership.

Integration of Technology into Curricula and Instruction Evaluation Narrative

Principals provide a report as to the progress of the activities for this goal approximately 3 times a year to the district technology office. Results from these reports, teacher surveys and other documentation are shared with district leaders, including principals.

Staff Training/Professional Development Evaluation Narrative

Reports from principals on embedded technology professional development are sent periodically through the year. The Technology Resource Teacher submits weekly reports from the onsite work with individual teachers. Teachers are surveyed at the end of the school year as to their needs. All three of these are used to determine trends and make adjustments to the technology professional development provided within the district.

Budget Summary

School Year 2011-2012

Acquired Technologies and Professional Development	Ed Tech Competitive Title IID	Ed Tech Formula Title IID $1900	E-Rate	NCLB/other than Title IID	KETS $99,250	Other (Specify)
Phone/data service			$77,601.68			$23,179.72 (Local)
Web hosting service			$4887.38			$982.12 (Local)
Network Infrastructure			$263,278.83		$70,453.12	
STLP participation (5 subs & bus 2 x a year)						$1700
Conference participation (3 district tech, 10 teachers for 2 days)		$1900			$2100	
Student Computers						$54,000 (SBDM)
Mounted Projectors						$35,100 (SBDM/Local)
District Tech Salaries						$190,000 (Local)
Other Expenses not outlined in this plan					$26,696.88	$155,000 (SBDM/Local)
1:1 Computers						$57,000 (Local)
TOTAL		$1900	$345,767.89		$99,250	$516,961.84