

Three-Year Local School District/ Charter School Technology Plan

July 1, 2010 through June 30, 2013

Directions: Indicate in the *PAGE #* column of the template, the page number from the district technology plan where the corresponding information can be found.

Page #	
I. Stakeholders	
6-9	<i>Provide the title, name and signature of each member of the technology planning committee. It is expected that there will be representation from at least nine of the positions indicated on the stakeholder sample table. Please provide an explanation if there is not a minimum of nine members on the technology planning committee.</i>
II. EXECUTIVE SUMMARY	
10	<i>Describe the school district's or charter school's vision or mission statement.</i>
III. TECHNOLOGY OVERVIEW	
A. Technology	
11-17	1. <i>Provide an inventory of current technology networking and telecommunications equipment.</i>
18	2. <i>Describe the technology inventory <u>needed to improve</u> student academic achievement through 2013 including, but not limited to:</i> <ul style="list-style-type: none"> ▪ <i>Technology equipment</i> ▪ <i>Networking capacity</i> ▪ <i>Software used for curricular support and filtering</i> ▪ <i>Technology maintenance policy and plans</i> ▪ <i>Telecommunications services</i> ▪ <i>Technical support</i> ▪ <i>Facilities infrastructure</i> ▪ <i>Other services</i>
19	3. <i>Describe how the district integrates assistive technology devices into the network to accommodate student needs.</i>
19	4. <i>How educators have access to educational technology in their instructional areas such as using desktops, mobile laptop and wireless units, PDAs.</i> <i>(NOTE: For purposes of this document, educators are defined as school staff members who teach children, including librarians and media specialists.)</i>
19	5. <i>How administrators have access to technology in their workplace (such as using desktops, mobile laptop and wireless units, PDAs).</i>
19	6. <i>Describe how the district's web site is accessible to all stakeholders (for example using Federal Accessibility Standards)</i>
20	7. <i>Describe the plan for replacing obsolete computers/technology and include the criteria for</i>

	obsolescence.
B. Cyber Safety	
21	1. List the filtering method(s) used. (NOTE: Be specific as this is a federal mandate.)
22-28	2. Identify the Acceptable Use Policies (AUP) used for students and staff and include a copy of the AUPs with the submission of this technology plan.
29	3. Describe the district's Internet safety policy that addresses the a) technology protection measure that protects against access through computers with Internet access to visual depictions by adults or minors that are— (I) obscene; or (II) child pornography; or (III) harmful to minors; and b) process for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response, as required by the Protecting Children in the 21st Century Act.
29	4. Indicate the dates when the school district provided the community with public notice and a hearing to address any proposed Internet safety policies adopted by the school district pursuant to CIPA. (Note: This is a requirement by e-rate only for those entities that have not already provided such notice and hearing related to an Internet safety policy and technology protection measure.)
C. Needs Assessment	
30	1. Complete a needs assessment for educational technology in your school district or charter school. Begin by determining current status. Afterwards, determine the educational needs, prioritize the identified needs and plan for necessary changes through goals and objectives.
30	a. Evaluate educators' current practices in integrating technology across the curriculum.
30	b. Provide a summary of educators' proficiency in the use of technology within the district.
31	c. Determine the current educational environment and barriers by describing how:
32	i Educators are assured access to technology to facilitate technology integration across the curriculum,
32	ii. Often students have access to technology to support the use of 21 st century skills in their learning environment,
32	iii. The needs of educators are evaluated,
32	iv. The needs of students are evaluated,

33	v.	<i>Past professional development addressed the educators' and students' needs for technology integration,</i>
33	vi.	<i>Past professional development for all administrators was provided to further the effective use of technology in the classroom or library media center,</i>
33	vii.	<i>Ongoing, sustained professional development was provided in 2009-2010 for all educators to further the effective use of technology in the classroom and library media center,</i>
34	viii.	<i>Ongoing, sustained professional development was provided in 2009-2010 for administrators to further support the effective use of technology in the classroom or library media center,</i>
34	ix.	<i>Supports were provided for educators other than professional development,</i>
34	x.	<i>Professional development needs and barriers relating to using educational technology as part of instruction have been identified.</i>
35	2.	<i>Based on the answers given above, indicate the needs of the district to improve academic achievement for all students through the integration of technology across all curricular areas.</i>
35	3.	<i>Prioritize the identified needs</i>
IV. THREE-YEAR GOALS AND OBJECTIVES		
A. History		
36	<i>Evaluate each goal from the previous plan, in one or two sentences, detailing each goal's success, or reasons for continuation, or issues preventing its success.</i>	
B. Goals and Objectives for 2010-2013		
37-38	<i>Modify goals and write new goals to meet the needs identified from the assessments. Goals for 2010-2013 should support district need and align with the state plan.</i>	
V. THREE-YEAR IMPLEMENTATION AND STRATEGIES TABLES (July 2010 – June 2013)		
39	A.	<i>Describe the implementation strategies/activities that relate to the goals and objectives. Include in the description the timeline, person responsible and documentation (or evidence) that will prove the activity occurred.</i>
40	B.	<i>Develop strategies to ensure that the technology plan addresses the use of technology, including assistive technology, to support 21st century learning communities.</i>
41	C.	<i>Provide details of the process for meeting the NCLB requirement that all students be technologically literate by the end of grade eight.</i>
41	D.	<i>Identify specific telecommunications and information technologies and any other specific resources that are useful to reach the stated goal.</i>
VI. FUNDING PLAN (July 2010 – June 2011)		
42-44	A.	<i>Provide the anticipated costs for 2010-2011 and then indicate the projected funding for 2012-2013 of the technologies to be acquired. Include expenses such as hardware/software, digital curricula including NIMAS compliance, upgrades and other services including print media that will be needed to achieve the goals of this plan. Also</i>

	<i>incorporate specific provisions for interoperability among components of such technologies to successfully achieve the goals of this plan.</i>
42-43	B. <i>Indicate the federal, state, local and other sources of funds used to help ensure that <u>students</u> have access to technology and ensure that <u>educators</u> are prepared to integrate technology effectively into curricula and instruction.</i>
App C	C. <i>Attach a copy of the board approval for this technology plan. Be sure it includes the budget for the first year of this plan.</i>
x	D. <i>A board approved budget for each successive year of this plan must be filed with the technology plan for e-rate auditing purposes.</i>
45	E. <i>Provide your technology plan's creation date which, as defined by e-rate, is the point when these five elements are in your plan.</i> <i>Those elements are:</i> <ul style="list-style-type: none"> • <i>Goals and strategies for using telecommunications and information technology;</i> • <i>A professional development strategy;</i> • <i>An assessment of telecommunications services, hardware, software, and other services needed;</i> • <i>Budget resources; and</i> • <i>An ongoing evaluation process.</i>
VII. PROFESSIONAL DEVELOPMENT	
46	A. <i>Provide the name and title of the person responsible for coordinating the professional development activities as stated in the district's professional development plan and noted in this plan.</i>
46	B. <i>Describe the planned professional development activities for teachers, administrators, and school library media personnel that include:</i>
46	1. <i>How ongoing, sustained professional development for all administrators will be provided to further the effective use of technology in all learning environments.</i>
47	2. <i>How ongoing, sustained professional development for all educators will be provided that furthers the effective use of technology, models 21st century skills and demonstrates global outreach and collaboration in the classroom or library media center.</i>
47	3. <i>The professional development opportunities and resources that exist for technical staff.</i>
47	4. <i>How professional development is provided to all staff on the application of assistive technologies to support all students in their learning.</i>

48-50	C. <i>Based on educators' proficiency and the identified needs for professional development, describe only the ongoing, sustained high-quality professional development opportunities planned for 2010-2011 as they relate to the infusion of technology into the curricular process. Include a description of in-class support, such as coaching, that is used to ensure effective use of technology to improve learning. Also, include a description of the involvement of all partners associated with professional development for the district.</i>
50	D. <i>Project professional development activities that will continue to support identified needs through 2013, including all partners.</i>
VIII. EVALUATION PLAN	
51	<i>Describe the evaluation process and accountability measures that monitor progress and mid-course corrections that are used to regularly evaluate the extent to which goals, objectives, activities, resources and services are effective in</i>
	1. <i>Integrating technology into curricula and instruction to promote 21st century skills and global collaboration and outreach,</i>
51	2. <i>Enabling students to meet challenging state academic standards, and</i>
52	3. <i>Developing life-long learning skills.</i>

53: Appendix A: Schedule of 2009-2010 Technology Course Offerings through February 2010

59: Appendix B: Proposed 2010-2011 Instructional Technology Budget as of March 4th 2010

69: Appendix C: BOE Plan Approval Resolution

I. Stakeholders

Provide the title, name and signature of each member of the technology planning committee. It is expected that there will be representation from at least nine of the positions indicated on the stakeholder sample table. Please provide an explanation if there is not a minimum of nine members on the technology planning committee.

Clifton Public Schools
745 Clifton Avenue
Clifton NJ 07013

Board of Education:

James Daley, President
Louis Fraulo, Vice-President
Paul K. Graupe
Michael Paitchell
Kim Renta
James St. Clair
Norman A. Tahan
John M. Traier
Joseph R. Yeamans

Administration:

Richard Tardalo
Superintendent of Schools

Maria M. Nuccetelli, Ed.D.
Interim Assistant Superintendent of Schools

Karen L. Perkins
Business Administrator/Board Secretary

Bryan Jursca
Assistant Business Administrator/Board Secretary

Janina Kusielewicz
Director of Curriculum, Instruction, and Federally Funded Programs

Eric Mountain
Supervisor of Instructional Technology

Technology Planning Committee:

(In addition to Administration listed on previous page)

Eric Mountain
Supervisor of Instructional Technology

Linda McCoy
Supervisor of Educational Media

Charlie Holland
Supervisor of Information Systems

Charles Donnelly
Supervisor of Special Education

Juanita Ludwig
Supervisor of Counseling and Student Services

David Montroni Ed.D.
School 4 Principal

Katie Zinsmeister
Technology Trainer/Facilitator

Danielle Liebi
Teacher

Chris Hoey
Network Engineer

Jeff Horn
Webmaster & High School Network Coordinator

Linda DiFalco
Parent

*Three-Year Local School District/Charter School Technology Plan Template
(2010-2013)*

The use of this table is optional and is provided as a convenience.

Stakeholder Sample Table

Stakeholder Table	
Title	Name
Superintendent	Richard Tardalo
Principal	David Montroni, Ed.D.
Technology Coordinator	Eric Mountain
Curriculum Director	Janina Kusielewicz
Teacher	Danielle Liebi
Special Education	Charles Donnelly
Library Media Specialist	Linda McCoy
Guidance	Juanita Ludwig
Parent	Linda DiFalco
* Network Engineer	Chris Hoey
* Information Systems	Charles Holland
* Webmaster / Network	Jeff Horn

Narrative (explanation if other members were part of the discussion, or if less than the required nine members were reported above):

* In addition to the required stakeholders, the Supervisor of Information Systems, the Network Engineer, and the District Webmaster were also included on the planning committee as they all play an integral role in the use of technology in our schools.

II. Executive Summary

PHILOSOPHY AND GOALS

The Clifton Board of Education firmly believes that it is the inherent right of every child enrolled in the public schools to receive a sound education rooted in equal opportunity and delivered in an environment, which ensures physical and mental security. In today's pluralistic technological society, our first and foremost task is to instruct students in the democratic principles found within the ethical framework of the constitutions of the United States and the State of New Jersey.

The Clifton Board of Education recognizes the importance of promoting early literacy as a foundation for academic success. Through its instructional programs and co – and extracurricular experiences, students will become independent thinkers, good decision makers and self-supporting, productive citizens.

The Clifton Board of Education promulgates the following outcome goals:

1. To provide students with the skills essential for obtaining information, thinking critically, solving problems, and communicating effectively
2. To create an atmosphere which encourages students to obtain knowledge and to develop the life skills necessary to enter the work force and/or pursue higher education
3. To furnish students with a basic knowledge of current and changing technologies across the curriculum
4. To encourage the school community to become effective and responsible contributors to the decision-making process
5. To develop an appreciation of the creative process through problem solving and technology
6. To foster an understanding of, sensitivity to, and respect for all cultures
7. To impart knowledge, practices, and perspectives that promote –personal and global health and safety
8. To nurture an appreciation for the fine, applied and performing arts

To attain these goals, the Clifton Board of Education shall provide meaningful instruction, an environment conducive to learning, an opportunity for community input and a professional staff of the highest quality.

III. Technology Overview

A. Technology

1. *Provide an inventory of current technology networking and telecommunication equipment:*

Instructional Network

Our elementary schools each have a 100 Mbps local area network (LAN) that provides shared resources and storage for the students and teachers. There are 4-6 network drops per room in order to accommodate 3-5 computers and one printer per classroom. Each elementary school is connected to the high school via a 1 Gbps managed fiber-optic connection, providing internet access to all the computers in those buildings.

The two middle schools also have a 100 Mbps LAN providing shared resources and storage. In most classrooms, there are 5 computers and a printer, all connected to the LAN and Internet. Internet is delivered to these schools on a 1 Gbps managed fiber-optic connection.

The Clifton High School Annex opened in the fall of 2009 and was modeled after the middle schools as far as the network and class setup is concerned: 5 student computers in each regular classroom plus one computer lab and a media center. In addition to providing Internet access, the 1 Gbps managed fiber-optic network also provides CHS Annex students and teachers access to additional resources physically located in the main building such as shared network drives and content filtering equipment.

Clifton High School (main building) is wired with a 100 Mbps LAN providing shared resources and storage. Multiple secure wireless hotspots also exist, providing wireless network and Internet access for the notebook computers in the Science labs and the school's Media Center. Acting as the instructional network hub for the district, Clifton High School is currently connected to the Internet via a Metro Ethernet 100 Mbps connection. There is a separate T-1 internet connection at CHS that is used exclusively for the ITV lab.

Workstations

Building	Classroom	Media Center	Labs	Instructional Computers Total	Admin Computers	Total
CHS	111 (laptops)	85	411	607	63	670
CHS Annex	233	25	30	288	8	296
CCMS	290	24	87	401	18	419
WWMS	343	23	82	448	17	465
1	58	6		64	4	68
2	95	10		105	4	109
3	55	10		65	4	69
4	38	8		46	4	50
5	79	9		88	4	92
6 (Admin)	(Tech Center)		18	18	80 (inc. trans.)	98
8	51	8		59	4	63
9	70	9		79	4	83
11	98	12		110	4	114
12	112	12		124	4	128
12 Annex	25	4		29	2	31
13	98	9		107	4	111
14	76	8		84	4	88
15	84	9		93	4	97
16	65	8		73	4	77
17	163	29	(8 laptops)	200	4	204
Total				3088	244	3332

Peripherals

School	Printers	Scanners	LCD Projectors	SmartBoards
CHS	74	10	57	38
CHS Annex	36	3	32	32
CCMS	53	2	65	59
WWMS	75	2	67	61
1	14	1	11	10
2	25	2	14	11
3	18	1	12	11
4	10	1	10	9
5	25	1	24	21
6 (Admin)	3	7	4 (2 loaners)	2
8	11	1	12	11
9	22	1	14	12
11	26	1	11	10
12	30	1	21	20
12 annex	10	1	7	7
13	27	1	15	13
14	24	2	23	21
15	21	1	12	11
16	19	1	11	10
17	35	5	42	40
District Total	558	45	464	409

Network Servers

All of the district's elementary and middle schools have two instructional computer servers. These servers divide many tasks including file storage and sharing, DHCP assignment, data backup, user authentication, application delivery, database storage, etc. For these schools, we are running HP Proliant ML 350 and 370 series, either G3 or G4. Due to its size and function as the district hub, Clifton High School has 3 additional servers.

With the "lighting" of the leased/managed fiber-optic network, we no longer need to have the server capacity at each physical location, so as equipment is replaced we are consolidating and streamlining wherever possible. The first manifestation of this savings took place with the opening of the CHS Annex. We are able to save over \$14,000 in hardware due to the fact that we could access to the main building with the 1Gbps connection. This phenomenon will continue this summer and beyond as we continue to replace outdated systems.

Software List - Elementary

Content Area	Software	Version	Grades
All Areas	BrainPop	Internet	3rd - 5th
All Areas	BrainPop Jr.	Internet	K-2
All Areas	Ed-Helper.com	Internet	1st-5th
All Areas	Inspiration	7.6 or higher	3,4,5
All Areas	Internet Explorer	7 or high	K-5
All Areas	Microsoft Office Pro	2003 or 2007	K-5
All Areas	Nettrecker	Internet	K-5
All Areas	Print Artist		K-2
All Areas	Print Shop		3,4,5
All Areas	Smart Notebook	9.7	K-5
All Areas	Ultimate Writing and Creativity Center		3,4,5
All Areas	United Streaming	Internet	K-5
All Areas	Worldbook Online	Internet	3,4,5
Keyboarding/Media	Type to Learn	1.26	3,4,5
Keyboarding/Media	Type to Learn Jr.	c. 1999	1
Language Arts	Accelerated Reader	6.3	3,4,5
Language Arts	Reading A to Z	Internet	K – 5
Language Arts/Math	Learnia	Internet	3-5
Language Arts/Math	Intelli-Tools : IntelliPics	1.03	SpEd K & 1
Language Arts/Math	Intelli-Tools CD	1.02 CD	SpEd K & 1
Language Arts/Math	Intelli-Tools: Overlay Maker	1.03	SpEd K & 1
Language Arts/Math	Jumpstart Kindergarten		K
Language Arts/Math	SuccessMaker	5.5, SME 1.3, SME 1.6	K-5
Language Arts/Math	Waterford		K (17 only)
Math	PearsonSuccessnet.com	Internet	K-5
Media	OPAC (Follet Circulation Plus)		K – 5
Physical Education	Fitnessgram	6.03 c. 2003	3,4,5
Pre-K	Board-Maker		
Pre-K	Millie's Math House		
Pre-K	Puzzle-Maker CD		
Pre-K	Reader Rabbit CD		
Pre-K	Sesame Street CD		
Science	Data Wonders		3.4.5
Science	SF Practice and Assessment	c. 2000	1,3,4,5
Science	Test Works		3,4
Technology/Media	KidPix		K-5

Software List – Middle Schools

Content Area	Software	Version	Grades
All Areas	Inspiration	7.6 or high	6th-8th
All Areas	Microsoft Office	2003 or 2007	6th-8th
All Areas	Nettrecker	Internet	6th-8th
All Areas	Smart Notebook	9.7	6th-8th
All Areas	United Streaming	Internet	6th-8th
All Areas	Worldbook Online	Internet	6th-8th
Art	Corel Creative Pack		6th-8th
ESL/Bilingual	Focus on Grammar (Beg + Int)		6th-8th (CCMS)
Language Arts	Accelerated Reader	6.35	6,7,8
Language Arts	Criterion for Write Source	Internet based	6th-8th
Language Arts	Read 180		6th-8th EI
Language Arts/Math	Learnia	Internet	6th-8th
Math	Orchard		6th-8th
Math	SuccessMaker	5.5 & SME 1.6	6th-8th
Math	Glencoe		6,7,8
Media	OPAC (Follet Circulation Plus)		6th-8th
Music	Music Ace		6th-8th
Music	Musition		6th-8th
Music	Sibelius 4	4	6th-8th
Physical Education	Fitnessgram	6.03 c. 2003	6th-8th
Science	BrainPop	Internet	6th-8th
Science	Prentice Hall Science Explorer	1.01	6th-8th
Technology	Adobe Creative Suite	CS4	6th-8th
Technology	Easy CAD	7	6
Technology	Mavis Beacon Teaches Typing	16	6th-8th
Technology	PAWS		6
Technology	Sync Eyes		6-8 Labs
Technology/Media	Microsoft Picture It! Photo	7	6th-8th

Software List – Clifton High School

Content Area	Software	Version	GL
All Areas	Smartboard Software	9.7	9th - 12th
Math	Boxer Intermediate Algebra		9th - 12th
Math	Boxer Introductory Algebra		9th - 12th
Math	C++		9th - 12th
Math	Fathom		9th - 12th
Math	Geometer's Sketchpad		9th -12th
Math	Jcreator	LE version	9th - 12th
Math	Minitab Statistics		9th - 12th
Math	NCTM Website	Membership	9th - 12th
Math	New Math Toolkit		9th -12th
Math	Princeton Review Software		9th - 12th
Math	SAT Excellerator		9th -12th
Math	School Maestro (Teacher Station)		9th - 12th
Math	StudyIsland	Internet	9th - 11th
Math	Visual Basic.Net		9th - 12th
Math	WordPad		9th - 12th
Science	Central Science Live	9th Edition	9th - 12th
Science	CyberEd Biology		9th - 12th
Science	CyberEd Chemistry		9th - 12th
Science	Darwin's Pond	1	9th - 12th
Science	Data Studio	1.9.6r4	9th - 12th
Science	General Chemistry Interactive	3	9th - 12th
Science	Science Workshop		9th - 12th
Science	Ward's AP Biology Labs	2.3.0	9th - 12th
Social Studies	Arc Explorer		9th - 12th
Social Studies	Ebsco Periodicals		9th - 12th
Social Studies	Facts on File		9th - 12th
Social Studies	Inspiration		9th - 12th
Social Studies	Jaws		9th - 12th
Social Studies	Proquest		9th-12th
Social Studies	Quick Time		9th - 12th
Special Education	Orchard		9th - 12th
Special Education/Math	Pre-Algebra CD		9th
Special Education/Science	Biology Exploration CD		9th - 10th
Special Education/Math	Physical Science Exploration CD		9th - 10th

Vo-Tech (and other)	Adobe Creative Suite	CS3 and CS4	9th - 12th
Vo-Tech	Adobe Type Manager		9th - 12th
Vo-Tech	AutoCad LT	various	9th - 12th
Vo-Tech	CadKey	V21	9th - 12th
Vo-Tech	Canon Utilities	5.1	9th - 12th
Vo-Tech	FilmMaker Pro 7		9th - 12th
Vo-Tech	Fine Pix Viewer		9th - 12th
Vo-Tech	Iphoto		9th - 12th
Vo-Tech	Mitchell On-Demand	Online 5.0	9th - 12th
Vo-Tech	Office 2004 (MAC)		9th - 12th
Vo-Tech	OmniPage Pro	8	9th - 12th
Vo-Tech	OPAC		9th - 12th
Vo-Tech	Pagemaker	7	9th - 12th
Vo-Tech	Quark Xpress	4.1	9th - 12th
Vo-Tech	Retrospect	6.1	9th - 12th
Vo-Tech	Roxio CD Creator 5		9th - 12th
Vo-Tech	SolidWorks 2005		9th - 12th
Vo-Tech	Stuffit	9	9th - 12th
Vo-Tech	SynchronEyes	6.1	9th - 12th
Vo-Tech	Virtual Business Management	6.1	9th - 12th
Vo-Tech	Virtual Business Retailing	1.0.1	9th - 12th
Vo-Tech	WordPerfect	3.5	9th - 12th

2. Describe the technology inventory needed to improve student academic achievement:

Inventory Table

The table below may be used to describe the district's or charter school's technology inventory that is needed to improve student academic achievement. The use of this table is optional and is provided as a convenience.

Three-Year Technology Plan Inventory Table			
Area of Need	Describe for 2010-11	Describe for 2011-12	Describe for 2012-13
Technology Equipment * See below for replacement plan	* additional SmartBoards * additional webcam and videoconferencing (telepresence) equipment * maintain 6 year schedule	* additional SmartBoards * expand wireless * begin e-book acq. * maintain/revise 6 year schedule	* additional SmartBoards * expand e-book acq. * maintain/revise 6 year schedule
Software used for curricular support and filtering	* explore competitors to current filtering solution * continue with Learnia initiative and "curriculum related" software * CMS/LMS pilot	* implement new/updated filtering solution or renew existing * expand CMS/LMS	* CMS/LMS district-wide * maximize digital curriculum use
Technology maintenance policy and plans	* Update the current 6 year cycle to adjust for "uneven years"	* continue to revise plan as needed	* continue to revise plan as needed
Telecommunications Services	* WAN year 3 of 5 * Internet year 2 of 3	* WAN year 4 of 5 * Internet year 3 of 3 (evaluate bandwidth use and compare alternate providers)	* WAN year 5 of 5 (evaluate bandwidth use and compare alternate providers) * Internet year 1 of X (new contract)
Technical Support	* plan for increase in demand for tech support with or without potential changes in staffing	* plan for increase in demand for tech support with or without potential changes in staffing	* plan for increase in demand for tech support with or without potential changes in staffing
Facilities – infrastructure including central telephone & security	* evaluate phone system upgrade for any potential cost savings.	* depending on cost effectiveness, phase one of upgrade	* depending on cost effectiveness, phase two of upgrade
Other Services:	* move instructional backup system to more efficient centralized system	* continue to utilize fiber network to consolidate eliminate future server purchases	* continue to utilize fiber network to consolidate eliminate future server purchases

3. *Describe how the district integrates assistive technology devices into the network to accommodate student needs:*

Clifton currently uses a number of assistive technology devices throughout the district. For our younger students with fine motor skill difficulty affecting their handwriting, we have several AlphaSmart devices and are in the process of ordering more. We are currently evaluating the use of netbooks as an inexpensive alternative to these types of devices. In the locations that house visually impaired students we have large screen monitors and Zoom Text software being used. The “text-to-speech” component of Windows is also being utilized with this population. As part of our Interactive Whiteboard training, the “magnify” feature of the software is taught in staff training. The district also uses a number of document cameras that have tremendous versatility in allowing teachers and students to “see” lessons, projects, experiments, etc. in a variety of ways – such as projecting microscope images onto a large classroom screen.

Numerous software solutions are currently implemented within the district like Boardmaker, Clicker 5, Mathpad Plus. The Special Education department also has plans to expand to many more titles as IEPs and related documents dictate.

The Special Services department has recently hired a part-time consultant for assistive technology. It is the intention of the Supervisor of Instructional Technology to continue to work closely with this consultant and the Special Services department in coming years to continue to explore assistive technology solutions for students with special needs.

4. *How educators have access to educational technology in their instructional areas such as using desktops, mobile laptop and wireless units, PDAs.*

Educators in Kindergarten through 8th grade (as well as the 9th grade teachers at the CHS Annex) have access to technology in their regular classrooms, faculty rooms, and media centers. Clifton High School educators have access to a PC in their classrooms for basic functions such as taking attendance, email, and Internet use. More robust applications are housed on computers in the media center, labs, and faculty rooms.

5. *How administrators have access to technology in their workplace (such as using desktops, mobile laptop and wireless units, PDAs).*

Administrators in the district (supervisors and principals) each have their own assigned computer – either an office/desktop PC or notebook. In addition, two notebook computers are available as loaners for presentations and for use when traveling on school business.

6. *Describe how the district’s website is accessible to all stakeholders:*

The site has been verified to comply with *Web Content and Accessibility Guidelines*: <http://www.w3.org>, allowing page accessibility to all users through simple modification such as the use of scalable text and alt tags for images when necessary.

7. Describe the plan for replacing obsolete computers/technology and include the criteria for obsolescence:

In general, the computers and related technology within the district are replaced on a 6 year rotating schedule (see chart below). When funding is not available, sometimes a computer is in use 7-8 years. Most of our replacements take place in the months of June, July and August to avoid classroom disruptions.

The criteria for obsolescence is constantly changing as new hardware and software are integrated into the classroom. Technology equipment will be monitored for condition and ability to run applications used by the assigned instructional program. At this time, any machine that cannot run Windows XP SP3 efficiently and *cannot be easily upgraded* is considered obsolete. Windows XP is required by a vast majority of the applications in use throughout the district. In addition, many of the websites used in our classrooms now recommend or require Internet Explorer 7, which in turn requires Windows XP. Some examples of these include Office 2007, SmartNotebook software, PearsonSuccessnet, Learnia, and the newest versions of Pearson SuccessMaker, all of which are vastly used in the schools.

Servers, network switches, and routers will be monitored and budgeted for replacement as deemed necessary by condition. Network software upgrades will be identified, tested and applied by the technical team as instructional software upgrades and hardware upgrades require. Many of our core network switches are reaching “end of life” (a term assigned by the vendor meaning they are no longer serviceable under normal circumstance – usually occurs after 10 years). We are beginning to prepare for the possibility of a large number of replacements of these switches over the next several years and will budget accordingly.

Year	Schools (Computers)	Other Replacements
2010-2011	12 and 17 (324)	3 servers (2, 3, 5, 12, 17) 2 CE (2, 3, 5, 12, 17) 5 Network Switches
2011-2012	2, 3, 5, +2 CHS labs (318)	5 Network Switches
2012-2013 + 2013-2014	1, 9, 11, 13, 14, 16, CC (918) over 2 years (all similar age)	3 Servers (1, 9, 16, CC, 11, 14) 5 Network Switches

B. Cyber Safety

1. List the filtering methods used:

- Smart Filter software by Secure Computing (running on Cisco Content Engine) is used in each building in the district. Annual subscriptions provide continuous updates to inappropriate sites.

- Symantec AntiVirus Corporate Edition is used in all buildings

* As contracts for the above services come to an end, several stakeholders will evaluate alternate products to determine which products should be renewed or replaced based on performance and cost effectiveness. In addition, due to the fiber optic network, it is no longer necessary to house a Content Engine in each building, eliminating the need to replace a good number of these devices as they reach end of life.

2. Identify the Acceptable Use Policies (AUP) used for students and staff and include a copy of the AUPs with the submission of this technology plan

- See following 7 pages

2361 ACCEPTABLE USE OF COMPUTER NETWORK/COMPUTERS
AND RESOURCES

The Board of Education recognizes that as telecommunications and other technologies shift the manner in which information is accessed, communicated and transferred that those changes will alter the nature of teaching and learning. Access to telecommunications will allow pupils to explore databases, libraries, Internet sites, bulletin boards, etc. while exchanging information with individuals throughout the world. The Board supports access by pupils to information sources but reserves the right to limit in school use to materials appropriate to educational purposes.

The Board also recognizes that telecommunications will allow pupils access to information sources that have not been pre-screened by educators using Board-approved standards. The Board therefore adopts the following standards of conduct for the use of computer networks and declares unethical, unacceptable or illegal behavior as just cause for taking disciplinary action, limiting or revoking network access privileges and/or instituting legal action.

The Board provides access to computer network/computers for educational purposes only. The Board retains the right to restrict or terminate pupil access to the computer network/computers at any time, for any reason. The Board retains the right to have district personnel monitor network activity, in any form necessary, to maintain the integrity of the network and ensure its proper use.

Standards for Use of Computer Networks

Any individual engaging in the following actions when using computer networks/computers shall be subject to discipline or legal action:

- A. Using the computer network(s)/computers for illegal, inappropriate or obscene purposes, or in support of such activities. Illegal activities are defined as activities that violate federal, state, local laws and regulations. Inappropriate activities are defined as those that violate the intended use of the network. Obscene activities shall be defined as a violation of generally accepted social standards for use of publicly owned and operated communication vehicles.

Acceptable Use of Computer Network/Computers and Resources

- B. Using the computer network(s)/computers to forge documents, print illegal copies, violate copyrights, institutional or third party copyrights, license agreements or other contracts.
- C. Using the computer network(s) in a manner that:
 - 1. Intentionally disrupts network traffic or crashes the network;
 - 2. Degrades or disrupts equipment or system performance;
 - 3. Uses the computing resources of the school district for commercial purposes, financial gain or fraud;
 - 4. Steals data or other intellectual property;
 - 5. Gains or seeks unauthorized access to the files of others or vandalizes the data of another user;
 - 6. Gains or seeks unauthorized access to resources or entities;
 - 7. Forges electronic mail messages or uses an account owned by others;
 - 8. Invades privacy of others;
 - 9. Posts anonymous messages;
 - 10. Possesses any data which is a violation of this policy; and/or
 - 11. Circumvents district content filtering and/or security systems (including, but not limited to the use of proxy servers, anonymizers, circumventors).
 - 12. Engages in other activities that do not advance the educational purposes for which computer networks/computers are provided.

I. Internet Safety/Protection

The school district is in compliance with the Children's Internet Protection Act and has installed technology protection measures for all computers in the school district, including computers in media centers/libraries that block and/or filter visual depictions that are obscene as defined in Section 1460 of

Acceptable Use of Computer Network/Computers and Resources

Title 18, United States Code; child pornography, as defined in Section 2256 of Title 18, United States Code; are harmful to minors including any pictures, images, graphic image file or other visual depiction that taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex, or excretion; or depicts, describes, or represents in a patently offensive way, with respect to what is suitable for minors, sexual acts or conduct; or taken as a whole, lacks serious literary, artistic, political, or scientific value as to minors.

The school district will certify on an annual basis that the schools, including media centers/libraries, in the district are in compliance with the Children's Internet Protection Act and the school district enforces the requirements of this policy.

This policy also establishes Internet safety policy and procedures in the district as required in the Neighborhood Children's Internet Protection Act. Policy 2361 addresses access by minors to inappropriate matter on the Internet and World Wide Web; the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications; unauthorized access, including "hacking" and other unlawful activities by minors online; unauthorized disclosures, use, and dissemination of personal identification information regarding minors; and measures designed to restrict minors' access to materials harmful to minors.

Consent Requirement

No pupil shall be allowed to use the computer network and the Internet unless they shall have filed a consent form signed by the pupil and his/her parent(s) or legal guardian(s).

Violations

Individuals violating this policy shall be subject to the consequences as indicated in Regulation No. 2361 and other appropriate discipline, which includes but are not limited to:

1. Use of the network only under direct supervision;
2. Suspension of network privileges;
3. Revocation of network privileges;
4. Suspension of computer privileges;
5. Revocation of computer privileges;
6. Suspension from school;
7. Expulsion from school; and/or
8. Legal action and prosecution by the authorities.

N.J.S.A. 2A:38A-3

Federal Communications Commission: Children's Internet Protection Act.

Adopted: November 14, 2007

Consent Requirement

No pupil shall be allowed to use the computer network and the Internet unless they have submitted to the building administration a consent form signed by the student and his/her parent(s) or guardian(s).

STUDENT ACCESS AGREEMENT

I understand that when I am using the Internet or any school computer network resources and equipment, I must adhere to all rules of conduct and the laws regarding access and copying of information as prescribed by either Federal, State, or Local law, Internet Service Provider and the Clifton Public School District. My signature below, and that of my parent(s) or guardian(s), means that I agree to follow the standards as outlined in this policy for the use of computer networks/computers and computer resources of the Clifton Public Schools.

Student Name Student Signature Date

PARENT or GUARDIAN (If applicant is under the age of 18, a parent or guardian must also read and sign this agreement.) We ask you to review this policy with your child and to sign the consent form.

Your child's teacher has already discussed the policy with your son or daughter.

As the parent or guardian of this student, I have been afforded the opportunity to read, in the student handbook, the Clifton Public Schools' Acceptable Computer Use Policy and have discussed it with my child.

Parent/Guardian Name Parent/Guardian Signature Date

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Acceptable Use of Computer Network(s)/Computers and
Resources by Teaching Staff Members

3321 ACCEPTABLE USE OF COMPUTER NETWORK(S)/COMPUTERS AND
RESOURCES BY TEACHING STAFF MEMBERS

The Board recognizes that as telecommunications and other new technologies shift the manner in which information is accessed, communicated and transferred that those changes will alter the nature of teaching and learning. Access to telecommunications will allow teaching staff members to explore databases, libraries, Internet sites, bulletin boards and the like while exchanging information with individuals throughout the world. The Board supports access by teaching staff members to information sources but reserves the right to limit in-school use to materials appropriate to educational purposes. The Board directs the Superintendent to effect training of teaching staff members in skills appropriate to analyzing and evaluating such resources as to appropriateness for educational purposes.

The Board also recognizes that telecommunications will allow teaching staff members access to information sources that have not been pre-screened using Board approved standards. The Board therefore adopts the following standards of conduct for the use of computer network(s) and declares unethical, unacceptable, inappropriate or illegal behavior as just cause for taking disciplinary action, limiting or revoking network access privileges, instituting legal action or taking any other appropriate action as deemed necessary.

The Board provides access to computer network(s)/computers for administrative and educational purposes only. The Board retains the right to restrict or terminate teaching staff members access to the computer network(s)/computers at any time, for any reason. The Board retains the right to have the Superintendent or designee, monitor network activity, in any form necessary, to maintain the integrity of the network(s) and ensure its proper use.

Standards for Use of Computer Network(s)

Any individual engaging in the following actions declared unethical, unacceptable or illegal when using computer network(s)/computers shall be subject to discipline or legal action:

CERTIFICATED STAFF MEMBERS
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Acceptable Use of Computer Network(s)/Computers and
Resources by Teaching Staff Members

1. Using the computer network(s)/computers for illegal, inappropriate or obscene purposes, or in support of such activities. Illegal activities are defined as activities which violate federal, state, local laws and regulations. Inappropriate activities are defined as those that violate the intended use of the network(s). Obscene activities shall be defined as a violation of generally accepted social standards for use of publicly owned and operated communication vehicles.
2. Using the computer network(s)/computers to violate copyrights, institutional or third party copyrights, license agreements or other contracts.
3. Using the computer network(s) in a manner that:
 - a. Intentionally disrupts network traffic or crashes the network;
 - b. Degrades or disrupts equipment or system performance;
 - c. Uses the computing resources of the school district for commercial purposes, financial gain or fraud;
 - d. Steals data or other intellectual property;
 - e. Gains or seeks unauthorized access to the files of others or vandalizes the data of another user;
 - f. Gains or seeks unauthorized access to resources or entities;
 - g. Forges electronic mail messages or uses an account owned by others;
 - h. Invades privacy of others;
 - i. Posts anonymous messages;
 - j. Possesses any data which is a violation of this policy; and/or

CERTIFICATED STAFF MEMBERS
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Acceptable Use of Computer Network(s)/Computers and
Resources by Teaching Staff Members

- k. Engages in other activities that do not advance the educational purposes for which computer network(s)/computers are provided.

Violations

Individuals violating this policy shall be subject to appropriate disciplinary actions as defined by Policy No. 3150, Discipline which includes but are not limited to:

1. Use of the network(s)/computers only under direct supervision;
2. Suspension of network privileges;
3. Revocation of network privileges;
4. Suspension of computer privileges;
5. Revocation of computer privileges;
6. Suspension;
7. Dismissal;
8. Legal action and prosecution by the authorities; and/or
9. Any appropriate action that may be deemed necessary as determined by the Superintendent and approved by the Board of Education.

N.J.S.A. 2A:38A-3

Adopted: January 28, 2009

3. Describe the district's Internet safety policy that addresses the
 - a) technology protection measure that protects against access through computers with Internet access to visual depictions by adults or minors that are—
 - (I) obscene; or
 - (II) child pornography; or
 - (III) harmful to minors; and
 - b) process for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response, as required by the Protecting Children in the 21st Century Act.

Clifton Board of Education Policy 2360 and 2361 address the district's approach to Internet Safety, including the mandating of filters (protection) to prevent the viewing of all inappropriate material as stated above. In addition, the district's Internet Safety Curriculum was updated in the Summer of 2009 to consolidate the piecemeal lessons that were being taught. The district's computer teachers and media specialists have now combined in-house lessons and resources from iSafe.org to create a comprehensive "path" of Internet Safety Instruction from K-12. A majority of this instruction is taking place in the Media Skills classes in grades K-5. In the middle schools, Internet Safety has been infused with the recently updated Computer Cycle curriculum. At Clifton High School, students receive Internet Safety training at their media center orientations, in computer courses, when doing research, and in health courses. We are evaluating other areas as well to see if there is a better fit for some of our Internet Safety lessons at the high school level.

4. Indicate the dates when the school district provided the community with public notice and a hearing to address any proposed Internet safety policies adopted by the school district pursuant to CIPA. (**Note:** This is a requirement by e-rate only for those entities that have not already provided such notice and hearing related to an Internet safety policy and technology protection measure.)

The original Internet Safety Policies were adopted on March 10th 1999. Public notice, and the opportunity to comment, was given before this adoption at this meeting and at preceding board meetings. The policies were most recently revised on November 14th, 2007 and the public was given notice and opportunity to comment at this meeting and preceding meetings as well.

C. Needs Assessment

1. Needs assessment for district educational technology.

a. Educator’s current practice:

The use of technology by our educators falls within a wide range. The extent to which it is used in each classroom is at the discretion of each teacher, but more and more required elements are being introduced into district curriculum guides and pacing charts. Many teachers have taken outstanding measures to continue to integrate technology into their daily lessons. With computers in every K-8 classroom and labs available to all high school teachers (and adding classroom computers in the future), we are seeing a steady usage of technology within the district. The technology currently is used primarily with teacher-centered activities, but we see a major push taking place towards student-centered activities and differentiated instruction. The Instructional Technology Supervisor and the Technology Facilitator will continue to support this growth of all staff. Technology is also being used more as a communication tool. With the widespread use of district email, we now see teachers and administrators using it more often to communicate with each other and also with the community. The district website continues to serve as a valuable communications tool.

b. Summary of teacher and library media personnel proficiency in the use of technology within the district:

The following data was collected during the 2009-2010 school year:

Answer Options	Not confident	Somewhat confident	Very confident	N/A
SMARTBoards	36	59	68	7
SuccessMaker	16	29	75	39
EnVisions Math (Grades K-5 Only)	10	45	28	64
Learnia (Grades 3-8 Only)	4	38	31	62
Accelerated Reader (Grades 3-8 Only)	18	23	25	69
Criterion Writing (Grades 6-8 Only)	6	10	5	88
Study Island (Grades 9-12 Math Only)	6	4	4	92
Using the Internet for interactive purposes	11	52	92	5
Using Microsoft Products such as Word, Excel, PowerPoint and Publisher	13	41	106	5
Using software such as Inspiration/Kidspiration,	36	46	36	38
ELMO Document Cameras	51	35	41	27
LCD Projectors	30	34	68	19
Digital Cameras	24	40	86	9

c. Current educational environment and barriers.

All K-8 classrooms are connected to a building LAN and all of its resources. Each classroom is equipped with at least 3 workstations with access to Internet and printers. Each media center is equipped with multiple workstations and appropriate peripherals such as printers and scanners. The high school is equipped with multiple computer labs which are scheduled for use by department. The high school also has an ITV lab for distance learning and TV studio. We are currently planning on introducing modern instructional computers into the regular (non-lab) high school classrooms over the next several years, along with SmartBoards and projectors, as funding allows.

Barriers to the success of integration of technology into the overall curriculum include:

- limited availability of staff for training to assist the staff/students in acquiring the basic technology skills necessary to meet the mandate of the NJCCCS 8.1 and 8.2 standards for technology integration:

- currently have one full time technology trainer for over 900 teachers in the district
- low number of substitutes limits the number of teachers who can be trained during the day
- lack of participation in classes offered after school
- limited amount of time available for horizontal and vertical articulation with regard to the integration of NJCCCS 8.1 and 8.2

- limited funds for continued infusion of new technologies such as interactive whiteboards (equipment is being purchased, just not fast enough to keep up with the demand).

i. How educators are assured access to technology to facilitate technology integration across the curriculum:

Each staff member has a user account and e-mail account that offers them access to the district network and all the resources on the network. Our elementary schools and middle schools have three computers per classroom in grades K-2, five computers in the classroom for grades 3-5, and six computers in the classroom in grades 6-8. The high school has a total of 607 instructional computers available to teachers and students in a variety of lab environments, including 105 wireless laptop computers in the Science department (with plans to expand as noted above). In all grade levels, SmartBoards, LCD projectors and laptop computers are available for teacher use. Most of the district's 409 interactive whiteboards are portable and we have now outfitted over half of all classrooms with these technologies. Teachers also have access to computers, projectors, and interactive whiteboards in each media center.

ii. How often students have access to technology to support the use of 21st century skills in their learning environment:

The amount of use is teacher's discretion. K-8 classes have computers in rooms. 9-12 classes have access to labs and soon will have at least one classroom computer. All teachers have access to interactive whiteboards, projectors, etc. within their building.

With the newly revised NJCCCS 8.1 and 8.2, we are updating curricula in all content areas to continue to incorporate 21st century skills into all subject areas and grade levels.

iii. How the needs of educators are evaluated:

- Classroom observations by building principals and supervisors.
- Technology planning committee assessment.
- Staff needs assessment with assistance of media specialists (survey).
- General technology surveys throughout the year.

iv. How the needs of students are evaluated:

- Performance based assessment
- Knowledge based assessment
- Project based assessment
- Portfolio based assessment
- Checklists
- Rubric
- Survey
- Observation

v. *How past professional development addressed the educators' and students' needs for technology integration:*

- Technology facilitator is available for on-going professional development
- In-house workshops, In-services
- Technology Conferences
- Technology Courses
- Ramapo Graduate Program hosted onsite: Masters of Science in Educational Technology
- Fairleigh-Dickenson middle School Math/Science Masters program hosted onsite has a strong technology component
- Professional days
- Collaborative planning and implementation
- On-going feedback
- School visitations

vi. *How past professional development for all administrators was provided to further the effective use of technology in the classroom or library media center:*

- Instructional Technology Supervisor and Technology Facilitator regularly meet with subject supervisors, principals, and other administrators.
- Supervisors and principals attend training with teachers
- Workshops
- Visitations
- Participation in 21st Century Skills Training and Group Work
- Professional Day Activities
- SCC Meetings

vii. *How ongoing, sustained professional development was provided in 2009- 2010 for all educators to further support the effective use of technology in the classroom or library media center.*

- See appendix A
- Establish "Learnia Leaders" who present at building-based after school meetings
- Technology Facilitator follow-up visits and support
- Building Media Specialists

viii. *How ongoing, sustained professional development was provided in 2009- 2010 for administrators to further support the effective use of technology in the classroom or library media center.*

- Instructional Technology Supervisor and Technology Facilitator regularly meet with subject supervisors
- Supervisors and principals attend training with teachers
- Technical training at principals' meetings and leadership meetings
- Workshops
- Visitations
- Professional Day Activities
- SCC Meetings

ix. *How supports were provided for educators other than professional development*

- K-12 Technology Facilitator visits
- Instructional Technology Supervisor visits
- District Technical Services – phone, email, and visits
- Online lessons and locally developed technology lessons shared on the buildings network server “Resource Drive”
- Building based “Learnia Leaders” established

x. *How professional development needs and barriers related to using educational technology as part of instruction have been identified.*

- Survey Tools
- Constant Feedback from Media Specialists from each building
- Interaction and discussions between Technology Department, Media Department, Curriculum department, and district and building administrators
- Discussion at principals' and supervisors' meetings

2. Based on the answers given above, indicate the needs of the district to improve academic achievement for all students through the integration of technology across all curricular areas:

We need **(1) continued professional development** to address teachers' needs on surveys and feedback from teachers. If we have increased teacher knowledge and skills, then we see improved classroom practice which results in improved student performance. Other needs:

- (2) More interactive technology such as interactive whiteboards
- (1) Continued support and lesson development for such technology
- (2) Broaden scope of technology devices to include increased use of digital microscopes, document readers, Science probe ware, multimedia technology
- (1-2) Additional training staff or "point person" in each building
- (2) Increased support for "Accelerated Reader" program and "Criterion" program
- (3) Increased use of district web site as an instructional resource
- (3) Additional Technical Staff (or duties assigned to existing teachers)
- (2) Program improvements and curriculum updates to address NJCCCS 8.1 & 8.2
- (1) Better sharing of ideas, lessons, plans, projects, amongst our 17 schools.

3. Prioritize the identified needs

As noted in parenthesis above.

IV. Three-Year Goals and Objectives

A. History

Evaluate each goal from the previous plan, in one or two sentences, detailing each goal's success, or reason for continuation, or issues preventing its success.

Goal 1: To improve student learning through the implementation of a well defined curriculum, NJCCCS, and technology access.

* In general, Clifton has made tremendous strides to improve the way we deliver instruction to our students with regards to technology. Room for continued improvement exists, but the focus of this goal will be redirected to the 21st century skills mentioned in the updated NJCCCS.

Goal 2: To enhance teacher knowledge and expertise through professional development activities that support the curriculum and improve instruction.

* Clifton's technology professional development effort remained steady over the past 3 years. Much emphasis was placed on large-scale training pieces such as the implementation of Learnia, use of a homework site to address H1N1 or other emergency closing scenarios, and the use of SmartBoards. We will be continuing this goal for the current plan with the hopes that we will be able to diversify the content of the technology professional development.

Goal 3: To ensure that all students have the opportunity to learn technology literacy skills (NJCCCS 8.1 and 8.2), thereby enabling them to use computer applications to gather information and solve problems.

* Both the K-12 media curriculum and the 6-8 grade computer cycle curriculum have been revised in the past school year. As teachers in those areas begin to implement the new curricula we are doing well to address the newly revised 8.1 and 8.2 standards. We are going to continue this goal as well to branch out into the other subject areas so that students are meeting the requirements of 8.1 and 8.2 in all classes, not just media or computer class.

Goal 4: To centralize resources and training, focusing on specific needs of subject and grade level teachers.

* We have created a centralized "U" drive for all district curriculum documents, pacing charts, benchmark exams, and other resources. Teacher created lessons and activities are also shared on network and are organized by grade and subject area. We still need to improve upon the professional development piece of this, especially as we continue to add new technology resources when revising curricula.

B. Goals and Objectives for 2010-2013

Modify goals or write new goals to meet the needs identified from the assessments. Goals for 2010-2013 should support district need and align with the state plan.

For the 2010-2013 Technology Plan, goals 2 and 3 were carried over from the previous plan with updated objectives and implementation plans. Previous goals 1 and 4 were merged and revised as the new goal number 1 to reflect the statewide movement towards 21st Century Learning.

Goal 1: To improve student learning through the integration of 21st Century Skills as outlined in the revised NJCCCS, specifically providing access to resources that support the “global classroom.”

Objectives:

- 1.1 Expand the use of webcams and teleconferencing equipment to interact with experts outside of the classroom.
- 1.2 Expand the use of webcams and teleconferencing equipment to interact with peers (other students outside of the classroom – possibly collaborating on projects).
- 1.3 Participate in virtual field trips and other experiments/activities when physical travel is not possible.
- 1.4 Use digital resources in lieu of traditional resources when possible (ex: online/interactive maps instead of paper or projected maps, online or media presentations instead of reports, blogs instead of journals, etc).

Goal 2: To enhance teacher knowledge and expertise through professional development activities that support the curriculum and improve instruction.

Objectives:

- 2.1 Technology will continuously be integrated into the subject area curricula.
- 2.2 Continue and expand summer “SmartBoard Academy” to create SmartBoard lessons aligned with the district’s curriculum and pacing charts.
- 2.3 Enhance professional development by combining subject specific training and technology training.
- 2.4 The number and variety of technology training and professional development workshops will be increased.
- 2.5 The technology department will continue differentiate its current program of staff development opportunities for educators to meet the needs of a wide variety of skill levels.
- 2.6 A “technology coach” will be designated in each building to assist the media specialists in providing technology support in each building.

Goal 3: To ensure that all students have the opportunity to learn technology literacy skills (NJCCCS 8.1 and 8.2), thereby enabling them to use computer applications to gather information and solve problems in all curricular areas.

Objectives:

3.1 All students will participate in technology infused curriculum and instructional activities.

3.2 All students will continue to use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

3.3 All students will continue to practice responsible use of technology systems (hardware), information and software.

3.4 All students in grades 3-12 will demonstrate proficiency in using educational technology and information literacy skills to solve problems, make informed decisions, and participate in authentic learning.

3.5 All 8th grade students will be assessed to determine their proficiency of Technology Literacy, specifically NJCCCS 8.1 and 8.2.

Other Objectives (applies to all three goals):

4.1 A Course Management System or Learning Management System (CMS or LMS) will be piloted and, if successful, expanded to the entire district (We are currently looking at the open source MOODLE project, which would be run at very minimal cost - potentially no cost).

4.2 Explore the use of E-Readers or other low-cost digital tools to carry textbook and other content in lieu of traditional printed media. The pace of this exploration would also depend on cost benefit, which at the moment is minimal, but has long-term potential.

Three-Year Implementation Activity Table July 2010 – June 2013

A. Strategies and activities that relate to the school district's or charter school's goals and objectives may be completed on the sample implementation table. If the goals and objectives were numbered in the above section, the corresponding numbers may be used in the table below.

Three-Year Technology Implementation Activity Table				
District Goal and Objective	Strategy/Activity	Timeline	Person Responsible	Documentation
1.1 and 1.2	Purchase inexpensive webcams as necessary. Configure existing teleconf. equipment as needed.	Summer 2010	Tech Sup and team	POs, sign-out sheets
1.1, 1.2, 1.3	Coordinate logistics of “other end” of conferences and virtual trips	Ongoing	Subject Supervisors	Calendars, emails
1.4	Revise curriculum documents and pacing charts to model new activities	Ongoing	Subject and Tech Sups	Revised documents
2.1	Inst. Tech. Sup. will to meet with Curriculum Director and subject supervisors at monthly meeting	Monthly	Supervisors	Agenda and minutes
2.1	Technology Facilitator/Trainer will meet with above when possible.	Monthly	Tech Facil	Agenda and minutes
2.1	Revision to subject area curricula to include more 21 st Century Tech Skills	Ongoing	Subject and Tech Sups	Curriculum Guides
2.1, 2.2, 2.3	Complete Language Arts SmartBoard lessons	Summer 2010	SB Trainers and partic.	Finalized lessons
2.1, 2.2, 2.3	Revisit completed Math, Science, and SS SmartBoard lessons	Summer 2011-12	SB Trainers and partic.	Finalized lessons
2.4 and 2.5	Add more specific training to our program (e.g. Excel for HS Math Teachers or Photoshop for K-5 Art)	Fall 2010	Tech Facilitator	Published schedule and evaluations
2.4 and 2.5	Group technology training attendees by subject area and/or grade where appropriate	Fall 2010	Tech Facilitator	Published schedule and evaluations
2.6	Designate and train “technology coach” in each building and/or set up online discussion groups.	Fall 2010 - 2011	Tech Facilitator	Group sessions, meeting documentation
3.1 and 3.2	Maintain district’s computer replacement cycle.	Ongoing	Tech Supervisor	POs and Inventory
3.2	Revise above schedule as necessary	As Needed	Tech Supervisor	Replacement plan
3.3 and 3.4	K-5 Students receive Tech Literacy and Internet Safety training in media classes	2+ times monthly	Media Specialist	Projects and small assess.

3.3 and 3.4	6-8 Students receive Tech Literacy and Internet Safety training in media classes	Quarter course	Computer Teachers	8 th grade Tech Literacy Assess.
3.5	The 8 th grade Technology Literacy Assessment will be reviewed and modifications to the content and method of delivery will be made as necessary.	Annually	Tech Sup + Computer Cycle Teachers	Revised Assessment
4.1	Train pilot group and test top options for CMS/LMS	2010 - 2011	Tech Sup + Pilot group	Pilot results
4.1	Roll out training to district with selected CMS/LMS	2011 - 2012	Tech Sup and Trainer	Usage Logs
4.2	Interview / research successful programs	2010 - 2011	Tech sup	Notes and reports
4.2	Pilot use in one or more sub populations	2011 - 2012	Tech Sup + Pilot group	Pilot Results
4.2	Share pilot results and research with several stakeholders to roadmap rollout if desired	2012 +	Various	Various

B. Develop strategies to ensure that the technology plan addresses the use of technology, including assistive technology, to support 21st century learning communities.

Numerous strategies to address the use of technology to support 21st century learning communities have been mentioned throughout this plan, including peer-to-peer online meetings, virtual trips, and videoconferences with experts and institutions, use of a CMS/LMS to share ideas and collaborate online, development of multimedia projects and the use of digital curriculum.

Other possibilities exist once the basics are in effect and running successfully. Some of these would include virtual class meetings, online summer and/or supplemental work, online publication of student work. Many hurdles exist, mainly keeping our students safe from the dangers of online activity. It is the intention of the Technology Supervisor and Technology Planning stakeholders to find the right balance of opening up resources and maintaining safety. The Instructional Technology Supervisor and a few other curriculum and administrative personnel have been and will continue to participate in professional communities with others across the state to learn how to best achieve this balance.

C. Provide details of the process for meeting the NCLB requirement that all students be technologically literate by the end of grade eight.

Details are outlined above, but in summary: K-5 students receive technology literacy skills training mainly in their media skills classes. 6-8 grade students receive technology literacy skills training mainly in their computer cycle classes. All 8th grade students take a state mandated technology literacy assessment at the end of 8th grade to determine proficiency levels. The district will also focus on integrating these skills, NJCCCS 8.1 and 8.2, into all content areas.

D. Identify specific telecommunications and information technologies and any other specific resources that are useful to reach the stated goal.

All of the goals listed above rely on the following telecommunication and information technologies:

- Building LAN (hardwired or wireless)
- District WAN (to distribute shared/district Internet bandwidth)
- ISP (Internet Service from hub location)

The district WAN and Internet service were recently upgraded, as per the 2007-2010 plan, and will provide adequate bandwidth to achieve the stated goals. It is worth noting that before these upgrades took place, many 21st century learning projects would not be possible. As noted earlier, some network switches may be reaching end of life and as they become inoperable, they will have to be replaced to maintain building LANs. Most buildings are wired properly to accommodate any foreseeable network upgrades, but we are looking into two unique building situations where we may have to upgrade/repair certain lines in the coming years.

VI. Funding Plan
Funding Plan Table (2010-2011)

Complete this table to indicate the funding source of anticipated costs of technologies to ensure that students have access to technology. The use of this table is optional and is provided as a convenience.

Three-Year Technology Plan Anticipated Funding Table (2010-2011)				
ITEM	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see NIMAS in the HELP section)			108,423	20,000
Print media needed to achieve goals				
Technology Equipment	18,000 Title II-D		372,926	20,000
Network	520,000 e-rate		422,000	
Capacity	* included	with	equipment	& upgrades
Filtering			20,540	
Software			47,937	
Maintenance			208,550	
Upgrades			60,000	
Policy and Plans				
Other services	* included	with	maintenance	

Funding Plan Table (2011-2012)

Complete this table to indicate the funding source of projected costs of technologies to ensure that students have access to technology. The use of this table is optional and is provided as a convenience.

Three-Year Technology Plan Projected Funding Table (2011-2012)				
ITEM	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see NIMAS in the HELP section)			110,000	20,000
Print media needed to achieve goals				
Technology Equipment	18,000 Title II-D		375,000	20,000
Network	520,000 e-rate		425,000	
Capacity	* included	with	equipment	& upgrades
Filtering			21,000	
Software			40,000	
Maintenance			200,000	
Upgrades			0	
Policy and Plans				
Other services	* included	with	maintenance	

Funding Plan Table (2012-2013)

Complete this table to indicate the funding source of projected costs of technologies to ensure that students have access to technology. The use of this table is optional and is provided as a convenience.

Three-Year Technology Plan Projected Funding Table (2012-2013)				
ITEM	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see NIMAS in the HELP section)			110,000	20,000
Print media needed to achieve goals				
Technology Equipment	18,000 Title II-D		400,000	20,000
Network	520,000 e-rate		425,000	
Capacity	* included	with	equipment	& upgrades
Filtering			21,000	
Software			40,000	
Maintenance			175,000	
Upgrades			0	
Policy and Plans				
Other services	* included	with	maintenance	

E. Provide your technology plan's creation date which, as defined by e-rate, is the point when these five elements are in your plan.

Those elements are:

- *Goals and strategies for using telecommunications and information technology;*
- *A professional development strategy;*
- *An assessment of telecommunications services, hardware, software, and other services needed;*
- *Budget resources; and*
- *an ongoing evaluation process.*

February 24th 2010

VII. Professional Development

A. The people responsible for the coordination of professional development activities as stated in the district's professional development plan and noted in this plan are:

- Janina Kusielewicz – Director of Curriculum, Instruction, and Federally Funded Programs
- Eric Mountain – Supervisor of Instructional Technology K-12
- Katie Trella-Zinsmeister - Technology Facilitator/Trainer K-12
- Danielle Liebi – Interim Technology Facilitator/Trainer (during Mrs. Zinsmeister's maternity leave)

B. Describe the planned professional development activities for teachers, administrators, and school library media personnel that include:

1. Sustained professional development for all administrators will be provided to further the effective use of technology in all learning environments. Methods include, but are not limited to:

- Administrators are provided with professional development during their monthly meetings in one of the following forums:
 - Leadership I & II
 - K-5 Principal's Meeting
 - 6-8 Principal's Meeting
- Administrators are invited to attend meetings by subject supervisors where they introduced to the latest software being utilized within the Classrooms.
- Content area supervisors and technology facilitator offer the district administrators' hands-on software instruction.
- Between meetings and training sessions, there are consistent communication opportunities with building administrators, content area supervisors and the technology facilitator.
- Building administrators also rely on their media specialists to assist them in utilizing technology software and hardware.
- Regular after school and summer technology courses are offered to all administrators at the technology-training center.

2. *Ongoing, sustained professional development for all educators will be provided that furthers the effective use of technology, models 21st century skills and demonstrates global outreach and collaboration in the classroom or library media center. Methods include, but are not limited to:*
 - Teachers are invited to attend during the day, after school and summer training.
 - Teachers are provided with three staff development days in which technology courses are often offered.
 - Media Specialists are also given an additional morning once a month for professional development.
 - Teachers are encouraged to develop their technology understanding through graduate work, web casts, and after-school workshops.
 - Several after-schools building-based and district based meetings are dedicated to specific technology initiatives.
 - All new curriculum rollouts include some technology components (websites, SmartBoard lessons, interactive projects) in the training.
 - As we move towards a district CMS/LMS, virtual training sessions and professional development courses will be made available.

3. *Professional development opportunities and resources exist for technical staff. They include, but are not limited to:*
 - Technology staff is given ongoing training as new software is released and implemented in district.
 - Technology staff has both in-house and offsite training as needed.
 - Technology staff attends Professional Development Days provided by the district when sessions are applicable to their job description and duties.

4. *Professional development is provided to all staff on the application of assistive technologies to support all students in their learning. Methods include, but are not limited to:*
 1. SmartBoard Instruction: Basic to Advanced.
 2. Document Camera Training
 3. AlphaSmart Training
 4. Speech Recognition and text reading software training as needed.
 5. Other software training as needed.

C. Based on educators' proficiency and the identified needs for professional development, describe only the ongoing, sustained high-quality professional development opportunities planned for 2010-2011 as they relate to the infusion of technology into the curricular process. Include a description of in-class support, such as coaching, that is used to ensure effective use of technology to improve learning. Also, include a description of the involvement of all partners associated with professional development for the district.

Professional Development Table (2010-11 only)

The professional development detail is needed for school year 2010-2011 only.
The use of this table is optional and is provided as a convenience.

Educator's Proficiency/ Identified Need	Ongoing, sustained, high quality professional development planned for 2010-2011	Support
Integrate SmartBoards into existing curriculum K-12	<p>Courses titled, but not limited to:</p> <ul style="list-style-type: none"> • “Basic SmartBoard” • “Advanced SmartBoard” • “Summer SmartBoard Academy” <p>will continue to be made available by the Technology Facilitator/Trainer to present content and model the use of SmartBoards in the Elementary, Middle and High School classrooms.</p>	<ul style="list-style-type: none"> ❖ Grade-Level/Subject area meetings will be given in-house support from the Technology Facilitator/Trainer ❖ Point people will be identified within each school building ❖ Coaching opportunities will be given to teachers during the month at scheduled times by both key people within the school building and the Technology Facilitator/Trainer ❖ Teachers will have the opportunity to participate in summer curriculum development allowing them to collaborate with Grade-Level colleagues for a week ❖ Summer lesson development will continue to include the following subject areas: <ul style="list-style-type: none"> ○ Math ○ Science ○ Social Studies ○ World Language ○ Art ○ Music ○ Physical Education ○ Family Life ❖ Summer lesson development will expand to include the following subject areas:

Educator's Proficiency/ Identified Need	Ongoing, sustained, high quality professional development planned for 2010-2011	Support
		<ul style="list-style-type: none"> ○ Language Arts ❖ Previously created lessons will continue to be organized in alignment with current pacing charts and modified where necessary <p>Instructional curriculum for SmartBoard courses will be reviewed and revised/updated where necessary</p>
Provide training on all current software and web-based programs in order to update training for existing staff and provide initial and follow-up training for new staff	<p>Courses will be offered during the day and after school including, but not limited to:</p> <ul style="list-style-type: none"> ● Microsoft Office Applications ● Smart Notebook ● RealTime ● OWA ● Web 2.0 / 21st Century Learning Projects ● Learnia ● Successmaker ● Envisions Math ● Accelerated Reader ● Criterion Writing ● Kidspiration ● Inspiration ● BrainPOP ● BrainPOP Jr. ● Unitedstreaming ● Windows Movie Maker 	<ul style="list-style-type: none"> ❖ Follow-up meetings will be held for all interested staff ❖ Technology coaches in individual school buildings will assist in troubleshooting and mentoring for each piece of software and/or program
Implement a coaching program	Based upon the varied needs of teachers, a coaching program will be created to allow teachers to collaborate, review, co-teach, mentor, and work closely with colleagues in the development and integration of technology products within current and future curriculum	<ul style="list-style-type: none"> ❖ Follow-up meetings will be held for all interested and participating staff ❖ Release time will be arranged to allow for appropriate time to work

Educator's Proficiency/ Identified Need	Ongoing, sustained, high quality professional development planned for 2010-2011	Support
Provide training and support on integrating district provided hardware	Courses will be offered during the day and after school including, but not limited to: <ul style="list-style-type: none"> • Digital Cameras • ELMO Document Cameras • Overhead Projectors • LCD Projectors 	<ul style="list-style-type: none"> ❖ Initial training will be offered for any interested staff ❖ Follow-up training and troubleshooting will be provided by the Technology Facilitator/Trainer ❖ Turn-key instruction will be recommended within school buildings
Incorporate distance learning as well as online and global learning communities into our educational repertoire	Students and staff will be offered opportunities to expand their learning through the pairing of our current hardware and software with the multitude of online resources available to connect to the world around us	<ul style="list-style-type: none"> ❖ Staff members already participating in activities that support this goal will share feedback about their experiences and the tools they use ❖ Other districts who are successfully implementing these educational techniques will be contacted and observed to learn about "Best Practices"

D. Professional Development will continue through 2013 with the focus on continuing the areas above. New opportunities for professional development in technology will revolve around:

- The adoption of new textbooks (digital or traditional)
- The adoption of a district-wide CMS/LMS
- The adoption of an E-Reader (digital text) program
- The use of Internet communication (synchronous and asynchronous) in the classroom
- Continued Internet safety
- Online collaborative projects (using Google docs for example)
- Multimedia creation in the classroom.

VIII. Evaluation Plan

Evaluation Plan Table

The evaluation narrative must include how telecommunications services, hardware, software and other services will improve education. Telecommunications services are leased, tariffed, contracted, or month-to-month services that are used to communicate information electronically between sites. The services **MUST** be provided by an eligible Telecommunications Service provider. Examples of Telecommunications Services for E-Rate include T-1 lines, basic telephone service, and ISDN. Broadcast services (such as over-the-air radio and television) and cable TV are not considered Telecommunications Services.

The burden of proof for any federal inquiry lies with the district, and they should be able to support their process with methodology and documentation.

Three-Year Technology Plan Evaluation Narrative	
Describe the process to regularly evaluate this plan as <u>effectively</u>. . .	
<i>a. integrating technology</i>	The members of the technology planning committee will continue to be involved in evaluating the plan and its execution. The supervisors and Curriculum Director will evaluate the teachers' role in implementing the technology in their classroom. The Technology Supervisor and technical staff will continue to evaluate the network, hardware, and software to maintain a reliable working environment in which students and teachers have access to current information from worldwide sources. They will also make sure the network grows in capacity as needed and allows for further sharing of ideas within the district and beyond. This includes <i>maintaining</i> and <i>improving</i> our LAN, WAN, and internet connection.
<i>b. enabling students to meet challenging state academic standards</i>	The curriculum changes mentioned in this plan are focused on providing the students with the instruction required to meet the state's academic standards. The computer teachers and media specialists will have an elevated role in implementing these changes, but with the help of the Technology Facilitator and other key people throughout the district, all subject teachers in district will be able to help the students meet all the state standards, including technology literacy. The plan also calls for the annual review of our current assessment of how the students are meeting the Technology Literacy standards 8.1 and 8.2. This data will be used as necessary to modify instruction and/or curriculum.

c. developing life-long learning skills

This plan provides for the support of both teachers and students as lifelong learners. **The professional development offerings are geared to not only help the teachers learn a specific skill set, but to elevate instruction overall by using technology. The curriculum offered to the students is aimed at providing them with skills and knowledge that is aligned with what they will be expected to know in order to succeed in the 21st century.** As described in the plan, as those expectations change, so too will the curriculum and instruction. The plan also calls for a continuous replacement of obsolete equipment and continuous maintenance on existing non-obsolete equipment.