

Table of Contents

<u>Benchmark 1</u>	3
Commitment to a Clear Vision and Implementation Strategies	3
Educational Technology Goals	3
<u>Benchmark 2</u>	4
Technology Integration and Literacy	4
Technology Integration and Literacy Goals	5
<u>Benchmark 3</u>	6
Technology Professional Development	6
Technology and Curriculum Integration Workshops	6
Graduate Level Course Offerings	6
Rockland Public Schools Instructional Technology Website	7
Additional Professional Development Opportunities	7
Data Supports the Development of Professional Development	7
<u>Benchmark 4</u>	8
Accessibility of Technology	8
Technology Tools Available to Students and Staff	9
Instructional Tools	9
<u>Benchmark 5</u>	11
Virtual Learning and Communications	11
<u>Benchmark 6</u>	12
Safety, Security and Data Retention	12

Benchmark 1

Commitment to a Clear Vision and Implementation Strategies

Rockland Public Schools is dedicated to fostering a community of 21st century learners who have the technological skills necessary to be productive members of a global economy. In this rapidly changing world, it is more imperative than ever that educators meld the 3Rs (reading, writing and arithmetic) with the 4Cs (communication, collaboration, critical thinking and creativity) in their daily instruction. Rockland Public Schools is committed to providing the technology tools and training necessary to support an educational environment in the areas of information literacy, media and technology skills, learning and innovation skills, STEAM (science, technology, engineering, art and math), and life and career skills.

Educational Technology Goals

Rockland Public Schools recognizes that technology plays a key role in achieving the following goals in the 2016-2021 school years.

- Provide a wide variety of training and support for all staff that is both flexible and effective
- Provide opportunities for teachers and staff to collaborate on best practices in their curriculum areas
- Provide state-of-the-art hardware, applications and web-based solutions for instruction, learning and management
- Provide each classroom with an electronic whiteboard or interactive whiteboard and a document camera
- Provide each teacher with an up-to-date laptop
- Provide students with a hands-on, curriculum-driven learning environment through the use of classroom technology, mobile laptop labs, mobile iPad labs, mobile Chromebook labs and computer labs
- Provide a solid network infrastructure that is both efficient and safe for our students and staff
- Integrate the new *Massachusetts Digital Literacy and Computer Science (DL&CS) Standards* into each subject area's curriculum map
- Assess hardware and software needs through formal and informal surveys and the use of Technology Self-Assessment Tool (TSAT) and Teacher Technology Use Survey (TTUS) in order to improve teaching and learning
- Continue to assess needs and evaluate the progress of this plan through the use of TSAT & TTUS and additionally through individual conversations and formal and informal meetings with teachers and department heads

Benchmark 2

Technology Integration and Literacy

Rockland Public Schools is dedicated to integrating technology into the curriculum and providing teachers and students with the tools they need to successfully accomplish all goals. The district provides all students and staff with training and workshops to assist in the integration of technology in the classroom. One hundred percent of Rockland Public School teachers are using technology for research, administration tasks, collaboration and communication. The TSAT is administered to all teaching staff each year and the results are used to guide professional development. The district's instructional technology integration specialist also surveys staff to help determine additional specific professional development needs. Our goal was to have 90% of teachers using technology for teaching and learning by 2015. This goal has been met. Now we continue to support faculty to expand, even more, the use of technology.

Putting technology in the hands of teachers and students is a priority for Rockland Public Schools. Each elementary schools has a Chromebook lab and a static computer lab and we plan to add additional Chromebook labs. Some elementary classrooms have sets of five iPad mini devices and we plan to expand this initiative. The middle and high schools have laptop labs and iPad labs available to grade level teams and departments as well as static labs. Each classroom in all of our schools has four computers in each large group classroom, two computers in each small group classroom, an interactive LCD projector, a document camera and a laptop for each teacher. The middle/high school library has Kindles for student use. Through the annual school budget and town articles, new technology will be distributed to schools based on a five year lifecycle plan. Aging networking equipment and classroom technology will be replaced as needed, new student laptop labs will be replaced with Chromebook labs as needed, and the sets of iPad mini device initiative will be expanded.

The entire district is now using Google Apps for Education and each staff member, as well as every student in grades 2-12, has an account. These accounts have allowed teachers to integrate technology into the classroom and have expanded collaborative work between students and teachers and between students and students, that can extend beyond the school day. The district has also adopted X2 as the attendance, gradebook and student data program. All teachers are using this program in some capacity with plans to expand its uses in the coming years. This goal has been met and now we need to expand on it.

Along with the purchase of new equipment and the adoption of new programs, Rockland Public Schools has been providing professional development to all staff in the district. Teachers are able to participate in workshops after school that address specific needs and provide them with skills and ideas for integrating the technology into the curriculum. These workshops are taught by teachers in the district and address specific needs based on grade-level, subject area and skill level. One of our goals is to create and implement a plan for providing professional development during the school day to all staff. We need to shift this goal to the collaborative PD that is now going on.

Rockland Public Schools employs one full time equivalent (FTE) district-level technology director/coordinator who is responsible for maintaining the infrastructure as well as end user support. The district also has one FTE district-wide instructional technology integration specialist with the goal being to add another specialist by 2015. This goal was not met, however the district has added a FTE technology support staff member which allows our Instructional Technology Specialist to concentrate on the classroom integration of technology. Data management is handled by our SIS (student information systems) manager who is district wide. Her responsibilities are to manage the X2 program, manage student data, and file reports to the commonwealth.

Technology Integration and Literacy Goals

- Ninety percent of teachers will be proficient on 90% of the skills in the TSAT by 2016
- In school professional development for integrating technology in the curriculum will occur district wide
- After school workshops taught by teachers will continue
- A district wide plan for teaching technology skills by grade level and subject area will be in place
- A part-time tech support specialist will be hired
- A second instructional technology integration specialist will be hired
- Expand the use of X2 in the district
- Expand the iPad mini initiative

Benchmark 3

Technology Professional Development

Rockland Public Schools provides extensive training and support to help teachers and staff members utilize technology to actively engage students and prepare them for the world. Training is delivered in a variety of ways to meet the needs of all learners. There are two FTE dedicated technology staff members, a technology coordinator and a technology support staff member and an instructional technology integration specialist, who mentor teachers and staff. Additionally, teacher technology leaders mentor teachers and staff at their schools. Our teachers and staff take an active role in planning and developing professional development.

Technology and Curriculum Integration Workshops

Rockland Public Schools has regular hands-on workshops on a variety of technology and curriculum integration topics. Technology staff, curriculum leaders and academic area teachers collaborate together to provide high-quality content to teachers and staff, allowing technology leaders to emerge, as best practices in the classroom are shared with colleagues. The workshops are held weekly throughout the school year and are targeted toward specific subject areas and grade levels as needed. District initiatives on curriculum and technology are supported with the goal of achieving 90% participation by 2016.

Graduate Level Course Offerings

Rockland Public Schools offers a three-credit graduate level course each school year. This allows the district to provide training that is focused on our goals and initiatives. Teachers and staff have found these courses to be beneficial toward enhancing their classroom instruction.

Rockland Public Schools Instructional Technology Website

Rockland Public Schools has developed an instructional technology website. This website provides information and links on a variety of areas such as Rockland Google apps, tools, apps, resources, workshop and course offerings, and support documents. An “app of the month,” “tool of the month,” “resource of month” and “tech tips” are featured here as well as emailed to all staff.

Additional Professional Development Opportunities

There are also additional professional development opportunities. Rockland Public Schools attends MassCUE each year and our technology leaders bring back and share their ideas through staff meetings and workshops. One goal is to dedicate twenty-five percent of in-service time to subject-specific technology integration into all curriculum. Another goal is to seek out more webinar opportunities and offer these in addition to the technology and curriculum integration workshops. The last goal is to continue identifying teacher technology leaders at each school to provide further support to staff.

Data Supports the Development of Professional Development

The district administers the Massachusetts Technology Self-Assessment Tool (TSAT) on a yearly basis. This data is used to design professional development. Additional formal and informal surveys are used to gauge the wants and needs of teachers and staff. This allows the district to better serve the faculty and staff.

Benchmark 4

Accessibility of Technology

Rockland Public Schools is dedicated to providing students and staff with the accessibility necessary to become fluent in communication, collaboration, critical thinking and creativity through the use of technology. We do this by making technology available before, during and after normal school hours through a solid network infrastructure foundation of gigabit switches, wireless connectivity and fiber optics connectivity which is seamless and reliable to our end users. We have incorporated and are expanding our virtual desktops to create an almost one computer to one pupil environment with the added benefit of natural resource savings and savings realized in hardware and software management.

Guided by the leadership of the superintendent's office and generosity and confidence of the town's finance committee our goal is to maintain a technology lifecycle of five years for specific equipment. The continued support of this line item allows us to keep current technology in the hands of our students and staff members. With this line item our goal is to expand our mobile technology at all grade levels. One of the goals is to add a FTE technology staff member by 2015. This goal has been met.

Critical thinking, communication, creativity and collaboration will be aided through the acquisition of Chromebooks and iPad mini devices which is currently under way. With the purchase of content and grade appropriate "apps" and or use of online content, teachers will engage students in ways in which they are already comfortable and familiar. All of our technology (laptops, iPads and Chromebooks) integrate well with assistive technology. The evolution of Rockland Public Schools is occurring through the use of web 2.0 tools and apps such as Google Apps for Education which we utilize for email, file storage, messaging and the suite of apps they offer for productivity and collaboration.

The district will implement and budget for a life cycle time frame to rotate out the oldest and most problematic equipment based on a five year rotation schedule. This schedule will be aided by the influx of new equipment into the high school and middle school through the new building project. The project will enable the district to concentrate on upgrading the elementary facilities as money that would have otherwise been budgeted for grades 5-12 will be redirected to start equipment and infrastructure improvements in the K-4 grades. This goal has been met. We will continue to strive, throughout the technology plans 5 year time frame (2016-2021), to continue to foster our relationship with the finance committee, so they will continue to see the need to fund the technology line item based on positive and quantifiable results.

The district currently has 100% internet connectivity from each classroom, office, gymnasium and open space and by the end of 2012 both the high school and middle school will have 100% coverage via wireless access. This goal has been met. We also have 100% wireless coverage at each of our 3 elementary schools. The coverage includes classrooms, gymnasiums and offices. The district is nearly 100% gigabit capacity switched and will be by 2014 at all locations. All current PC-based systems are 100/1000 capable to the desktop and we will continue to maintain those speeds through fiber connectivity and upgraded infrastructure. Our goal of

implementing a totally wireless campus has been met through implementation of Aerohive’s wireless solution. Our next goal with regards to connectivity is to increase our bandwidth and reliability with the influx of more mobile devices.

Through our wide area network (WAN) the district has the ability to exchange data with utmost reliability. We provide file storage space locally on our servers located at each school and also via our contract/subscription with Google Apps for Education. Our partnership with Google allows the district to seamlessly email and share files no matter whether on site or away from Rockland Public Schools. Rockland Public Schools provides information to its student body on where they can get access to the Internet outside of school hours. We also currently allow students access to the computer labs one hour before school and at least one hour after the final bell. Our goal of providing distance learning will be attainable through the state-of-the-art lecture hall and its infrastructure.

With the additional FTE staff member, our goal for trouble ticket resolution is down to one school day. However, emergencies are prioritized and handled immediately.

Technology Tools Available to Students and Staff

Instructional Tools	High School	Middle School	Elementary Schools
Laptops and/or desktop computers for all instructional staff	★	★	★
SMART Boards			★
Epson Interactive Projectors	★	★	★
LCD Projectors	★	★	★
Assistive Technology Devices	★	★	★
iPads, iPad minis and iPods	★	★	★
Computer labs	★	★	★
Laptop and/or Chromebook mobile labs	★	★	★
iPad and iPod Accessories (speakers, guitar adaptors)	★	★	★
Scanners	★	★	★
Laser Printers	★	★	★
DVD, VHS, CD and Audio Cassette Players	★	★	★
Electronic Tuners	★	★	
Microphones	★	★	★
Graphing Calculators	★		

Software & Apps	High School	Middle School	Elementary Schools
Windows 7	★	★	★
Mac OS X and Mac OS X Lion Server	★	★	★
iOS Systems	★	★	★
X2 Student Information System	★	★	★
Book Systems	★	★	★
Rockland Google Classroom, Email and Apps	★	★	★
Microsoft Office Suite (Word, Excel, PowerPoint)	★	★	
Open Office	★	★	★
Assistive Technology Software (Dragon, BoardMaker, etc.)	★	★	★
BrainPOP, BrainPOP Jr. and BrainPOP ESL	★	★	★
Moby Max		★	★
Keyboarding		★	★
Windows Movie Maker	★	★	★
iLife Suite (iPhoto, iMovie, GarageBand, iDVD) and iTunes	★	★	★
VoiceThread	★		
Music Software (Smart Music, Finale, Pixelmator, Pyware 3D)	★	★	
Twitter	★	★	★
iWork (Pages, Keynote, Numbers)	★	★	
FileMaker Pro	★	★	
Geometry Sketchpad	★	★	
Other Productivity Tools (SMART Notebook, Chrome extensions)	★	★	★
Other Presentation Tools (30 Hands, Audioboom, etc.)	★	★	★

Benchmark 5

Virtual Learning and Communications

Rockland Public Schools is creating opportunities to extend learning beyond the school day. Teachers and staff utilize Google Classroom, Google Sites and Blogger to create classroom websites and courseware. These online portals allow students access to a wide variety of tools 24/7. In addition, teachers and staff embed or provide links to other online tools and research databases to enhance online learning, creativity, collaboration and communication. The district's at risk students utilize Edgenuity for in class and distance learning to stay on schedule with their fellow classmates and to help reduce the dropout numbers. Our goal is to maintain the ability for all students to be able to take advantage of distance learning regardless of their situation.

Teachers and staff use a wide variety of video, interactive and research resources to support the curriculum. The district has school-based and home subscriptions to BrainPOP, BrainPOP Jr., BrainPOP ESL, and GameUp. In addition, websites such as PBS LearningMedia and TED-Ed are utilized for their high-quality, standards-based videos, interactives and curriculum resources.

Rockland Public Schools maintains an up-to-date website that includes information for parents and community members at www.rocklandschools.org. The goal is to continue to improve the look and content of the district's website through input from administrative staff, faculty, students and parents.

Benchmark 6

Safety, Security and Data Retention

RPS has and references their Acceptable Use Policy on a regular basis and uses it as a guideline for reinforcing the message of safe and ethical Internet, email and network use. All RPS school district firewalls are CIPA compliant in their configuration and continuously updated with the latest definition files necessary to combat the continued efforts of viruses, spam, malware and spyware as well as intrusions from outside the network. Our goal with regards to edge technology is to purchase new firewalls. It must be understood that no firewall is 100% effective. However, when a security hole is found, it becomes our number one priority to eliminate the compromise.

All RPS parents and guardians are required to sign a permission form, which is included here, before a picture of their child can be used in any public format related to Rockland Public Schools. Students need to verify, with a signature, that they have read the Rockland Public Schools Technology & Electronic Communications Device Acceptable Use Policy before they can use an RPS owned ECD. Students receive instruction about appropriate online behavior which is reinforced throughout the school year by all teachers during their regular classroom activities and also through the curriculum of the health teacher and the media information specialist.

RPS faculty and staff are required to attend a one day orientation with part of the discussion being focused on the use and laws governing email. Specifically that all email should remain concise and professional in nature and is subject to Public Records Law. G. L. c. 66, § 10, which states that “All email messages are subject to public access and disclosure through the provisions of the Public Records Law”. This is also reinforced continuously by the technology coordinator and technology integration specialist throughout the school year.

Student and staff personal record information is electronically protected with user names and passwords. Our Student/Staff Information System is Follett’s X2 application which is run from secure and redundant servers. All hard copy information is kept in locked file cabinets in secure rooms accessible by only a few select staff members. Rockland Public Schools’ goal is to electronically scan all personal and personnel information to a cloud based redundant server for long term archiving of past and present data. We are currently in the process of evaluating different vendors solutions with a goal for implementation in the spring of 2013. This goal has been met and is ongoing, previously through the use of DigiDoc software and currently with Ecopy software.

Tim Wells/Technology Coordinator
Lisa Ryan/Technology Integration Specialist