

HUDSON CITY SCHOOL DISTRICT

TECHNOLOGY PLAN

September 2011 – June 2014

BOE Approved 1/23/12

TABLE OF CONTENTS

I.	Technology Advisory Committee Members	Pg. 3
II.	District Overview	Pg. 4
III.	Technology Vision Statement	Pg. 5
IV.	Technology Mission	Pg. 6
V.	Current District Technology Status	
	A. Administration	Pg. 7
	B. Hudson Sr. High School	Pg. 7
	C. Hudson Jr. High School	Pg. 7-8
	D. Montgomery C. Smith Intermediate School	Pg. 8
	E. John L. Edwards Primary School	Pg. 8
VI.	Goals	Pg. 9
VII.	Action Plan	
	A. Training	Pg. 10
	B. Curriculum	Pg. 10
	C. Communications Restructuring	Pg. 10
	D. Hardware/Software	Pg. 10-11
	E. Infrastructure	Pg. 12
	F. Support and Maintenance	Pg. 12
	G. Evaluation	Pg. 12
VIII.	Funding	
	A. E-rate	Pg. 13
	B. Federal Grants	Pg. 13
	C. Questar III (BOCES) Aid	Pg. 13
	D. State Aid for Software	Pg. 13
	E. District Funding	Pg. 13
IX.	Appendices	
	Appendix A	Pg. 14
	Appendix B	Pg. 15
	Appendix C	Pg. 16

I. TECHNOLOGY COMMITTEE MEMBERS

Maria Suttmeier Co-Chair	Assistant Superintendent	District
Terry Harcleroad Co-Chair	Computer Technology Coordinator	District
Anna Barletta	Teacher	Jr./Sr. High School
Mark Brenneman	Associate Principal	M.C. Smith Intermediate School
William Clark	Network System Manager	District
Rosalie Cornell	Guidance Counselor	Jr./Sr. High School
Julia Coryell	Teacher	Jr./Sr. High School
Nicole DeDominicis	Transportation/Registrar	District
Douglas Fenson	Teacher	Jr./Sr. High School
Gary Finelli	Teacher	Jr./Sr. High School
Amparo Gazzera	Teacher	Jr./Sr. High School
George Keeler	Buildings & Grounds Superintendent	District
Judy Roehr	School Library Media Specialist	Hudson High School
Retta Salerno	Teacher	Jr./Sr. High School

II. DISTRICT OVERVIEW

The Hudson City School District Hudson, New York 12534

The enlarged Hudson City School District was formed in 1966 by incorporating the City of Hudson and eleven adjoining school districts into one school system. The district has an enrollment of approximately 1960 students, who are housed in four buildings: Sr. High School, Jr. High School, Intermediate School and Primary School. The professional staff consists of 199 teachers with a support staff of 150. Students in grades K-12 reflect a mix of urban, rural and suburban populations.

Our facilities include an indoor pool, tennis courts and outdoor fields, creative play areas on school grounds, auditoriums and stages for school and community events.

Our geographic location on the Hudson River between the Catskills and Berkshire Mountains provides access to a bountiful array of year round activities including hunting, fishing, skiing, ice-skating, hiking, historical sites and the beauty of upstate New York living. Yet we are within easy commuting distance, via the Taconic Parkway, NYS Thruway, Massachusetts Turnpike or Amtrak, to the cities of Albany, New York City, Hartford, CT and Boston, MA, Montreal, Canada, and the resort areas of the Catskill, Berkshire and Adirondack Mountains and the Hudson River Valley.

III. TECHNOLOGY VISION STATEMENT

For Our Students

Advancements in technology must be introduced into all areas of the curriculum, to assist in both accessing and presenting information as an instructional tool. As an area of study in its own right, technology becomes an important link to a vast array of modern career possibilities. The New York State Learning Standards require students to use technological skills to satisfy human and environmental needs.

For Our Teachers

Access to technology and on-going training must be provided for our teachers and instructional support staff. Increased instructional availability of technology will enhance effectiveness in the classroom. Additionally, teachers will benefit from increased efficiency in communication, organization, and record keeping. Incorporating multimedia—such as images, video, and audio—into lessons can help engage students in the learning process and prepare them for a 21st-century, multimedia work environment.

For Our Administration

Our entire organization must take advantage of technology improvements in managing student and staff data and automation of daily operating procedures to enhance communication capabilities of the school community and the community at large.

For Our Community

The citizens of the Hudson City School District expect graduating students to be prepared for rewarding and productive lives. Integration of technology proficiency into curriculum is essential preparation for our students as they pursue higher education or enter the workforce.

For The Future

Advances in technology are occurring in quantum leaps. Computer technology equipment must be maintained and upgraded regularly to enhance student learning, staff productivity and district eligibility for sources of funding.

IV. TECHNOLOGY MISSION

The technology mission of the Hudson City School District, is to incorporate technology into our educational and administrative programs in order to:

- **Develop, articulate, expand and deepen our curriculum**
- **Prepare our school community for lifelong learning**
- **Meet and exceed NYS Learning Standards**
- **Efficiently and securely manage data and information for all**
- **Provide managed access to the global community**
- **Periodically monitor and evaluate the Technology Plan and its components to make it a true “living document”**

V. CURRENT ENVIRONMENT INFORMATION TECHNOLOGY

A. ADMINISTRATION

- **Central administration offices at the Hudson High School site are linked to a central server located in the data center. Offices have been upgraded to current versions of Microsoft Office, with some offices also using programs specific to their particular needs.**
- **A Lucent Definity Audix telephone system with the Hudson Sr. High School as its hub, connects all telephones throughout the district via a fiber optic connection to each building.**
- **Paging systems at Hudson Jr./Sr. High School, M.C. Smith Intermediate School, and John L. Edwards Primary School have been upgraded.**
- **A centralized IT (Information Technology) department provides help desk support to all district staff.**
- **A Wide Area Network (WAN) encompassing the entire district is fully operational. All administrative areas have network and internet access.**
- **The district maintains a comprehensive website which is regularly updated.**
- **ConnectEd**

B. HUDSON SR. HIGH SCHOOL

Computers are available for students and staff use in three computer labs, the library media center, and classroom clusters. Access to internet and school district network is available at all teacher and student stations. The technology wing houses a full computer lab, comprised of a wireless notebook cart with 30 laptops. There are also 3 more laptop carts in the Sr. H.S. Library for teachers to sign out on a rotating basis. The Sr. High School currently has thirty-eight Promethean Active Boards, a shared mobile teaching station with two ELMO Document Readers and Projectors. The Science wing has two dedicated ELMO Document Readers and Projectors.

The library media center participates in an on-line data sharing system through Questar III which provides access to collections of all participating school library media centers. Students now conduct searches through OPALS, a web-based catalog system.

The ESL classroom has its own Laptop Cabinet to accommodate small group computer-based instruction. Wireless network access is now available for internet/network use in every building in the district.

C. HUDSON JR. HIGH SCHOOL

The Jr. High is connected to the Sr. High forming the Jr./Sr. High School complex. It houses one full computer lab and has one laptop cart, two ELMO Document Readers and Projectors available for teachers to sign out on a rotating basis. The Jr. High has a Promethean Active Board in nearly every full-sized classroom.

The Jr. High Library Media Center, which includes a computer cluster, is automated and participates in an on-line data sharing system, OPALS, which allows access to other collections within participating school library media centers.

The ESL classroom has its own Laptop Cabinet to accommodate small group computer-based instruction. Wireless network access is now available for internet/network use in every building in the district.

D. MONTGOMERY C. SMITH INTERMEDIATE SCHOOL

Access to internet and school district network is available at all teacher and student stations. Thirty-three classrooms have Promethean Boards. Two laptop carts are available to teachers on a rotating basis as well as three ELMO Document Readers and Projectors. Students are given regular instruction in a computer lab. Students are instructed in basic keyboarding, word processing and multi-media research applications, publishing and internet. Computers are available for student and staff use in two computer labs, in the library media center, and classroom clusters.

The M.C. Smith Library Media Center is automated and participates in an on-line data sharing system, OPALS, which allows access to other collections within participating school library media centers.

The ESL classroom has its own Laptop Cabinet to accommodate small group computer-based instruction. Wireless network access is now available for internet/network use in every building in the district.

E. JOHN L. EDWARDS PRIMARY SCHOOL

John L. Edwards has two computer labs with internet and network access. There is one laptop cart and two ELMO Document Readers and Projectors available to teachers on a rotating basis as well as a cluster of internet connected PCs which is available for staff and student research. Access to the school district network is also available at all teacher and student stations through wired and wireless access. Seventeen classrooms have Promethean Active Boards.

The JLE Library Media Center is automated and participates in an on-line data sharing system, OPALS, which allows access to other collections within participating school library media centers. A cluster of computers are also available in the library media center.

The ESL classroom has its own Laptop Cabinet to accommodate small group computer-based instruction. Wireless network access is now available for internet/network use in every building in the district.

VI. GOALS

The purpose of our Technology Plan is to support the following goals of the district-wide Technology Committee:

- **Integrate the use of technology into instruction to enhance student achievement across all curriculum areas**
- **Build awareness of technology connections with all areas of curriculum, particularly in compliance with the New York State Learning Standards**
- **Provide students with direct training in a variety of technology-based applications**
- **Strengthen relationships with families and the community by effectively communicating our progress and sharing our facilities**
- **Obtain sufficient and appropriate hardware and software to support these goals**
- **Provide for routine maintenance, recycling and replacement of equipment and software**
- **Maintain a district website with news, current and upcoming events, policies and emergency closure information which can be easily accessed by the public, students, and staff**
- **Maintain a district computer network for communication and data management**
- **Implement and maintain administrative data systems for all areas of information management**
- **Improve parent/guardian/staff school communication via the internet, Parent Portal and the computer-based Connect Ed systems**
- **Continue to improve, upgrade and expand the library media centers' automation system, including the elementary schools**

VII. ACTION PLAN

A. TRAINING

- **Continue to provide training in technology for staff on an ongoing basis through staff development, the Questar III Model Schools Programs and other training opportunities**
- **Provide students with instruction in network basics and appropriate internet use including appropriate online behavior, interacting with other individuals on social networking websites and in chat rooms, and regarding cyberbullying awareness and response.**
- **Training for staff on eSchools is offered on an on-going basis**

B. CURRICULUM

- **Provide training and review basic network procedures, appropriate internet use, and opportunities to develop computer knowledge and skills**
- **Continue refinement of all district curricula with an emphasis on incorporating technology into instructional delivery**
- **Extend technology curriculum to provide students with direct training in a variety of technological applications**
- **Rubicon Atlas is used as the district's curriculum mapping software and teachers have been involved with an ambitious initiative to have all content areas mapped.**

C. COMMUNICATIONS RESTRUCTURING

- **Maintain the district website with news, current and upcoming events, calendar, emergency closing events, BOE policies and other pertinent information**
- **Controlled network access will be available for all trained staff**
- **District wide staff email is accessible on any district networked computer and from off-site PCs**
- **eSchools Parent Portal is offered to parents of Students 7 - 12 on an on-going basis**
- **EETT, in collaboration with Bethlehem CSD, to provide video conferencing carts and smaller desktop devices for virtual field trips and classroom collaborations**
- **Connect Ed, an automated calling and email system, to notify parents and staff of upcoming district-related information**

D. HARDWARE / SOFTWARE

Year 1

- **Maintain and/or install more classroom computer clusters (using repurposed or donated PCs) as funding becomes available**
- **Maintain and/or implement wireless laptop carts into more areas as funding becomes available**
- **Maintain and/or install networked printers in cluster areas (giving students ability to print in room) replacing desktop printers with a shareable resource as funding becomes available**

D. HARDWARE / SOFTWARE Year 1 *Cont'd*

- **Maintain computer physical inventory and live database (see Appendix B) as funding becomes available**
- **Investigate the implementation of online credit recovery or credit bearing courses as funding becomes available**
- **Continue to support the use of review and assessment software tools e.g., Scholastic Reading Inventory, Castle Learning, Journeys Digital Resources as funding becomes available**
- **Continue to support the use of Rosetta Stone for the ESL program as funding becomes available**
- **Continue to support the use of Special Education assistive learning devices such as Alpha Smarts as funding becomes available**
- **Continue the eSchools Parent Portal which is offered to parents of students grade 7-12 to check on attendance, progress reports, and grades as funding becomes available**
- **Continue to implement/support the use of other online tools as funding becomes available**
- **Continue to implement/support the use of other online learning tools (credit recovery, distance learning, etc.) as funding becomes available**

Year 2

- **Continue PC replacement plan for high use areas, such as computers labs, library media centers as funding becomes available (See Appendix A)**
- **Continue Software Upgrade Plan. For example: move everyone to MS Office 07, to be installed on all computers as funding becomes available**
- **Continue to add digital projectors and/or Promethean Boards into more classrooms as funding becomes available**

Year 3

- **Continue PC replacement plan for high use areas, such as computers labs, library media centers as funding becomes available**
- **Continue Software Upgrade Plan. For example: move everyone to MS Office 07, to be installed on all computers as funding becomes available**
- **Continue to upgrade and/or replace all district file servers (5+ years old at this point) as funding becomes available**
- **Continue to add digital projectors and/or Promethean Boards into more classrooms as funding becomes available**
- **Explore mobile technology and wireless connection to student management systems as funding becomes available**

E. INFRASTRUCTURE

Years 1 - 3

- **Maintain and upgrade our E-Rate provided infrastructure as budget allows**

F. SUPPORT AND MAINTENANCE

Years 1 - 3

- **Provide the necessary support and maintenance to insure the protection of the district's investment in information technology and to guarantee that faculty, students and staff are granted the maximum opportunity to secure the benefits of the investment.**

G. EVALUATION

Year 1 - 3

- **E-mail based electronic survey to poll faculty and staff regarding frequency and types of use of technology as an instructional tool**
- **Survey students in grades 5, 8 and 10 computer courses, to ascertain their level of mastery of basic computer applications and their exposure to technology, as part of their learning experiences**

VIII. FUNDING

A. E-RATE

A yearly application will be submitted for the purpose of obtaining e-rate assistance in Priority 1 (telephone, LAN and WAN charges from telco or internet providers) and Priority 2 (internal hardware/infrastructure requests).

B. FEDERAL GRANTS

Staff training opportunities can be funded through a combination of federal grant monies and district funds. Portions of the Title grants can be applied toward staff development.

C. QUESTAR III (BOCES) AID

Participation in Questar III's Model Schools Program qualifies the district for staff training in technology integration in classroom instruction. It also allows teachers to participate in a variety of curriculum related workshops and mini-courses at minimal cost. Through Model Schools, additional hardware and infrastructural purchases are state aidable through Questar III purchases.

By contracting for service and support through Questar III, or requesting a cross-contract through them, the district receives BOCES aid on student data management system expenses. The district can purchase certain software packages through the same mechanism and receive BOCES aid on the ongoing maintenance costs of our library media centers' automation systems. The district currently contracts with Questar III for the data warehousing data analysis services and information technology purchasing and maintenance.

D. STATE AID FOR SOFTWARE

The software allocation for 2011-2014 is \$29,960.

E. DISTRICT FUNDING

The district will assume responsibility for the non-subsidized portion of technology expenses.

Appendix A

An introductory note on Hudson City School District's Technology End of Life-Cycle Management Strategy

HCSD seeks to manage technology assets on a defined life-cycle based upon the type of technology. Some life cycles are extended when academically justified:

Asset	Life Cycle	End of Life Protocol
Personal Computers	5-year replacement	*Repurposed/Recycled
File Servers	5-year replacement	*Repurposed/Recycled
LAN/WAN gear	5-year replacement	*Repurposed/Recycled
Whiteboards	5-year replacement	*Repurposed/Recycled
Printers	4-year replacement	*Repurposed/Recycled
Lab/Library Media Center PCs	3-year replacement	*Repurposed/Recycled
Projectors	3-year replacement	*Repurposed/Recycled
Cameras	3-year replacement	*Repurposed/Recycled
Accessories	3-year replacement	*Repurposed/Recycled

*HCSD's goal in repurposing computer equipment is multifaceted:

- We strive to keep the most current technology available in the areas of highest use, i.e., the computer labs, library media centers and specialty labs (science lab, tech wing);
- When equipment is replaced with newer technology, or when donated computers are acquired, they will be cleaned up, reprogrammed and reassigned to areas where computer equipment is needed, such as teacher stations or student classroom clusters;
- Finally, at the end of its usable life cycle, equipment will be auctioned, donated or recycled.

Appendix B

HCSD Computer Inventory

	Switches	Printers	Laptops	PC	Boards	Servers
Sr. HS	9	30	141	171	38	
Jr. HS	4	15	65	84	27	
MCSIS	6	17	84	170	33	
JLE	2	12	53	106	17	1
DO	6	13		19		15
Total	27	87	343	550	115	16

** These figures change continuously as new equipment is purchased and refurbished throughout the year.*

Appendix C

Projected 3-Year Budget for HCSD Technology Plan

Fiscal Year		2011-12	2012-13	2013-14	Notes
OPERATIONAL COSTS					
Internal IT					
	Personnel				
	HCSD IT staff	\$152,199.00	\$152,199.00	\$152,199.00	
	Services				
	Network Infrastructure Upgrades and Repairs	\$80,825.92	\$80,825.92	\$80,825.92	Most purchases are done thru BOCES to be state aidable @ 58%
	Materials and Supplies				
	Toners, repairs etc	\$19,784.70	\$19,784.70	\$19,784.70	
	Instructional Hardware	**	**	**	Line removed due to budget constraints
	Instructional Software	\$28,297.22	\$28,297.22	\$28,297.22	State Aid - based on # of students
BOCES					
	Personnel				
	Questar III Data Coordinators	\$58,071.00	\$60,974.55	\$64,023.28	State Aidable
	Services				
	Questar III Library Services	\$19,598.00	\$20,577.90	\$21,606.80	State Aidable
	NERIC eSchool Data Lic. and Tech Support	\$67,224.00	\$70,585.20	\$74,114.46	State Aidable
	Questar III Web Services	\$8,446.00	\$8,868.30	\$9,311.72	State Aidable
	Special Ed Software (RTIDirect, IEPDirect)	\$14,000.00	\$14,700.00	\$15,435.00	State Aidable
	Data Warehouse (see BOCES Personnel, above)				
	Rubicon Atlas (Curriculum Development)	\$14,160.00	\$14,160.00	\$14,160.00	State Aidable
Private Firms (non-BOCES)					
	Services				
	Food Service Technology	\$2,539.00	\$2,665.95	\$2,799.25	Funded by Food Service income
	Telephone	\$74,100.00	\$77,805.00	\$81,695.25	Funded partially by Erate (80%)
	Wide Area Network	\$94,000.00	\$98,700.00	\$103,635.00	Funded primarily by Erate (80%)
	Blackboard ConnectED	\$7,500.00	\$7,500.00	\$7,500.00	
		\$640,744.84	\$657,643.74	\$675,387.59	