Natick Public Schools

TECHNOLOGY PLAN
SCHOOL YEARS
2010 – 2013

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NATICK PUBLIC SCHOOLS

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12	Karen Ghilani	Principal, Johnson Elementary School
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Technology Vision

Our vision for the Natick Public Schools is to create the best educational environment for our students; one that creates opportunities and allows our students to excel in today's ever changing world.

The world today is a much difference place than a mere generation ago. It is a much smaller planet, as students regularly compete on a global basis for entry into college. Our workforce is also much more competitive as outsourcing strategies are often used in the business world to keep labor costs down which shifts many jobs overseas.

Technology has played a role in this global shift as transportation systems have improved; worldwide travel has increased, as it is now faster and more affordable. Through the use of technology participation in the global economy is also much easier and global travel is often not needed; a mere internet connection anywhere in the world can now give you a global storefront if you have an idea or product to sell.

In the midst of all of these changes, how has our public school system changed over this same period of time? Is our public school system keeping pace to meet these new trends and competitive environments?

The reality is that much more needs to be done; especially if our students are going to compete and thrive in this new global economy. We need to do more.

Our students need to be problem solvers, critical thinkers, and collaborative workers; able to work from anywhere, anytime, anyway. Our students must be able to manage projects and deadlines, qualify valid sources of information, prioritize, organize and disseminate information, analyze data and identify trends, reach conclusions, make decisions and take action, and be able to shape the direction of our world by leading effectively.

Students today are digital natives; they use technology constantly to communicate amongst themselves and expect immediate access to information. Students today want to create and express themselves; they don't want to sit and be lectured to. Most importantly students want to be engaged and not told to "power down" when they come to school. All of these challenge the traditional school model and create missed opportunities.

To transform the educational system in Natick and help our students develop 21st century skills; those skills needed to be successful in our world today, we need to embrace change. Our school system needs to embrace the use of technology. Technology can be both an accelerator of the learning process and help streamline administrative functions of a school district if implemented and used effectively.

In the learning environment, technology can help improve student engagement as most digital natives are just waiting for school districts to get it right and encourage use of technology in our schools. Technology can also be used to create easier access to information through on-line classrooms or portals; which extend the learning process beyond the four walls of the classroom and beyond

the restrictions of a single block of time for each subject. Use of technology also creates an opportunity to personalize the learning experience, we know not all students are alike and learn differently.

Effective technology use in our schools changes everything! It challenges teachers to rethink how to best use classroom time; maybe spending more time on group projects and collaboration while viewing lectures at home via podcasts; or participation in an on-line forum to discuss a topic are just a few examples that break the traditional stand and lecture model.

The administrative burdens of running a school district are also becoming much more demanding and complex and require the same level of automation and streamlining that the business world has realized. Increasing levels of mandatory federal and state reporting will overwhelm school districts that realize this trend too late and could jeopardize alternative sources of funds through eligible grants or E-Rate programs.

All in all technology plays a key role in today's educational environment and is no longer something we can live without. It is an expectation that needs to be in place and given careful and thoughtful planning and execution.

Effective technology in our schools does change everything, and it will not come easy. It will require dedicated individuals who want to make a difference and work hard to change the ways our schools operate and the way our classrooms function. But what's at stake is our student's future and in the end that's why we are here in public education.

It's all about our students!!!

Technology Foundation

In order to have an effective and reliable technology presence in our school district, it requires a solid foundation to build upon. This means leveraging our existing investments and making sure our technology house is in order. The four corners of this foundation are:

- Technology Staffing
- Infrastructure & Emerging Technologies
- Applications & Classroom Technologies
- Professional Development

In order to progress forward and realize this vision, periodically a rebuilding process needs to take place, a process very similar to that of renovating or rebuilding a house. We cannot tear down the structure since it is used daily as the renovation takes place. An assessment conducted before construction begins will allow for careful planning and execution.

As in any project, planning is the key to success. Before constructing the walls or roof of a house, the foundation must be solid to support the structure above it.

Technology Staffing

In the case of the Natick Public Schools, the first and most vital corner of our technology foundation is the technology staffing. By far, people are the most important element when it comes to technology. If people do not have the proper training, the proper skill sets, or are not comfortable or cannot rely on the technology, then we will not succeed.

We rely on people to evaluate, implement, train and use technology, so it is vital we get the right people in the right jobs. We need people who view technology as a tool to get things done and come each day with an open mind to achieving success.

It is important that we have defined roles and responsibilities for all technology positions. This will allow us to recognize staffing gaps and formulate staff development programs. Part of the success of building an effective team is not just defining the right positions and completing the recruitment process but what is done after they are on the job to inspire and develop each member to their fullest potential.

Infrastructure & Emerging Technologies

The infrastructure should be flexible and reliable giving us options to grow. Our vision for technology should be an open one, that embraces all forms of technology and we need to be aware of emerging technologies and their future impact. We should not limit ourselves to a single vendor's solution or marry ourselves to one technology, as it would only back us into a corner that we would need to deal with later on.

We need to consider the convergence of voice, video and data. Technologies such as wireless, interactive whiteboards, on-line learning environments and data

repositories, RFID, biometrics, VOIP and various hand-held devices all offer tremendous possibilities.

Applications & Classroom Technologies

As a school district, we should take a serious look at open source and web based software. Open source is software developed by a community of users and freely distributed throughout the world. Many open source products meet if not exceed many of our needs and may help keep our software license costs down. Web based products today offer robust functionality, usually for a modest annual investment, rapid deployment and allow students and teachers the flexibility of using in school or from home. Before making purchase decisions on traditional commercial software packages these options will be considered.

In the classroom, we need to define the tools needed to aide students and teachers to excel with teaching and learning. Technology is both a tool to get things done but also a way to engage and make learning fun. Technologies such as on-line learning environments, interactive white boards and laptop computers and other wireless devices for students and teachers need further exploration.

Professional Development

The final corner in our foundation is professional development. As we progress on the other three corners, our focus needs to shift toward getting the maximum value from all our investments. That will only occur by offering both our technology staff and faculty the proper amount of training and development opportunities along the way. For each dollar spent on technology we need to invest in educating our people in how to use it. We also need to keep in mind, training and development is an on-going process, not just when new systems are deployed and implemented. As our plans develop and evolve much more attention and focus will occur in this area.

As the following plans indicate it will be an iterative rebuilding process. As the technology team and infrastructure matures more strategic discussions on applications and professional development opportunities will emerge. But what makes our technology plan unique from most other school districts is that our plan begins and ends with people.

Technology Planning Framework

Since July of 2005, the Natick Public School has been using the following framework for Technology Planning. It is an iterative process and sometimes takes years to complete a full cycle. The framework has been extremely helpful in guiding and gauging our progress:

Technology Planning Framework

1. Assessment
2. Team Building
3. Invest in the Back End Solutions
4. Invest in the Front End Solutions
5. Invest in Training and Support
6. Collaborate on new Technologies and Expectations

Assessment
The Technology Director conducts regular audits and assessments of our technology environment and frequently includes findings in our annual technology plans. These audits undercover a variety of issues and potential risks. It documents recommendations made, action taken and results achieved. It is these audits that still guide much of our technology planning today.

Team Building
In order to address concerns discovered in any audit, and ensure the proper resources are in place to manage the technology environment in both the short and long term, a technology staffing plan was defined and is included as Appendix A in this year's plan. A process of restructuring and recruiting is sometimes necessary to ensure we have a team of talented individuals in place, ready, willing and able to continue moving our technology efforts forward.

Invest in the Back End Solutions
Before we can address the needs of students and teachers directly in the classroom regarding technology we need to have a solid foundation on which to build on. Sometimes audit concerns require changes to our backend infrastructure to support the goals and initiatives we want to achieve in the classroom.

Invest in the Front End Solutions
Investing in the front end is simply investing in the teachers and the students. It means investing in the classroom, in the things we all see and touch. It is the most visible area of our technology environment and it is the most widespread. The front end encompasses all the computers and software used by students, faculty and administrators. It includes all the physical devices we see such as printers, scanners, digital and video cameras, projectors and also the more progressive technology we have been piloting such as interactive white boards.

Since these front-end technologies include so many touch points, it is also the most expensive and dynamic. It will require a significant amount of planning, funding and a review of all technology resources. It will require collaboration with students, parents, teachers, administrators and members of the community.

It will require an expansion of the technology planning process that doesn't exist today so that all these groups have a voice toward our future direction.

Invest in Training and Support
As the building blocks are put into place, the faculty and staff need to be given frequent opportunities to master their technology skills so that they can effectively use them in the classroom. The faculty need to feel confident that the district will fully support technology before we will see its use expanded into the curriculum. As our technology staffing plan indicates (Appendix A), a dedicated resource has now been allocated to this function, as it has become a standard practice within the Natick Public Schools.

Collaborate on new Technologies and Expectations
As we meet objectives previously identified, our needs and expectations as a community will continue to rise. On a regular basis, we need to look beyond our daily activities and seek out what are the next rounds of challenges we need to face. As we do this, the framework begins a repetitive process as we need to re-assess where we are, identify we have the proper staff to get to the job done, make back end adjustments as we consider and implement new front end technologies, ensure people have the opportunity and training to master the technology and then look outside the box for the next wave of expectations.

2009 – 2010 School Year Improvements

Completed Initiatives Summer and Fall of 2010:

1. **Team Re-Organization**
    a. Dedicated Webmaster position was eliminated and responsibility spread out over several positions within the technology team.
    b. Re-allocated funds from above position (Webmaster) to create new role to help with training the faculty and staff in the use and integration of technology; Technology Integration and Innovation Specialist.

2. **Wireless Network Rollout at Kennedy and Wilson Middle Schools.**
    a. Installed Aruba Wireless Network Solution at both Middle Schools to create a more flexible learning environment for teachers and students.
    b. Approximately 60% of both middle school buildings are covered by the wireless network.

3. **Wiring Closet Upgrades**
    a. Equipment was added to the Wilson Middle School to prepare this building for the wireless rollout this summer. Faster switches consistent with the district standard (1GB POE HP Pro-Curve Switches – Lifetime Warranty) to improve network reliability and performance.

4. **High School Classroom Upgrades**
    a. **Super Tech Room** – A Super Technology Room was created this summer at our High School. This room has in it some of the new technology that will be used in our new High School and will be used to help teachers become familiar with some of the tools that will be become widely available once the New High School opens. This room comes equipped with a wireless network much like the one deployed this summer at our two middle schools, a cart of 25 laptops for use by students and the newest Epson interactive projection system.
    b. **New Apple Lab** – A new high school technology teacher was hired and a new computer lab was created and equipped with 25 new IMac desktop computers that will be used to help students learn and develop skills creating digital content using Apple's ILife Suite.
    c. **NovaNet Program Expanded** – The NovaNet program was moved to a bigger classroom in the High School and more computers have been allocated to double the capacity of this program which can now accommodate up to 20 students per class.

5. **Moodle – Our Learning Management System and Intranet Solution**
    a. This past summer we've brought this application in-house which has allowed us to tightly integrate it with our network. With this integration Moodle is able to provide benefits to both our learning environment and help streamline many administrative functions.
        i. **Learning Environment Benefits** – Moodle provides a true 21st learning environment for students and teachers. It enables teachers and students to share, collaborate and interact in a digital world.
        ii. **Administrative Benefits** – Moodle provides numerous opportunities for district administrators to share documents and collaborate with all faculty and staff thus reducing our need as a school district to produce costly paper documents.

6. **Google Apps**
    a. The district has registered our domain (natickps.org) with Google which will allow us to explore with a group of teachers this year what collaborative features it offers to extend our 21st century learning environment. Since the Google environment offers such tremendous potential, a focus group of teachers will be established working closely with our technology team to pilot this solution prior to a district wide deployment.

6. Computer Updates District Wide (1700 Computers)

- Software Refresh of Teacher Laptops
    - Upgraded Operating System to Snow Leopard – Apple's latest operating system. One of the more interesting features it gives us is a text to speech capability.
    - Upgraded to Apple's Ilife 09 and Iwork 09
    - Administrative Rights granted to all faculty and staff issued laptops
    - External Hard Drives to be deployed to all faculty and staff issued laptops to backup and protect all content.

Technology Fundraising Summary

During the 2008 – 2009 school year through collective efforts of school district administrators, members of the Parent Coordinating Council, the Natick Education Foundation, parents and many local businesses, fund raising efforts were put in place to further fund the needs of technology within the Natick Public Schools.

Due to the state of the economy no official fund raising activities were conducted during the 2009 – 2010 school year. However one local business Cognex had made a multi-year donation during the 2008 – 2009 school year of $10,000 a year for the next five years.

Based on this $10,000 donation from Cognex, we were able to continue with the "Taste for Technology" mission and obtain and deploy the following equipment to each school:

	School	**Results Achieved**
1.	Elementary Schools	Brown, Lilja, Johnson, and Memorial each received 1 portable interactive Mimio solution. BenHem received 2 portable interactive Mimio solutions.
2.	Middle Schools	Each middle school received 2 portable interactive Mimio solution.
3.	High School	1 Epson Brightlink Interactive Projector.
	District Totals	10 Portable Interactive Mimio Solutions 1 Epson Brightlink Interactive Projector.

Technology Funding Summary

Technology Replacement Funding 2010 – 2011 School Year as of 8/09/2010				
	Objective	**Results Achieved**	**Cost Estimate**	**Actual Cost**
1.	Fund Year 3 of Laptop Lease	Annual payment needed to fund lease of laptops purchased for teachers and elementary students.	$203,000	$203,000
2.	Pilot Managed Wireless Infrastructure	Implemented managed wireless solution in approximately 60% of Kennedy and Wilson Middle Schools.	$100,000	$100,000
3.	Replacement of Computers	One new Mobile Lab of computers for each Middle School. New Apple Lab at Natick High School Additional Laptop Computers for Faculty & Staff	$97,044	$97,000
	Funding Summary Sub Totals Balance of Funds		$400,044	$400,000 $44

The Natick Public Schools also files for E-rate reimbursement funds each year. These funds are used to address areas of the technology plan that would otherwise go unfunded.

Current Environment and Challenges

TECHNOLOGY STAFFING
Our Technology team manages the technology needs of the entire school district, serving approximately 700 faculty and staff and over 4600 students. The team today consists of individuals whose jobs focus in the following areas:

Help Desk
Network Administration
Training
Data Base Administration and Reporting
Web and Internet Technologies

Over the last six years, the Technology Team has worked on and accomplished many district objectives by working closely and collaboratively with faculty, staff, administrators, parents, students, and many other members of the Natick Community. Our goal is to provide daily support and solutions that enhance and enrich our educational mission. A current technology staffing organizational chart is provided in Appendix A.

PROFESSIONAL DEVELOPMENT
In the area of Professional Development we conducted our second annual Technology Day on November 2, 2010. This year's event was hosted in-district at our Wilson Middle School, which was made possible by our investment in implementing a robust wireless infrastructure. All school district employees attended this all-day event, which offered opportunities to enhance technology and 21st century skills.

The success of this day, the courses offered and all the people involved can be seen by watching a brief 4 minute video via the link below:

http://www.youtube.com/watch?v=mtO6ObFuIbQ

The $40,000 grant the Natick Education Foundation awarded to the school department last year was used to offer summer workshops as well as provide stipends to teachers who led workshops at the Technology Day. The greatest achievement we've realized from our annual Technology Day is the internal capacity we're building with our faculty and staff. We had over 90% of the workshops offered this year taught by our own faculty and staff, which is a significant increase from the previous year. It is a tribute to the internal talent we have within our own district. The amount of collaboration and excitement this one event creates among the faculty and staff continues to build momentum that inspires teachers to incorporate technology into their teaching and learning.

CLASSROOM TECHNOLOGIES & FUNDRAISING
Due to the poor economic conditions no official fundraising is scheduled for technology initiatives this year. We however do have the third year of a multi-year donation made by Cognex in the amount of $10,000. These funds will be used to provide more interactive technologies for each of our schools.

TECHNOLOGY INFRASTRUCTURE

The district maintains approximately 1700 computers and roughly 1/2 of these devices are laptop computers. The majority of laptops are deployed to faculty and staff to ensure teachers have tools of the 21st century which are essential if our expectations are that technology be integrated into as many areas of the curriculum as possible. Our long-term vision, which we share with our Superintendent Dr. Peter Sanchioni, is to establish 1 to 1 initiatives with our students. But first, we need to ensure our teachers; the ones leading and guiding the educational experience in the classroom are provided the tools, training and opportunities to master these skills so they have the confidence to integrate them into routine daily classroom use.

These laptops have given teachers the ability to work with current technologies and the flexibility of doing so anywhere their work takes them. Whether it is conducting a videoconference with students from remote locations, using updated web technologies to communicate and share information with both students and parents, truly effective technology changes the way we do things. This can now be seen in the administrative side of teachers' and administrators' jobs as much more efficient and cost effective ways of distributing information is now in use than ever before; weekly email blasts from all schools to interested members of the Natick community, automated calls from our ConnectED System to quickly notify parents and staff of timely information as the need arises, providing web based access of student attendance, grades and discipline from our Student Information System, and with continued enhancements being made to our websites; use of the "Virtual Backpack" concept at all schools and teachers providing additional content to students and parents via Teach Web Pages.

In addition to these 1700 computer devices, the technology team also continues to support hundreds of networked printers and numerous other computing devices located within 9 buildings; one high school, two middle schools, five elementary schools and central office staff within the Town Hall.

All school and town buildings are interconnected by a fiber based network that enables us to provide centrally managed services, such as robust internet access, to all school district employees and students from the High School where the technology team is based. This strategy has allowed us to implement solutions once and provide them throughout the district without having to re-invent the wheel at each school.

Last year we implemented a wireless network at our two Middle Schools, the same wireless solution that will be in place when we open our new High School. Our plans are to expand the wireless at the middle schools this summer to pave the way for our 1 to 1 initiative with the 8th graders and to also deploy wireless to all elementary schools. This will ensure all school have a wireless infrastructure in place by the time the new High School opens in the 2012 – 2013 school year.

Our backend infrastructure is constantly changing and evolving to adapt to the growing needs of the school district. Virtualization technologies and cloud based solutions are being introduced to help add redundancy, maximize utilization and scalability, provide greater access and keep our costs down while the demands for technology services continues to accelerate. Our infrastructure is based on well known industry standards utilizing solutions from Microsoft, Apple, Aruba Networks, Dell, Cisco, HP and Sonicwall to name a few.

Next Steps – Implementing a District Wide Digital Conversion

We are now ready to chart a new course in our journey to creating the 21st century learning environment in the Natick Public Schools. It is now time to invest in our students!!!

As stated in previous plans and earlier within this plan, much has been done over the last six years leading us to this moment. We have built a solid technology infrastructure, we have built a solid technology team, we now have a well-defined and focused program of professional development in place that builds teacher confidence and develops 21st century skills. Now is the time to engage our students.

Beginning in the 2011 – 2012 school year the Natick Public Schools will begin a 1 to 1 pilot with all 8th grade students.

This pilot will be refined over the next year in preparation for the even larger 1 to 1 initiative that will follow at the beginning of the 2012 – 2013 school year with the opening of our new High School. At that time all high school students will be added to the 1 to 1 program.

These are extremely ambitious plans. Our 8th grade teachers are ready now and our high school teachers will be ready in another year. To accomplish these goals much research and due diligence has been done. Required resources have been identified and cost estimates have been developed. It is now time to share the details with the Natick Community.

HOW WE'LL BEGIN…. AT THE MIDDLE SCHOOLS
Before the end of this school year, the district will host an information session for parents of current 7th grade students to prepare them for next school year. At this meeting we will discuss the program in detail, identify responsibilities, expectations and answer questions.

Early next school year, all 8th grade students will attend a training session and receive a district issued laptop, backup device and protective bag to transport the laptop. All students participating in the 1 to 1 initiative will be allowed and encouraged to bring the laptop home to complete assignments.

At the end of each school year all students participating in the 1 to 1 initiative will return their laptops by the last day of school so updated software can be installed and any necessary hardware repairs can be conducted over the summer. Student laptops will then be redistributed in the fall for the following school year.

HOW WE'LL CONTINUE TO PREPARE AT THE HIGH SCHOOL LEVEL
While the 8th grade 1 to 1 pilot takes place at the middle schools during the 2011 – 2012 school year we also have plans in place to prepare our current high school students and faculty for our new high school.

During the summer of 2011, sections of the existing high school will be removed to allow construction of the new high school to continue. To accommodate the loss of space, the district will rent a number of modular classrooms. These classrooms will be equipped with wireless internet access and laptops so students and teachers can continue to have a progressive experience with technology while awaiting the opening of the new high school.

Since the district will be purchasing a limited number of laptops for the high school for next year these laptops will not be allowed to leave the school. During the 2012 – 2013 school year laptops will be assigned to every high school student and will then be allowed to go home.

WHAT IS NEEDED BY THE DISTRICT TO IMPLEMENT THESE INITIATIVES?

As we visited other school districts to see how they implemented their own 1 to 1 initiatives we saw many similarities with our own district:

- **Leadership - Administrators and Faculty with a vision and passion**
- **Strong Professional Development & Collaboration**
- **Robust Technical Support & Infrastructure**
- **Community Support**

RESOURCES NEEDED FOR SUCCESS

1. Funding Source for Student Devices – The Superintendent of Schools and Business Manager have identified funding sources for both the 8th grade 1 to 1 project and the High School 1 to 1 project.

2. Building Based Technical Support for Middle Schools – Every district we visited had a combination of building based and district based technical support staff. We currently have a solid district based technology team but we'll need to address the lack of building based technical support staff at the middle schools for next year. We need to add a minimum of one person to each middle school to successfully implement the 1 to 1 initiative.

3. Classroom Management Software – Lan School is a software program that gives the classroom teacher monitoring and remote control capabilities of all student laptops. It can also be used to get instant feedback from students, give electronic quizzes, exchange files and so much more.

THE CHALLENGE

The challenge next school year will be allocating our technical resources among all schools to adequately cover the demands for:

- Supporting the 8th grade 1 to 1 pilot at both middle schools - Wilson and Kennedy.
- Supporting the addition of hundreds of laptops being purchased at the High School for students.
- Designing and building the new district wide Data Center for the new High School.
- Executing a seamless parallel cutover of the district wide Data Center from the current High School to the New High School.
- Continue providing daily support of all five elementary schools as they begin the school year with wireless access.
- Be ready to embrace and execute the larger 1 to 1 High School rollout in the fall of 2012.

8th Grade 1 to 1 Costs

Funding Required for 8th Grade 1 to 1 Initiative				
	Objective	**Recommended Action**	**Comments**	**Estimate**
1.	8th Grade student and faculty devices	Lease over three years to keep costs within reason. Will be paid through Technology Operating Budget.	Provide students and teachers a true 21st century learning environment.	$260,000
2.	Classroom Management Software	Purchase Lan School district wide license. One time purchase.	Will allow teachers to monitor and remote control student laptops.	$10,000
3.	On-Site Technical Support for Middle Schools	Hire one certified technician for each middle school to work school year calendar (40K each).	Will be primary support person for building. This is an annual increase in salary budget.	$80,000
	Total			**$350,000**

High School 1 to1 Costs

Funding Required for High School 1 to 1 – Phase One				
	Objective	**Recommended Action**	**Comments**	**Estimate**
1.	High School student and faculty devices	Charge to High School project as these devices will all stay with High School.	Add additional capacity to prepare for 1 to 1 initiative at High School level.	$800,000
	Total			**$800,000**

Funding Required for High School 1 to 1 – Phase Two				
	Objective	**Recommended Action**	**Comments**	**Estimate**
1.	High School student and faculty devices	Charge to High School project as these devices will all stay with High School.	To provide devices to all High School students.	$1,200,000
	Total			**$1,200,000**

Plan for 2010 – 2011 School Year

Technology Operating Budget				
	Objective	**Recommended Action**	**Comments**	**Estimate**
1.	Fund Year 3 of Laptop Lease (Final Year)	Annual payment needed to fund lease of laptops purchased for teachers and elementary students.	Needed to maintain the lease.	$203,000
2.	Implement Managed Wireless Solution	Implement a managed wireless solution at the Middle School level (Wilson & Kennedy).	Provide students and teachers a true 21st century learning environment.	$100,000
3.	Replacement of Student Computers	Provide a mobile lab of computers to both Middle Schools. Equip a classroom at the High School with new Computers to teach students Apple's ILife and IWork applications.	This is the minimum level to continue to allow the curriculum to grow and provide students opportunities to use advanced technology.	$97,044
	Total			**$400,044**

Plan for 2011 – 2012 School Year

Technology Operating Budget				
	Objective	**Recommended Action**	**Comments**	**Estimate**
1.	Introduce Managed Wireless Solution	Introduce managed wireless solution at the Elementary level. (Ben-Hem, Brown, Johnson, Memorial and Lilja)	Provide students and teachers a true 21st century learning environment.	$150,000
2.	Expand Managed Wireless Solution	Expand wireless solution at the Middle School level (Wilson & Kennedy).	Add additional capacity to prepare for 1 to 1 initiative at 8th grade level.	$100,000
3.	Wiring Closet Upgrades	Needed at Brown, Lilja and Wilson to support wireless deployments.	These are the schools still in need of closet work.	$150,044
	Total			**$400,044**

Plan for 2012 – 2013 School Year

Technology Operating Budget				
	Objective	**Recommended Action**	**Comments**	**Estimate**
1.	Laptops for 8th grade students and faculty	Year 2 of 3 year lease payment for these devices.	Provides students and teachers a true 21st century learning environment.	$260,000
2.	Refresh laptops district wide	Replace laptops that are now turning five years old: a. Elementary labs for student use. b. All faculty & staff laptops that have not been refreshed by other initiatives in last 4 years.	Need to review age of equipment and keep within 5 years in order to meet basic educational needs.	$240,000
	Total			**$500,000**

Summary

It's no secret; the key to a successful educational system is having dedicated individuals that want to make a difference and strong support from the community in which we work. Here in Natick we have very strong support for all that we do and we thank each and every one of you for your continued support, feedback and collaboration.

Technology continues to change and we need to continue to find ways to accelerate, to raise the standards and expectations of the Natick educational system.

As we continue with our digital conversion over the next few years you will continue to see a focus on Professional Development, Infrastructure and Tools and Technology for the Classrooms. We will continue to focus on making the most significant district wide impact so that all students benefit.

Over the next couple of years there will be a lot of attention given to the new High School but our focus is much broader than a single building or any single initiative. Our entire educational system is being rethought.

I would like to continue to encourage those of you in the community to contact me directly if there is anything you see that interests you or if you simply want to help move our schools forward.

Some of our best ideas come from those we serve.

Sincerely,

Dennis E. Roche, CISA, CISM
Director of Technology
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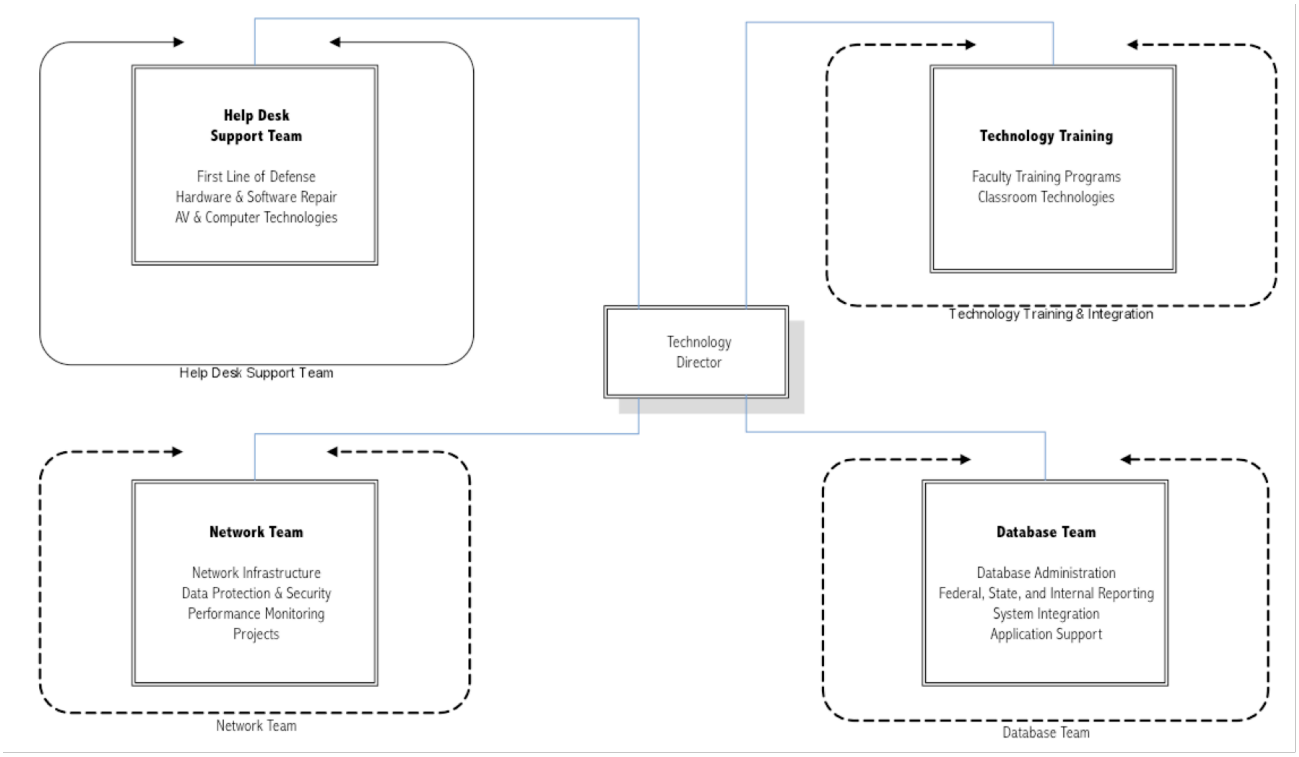
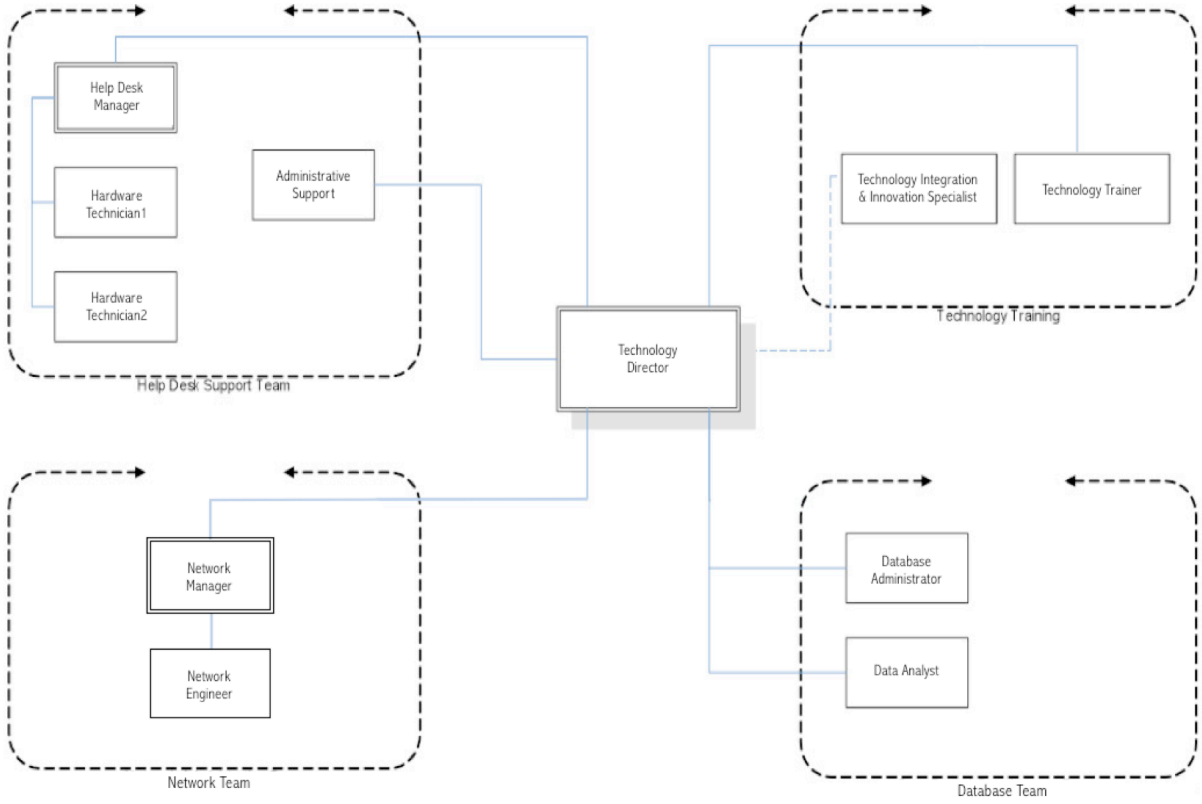
Appendix A – Technology Staffing Plan

Natick Public Schools
Long Range
Technology Staffing Plan



Natick Public Schools
Current Technology Staff
2010 – 2011 School Year



* Technology Integration & Innovation Specialist position reports directly to the Superintendent of Schools.