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**Clinton Central School District Technology Plan  
2010-2013**

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**Table of Contents**

1. Executive Overview
2. Vision Statement
3. Mission Statement
4. Belief Statement
5. Current Status and Projected needs:
  - a. Human Resources
  - b. Equipment and Networks
  - c. Software and Materials
  - d. Facilities and Space
  - e. Policies and Procedures
  - f. Curriculum Integration
  - g. Parental / Community Integration
  - h. Technology Delivery
  - i. Professional Development
6. Three Year Technology Plan, 2010-2013
7. Appendices
  - A. Network Diagrams: Academic, Administrative, Town of Kirkland
    1. Network Operations Center (NOC)
    2. CCS Wide Area Network (WAN)
    3. CCS Fiber Network
    4. Network Topology Report Topology Report
    5. MAC Lab Network
    6. Town of Kirkland Layout (designed and maintained by CCS)
    7. Pasco

- B. Software List
- C. Computer Inventory
- D. Professional Development Plan
- E. Authorized Use Policy

# Clinton Central School District Technology Plan 2010 - 2013

## 1. Executive Overview

### IMPACT OF TECHNOLOGY

The purpose of the Clinton Educational Information Network (CEIN) is to provide shared educational resources for the Clinton Central School Community. Its goal is to promote quality and equitable, efficient access to technological resources that support and enhance the educational program. The Clinton Central School District is committed to the use of technology to support district school improvement initiatives and the District standards.

### JUSTIFICATION OF THE USE OF TECHNOLOGY

In an excerpt from Administrative Regulations, the following is stated:

The purpose of the Clinton Educational Information Network (CEIN) is to provide shared educational resources for the Clinton Central School Community.

#### **Goal:**

- The goal of the CEIN is promote equitable and efficient access to technological resources that support and enhance the educational program.

#### **Mission:**

- The Clinton Central School District is committed to the use of technology to support school district improvement initiatives and the district standards.

### PROFESSIONAL DEVELOPMENT

In addition, the commitments to the use of technology in teaching and learning are captured in the following professional development goals.

#### • **PDP Objective #1:**

Teachers will learn to use available technology, resources, and to integrate the use of technology into their classrooms.

#### • **PDP Objective # 2:**

Teachers will learn to use technology to enhance their classroom activities, develop and maintain contact with parents and community members, simplify record-keeping requirements, and maximize student learning within scheduled class time.

## 2. Vision Statement

The Clinton Central School District's vision is for all students to achieve excellence through the following:

- Mastery of skills and knowledge, including the use of technology
- Thinking and communicating
- Responsibility
- Lifelong learning

### 3. Mission Statement

The Clinton Central School District is committed to excellence in education by:

- Offering curricula and programs for all students to achieve excellence at their level of capability
- Providing activities that support the physical, social, and cultural development of all students
- Using, supporting, and enhancing the professional and technological expertise of the staff
- Encouraging parental partnerships in education
- Developing programs to improve the relationship between the school system and the communities it serves
- Providing the information technology infrastructure to support the district’s mission and goals

### 4. Belief Statement

The Clinton Central School District believes that:

- All students can learn and achieve excellence
- All teachers should be teachers of reading, writing and thinking
- The home, school and community should be partners in helping children fulfill their potential
- All graduating students should understand and be able to use the tools of technology to support lifetime learning.

### 5. Current Status and Projected Needs:

Human Resources, Equipment and Networks, Software and Materials, Facilities and Space, Policies and Procedures, Curriculum Integration, Professional Development

<b>Human Resources</b>	
<b>Status</b>	<b>Projected needs</b>
<b>Network Coordinator</b> (Paul Frey)	<ul style="list-style-type: none"> <li>• Paul acts as sysop and network manager.</li> <li>• Paul, along with two outside consultants, maintains and develops the network to meet instructional needs as determined by the Educational Technology Committee.</li> <li>• Designs grade level software ghosts</li> </ul>
<b>Educational Technology Coordinator</b>	<ul style="list-style-type: none"> <li>• Coordinates technology purchases</li> <li>• Keeps up-to-date on new technologies</li> <li>• Advocates and advises for teachers and students in relation to technology matters</li> <li>• Conducts periodic surveys of both teachers and students to determine technology use at CCS.</li> <li>• Attends Model Schools Site Administration meetings</li> <li>• Meets regularly with the Technology department, and consults with the K-12 Curriculum Principal and the CIO on at least a weekly basis.</li> </ul>

<b>Future Needs: Educational Technology Coordinator (1.0 FTE)</b>	By Year Two of this plan, a full-time on-site technology educator should be available for program coordination and implementation of the Plan. We have made progress toward this goal by combining the positions of Professional Development Director and Educational Technology Coordinator.
<b>Professional Development Director (Sheri Hunter),</b>	<ul style="list-style-type: none"> <li>• Arranges for all professional development in the district, both technological and curricular, integrating both when possible</li> <li>• Attends Model Schools Site Administration meetings</li> <li>• Keeps up-to-date on new technologies</li> <li>• Meets regularly with the Technology Department, the Superintendent, the building principals, and the Principal for Curriculum and Instruction</li> </ul>
<b>Technology teaching assistant: (Nancy Lillibridge, K-5)</b>	<ul style="list-style-type: none"> <li>• Allocate computers and peripherals</li> <li>• Daily maintenance and repair of technology;</li> <li>• Oversee student and faculty accounts and mailing lists.</li> <li>• Provide instruction to teachers and students when appropriate.</li> <li>• Teacher assistants need continued education on integration, networks, hardware, and software</li> </ul>

<b>Consultant Services:</b>  <b>Network Consultant</b> (George Breese)  <b>Tech Specialist (Ryan McCoy)</b> .6 position – BOCES Shared Services	<p>Troubleshoots higher end network needs and problems, adjusts network mapping, monitors accounts when requested.</p> <p>Provides technical services, helps plan for and distribute technology. Daily maintenance and repair of technology.</p>
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<b>Equipment and Networks</b>	
<b>Status</b>	<b>Projected Needs/Program Initiatives</b>
See Narrative below	<ul style="list-style-type: none"> <li>• Analyze instructional needs</li> <li>• Replacement schedule for hardware</li> <li>• Design an equipment allocation strategy according to technology committee goals</li> </ul>

The Clinton Central School District Network has evolved from a 16Mb Token Ring Architecture to the current gigabit architecture supporting approximately 700 multimedia workstations, 15 Windows 2008 Servers, twelve digital high speed integrated printers/copiers/scanners, large format color capability, and internet access to all network devices over a layer two 100 meg circuit connected to Oneida-Herkimer-Madison BOCES. A second T-1, (ISDN PRI) provides complete video capability and independence for global Teleconferencing.

The basic philosophy of the district's network design is:

- Stability, Simplicity, Maintainability and Power
- Portability of Computing
- Anytime Anywhere Learning
- Community Integration
- Wide Area Networks
- Wireless Access in the future

The Network Architecture is a blend of fiber optic cabling using both multimode and single mode cable and Category 5e cable to all desktops. The network backbone is a full duplex, switched gigabit ethernet architecture using only TCP/IP network protocol implementation. For link failures between the switched backbone we use a combination of trunking and resilient links.

The gigabit switches are linked by gigabit ethernet modules to 100BASEFX switches in full duplex mode. The 100BASETX switches are linked to each desktop by a 10/100Mb network interface card set to 100BASETX in full duplex mode.

The size and complexity of the network requires network enterprise management tools. The district has on hand the following hardware and software tools to manage the network. For the fiber optic cables and category 5e copper cables we use a Fluke DSP 4000 cable tester and a Wavetek Optical Time Domain Reflectometer. Protocol analysis, bandwidth utilization, problem detection, and network design simulations are monitored by a combination of a Fluke OptiView Integrated Network Analyzer, Fluke Enterprise Lanmeter, Fluke Network inspector, 3Com Transend Network Supervisor, and Visio Enterprise and Real Time Statistics. A Fluke Q-BERT is used to continuously monitor the T-1 data circuit for integrity. All network devices are web enabled where possible, allowing desktop centralized control.

Clinton is proud of the following enterprise capabilities:

- 100 megabit speeds to the internet for email, internet site protection, virus protection and firewalling.
- ISDN for video conferencing.
- Complete multi-media compatible labs in the high school, middle school and elementary school.
- A 600+ system installed base campus-wide.
- Wide area fiber network to town and village governments. Wireless access to the town library.
- Local premise web servers for internet, intranet, streaming audio and streaming video.

<b>Software and Materials</b>	
<b>Status</b>	<b>Projected Needs/Program Initiatives</b>
Ongoing documentation	To build database of titles, site licenses, seat licenses and versions. To build database of Smart Board serial numbers.

<b>Facilities and Space</b>	
<b>Status</b>	<b>Projected Needs/Program Initiatives</b>
Have building maps with number of network drops and hardware	Update map, building in software

<b>Policies and Procedures</b>	
<b>Status</b>	<b>Projected Needs/Program Initiatives</b>
Have Authorized Use Policy (AUP), which has been published in handbook and newsletter	Developing written set of policies and procedures through technology department, technology committee, curriculum committees, administration, and Board of Education

<b>Curriculum Integration</b>	
<b>Status</b>	<b>Projected Needs/Program Initiatives</b>
Have curriculum maps for all content areas; Use Professional Learning Community model to integrated technology into content areas, K-12	<ul style="list-style-type: none"> <li>• Utilize technology to increase student motivation</li> <li>• Make strategic links between content and technology to enhance student understanding</li> <li>• Use technology to enhance links to the outside world</li> <li>• Use technology to develop students problem-solving and critical thinking skills</li> <li>• Expand the use of platform-based instruction (BrainHoney, Angel Learning, other e-learning opportunities)</li> <li>• Consider the use of technology for credit recovery</li> </ul>

<b>Parental/ Community Communication</b>	
Ongoing parental and community communication	<ul style="list-style-type: none"> <li>• Technology is used on a daily basis in communicating with parents and in promoting parent involvement.</li> <li>• All faculty and staff members have email accounts and check them daily.</li> <li>• Some secondary teachers (6-12) use eBoard accounts to communicate assignments to students, parents and guardians.</li> </ul>

	<ul style="list-style-type: none"> <li>• Our CCS District website communicates to our community at large; it includes district information and newsletters, community information, and an alumni link</li> </ul>
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<b>Technology Delivery</b>	
<b>Status</b>	<b>Projected Needs/Program Initiatives</b>
<p>Currently the District participates in Project Lead the Way, distance learning experiences, and Information Literacy projects. Our Middle School summer reading program is accessible through the District web page. We are building our inventory of classroom SMARTBoards and Airliners for instructional use throughout the district. In Fall 2008, we upgrades our base of instructional computers by replacing 350 outdated CPUs and monitors with newer devices.</p>	<p>Continue to offer rigorous and up-to-date delivery and training in technology skills and opportunities.</p> <p>Continue to upgrade the network and workstations available for instructional use. Increase the number of SMARTBoards and Airliners in classrooms.</p> <p>Continue to investigate cost effective mechanisms in which to deliver technology resources.</p> <p>Continue to investigate shared service models that create financial and physical resource efficiencies.</p>

<b>Professional Development</b>	
<b>Status</b>	<b>Projected Needs/Program Initiatives</b>
<p>Match Professional Development to software purchases. See Narrative below.</p>	<p>Continue to offer training, matching training to purchases and current and existing software</p> <p>Expand the integration of new and existing technologies into K-12 curriculum.</p>

**Clinton Central School District Three Year Technology Plan, 2010-2013**

**1. Maintain a reliable network.**

<b>What</b>	<b>How</b>	<b>Who</b>	<b>Time-Line</b>	<b>Support</b>	<b>Responsibility</b>	<b>Professional Dev.</b>
<i>Strategies</i>	<i>Major Tasks/ Activities</i>	<i>Target Population</i>	<i>Dates</i>	<i>Funding Sources</i>	<i>Who Does It</i>	<i>What is needed</i>
<b>Year One</b>						
Based on our Needs Assessment Data , the district has committed to creating up to 5 Smart Classrooms and the purchase of 1 Smart Table.	Order all hardware and software by July 1, 2010.	Students and Teachers	Installation with July, 2010.	ARRA Grant	Network Engineer	SMART classroom training, Summer Camp devoted to SMART curriculum development and integration.
Move from a multi-homed network infrastructure to a more stable IP routed data network.	Implementation plan complete by June, 2010.	IT Staff	Ongoing		Educational Technology Coordinator	
Reduce number of existing fiber connections within each Data Closet.	Reduce number of connections to one per data closet by June 2011.	IT Staff	Jan, 2011		Technology Committee	
Purchase additional computer systems within replacement window.						
<b>Year Two</b>						
Continue with Year One Plan, expanding the number of district Smart Classrooms	Same	Same	2011-2012 Academic year	In-house; Grants if possible	Network Manager; Business Administrator	Network training as necessary
Introduce Windows 7	Testing	Network users			Educational Technology Coordinator	
Purchase new core data switch.	Tech Committee investigation	Students and Teachers				
Purchase additional computers within replacement window.		Students and Teachers				
<b>Year Three</b>						
Continue with Year Two Plan, expanding the number of district Smart Classrooms.	Same	Same	2012 – 2013 Academic year	Same	Educational Technology Coordinator	Training for community members
Purchase additional computers within replacement window.	Planning and coordinating with remote sites	Students Parents			Network Manager Consultant	
Implement Quality of Service within Data Network.	Set up policies and procedures					

**2. Promote reliability and usability of individual workstations in resource rooms, classrooms, labs and media centers.**

<b>What</b>	<b>How</b>	<b>Who</b>	<b>Time-Line</b>	<b>Support</b>	<b>Responsibility</b>	<b>Professional Dev.</b>
<i>Strategies</i>	<i>Major Tasks/ Activities</i>	<i>Target Population</i>	<i>Dates</i>	<i>Funding Sources</i>	<i>Who Does It</i>	<i>What is needed</i>
<b>Year One</b>						
Standardize configuration of hardware	1. Written three-year replacement plan, updated annually	Staff and Student	July 2010	In-house	Network Manager	Training in use of upgraded hardware or added peripherals, such as scanners, digital cameras, mini-cams.
	2. Purchase or lease all equipment with three year warranty	Same as above			Instructional Technology Coordinator	
	3. Continue to upgrade district computers to prepare for move to new OS		June 2011	Aid	Technology Committee Network Manager; Lab Teaching Assistants; Additional technician consultants	
Standardize and sequence software by content and grade level	Inventory existing software		July – August 2010	In-house	Network Manager; Teaching Assistant Consultant	None
	Preview software solutions	Students & Faculty	Prior to purchase, ongoing	None	Faculty PDC Director Educational Tech. Coordinator	Arrange product demonstrations for faculty
	Require a written plan from each content area and/or grade level for comprehensive software solutions	Students & Faculty	Prior to purchase	In-house	Faculty	
<b>Year Two</b>						
Continue with Year One goals	Review and update equipment replacement plan.	Network users in priority order (see year one)	2010-2011 academic year	In-house	Technology Committee; Tech Coordinator; Network Manager	Same as year one
	Review and update software purchase plan and priorities				Business Manager Technology Committee	Training in software solutions
<b>Year Three</b>						
Continue with year one and two strategies						

### 3. Purchase Software that will meet educational needs directed by Clinton Technology Committee.

What	How	Who	Time-Line	Support	Responsibility	Professional Dev.
<i>Strategies</i>	<i>Major Tasks/ Activities</i>	<i>Target Population</i>	<i>Dates</i>	<i>Funding Sources</i>	<i>Who Does It</i>	<i>What is needed</i>
<b>Year One</b>						
Have all teachers continue to participate in Curriculum Mapping	Atlas Curriculum Mapping software	Faculty Students	July 2010- July 2011	In House Model Schools	Educational Tech Coordinator Professional Development Coordinator	Training for turn-key trainers to help teachers do curriculum mapping
Purchase software that meets identified areas of need, as determined by tech committee. <ul style="list-style-type: none"> <li>Literacy</li> <li>Accountability</li> <li>Measure student learning (NWEA)</li> <li>Prof. Development Management Software</li> <li>Content Area Solutions</li> </ul>	Identify appropriate software packages  Set priority level for software solutions	Students Faculty	2010-2011 school year	In-house; State software aid	Educational Technology Coordinator; Curriculum Councils; Professional Development; Department Chairs; Team Leaders	Arrange previews, demonstrations, training
<b>Year Two</b>						
Review and revise curriculum maps to provide more accurate and detailed description of student learning experiences K-12	Provide teachers with at least one in-service day to review maps by content areas and grade levels	Faculty	2011-2012	In-house	Professional Development Center Director	Training for new hires; Training in analyzing and working with curriculum maps to improve teaching and learning
<b>Year Three</b>						
Review and revise curriculum maps to provide more accurate and detailed description of student learning experiences K-12	Provide teachers with at least one in-service day to review maps across content areas and grade levels	Faculty	2012-2013 academic year	In-house	Professional Development Center Director	Training for new hires; Training in analyzing and working with curriculum maps to improve teaching and learning

#### 4. Track Technology spending

What	How	Who	Time-Line	Support	Responsibility	Professional Dev.
<i>Strategies</i>	<i>Major Tasks/ Activities</i>	<i>Target Population</i>	<i>Dates</i>	<i>Funding Sources</i>	<i>Who Does It</i>	<i>What is needed</i>
<b>Year One</b>						
Track hardware and software purchases, updates and repairs. Review Software purchases and contracts annually.	Set up multi-year grid/database to track hardware and software purchases, updates and repairs	Administration; Tech Committee Technology Coordinator Network Manager	2010-2011 school year	In-house	Educational Technology Coordinator; Business office	Training In MS Access
<b>Year Two</b>						
Continue year one plan	Use database to track purchases	Network Manager; Ed. Tech Coordinator; Business Administrator; Superintendent School Board	2011-2012 school year	In-house	Network Manager Ed. Tech Coordinator	Training In MS Access
Establish hardware repair plan	Check which computers are coming out from under warranty and determine alternative repair source	Network Manager Ed. Tech Coordinator Business Administrator				
Establish software upgrade plan	Use curriculum maps and software database to develop plan	Faculty & Students			Ed. Tech. Coordinator; Principals Technology Committee Professional Development Center Director	
<b>Year Three</b>						
Continue year one and two plan	Use tools developed in years one and two to track technology purchases		2012-2013 school year	In-house		Training In MS Access

<b>Budget and Funding Sources</b>			
	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>
<b>Salaries and Benefits</b>			
• Technology Director	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
• Network Administrator	<b>\$99,905.02</b>	<b>\$106,898.37</b>	<b>\$114,381.26</b>
• Teaching Assistant			
• Computer Technical Assistant	<b>\$43,194.13</b>	<b>\$46,217.72</b>	<b>\$49,452.96</b>
• Outside Consultants	<b>\$34,025</b>	<b>\$36,406.75</b>	<b>\$38,955.22</b>
	<b>\$33,000</b>	<b>\$33,000</b>	<b>\$33,000</b>
<b>Hardware</b>			
• Administrative	<b>\$8,000</b>	<b>\$10,000</b>	<b>\$12,000</b>
• Academic	<b>\$150,000</b>	<b>\$154,000</b>	<b>\$158,000</b>
Network	<b>\$40,000</b>	<b>\$42,000</b>	<b>\$44,000</b>
Software Licenses	<b>\$50,000</b>	<b>\$52,000</b>	<b>\$54,000</b>
Supplies	<b>\$32,000</b>	<b>\$34,000</b>	<b>\$36,000</b>
<b>Total</b>	<b>\$490,124.16</b>	<b>\$514,522.84</b>	<b>\$539,789.44</b>

**Funding Sources:**

- CCS Operating Budget
- Clinton Foundation
- Title II D
- Title IIA Professional Development
- Model Schools Mohawk Regional Information Central
- Center State Teacher Center
- Oneida-Herkimer School Library System

<b>Monitoring and Evaluation</b>	
<b>Status</b>	<b>Projected Needs/Program Initiatives</b>
Integration of Technology measured as a criterion in the APPR Teachers maintain curriculum maps	<ul style="list-style-type: none"> <li>• Continued review through the Annual Professional Performance Review process</li> <li>• Review of DOWOS (work order) trouble-shooting</li> <li>• Review of Curriculum Maps</li> <li>• Continuing the development of benchmarks that describe technology skills students have or should have acquired</li> <li>• Develop benchmarks and rubrics for technology integration in instruction on grade level and departmental level</li> <li>• Continue to keep statistics on the number of types and level of participation in professional development activities offered</li> </ul>

	<p>through the PDC</p> <ul style="list-style-type: none"><li>• Continue to design professional development offerings tailored to data gathered from students assessments, workshop evaluations, technology committee suggestions, etc.,</li></ul>
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