

LaFayette Central School District Technology Plan

2010-2013

(Plan Approved NYSED: May 20, 2010)

Table of Contents

A. Executive Summary.....	4
B. Program Assessment	5
C. Technology Planning Goals	10
D. Network Infrastructure and Telecommunications	31
E. Network and Computing Security	43
F. Replacement Schedule and Equipment Inventory	46
G. Professional Development.....	51
H. Budget Planning and Development	54
I. Plan Evaluation Process	57
M. E-Rate & Technology Plan Evaluation Rubric	59

District Technology Committee (2009-2010)

Peter Tigh: Superintendent

Robert Sauro: Director of Technology

Tom Goskoski: School Business Official

Marcie Mann: HS School Library Media Specialist

Rich Blair: Network Administrator

Will Smith: Computer Technician

Jen Blossey: Assistant Principal

Diane Ellsworth: Principal

Sue Osborn: Principal

Karen Grimm: Community Member

Nick Lefort: HS Teacher

Steve Young: HS Teacher

Joe Fox: HS Teacher

Janet Conners: Elementary Teacher

Matt Priest: Elementary Teacher

Executive Summary

LaFayette Central Schools believes that to succeed in today's world students need to achieve mastery in a wide variety of technological tools. The world uses technology to manipulate information in many ways ranging from gathering, recording, constructing knowledge, demonstrating, and problem solving, learning and collaborating. Our district is committed to supporting Computer Assisted Instruction as an important educational tool for students to utilize the resource of technology to enhance their learning; teachers to expand academic and social instruction; and families to participate in the numerous choices available for their children within the worlds of school and work.

In order to generate and utilize the required new workforce skills our students need an environment that fosters development of these skills. The world of work expects that employees, our students, are technologically fluent, know how to learn, and are able to use technology to communicate, collaborate and support critical thinking and creative problem solving. Aiming for 21st century skills with instructional technology involves planning and curriculum mapping in core academic areas with a focus on content and context. Planning for instructional technology within this learning environment requires collaboration among teachers to set educational objectives, and to choose instructional techniques and corresponding technology tools.

Program Assessment

Beginning July 2009, an analysis of the technology program has been ongoing to ensure that all components of technology are operating efficiently and cost effective. We have been working with our local OCM BOCES to survey all areas of our infrastructure; including phone systems, network communication equipment such as switches, bandwidth, wireless and server equipment. We have also been working with building administration to support their current and growing instructional technology needs.

LaFayette CSD is at the end of its existing (3) three year Technology Plan. A comprehensive technology plan is required of all school districts that receive state and federal funding. The plans are approved by the New York State Education Department. Our newly formed District Technology Committee consists of representatives from each of our schools, representing support staff, administrators, and parents. The Technology Committee has been meeting regularly to discuss the future of technology in the district and how it will help our students prepare for knowledge based world. The committee has been developing technology goals, objectives and actions for the next three year technology plan.

Evaluation

Network Infrastructure

It is essential to prepare to build a school environment that has a secure, reliable infrastructure that can support and enhance computer assisted instruction in the classroom. The technology infrastructure is the foundation that all other technologies are built. The infrastructure provides the network that connects computers internally as well as externally outside the school district. It includes components such as switches, routers, firewalls, cabling and servers. As our district moves forward to accommodate 21st Century technologies in the classroom it is vital to have network resources to accommodate for growth and exploration of multimedia technologies as well as videoconferencing opportunities. Without continued monitoring and replacement of key infrastructure components, the networks will become unreliable, unresponsive, outdated and thus affect instruction. The district has begun utilizing the free services of OCM BOCES and other companies to conduct site surveys of our current infrastructure.

These devices are nearing 10 years old, beginning to fail and offer limited technology growth to correspond with current or emerging technologies. Upgrading will: 1) improve the speed to our desktop computers; 2) allow for wireless capability; 3) standardize our product line; 4) ensure our capability of supporting our continually expanding instructional needs.

- Onondaga Nation School will be upgrading their network summer 2010.
- High School & Grimshaw will follow 2011.
- Improving bandwidth to allow for the ever growing demand of video streaming resources through our BOCES Curriculum Center.
- BOCES conducted district-wide Wireless Survey (secure and reliable).
- BOCES survey underway to provide recommendation to upgrade servers.

Telecommunications

In collaboration OCM BOCES and their partnerships with local telecommunications companies the district is has reviewed its current telecommunications systems. At this time the following exists: outdated non-supported equipment, multiple vendors, and different types of equipment, not maximizing BOCES Aid, poor quality phones with limited functions, no integration with PA systems and no disaster recovery plan.

A plan is being developed for a cost effective maintenance plan for operational and functioning phones as well as provisions that provide for survivability or disaster recovery in the event of an outage.

- BOCES Surveyed existing phone systems with recommendations.
- BOCES Surveying our existing T-1 and fiber connections to ensure reliability.

Classroom Technology

As we evaluated our infrastructure immediate needs were discovered in instructional technology. In particular, the middle school does not have computers to adequately support teacher/student instruction. Computers are outdated and unable to support the demands of the classroom. Computers were being handed down from the high school to the middle school; there are no smartboards for teachers to utilize to enhance their lessons and bring differentiated instruction to support student learning styles.

- Board of Education approved the purchase of over (70) computers and (16) smartboards.
- BOCES Lease structure tied to replacement plan now in place to ensure equal distribution of new computers.
- We have upgraded Project Lead the Way Computers to ensure effective use of program software, plan in place for consistent upgrades.
- Increased the number of Promethean Boards at the High School and ONS.
- ONS is planning an upgrade of their classroom and computer labs this summer.
- Special Education program has received (20) laptop computers this spring to enhance instruction.
- Teachers given more access to instructional resources on the internet so they can research and enhance their lesson planning.
- Re-assigned technology staff personnel to be more responsive to technology requests in the buildings and get systems back to a functional state faster for teachers and students to use.
- Big Picture School has received Apple laptops and Itouch devices.
- Partnered with BOCES School Library Services to provide AudioBooks to the classroom through a shared network drive.

Technology Integration

Supporting teacher's use of technology is the biggest factor for success. The district entered into an agreement with OCM BOCES to have a Technology Integration Specialist on-site (3) three days a week with the intent to provide professional development and support to teachers with a focus on the integration of instructional technology into the learning process. We currently have support staff from BOCES providing training in various software applications including Promethean software and video-conferencing. They are available for individualized, grade level, or department level training upon request.

- BOCES Technology Trainers scheduled on-site to support teachers.

Technology Planning/Committee

This structure offers opportunities to exchange thoughts, share research, synthesize findings and formulate solutions that will help lead our district over the next three years. The plan will outline the district's vision to effectively use technology as a tool in the learning process. Essential to the development is input from all buildings which have been established this year.

The purpose of the committee is to:

1. Develop, Implement, and Monitor long-range technology plan
 - Promote a structured technology program tied to District Goals
 - Collaborative process to assess progress of the technology program
 - Promote an objectives-based process for decision making
2. Submit recommendations to the Board & Superintendent
 - Collaboration to prioritize budget technology requests
 - Forecast and Plan for long-term technology replacement and upgrades through BOCES Lease, Projects, and Grants

The technology committee began meeting in the Fall, the first activity was to gather information based on the Existing State of technology in the district. Data was gathered in the areas of infrastructure, telecommunications, classroom technology, professional development, communication/collaboration, and 21st century technology.

Based on the data collected the committee formed the goals, objectives and action items contained in this technology plan.

CURRENT EQUIPMENT INVENTORY

ITEM	TOTAL DISTRICT COUNT
Desktop PC	450
LAPTOP	39
Network/Standalone PRINTER	58
CEILING MOUNTED PROJECTOR	90
Portable LCD Projectors	16
SERVERS including LIB and Video	21
DIGITAL Still/Video CAMERAS	164
Portable Smart boards	4
Fixed Smart boards	11
MacBook	36
XServer	1
IMac	2
Audio Video Controller systems (ONS)	24
ClassRoom Response Systems	4
Portable Multi-Media Carts with Projectors	4
Video Conferencing Units	5
NetBook	12
Wireless Controller/Access points	1/7
Visual Presenters (Avermedia and Elmo)	39
Wireless Chalkboard	16
Uninterruptible Power supply (UPS)	37

Section

C

Technology Planning Goals

Technology Plan Goals for 2010-2013

Goal Area: Infrastructure

Objective: Upgrade district network/telecommunications infrastructure capable of supporting user demands and technological trends

Goal Area: Professional Development (Technology)

Objective: Enhance instructional technology use through consistent, ongoing professional development to ensure appropriate and effective use

Goal Area: Instructional Technology

Objective: Provide up to date computer hardware and software for classrooms to access the latest technologies for improving student achievement and enhancing the learning process

Goal Area: Communication/Collaboration

Objective: Implement a consistent set of communication resources to enhance collaboration and productivity

Goal Area: 21st Century Technology

Objective: Develop new capabilities to support teacher and student learning through 21st Century technologies such as videoconferencing, Web 2.0, mobile devices

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Infrastructure

Objective: Upgrade district network/telecommunications infrastructure capable of supporting user demands and technological trends

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Implement core network replacement plan. Upgrade switches, routers, network infrastructure	100% infrastructure backbone updated ONS upgrade followed by HS and Grimshaw Schools	Director of Technology Network Administrator Business Official BOCES	ONS-Summer 2010 HS/GS Summer 2011			Funding Source: <u>Boces Lease, Line Item, Grant</u> Professional Development: Training... None BOCES personnel will implement upgrade
Increase Internet Bandwidth to support increased use of web-based software, streaming of video resources offered by BOCES (Current bandwidth 6 MB) Promote media content	Bandwidth will increase Increase in teachers using streaming video	Director of Technology Network Administrator Business Official Library Media Specialists BOCES		7/2010	7/2010	Funding Source: adjustment to service contract 1MB @ \$ 900.00 Professional Development: Teacher Training of Curriculum Resources at BOCES and streaming media

resources available						Other: BOCES provides districts with documentation
Upgrade all district servers and implement common server operating system	Reliable up to date servers running the latest operating systems	IT Staff Business Official Director of Technology BOCES	7/2010	2013		BOCES site survey, recommendations and quote
Review current video surveillance and key entry systems throughout the district.	Consistent, up to date security system in place -Administrator remote access	Business Official Director of technology IT Staff BOCES/Outside Vendor Building Principals	7/2011	7/2013		Funding Source: grants, local budget Professional Development: Key personal trained

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Infrastructure

Objective: Upgrade district network/telecommunications infrastructure capable of supporting user demands and technological trends

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Secure external funding to be used for enhancing and upgrading video surveillance systems across the district	Purchases are funded and approved	Business Official BOCES/Outside vendor	7/2011	7/2013		Funding Source: Professional Development: principals and support staff, IT staff
Implement wireless campus to support mobile technology in instruction	All buildings will have a secure, reliable wireless backbone Wireless will support current and future growth of mobile and handheld technologies	IT Staff Director of Technology Business Official BOCES	1/2010	2013		Funding Source: Professional Development: BOCES Wireless Site Survey (Completed).

<p>Upgrade district-wide phone systems (to include voice, auto attendant functions, integration with paging system, provisions for survivability and disaster recovery, integration with email system, consistent maintenance and support through one vendor)</p>	<p>New phone systems with paging</p> <p>System support provided by BOCES and vendor</p>	<p>BOCES</p> <p>Northland</p> <p>Director of technology</p> <p>Business Official</p> <p>IT Staff</p>	<p>8/2009</p>	<p>2013</p>		<p>Funding Source:</p> <p>Professional Development:</p> <p>Training to all staff, admin's by BOCES/Northland</p> <p>Site Survey and estimated cost by BOCES/Northland (Completed) Quote is for all but ONS \$ 90,172</p>
<p>Provide secure, reliable access to district resources outside of the district (VPN)</p>	<p>All staff will be able to access district network from remote location</p>	<p>Network Administrator</p> <p>IT Staff</p>	<p>7/2011</p>	<p>8/2011</p>		<p>Funding Source: local bdgt</p> <p>Professional Development: staff/admin</p> <p>Site Survey and estimated Cost (Completed) \$ 9, 541</p>

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Infrastructure

Objective: Upgrade district network/telecommunications infrastructure capable of supporting user demands and technological trends

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Increase 100 MB circuit to 1GB from ONS to rest of campus	Increased speed and reliability evident with reduced trouble tickets	Network Administrator Time Warner Cable BOCES	7/2010	8/2011		Funding Source: local bdtg Professional Development: none
Implement Commvault Backup solution on key servers	Nightly backups consistently done with disaster recovery	BOCES Network Administrator	7/2010	7/2013		Funding Source: local bdtg \$ 1,500 per server, estimated 6 servers Professional Development: Commvault training for Network Admin

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Professional Development (Technology)

Objective: Enhance instructional technology use through consistent, ongoing professional development to ensure appropriate and effective use

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Develop and coordinate technology related staff development, workshop	Formal Instruction Workshops	Tech Integration Staff Building Principals Director of Technology	7/2010	7/2013	ongoing	Funding Source: none Professional Development:
Provide support to staff as requested at their "point of need"	Staff is able to do routine tasks with ease, teachers use technology as an integral part of lesson creation and delivery. Requires students use technology for	Tech Integration Staff Building Principals Director of Technology	7/2010	7/2013		BOCES Workshops Consultants Peer to Peer Allow for different models of delivery, ie: during school, after

	assignments Staff Trained in content areas					school, professional development days
Provide ways in which teachers can share best practices in classroom technology	Teacher(s) will demonstrate best practices le: PD days, department mtgs,etc..	Teachers Principals Library Media Staff Director of Technology Tech Integration Staff	7/2010	7/2013		Funding Source: Professional Development: Visitation to local districts Faculty Mtgs BOCES
Support the continuation of Technology Mondays	Technology Momdays at High School level are supported and encouraged	Tech Integration Staff HS Administration	9/2010	ongoing		Funding Source:local Professional Development: On-site trainings

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Professional Development (Technology)

Objective: Enhance instructional technology use through consistent, ongoing professional development to ensure appropriate and effective use

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Design K-12 Technology Literacy Standards	Linked to NYS/ISTE Standards Progressive plan that includes all grade levels & age appropriate resources	Teachers Principals Tech Integration Staff Director of Technology Library Media Specialists	7/2010	12/2010		Funding Source: local Professional Development: BOCES Services Workshops Survey other districts
Develop skills and instructional strategies to effectively use Promethean Boards in the classroom	Scheduled training are offered throughout the school year in a variety of models	Tech Integration Staff	9/2010	ongoing		Funding Source: local Professional Development:

Promote future technology trends to all staff	Communication of new technology and training offerings thru webpage, newsletters and email	Teachers Tech Integration Staff BOCES	9/2010	ongoing		Funding Source: local Professional Development: NYSCATE, BOCES workshops, Model Schools
Development of How to resources, utilizing web resources such as Jing	A collection of instructional how to's is collected and communicated to staff	Tech Integration Staff	9/2010	ongoing		Funding Source: local Professional Development: Training offerings

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Instructional Technology

Objective: Provide up to date computer hardware and software for classrooms to access the latest technologies for improving student achievement and enhancing the learning process

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Develop a consistent sustaining computer replacement plan	Replacement plan will be built into a lease structure	Director of Technology Business Official Tech Staff Technology Committee	7/2010	ongoing		Funding Source: <u>Boces Lease and Line Item,</u> Professional Development:
Transition to an updated Office productivity Suite	All computer systems will be running consistent, up to date office productivity software	IT Staff Administration Technology Committee	7/2011	8/2011		Funding Source: Local Budget Professional Development: Training for all staff/admins
Incorporate and monitor the integration of new technologies into instruction, ie: Interactive whiteboards	Increased requested from teachers for the available technology and incorporation	Tech Integration Staff Teachers	9/2010	ongoing		Funding Source: Budget planning, leases, grants

<p>(Promethean), Slates, Response systems, handheld technology ,etc..</p>	<p>into daily lesson planning</p> <p>Evidence of student engagement and exemplar lessons are collected and stored for sharing</p>	<p>Building Administrators</p>				<p>Professional Development:</p> <p>Training offerings</p>
<p>Explore Digital tools and strategies for Sciences: Digital microscopes, sensorware, gps, weather stations, probes,etc.</p>	<p>21st century science labs and equipment will be incorporated into classrooms</p>	<p>Tech Integration Staff</p> <p>Science Department</p>	<p>9/2010</p>	<p>ongoing</p>		<p>Funding Source: local budget, lease, grants</p> <p>Professional Development:</p> <p>Training offerings</p>

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Instructional Technology

Objective: Provide up to date computer hardware and software for classrooms to access the latest technologies for improving student achievement and enhancing the learning process

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Replacement/updating of instructional computers in the classrooms and labs	<p>Replacement plan developed</p> <p>Each building will offer a plan based on their instructional needs</p> <p>Implementation of new computers systems in place</p>	<p>Business Official</p> <p>Director of Technology</p> <p>Building Principals</p> <p>IT Staff</p> <p>Teachers</p>	7/2010	7/2013		<p>Funding Source: BOCES Lease structure</p> <p>Professional Development: ongoing</p>
Implement model for distributed computing, mobile laptop/netbooks, etc..	Each building will offer a plan based on their instructional needs	<p>Business Official</p> <p>DOT</p> <p>Principals</p> <p>IT Staff</p> <p>Teachers</p>	9/2011	7/2012		<p>Funding Source: local, lease, grants</p> <p>Professional Development:</p>

<p>Create awareness of available instructional software programs and web-based subscription software for staff</p>	<p>Develop web resource that lists software and purpose (include account information where appropriate) Include District, Building, Grade level purpose</p>	<p>Tech Integration Staff Library Media Specialists</p>	<p>9/2010</p>	<p>ongoing</p>		<p>Funding Source: none Professional Development:</p>
<p>Explore Virtualization for staff, parents and students (ClassLink)</p> <p>Extend use of technology and access to information beyond the school day</p>	<p>Staff, Parents and students have 24/7 access software, files and instructional resources</p>	<p>IT Staff BOCES</p>	<p>7/2011</p>	<p>12/2011</p>		<p>Funding Source: local Professional Development:</p>

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Instructional Technology

Objective: Provide up to date computer hardware and software for classrooms to access the latest technologies for improving student achievement and enhancing the learning process

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Utilize Library Media Centers to promote digital library and digital media	Library staff will collaborate with BOCES in continuous collection development	Library Media Staff Tech Integration Staff	9/2010	ongoing		Funding Source: cosers Professional Development:
Library Media Centers will support digital media including kindles, Itouches, ipods and audiobooks for student exploration	An increase in these devices	Library Media Staff Tech Integration Staff	9/2010	ongoing		Funding Source: local, lease Professional Development: Ongoing training

<p>Library Media Staff will develop and improve access to school library resources beyond the school day for students and staff</p>	<p>Library Resources will be offered beyond the school day</p>	<p>Library Media Staff Tech Integration Staff</p>	<p>9/2010</p>	<p>ongoing</p>		<p>Funding Source: local Professional Development: BOCES SLS</p>
---	--	---	---------------	----------------	--	---

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Communication/Collaboration

Objective: Implement a consistent set of communication resources to enhance collaboration and productivity

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Upgrade current email system	All staff will have functioning access to new email system	DOT Business Official Network Administrator	7/2010	8/2010		Funding Source: BOCES Project Professional Development:
Upgrade administrative phones to Blackberry devices to integrate into Email/Calendar system	Administrative staff will have phones compatible with email system	Business Official IT Staff	9/2010	12/2010		Funding Source: lcoal Professional Development: Training

<p>Upgrade and Standardize Office productivity tools for Administrative/Office staff</p>	<p>100% of systems will be running consistent operating system and latest office productivity software</p>	<p>Business Official Director of Technology IT Staff</p>	<p>9/2010</p>	<p>10/2010</p>		<p>Funding Source: local Professional Development: Training on upgraded sw</p>
<p>Improve X-stop filtering system, incorporate LDAP to ensure consistent AD naming scheme to x-stop logins for teachers</p>	<p>All Staff will have LDAP universal login credentials</p>	<p>IT Staff</p>	<p>7/2011</p>	<p>8/2011</p>		<p>Funding Source: Professional Development:</p>

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: Communication/Collaboration

Objective: Implement a consistent set of communication resources to enhance collaboration and productivity

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Explore communication/collaborate concept that will utilize the technology for document management, information repositories, teacher knowledge bases/lesson plan sharing, online workspaces (ie: Microsoft Sharepoint)	Collection of shared resources	DOT All Staff Tech Integration Staff	7/2012	12/2012		Funding Source: local Professional Development: New Horizons and Turn Key Trainers
Evaluate current state of district website, possible upgrade to SchoolWorld	Expansion of district and building websites Usage Data	Tech Integration Staff DOT Karen Grimm BOCES	7/2011	9/2011		Funding Source: adjustment to service contract Professional Development: K. Grimm and Tech Integration Staff

Exploration of change in Lafayette email listing	Change in email name	Network Administrator	7/2011	8/2011		Funding Source: none Professional Development:
--	----------------------	-----------------------	--------	--------	--	---

LaFayette Central School District

Technology Action Plan

Year: 2010-2013

Goal Area: 21st Century TechnologyObjective: Develop new capabilities to support teacher and student learning through 21st Century technologies such as videoconferencing, Web 2.0, mobile devices

Action Step(s)	Success Indicator	Learning Community Responsible	Start Date	Due Date	Completion Date	Resources and Support
Provide opportunities to explore Web 2.0 tools, such as wikis, blogs, podcasts	Implement tools without filtering or blocks	Tech Integration Staff Director of technology Library Media Specialists Building Principals	7/2010	ongoing		Funding Source: local Professional Development: Staff Development time BOCES workshops
Coordinate sustained and ongoing support for video conferencing. Develop a plan in collaboration with BOCES staff (Amy Spath)	Plan is developed to enhance and promote distance learning opportunities for staff and students	Tech Integration Staff BOCES personnel IT Staff	12/2011	ongoing		Funding Source: Ensure district is participating in the E-Learning Connect Coser thru BOCES Professional Development:

Section

D

Network Infrastructure and Telecommunications

Overview

The physical networking design throughout the district is based on an extended star topology. Within individual buildings, data traffic traverses the network through a series of managed switches in the main and intermediate data facilities. Between buildings, data is routed by a Layer 3 core switch at the High School to other buildings over either dedicated optical fiber (Grimshaw and the District Office (DO)) or optical fiber leased through Time Warner (Onondaga Nation School (ONS)).

Servers, core and edge switches are installed in centralized main data facilities and storage areas in each building; where necessary, one or more intermediate data facilities exist to interconnect and redistribute traffic over extended distances. Campus connections between the High School, Grimshaw School and the DO are linked via 1000Mbs fiber; otherwise, 100Mbs fiber is deployed between buildings (ONS).

Category 5/5e copper wire is deployed to the desktop. All connections and internal wiring conform to EIA/TIA industry standard specifications and support lower-layer Ethernet transport protocols. Upper-layer data protocols are transported over TCP/IP.

The district offers World Wide Web and electronic mail resources through servers located at the Jr./Sr. High School and the DO respectively. The website (www.lafayetteschools.org) offers a variety of information to students, teachers and community members. The current email system is used by staff and students between grades 7 and 12. Its use is restricted for interpersonal, departmental, and other group communication, calendaring and document sharing. Telephone/email synchronization, shared calendars and group collaboration is not possible with our current system. OCMBOCES has provided a proposal to upgrade and plans are underway to migrate to MS exchange server in July 2010.

Local Area Networking

All instructional and administrative spaces are wired with Category 5/5e wire terminated in local data facilities. Generally, these spaces have multiple live data drops.

In Progress:

Local file, print and shared application resources are provided by Windows 2000/2003 servers located in the High School and ONS facilities. Active Directory Domain Controllers are located in High School, Grimshaw and ONS. Backups are currently done in-house for email and data servers. This server is located at the HS and combines Disk-to-Disk and Disk to tape backups. Tapes are rotated weekly and stored in a safe located in another part of the building.

Security:

All servers are located in physically secured locations. The network Technology Security Plan has been revised, and includes a maintenance schedule for all updates/patches/security for Windows Servers. A password policy is enforced for improved security, and a history of passwords used specification instituted to prevent reuse of a previous password.

Windows Active Directory utilizes a logical distribution of users' rights and established that users are only granted the minimal rights they need to perform their duties. Access is restricted to normal school hours, unless authorized by the Director of Technology. A policy is in place to automatically log off inactive users. Wireless networking is used on a limited basis in only a few buildings.

Ultimately, when security, management, standards and coverage issues are resolved by the industry, more widespread deployment of wireless technologies may be considered by the district.

In Progress:

- A new procedure is being developed to facilitate users (students, administration, faculty, and staff) entering the LaFayette Central School District information system, and just as importantly, leaving the LaFayette Central School District information system. This procedure will be implemented during the summer of 2010.

- A Windows Server Update Services (WSUS) server is installed to implement security patching to the desktop on a weekly regular basis.

Policies and Procedures:

LaFayette Central School District has an Acceptable Use Policies that describe the guidelines for use of district owned networks, equipment and software by all users.

Wide Area Networking

All remote buildings connected back to the High School communicate over optical fiber at 1GBs, or 100MBs as stated earlier. This significantly increases the reliability of data transfer between buildings since voice and data traffic are no longer carried over older and much slower multiplexed copper lines.

LaFayette Central School District is part of a network of OCM BOCES component District's linked by a 100MBs connection to Time Warner Digital Network.

Access to administrative applications (SIS, IEP Direct, etc.) is hosted by the CNYRIC mainframe and web servers. Internet access, with restrictions described below, is available from every networked computer in the district. The district subscribes to three important Internet services offered by the CNYRIC: firewall services, mail gateway services and Web content filtering.

The firewall allows approved data traffic ports destined for the public Internet out from our public addressed IP network, but blocks all but specifically authorized traffic back into it. Both these services help insulate our network from attack by hiding its structure behind a protective screen. In addition, mail gateway services greatly reduce the flow of spam and infected email to our mail server and users' mailboxes. Finally, the Web content filtering service helps insulate students from harmful, objectionable and other inappropriate information otherwise available on the Web. The Web filters vendor provides a CIPA profile we use for students to remain compliant with current state and federal regulations. Both the mail gateway and web content filtering services are flexible and able to be administered to meet individual districts' needs.

Currently, all switches installed in data facilities only support 10/100Mbps connections to workstations, although switch-to-switch uplink ports are currently running at 1000Mbps.

Wireless communications (WiFi) based on 802.1x specifications are employed only on an ad hoc basis throughout the district. Most access points currently installed support 802.11g up to 54Mbps. At this time WiFi Security is provided with private SID and 128 bit encryption keys manually installed to each WiFi device currently running on our network. Future WiFi will be controlled via a Wifi controller on a VLAN using Radius Server authentication. This will allow guest access to the internet while still allowing our users to gain access to network resources.

Local Area Network Electronics

In Progress:

The Nortel network equipment currently used by the District should be replaced as follows: The primary MDF of the network is a Nortel 5510 in the High School main data facility, and one MDF at each of the three remote sites. The District should upgrade the remote sites Baystack 450 switches to Nortel 5698 10/100/100 series switches to support gigabit Ethernet communications throughout to the desktops and 10Gbs backbone linking the campus. To do this all remote closets should be upgraded to a combination of Nortel 4526, 5520, 4524 series switches. The WAN to two remote sites running 5698 series switch would uplink to the core switch via a 10Gbase fiber connection. The ONS site needs to increase monthly service fees by \$800 to migrate from a 100Mbs to a 1Gbs.

The IP structure for each of school's local area networks is comprised of assigned Class C subnets via a virtual local area networking (VLAN) configuration. Almost all ports are used and wired to each classroom and/or computer lab directly.

The Layer 3 routing capabilities of the core Nortel 5510 switch in the HS MDF have been leveraged to support an IP-based VLAN scheme. Although not technically routed, broadcast domains are limited to VLAN member addresses and network traffic congestion is greatly reduced.

The District currently subscribes to a CNYRIC service that provides a firewall between its internal LAN/WAN network and the public Internet. This firewall also provides network address translation (NAT) services should the district convert to a private IP network solution.

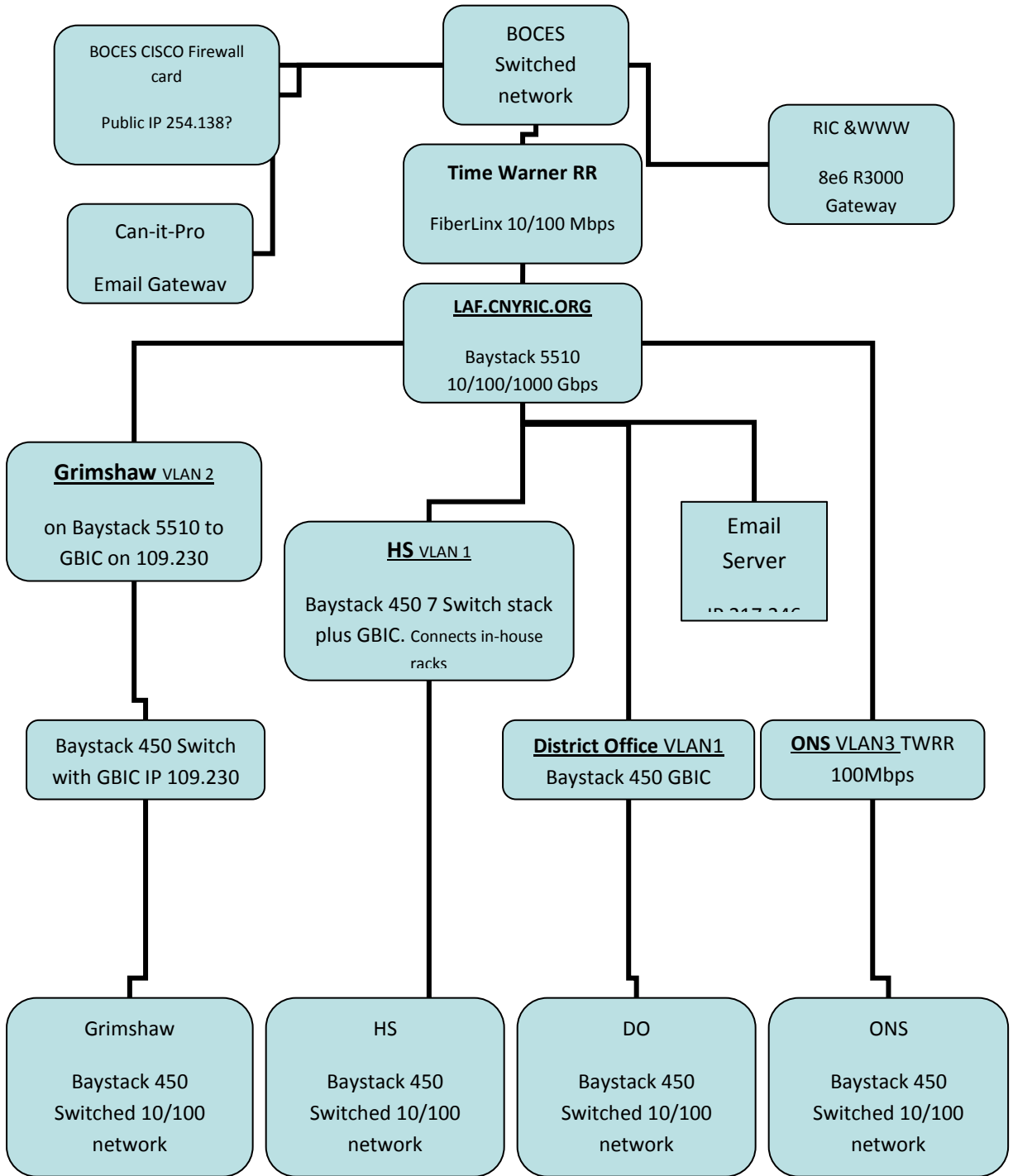
All Windows servers are currently running Windows 2000, 2003 or 3008 Server. These servers provide local DNS, DHCP and Active Directory services as well as.

Distance Conferencing is done with 4 Polycom, 1 Tandberg, RS2000 video server and Video firewall. Currently each video conferencing device connects directly to other public sites and the video server is used to record sessions as needed. In the summer of 2010 the Video Firewall will be configured to provide a single point of access in and out of the district.

Security Video Surveillance systems were introduced in our 2007 – 2010 Tech Plan. These IP based High Definition (HiDef) systems were intended to replace our current analog system, utilize current analog cameras and provide expansion to HiDef video cameras with Network Area Storage (NAS) systems. This has not come to fruition.

Solution:

Through grants and other funding it is recommended that the district pursue the expansion of our current video security systems in order to provide each building with greater capabilities so monitor and provide law enforcement with quality video should the need arise.



Unless otherwise specified LAN/WAN network backbone is 1000MBS SX LAN with 1000MBS LR WAN connections Richard Blair Network Administrator rev 2 02/26/07, rev3 3/30/07

Telecommunications

Current: Our current systems include Two NEC PBX systems, installed by Business System of CNY, at ONS and Grimshaw that are capable of Voice over Internet Protocol (VOIP) and are less than 5 years old. The HS has a Siemens Hicom 150 series PBX that is 10 years old and will no longer be supported by siemens after 2010. Both systems run a combination of digital and analog phones. The HS and Grimshaw have voice mail while ONS is without.

In Progress:

Northland Communications was asked by LaFayette Central School District (LCSD) and Onondaga Cortland Madison (OCM) BOCES to provide a proposal for a voice communications system for the entire school district as an upgrade to the existing communications system. LCSD has requested a proposal for voice communications utilizing Internet Protocol also know as Voice over Internet Protocol (VoIP) vs. the traditional Time Division Multiplexing (TDM or digital phone service) solution LCSD is currently utilizing. VoIP communications solutions are the newest technology for voice communications and are ideal solutions for certain applications. IP Technologies were not originally engineered for real time voice or video communications as a result the technology has been backward engineered to support real time voice & video. Because of this engineering consideration the current VoIP technology is cost effective only under certain conditions such as geographically dispersed offices, traveling or road warrior employees, new construction/new office space, and specialized business applications.

Analysis:

Northland Communications has evaluated the telecommunications needs of LaFayette Central School District (LCSD). We have:

1. Analyzed the existing voice communications system
2. Analyzed the existing data communications infrastructure to determine its robustness to provide high quality voice communications
 - a. Information on existing data hardware provided by LCSD.
3. Inspected the cabling at the demarcation points
4. Walked through all the various buildings, and spoken with key individuals to uncover any critical need or unusual application for voice communications
5. Sent a technician to evaluate the existing paging system to verify how it would interface with the proposed voice solutions.

LCSD has provided the following specifications for the voice solution:

1. Three hours of UPS for the communications system
2. Northland is to provide a data rack and installation for all appropriate equipment for VoIP solution into each data rack.

Northland has communicated with Sack Associates and they have provided:

1. The phone count per building
2. An approximation of the type of phone utilized at each building
3. The number of Intermediate Distribution Frames (IDF's) or cabling closets per building

The Northland team has taken all these factors into consideration and has engineered the following traditional digital solution and a VoIP solution for LCSD to choose from.

Paging:

Northland has determined that there is a benefit to be able to page from any phone to any paging zone. This issue was discussed as a function that would be beneficial for emergency response. Currently paging can only be accomplished at the console of the primary buildings. By integrating the paging into the phones system LCSD has the flexibility of paging through the overhead speakers and through the phones from any building to any other building. The Northland technician has determined that the primary cost for this integration would be from the existing paging vendor and not a

significant part of this proposal. Therefore this proposal will not address this issue and LCSD should decide if they want to engage their paging vendor for more information.

Existing Cabling:

Northland has confirmed that there is existing data cabling within each class room proposes CAT 5e/6 cabling to replace the older CAT 3 cabling and some additional cabling drops.

Digital Solution:

Northland Communications is proposing two Nortel CS1000M Digital, non-blocking PBX's; one installed at the Jr/Sr High School and one installed at Grimshaw Elementary School. The CS1000M is a hybrid PBX capable of supporting 100% traditional digital phones and 100% IP phones or any combination of digital and IP phones. It is also capable of communicating to another Nortel PBX utilizing VoIP trunking.

VoIP Trunking:

VoIP is the first IP technology utilized for voice communications and is the most robust and most widely utilized of the VoIP technologies. The two systems would be connected via VoIP trunking. This trunking solution would utilize the existing fiber data circuit that connects the ONS, Grimshaw Elementary and the Jr/Sr High campus. VoIP trunking would allow for four digit calling and name display between the Three locations at no additional cost. Northland has discussed the data requirements with Robert Sauro and from the information he has provided we estimate that the additional voice traffic will have no or minimal impact on existing bandwidth utilization. In the event the fiber circuit was disabled the calls would be routed through the public phone network.

CS1000M:

The CS1000M will allow ONS, Grimshaw and the Main Campus to have standalone PBX's with VoIP trunking for interoffice calling. The CS1000M is a standalone hybrid PBX that supports both VoIP phones and Digital phones. In this proposed solution the new phones proposed are digital and the third party analog phone we currently have will be reused with the new system.

Recommendation:

From our analysis of the users, our knowledge of the benefits of digital vs. IP, and the cost differential Northland would recommend solution one the digital PBX. This solution offers LCSD the most cost effective solution for their current needs while at that same time offering then the flexibility of utilizing VoIP phones in the future with incremental upgrade and not a large upgrade.

Network and Computing Security

Over the past year the LaFayette Central School has been in development of policies, processes and procedures to ensure a safe and secure computing and network environment in compliance with best practices. Several years ago the Onondaga Cayuga Madison BOCES Regional Information Center put out a checklist of Security items that districts should take into consideration when examining their district IT security. This document is attached in this section.

The Office of Technology reviewed all aspects of IT security on campus. All servers are located in physically secured locations. The network Technology Security Plan needs to be revised, to include our maintenance schedule for all updates/ patches/security for Windows Servers, and workstation. A password policy is enforced for improved security, and a history of passwords used specification instituted to prevent reuse of a previous password.

A security audit of user rights and permissions occurs on a regular basis, and a review has taken place related as to who has access to the system. Windows Active Directory utilizes a logical distribution of users' rights and established that users are only granted the minimal rights they need to perform their duties. Access is restricted to normal school hours, unless authorized by the Director of Technology. A policy is in place to automatically log off inactive users. Wireless networking is used on a limited basis in only a few buildings. Ultimately, when security, management, standards and coverage issues are resolved by the industry, more widespread deployment of wireless technologies may be considered by the district.

BOCES Regional Information Center Security Awareness Checklist

Physical Security

- Define building access policy, restrict physical access when possible by locking unoccupied rooms.
- Define network and equipment access for times outside normal instruction periods.
- Conduct physical inspection of equipment both random and planned at various times through the year.
- Ensure documents that have student and/or confidential information are shredded and not just thrown away.

- Consider the use of alternate password authentication devices such as biometric/ fingerprint reader, or the use of Smart Cards or other one-time-password devices to log into the network.
- Define a maintenance schedule that will verify that all security patches, anti-virus and anti-spyware software has been installed and is up-to-date.
- Evaluate and assess for potential weak points in security on regular scheduled basis. (Potential hackers look for weak points to start an attack then move to more secure systems.)
- Staff should lock access to their computers if they leave their workstation
- Access to network equipment needs to be secured. (switches, servers)

Communication

- Educate technical staff and Administrators about security.
- Educate users - outline password and access procedures. Instruct staff on how to change passwords and lock access to their computer.
- Communicate security procedures and policies to staff and students.

Access Security

- Ensure that only authorized persons or processes are allowed to use or access any given system. (Access consists of three aspects; physical, logical and Administration.)
- Restrict global access methods and generic ID's. Do not use a single access ID and password for multiple applications, servers or networks.
- Clarify the policy for access by staff from home computers to district network.
- Define/ clarify access by students from home computers to district network.
- Evaluate authentication methods that can identify or restrict machine access to specific networks or applications. (i.e. MAC address, VPN, LDAP, second tier password, etc.)
- Conduct assessment to determine security risk and develop risk management plan.
- Change passwords frequently, at least every 90 days.
- Never create accounts with the user ID "administrator".

- Passwords should never be written down and kept where unauthorized users can find them (ex: post-it notes under computer keyboard or CPU).
- Require a set number of characters for passwords, and maintain a history of passwords used to prevent reuse of a previous password.

Policies and Procedures

- Every district should have Acceptable Use Policies that describe the guidelines for use of district owned networks, equipment and software.
- Teacher and Student handbooks should be updated to reflect policy and subsequent penalties for violation.
- Establish, document and communicate password policy. Conduct periodic audit of users.
- Remove all accounts of people that have left district.
- Identify and implement summer access for users. Deactivate accounts? Change passwords??

Replacement Schedule and Inventory

In order to maintain effective Computer Assisted Instruction tools in the classroom, it is essential that the district have a replacement schedule of equipment including computers and network infrastructure and telecommunications services. When schools invest in computers and networks, they often fail to plan for the long-term costs of using them effectively and efficiently. We have begun to put the process in place to evaluate the role of technology and their goals and budget accordingly. Planning for Total Cost of Ownership (all of the costs associated with deploying, operating, maintaining and asset management of a computer network) is an essential element to utilizing our resources and having a plan to implement technology based on those limited resources.

We are constantly updating and redesigning our Asset database to better implement, locate and track district resources. An analysis of assets including hardware, software and network equipment is being reviewed yearly; site visits and review of current structures are being examined including age and condition.

This report will also assist in collecting data to develop a process that provides a replacement schedule plan and phased budget for continued upgrades of computer hardware in order to provide access to the latest technologies for the purpose of enhancing the learning process. In addition, the information provided will help assist

in the Budget and Facilities Strategic planning goals to develop a facilities improvement plan.

Our current infrastructure which includes network switches and routers are nearing 10 years old. These devices are beginning to fail and offer limited technology growth to correspond with current or emerging technologies.

Upgrading will: 1) improve the speed to our desktop computers; 2) allow for wireless capability; 3) standardize our product line; 4) ensure our capability of supporting our continually expanding instructional needs.

Since the core switch is located at the High School, infrastructure upgrades need to occur here first. With the assistance of Onondaga Cortland Madison BOCES, their assessment of cost for this upgrade is \$55,000. Each building will follow accordingly, starting with the MDF. We are currently pursuing a legislative grant to offset the costs.

In addition, current teacher and classroom computers are ranging from 4 to 8 years old. Low memory, lack of multimedia ability (DVD and Video TV Tuner Cards), End-of life cycle on Windows XP operating system and MS Office 2002 productivity software is hindering Computer Assisted Instruction in the classroom.

Review of the current technology assets reveals a large number of classroom desktop computers need to be replaced in 2010. A combination of school year budgeting, BOCES Projects, Legislative grants and leases will be used to accomplish our replacement cycle.

Computer Replacement Cycle 2010-2013

• **Desktop Computer Replacement (ONS)** – 130 new classroom PC computers at ONS School March 2010

• **Desktop Computer Replacement (Grimshaw)** – 100 new classroom PC computers at Grimshaw School May 2010

• **Desktop Computer Replacement (High School)** – 162 new classroom PC computers at the Jr/Sr High School March 2012

• **Desktop Computer Replacement (DO/Facilities/Trans)** – 14 office PCs March 2012

• **Laptop Computer Replacement (Administrators/ Loaners)** – 35 Laptops March 2012

• **Mac Book Replacement (Big Picture)** – 15 added per new classroom per year as needed. Next order in March 2010. 35 will be replaced starting March 2014

• **Desktop Computer Replacement (PLTW)** – 54 New lab PCs in classroom 140, 141, 142 and 112 March 2010. 138 replaced ever 2 years starting March 2012

• **Net-Book Computer Replacement (Special Ed IEP)**– 15 Net-Books March 2014

LaFayette Central Schools District Server and Switch and Life Cycle Replacement Plan

Model	Location	Function	In-Service	Replacement yr
Servers				3 yr update 6yr Life cylce
HP				
Dell PE 2600	HS rm110	HS - Share, WASP, ADBDC, Terminal License server, Apps, Win 2000	2003	2010 -
Dell PE 2600	HS rm110	DO - File, Apps, SQL, Print, Win2003	2003	2010
Dell PE 2600	HS rm110	GS – File, Apps, Win 2003	2003	2010
Dell PE 2600	HS rm110	Spare, Win 2003	2003	2010
Dell PE 2600	ONS 332 Storage	ONS – File, Apps , Win 2003	2003	2010
Dell PE2800	HS rm110	HS - File, Win 2003	2005	2011
Dell PE2800	HS rm110	HS - Apps District Global apps	2005	2011
Dell PE2800	HS rm110	Image Server for servers, Win 2003	2005	2011
Dell PE2800	HS rm110	Email	2005	2010
Dell PE2800	HS rm110	Spare	2005	2011
Dell Precision 390	GS 301 Phone/server	ADDC, DNS, DHCP, Wins, FRS,Altiris	2008	2012
Dell Precision 390	ONS 332 Storage	ADDC, DNS, DHCP, Wins, FRS,Altiris	2008	2012
Dell Precision 390	HS rm110	ADDC, DNS, DHCP, Wins, FRS,Altiris	2008	2012
Dell Precision 390	HS rm110	Software License and Administration	2008	2012

Dell Precision 390	HS rm332	Image, Symantec Ghost PQDI, Win XP	2008	2012
Dell Precision 390	GS rm301	Image, Symantec Ghost PQDI, Win XP pro	2008	2012

LaFayette Central Schools District Server and Switch and Life Cycle Replacement Plan

Model	Location	Function	In-Service	Replacement yr
Servers				
				3 yr update 6yr Life cycle
Dell Precision 390	ONSS rm332	Image, Symantec Ghost PQDI, Win XP pro	2008	2012
HP D530	HS rm110	Global Print Server	2005	2010
IBM E 8479-61X	LIB	Mandarin, Win 2000	2002	2008 Overdue
Dell	ONS rm332	Waterford Apps	2007	2013
IBM E 8479-61X	LIB	Mandarin, Win 2000	2002	2008 Overdue
IBM E 8479-61X	LIB	Mandarin, Win 2000	2002	2008 Overdue

Model	Location	Function	In-Service	Replacement yr
Switches				
				8yr Life cycle tba
Nortell Baystack 450-24T Switch	All Schools	Data Network Switches	1999	tba

Model	Location	Function	In-Service	Replacement yr
Power Supplies (UPS)				
				5 yr Battery Replacement
Smart UPS 2200	Servers/PA/Phone Systems	Power Supply Backup	2006	Replace as needed
Smart UPS 1500	Comm. Racks	Power Supply Backup	2002	Replace as needed
Smart UPS 1400	Comm. Racks	Power Supply Backup	2001	Replace as needed
Smart UPS 800	AD/image/admin server	Power Supply Backup	2006	Replace as needed

Model	Location	Function	In-Service	Replacement yr
PBX Phone System				8 yr Life cycle
Siemens HiCom 150	HS	Voice/ Voice Mail	2000	2008 Overdue
NEC I Series	GS	Voice/ Voice Mail	2005	2013
NEC I Series	ONS	Voice	2008	2016

Professional Development

LaFayette Central Schools offers many opportunities to staff to develop technological literacy skills. These opportunities have been made available in the form of conferences, staff development days, after school and summer workshops, as well as one-on-one training for a specific project by district technology staff.

The majority of training results in some form of remuneration or takes place on a Superintendent Conference day, therefore most staff chooses to participate in the opportunities available. ITT (Individual Technology Training) request may be made using the form on the District Technology website. Teachers are encouraged to take part in the Model Schools offerings available through BOCES.

Staff Development

A minimum of \$10,000 is set aside as a line item in the LaFayette Central Schools District Technology Budget to pay stipends for staff engaged in technology related staff development. While these particular funds are targeted strictly at technology related staff development other monies are part of priorities set by the Curriculum Council. In addition, days are contracted for through BOCES for trainers specializing in technology integration. These days are used to conduct teacher training both after school and during Superintendent Conference Days and Departmental training time. Any department involved in development must also be involved in a staff development project. Rubrics have been designed to insure that administration can evaluate any Instructional Improvement Plans and the technology they incorporate. Money is also budgeted for ongoing Project Lead the Way training, conferences such as NYSCATE, ISTE, NECC and STANIS. These types of conferences enable LaFayette to take advantage of the "train the trainer" concept.

LaFayette teachers are committed by contract to 30 hours of Professional Development in a three year period.

Professional Development Goals

- Staff will continue to be adequately trained in the use and integration of new hardware and software as it is acquired
- The district will continue to dedicate at least one in-service day to the integration of technology into the curriculum
- Teachers and instructional staff members will continue to attend conferences and workshops sponsored by organizations such as but not limited to BOCES and the teaching center
- PLTW staff will attend relevant summer training
- Faculty will be trained and encouraged to expand their use of Acuity (or equivalent service) in order to monitor student progress
- The District will continue to identify and train additional mentors who can

provide training in a more informal environment at convenient times for all staff members

- Online training materials will continue to be developed and posted on district web pages
- Substitutes will be provided for teacher release as necessary
- Out of school sessions will be offered and contractually determined stipends will be provided as necessary
- Elementary teachers will receive in-depth training in the use of the district's electronic grading and attendance software as it becomes available
- The Director of Technology will work in conjunction to develop technology specific training to media staff during monthly scheduled meetings.
- The Technology Department will continue to provide brochures detailing technology policies in the district. A sample is provided in the appendix.

There are plans beginning with the 2010-2011 budget to employ a .6 BOCES Technology Integration Specialist. This position is responsible to the Director of Technology. The technology integration specialist collaborates with building principals to support teacher development in the area of technology integration.

The primary function of this position is to provide professional development and support to teachers with a focus on the integration of instructional technology into the

learning process, consistent with the mission of the school district. As such, the technology integration specialist maintains technology resources to support teacher development in all three buildings.

Professional development in support of technology literacy skills to improve instruction continues to be a high priority. The improvement of teaching and learning is the most important goal in our district's technology plan. All staff must be competent in the use of technology in order to support these goals, ISTE goals, and promote student proficiency in 21st skills. We continue to focus on the integration of curriculum while attempting to meet the needs of a wide range of skills among our staff. In addition to opportunities supporting the integration of technology into all curricular areas, we continue to develop skills that promote communication and productivity, including, but not limited to, MS Office, Outlook, webpage design, and other tools specific to staff needs.



Budget Planning and Development

Justification budgeting is used to build the technology budget, this process is similar to zero-based budgeting, with each budget line starting with zero and then justifying what is needed to meet the educational needs and goals of the district. The technology committee is the creation of its technology goals collaborated in discussion on justification of requests that built the tech planning goals.

As state aid and revenue estimates are revealed it is then time for the district to establish budget limits and tax impacts. The administration discusses the budget limits and tax impact with the Board of Education to determine guidelines. Once limits are established each administrator goes back to their staff to discuss potential cuts. The items that are cut are then placed on a separate priority list which is used to establish long term budget planning. This list is used to help establish future priority purchases as revenues estimates change or additional grant monies are pursued. It is also beneficial for the administrator and departments to review this data for the development of replacement schedules and future planning.

Final budgeted amounts will reflect the estimated needs of the district as part of the larger strategic plan and mission statement and are not the property of any individual staff member, or department. Adjustments throughout the budgeting and

procurement process may require the re-allocation of resources for the greater needs of the District as a whole.

The procurement, implementation, operability and maintenance of technology resources are part of doing business in a school district. In order to sustain and support Computer Assisted Instruction in the classroom it is essential to maintain and budget for the acquisition of hardware resources.

LaFayette Budget 2010-2013				
	2010-2011	2011-2012	2012-2013	
Item	Year 1	Year 2	Year 3	Funding Source
Hardware				
WAN/LAN Hardware	\$150,000	\$150,000	\$150,000	E-rate, District Funds, BOCES Lease
Servers	\$100,000	\$25,000	\$5,000	E-rate, District Funds, BOCES Lease
Desktop	\$50,000	\$50,000	\$50,000	District Funds, BOCES Lease
Laptops	\$25,000	\$25,000	\$25,000	District Funds, BOCES Lease
Printers/Scanners/Digital Cameras	\$29,000	\$10,000	\$5,000	District Funds, BOCES Lease
Distance Learning Equipment	\$25,000	\$25,000	\$25,000	District Funds, Grants, BOCES Lease
Software				
Administrative/Management	\$20,000	\$20,000	\$20,000	District Funds, BOCES
Instructional	\$50,000	\$50,000	\$50,000	District Funds, BOCES
State Aided Software	\$18,000	\$18,000	\$18,000	State Aid, District Funds
Staff Development				
Model Schools	\$ 4, 500	\$ 4, 500	\$ 4, 500	District Funds
Professional Development	\$26,000	\$26,000	\$26,000	District Funds
IT Staff Development	\$1,300	\$1,300	\$1,300	District Funds, Title II Funds
Technical Support Staff				
District Support Staff	\$140,000	\$140,000	\$140,000	District Funds
BOCES Tech Support	\$80,000	\$80,000	\$80,000	District Funds, BOCES
Other/BOCES				
Cell Phone/Pagers				E-rate, District funds
Distance Learning	\$5,400	\$5,400	\$5,400	E-rate, District funds, BOCES
Supplies	\$25,000	\$25,000	\$25,000	District Funds, BOCES
Library Automation Software	\$27,000	\$27,000	\$27,000	District Funds, BOCES
Security Cameras and Software	\$30,000	\$30,000	\$30,000	District Funds, Capitol Project
COSER 562-Center for Learning Technologies	\$78,000	\$78,000	\$78,000	District Funds
COSER 563-Model Schools Program-Professional Development	\$4,500	\$4,500	\$4,500	District Funds
COSER 601-Telecommunications	\$47,000	\$47,000	\$47,000	E-rate, District funds
COSER 602-Telecommunications Interconnect Service	\$23,000	\$23,000	\$23,000	E-rate, District funds
COSER 620-Telecommunications Network Line	\$5,900	\$5,900	\$5,900	E-rate, District funds
COSER 620 Internet Services	\$5,900	\$5,900	\$5,900	E-rate, District funds
COSER 620 Technology Infrastructure Support-Admin	\$39,000	\$39,000	\$39,000	E-rate, District funds
COSER 620 Data Warehouse Services	\$5,500	\$5,500	\$5,500	E-rate, District funds
COSER 620-Financial Support Services	\$0	\$0	\$0	District Funds
COSER Food Management Support Services	\$11,000	\$11,000	\$11,000	District Funds
COSER 620-Priority Services, Supplies and Support	\$38,000	\$38,000	\$38,000	District Funds
COSER 620-Special Education Applications	\$13,000	\$13,000	\$13,000	District Funds

Plan Evaluation Process

Implementation, monitoring, and evaluation of district technology initiatives will be accomplished through a collaborative effort from different learning communities. These include Technology committees and District Library committees. Modifications to the plan will occur by these groups to examine the implementation of goals and objectives of the plan and to modify timelines as needed.

The plan annually will be evaluated for the effectiveness of implementation. Evaluation will be based on the following:

Review of the acquisitions plan completeness.

Review of the use of technology by staff and students to include the increase of staff web pages and student work posted. We anticipate a minimum of a 10% increase per year.

Review of staff, student, and parent surveys as appropriate.

Review of data relating to student achievement on standardized tests.

An analysis of data on student achievement related to the goals set out in the district goals.

IT Staff will also review all policies regarding technology use by staff and students. As changes are recommended and approved by the committee, the Board of Education must then officially approve any changes or amendments to existing policies as well as new policies.

Technical assistance and helpdesk calls will be reviewed by the technology staff.

A review of success indicators as detailed in the Technology Goals section.

Usage statistics such as library and Computer Lab sign outs, audio visual equipment logs and peripheral usage will be reviewed by the committees.

A report on the progress of the plan and recommendations will be submitted to the Board of Education annually.

Staff needs will continue to be monitored based on submissions of TIP and ITT forms.

The Director of Technology will continue to review to verify that technology integration goals are being met and help identify needs strategies to integrate technology into the curriculum. It will also help plan for future staff development.

Section

J

E-Rate & Technology Plan Evaluation Rubric

This rubric is used by staff members at the Central New York Regional Information Center to review technology plans for E-Rate compliance. Please list the page numbers in your plan where each of the 5 required areas can be found, then attach a copy of this document as the last section of your technology plan. We will use the following key when reviewing your plan, please use it as a guide.

Level 1 = Does Not Meet Requirement

Level 2 = Meets Requirement

Level 3 = Exceeds Requirement

Requirement 1 – Technology Program Assessment

An assessment of telecommunications, hardware, software, professional development, staffing, and other services that are needed to improve education and/or library services.

Page(s)							
---------	--	--	--	--	--	--	--

Level 1: An assessment is not included, fails to address areas of need, and/or has little connection to the planned purchases outlined in the budget.

Level 2: The assessment identifies specific strengths and areas of need, and has a logical connection to the planned purchases outlined in the budget.

Level 3: The assessment includes detailed inventory lists, evaluation data on many aspects of the technology program, staff/student survey data, and a direct tie to the planned purchases outlined in the budget.

Requirement 2 – Goals & Strategies

The establishment of clear goals and realistic strategies for using instructional technologies and technology services to improve education and/or library services.

Page(s)							
---------	--	--	--	--	--	--	--

Level 1: Goals and strategies are not included or fail to identify the major objectives of the plan.

Level 2: A list of specific goals and strategies is included, with general time frames and other details about how the goals will be implemented.

Level 3: A comprehensive list of goals is included, with specific target dates for completion, persons responsible, strategies/action steps for implementation, and evaluation measures to determine success.

Requirement 3 – Professional Development

A professional development strategy that ensures staff members know how to use planned technologies to improve education and/or library services.

Page(s)							
---------	--	--	--	--	--	--	--

Level 1: Professional development is not mentioned or has no tie to the technology goals set forth in the plan.

Level 2: A professional development strategy is included which lists specific steps for implementation and has a direct tie to the goals set forth in the plan.

Level 3: A comprehensive professional development strategy is included which details implementation procedures, staffing needs, major objectives, intended outcomes, and has a direct link to the goals set forth in the plan. A copy of the district’s professional development plan is attached as an appendix.

Requirement 4 - Budget

A detailed budget of planned expenses for acquiring and maintaining hardware, software, professional development, telecommunications, staff salaries, BOCES services, and other items that will be needed to implement the technology plan strategy.

Page(s)							
---------	--	--	--	--	--	--	--

Level 1: A budget is not included, fails to list each year of the plan, or fails to include all of the major budget areas listed above.

Level 2: A budget for each year of the plan is included and lists planned expenditures in all of the major budget areas listed above. The planned expenditures have a clear tie to the goals set forth in the plan. E-Rate eligible expenses are denoted.

Level 3: N/A

Requirement 5 – Evaluation Process

An evaluation process enabling the district to monitor progress toward the specified goals and make mid-course corrections as needed in response to new developments and opportunities that arise.

Page(s)							
---------	--	--	--	--	--	--	--

Level 1: An evaluation process is not included or fails to identify a clear process for reviewing and updating the plan.

Level 2: An evaluation process is included that lists specific steps for reviewing and updating the technology plan including persons/committees involved.

Level 3: N/A