Pawtucket School Department

Technology Plan

1 Year Extension

Original Approved by Pawtucket School Committee
6/16/2009

Extension Approved 9/2011
SECTION I: Executive Summary

The purpose of The Pawtucket School Department District Technology Plan is to outline the measures and technical resources the district employs, and will employ, to improve student performance by enhancing the teaching/learning process through the effective use of technology.

Mission Statement:

The Pawtucket School Department’s teachers, students, staff, and administration will, through the effective use of its technical resources, support and promote all measures, goals, and benchmarks as outlined in the District Strategic Plan. We will do this through integrating the considerable technical resources available and utilize emerging technologies to improve student learning, enhance instruction, and augment efficiency in administration.

Priorities for Education and Technology Integration

Although it is impossible to predict the future of technology given its rapid pace of change the district recognizes the impact technology has on the education of its students and the challenges this places on teachers within the educational process. Education and the use of technology will have a synergistic effect on education, significantly influencing the way pedagogy and instructional time is used.

Demands from the workplace to have technologically adept employees, charges Pawtucket’s schools with the task of ensuring that their graduates are competent in their ability to use technology. The skills needed to access, gather, organize and transmit information are necessary skills. Further, students need to use these skills in order to create their own knowledge, to think more critically, and to communicate and solve problems more creatively and analytically.

The district needs to continue maintaining existing and deploying emerging technologies into the classroom, school buildings, and administration. It needs to maintain and develop the infrastructure that supports these technologies and work with the business community in its decision-making. It needs to use these resources to promote student achievement.

Educational Priorities

Through the use of technology, the district will continue to enhance student learning, increase student achievement, improve teaching productivity, promote equitable access to technology and information, and provide industry standard software and training to its students, teachers, and staff. Technology planning focused upon improved teaching and learning, professional development for curriculum integration, and connectivity within the district and to related institutions, must be considered integral to success.

Administrative Priorities

Through the use of technology the district will continue to provide uniform management tools, avoid duplication of tasks by utilizing integrated entry and retrieval methods, efficient means of gathering, tracking and reporting student information, and provide communication vehicles for staff, students, and community.

Technology Priorities

Management of technology begins with securing the infrastructure and the information it delivers by providing networks and connectivity, user security, applications, firewalls, redundancy, fault-tolerance, levels of access, and backup of data. As the network expands, the management of traffic and associated speed of delivery takes on more importance. This requires continued improvements to the existing network infrastructure that is flexible,
manageable, and scalable. The purpose of this infrastructure must reflect the educational and management needs of the district.

**Community Priorities**

Continued access to information and staff by community members through e-mail and Internet access will continue to be made available in order to provide a partnership between school and home. This network will then provide parents and the community access to information deemed appropriate over such a medium.
SECTION II: Standards, Core Competencies, Performance

The Pawtucket School Department is adopting the National Educational Technology Standards (NETS) for Students, Teachers, and Administrators. The primary goal of the International Society for Technology in Education, ISTE (http://www.iste.org) NETS Project (http://cnets.iste.org) is to enable stakeholders in PreK-12 education to develop national standards for educational uses of technology that facilitate school improvement in the United States.

Pawtucket’s adoption of the NETS serves to define the District’s expectations for instruction and learning, integrating curriculum technology, technology support, and standards for student assessment and evaluation of technology use.

NETS for Students Core Principles

To live, learn, and work successfully in an increasingly complex and information-rich society, students must be able to use technology effectively. Within an effective educational setting, technology can enable students to become:

- Capable information technology users
- Information seekers, analyzers, and evaluators
- Problem solvers and decision makers
- Creative and effective users of productivity tools
- Communicators, collaborators, publishers, and producers
- Informed, responsible, and contributing citizens

NETS for Teachers Core Principles

Teachers in order to prepare students for the above student goals must be similarly prepared by displaying the following skills and competencies:

- Demonstrate a sound understanding of technology operations and concepts.
- Implement curriculum plans that include methods and strategies for applying technology to maximize student learning
- Apply technology to facilitate a variety of effective assessment and evaluation strategies
- Use technology to enhance their productivity and professional practice
- Understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice

NETS for Administrators Core Principles

In their role as educational leaders, administrators must exhibit the certain core technical competencies as well as work towards the following goals:

- inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision
- ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching
- apply technology to enhance their professional practice and to increase their own productivity and that of others
- ensure the integration of technology to support productive systems for learning and administration
- use technology to plan and implement comprehensive systems of effective assessment and evaluation
- understand the social, legal, and ethical issues related to technology and model responsible decision-making related to these issues
NETS for Students  UPDATED 2011-2012

Technology Foundation Standards for All Students

The technology foundation standards for students are divided into six broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking performance indicators within the Profiles for Technology Literate Students to the standards. Teachers can use these standards and profiles as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills.

National Educational Technology Standards for Students

1. Creativity and Innovation
Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:
   a. apply existing knowledge to generate new ideas, products, or processes.
   b. create original works as a means of personal or group expression.
   c. use models and simulations to explore complex systems and issues.
   d. identify trends and forecast possibilities.

2. Communication and Collaboration
Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:
   a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
   b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
   c. develop cultural understanding and global awareness by engaging with learners of other cultures.
   d. contribute to project teams to produce original works or solve problems.

3. Research and Information Fluency
Students apply digital tools to gather, evaluate, and use information. Students:
   a. plan strategies to guide inquiry.
   b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
   c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
   d. process data and report results.

4. Critical Thinking, Problem Solving, and Decision Making
Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:
   a. identify and define authentic problems and significant questions for investigation.
   b. plan and manage activities to develop a solution or complete a project.
   c. collect and analyze data to identify solutions and/or make informed decisions.
   d. use multiple processes and diverse perspectives to explore alternative solutions.
5. **Digital Citizenship**
Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

   a. advocate and practice safe, legal, and responsible use of information and technology.
   b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
   c. demonstrate personal responsibility for lifelong learning.
   d. exhibit leadership for digital citizenship.

6. **Technology Operations and Concepts**
Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

   a. understand and use technology systems.
   b. select and use applications effectively and productively.
   c. troubleshoot systems and applications.
   d. transfer current knowledge to learning of new technologies.
NETS for Teachers
Performance-based Standards and Assessments for Improving Technology Competence

1. **Facilitate and Inspire Student Learning and Creativity**
   Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:
   a. promote, support, and model creative and innovative thinking and inventiveness
   b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
   c. promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes
   d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. **Design and Develop Digital-Age Learning Experiences and Assessments**
   Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:
   a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
   b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
   c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
   d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

3. **Model Digital-Age Work and Learning**
   Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:
   a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
   b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
   c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
   d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. **Promote and Model Digital Citizenship and Responsibility**
   Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:
   a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
   b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
   c. promote and model digital etiquette and responsible social interactions related to the use of technology and information
   d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools
5. **Engage in Professional Growth and Leadership**

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

a. participate in local and global learning communities to explore creative applications of technology to improve student learning

b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community
1. **Visionary Leadership**

Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization. Educational Administrators:

   a. inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders.
   b. engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision.
   c. advocate on local, state and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan.

2. **Digital Age Learning Culture**

Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students. Educational Administrators:

   a. ensure instructional innovation focused on continuous improvement of digital-age learning.
   b. model and promote the frequent and effective use of technology for learning.
   c. provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners.
   d. ensure effective practice in the study of technology and its infusion across the curriculum.
   e. promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration.

3. **Excellence in Professional Practice**

Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources. Educational Administrators:

   a. allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration.
   b. facilitate and participate in learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology.
   c. promote and model effective communication and collaboration among stakeholders using digital-age tools.
   d. stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning.

4. **Systemic Improvement**

Educational Administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources. Educational Administrators:

   a. lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources.
   b. collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning.
   c. recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals.
   d. establish and leverage strategic partnerships to support systemic improvement.
   e. establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning.

5. **Digital Citizenship**

Educational Administrators model and facilitate understanding of social, ethical and legal issues and responsibilities related to an evolving digital culture. Educational Administrators:
a. ensure equitable access to appropriate digital tools and resources to meet the needs of all learners.
b. promote, model and establish policies for safe, legal, and ethical use of digital information and technology.
c. promote and model responsible social interactions related to the use of technology and information.
d. model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools.
Profiles Describing Technology Literate Students

A major component of the NETS Project is the development of a general set of profiles describing technology literate students at key developmental points in their precollege education. These profiles are based on ISTE’s core belief that all students must have regular opportunities to use technology to develop skills that encourage personal productivity, creativity, critical thinking, and collaboration in the classroom and in daily life. Coupled with the standards, the profiles provide a set of examples for preparing students to be lifelong learners and contributing members of a global society.

The numbers in parentheses after each item identify the standards (1–6) most closely linked to the activity described. Each activity may relate to one indicator, to multiple indicators, or to the overall standards referenced. The categories are:

1. Creativity and Innovation
2. Communication and Collaboration
3. Research and Information Fluency
4. Critical Thinking, Problem Solving, and Decision Making
5. Digital Citizenship
6. Technology Operations and Concepts

Grades PK–2 (Ages 4–8)
The following experiences with technology and digital resources are examples of learning activities in which students might engage during PK–Grade 2 (ages 4–8):

1. Illustrate and communicate original ideas and stories using digital tools and media-rich resources. (1, 2)
2. Identify, research, and collect data on an environmental issue using digital resources and propose a developmentally appropriate solution. (1, 3, 4)
3. Engage in learning activities with learners from multiple cultures through e-mail and other electronic means. (2, 6)
4. In a collaborative work group, use a variety of technologies to produce a digital presentation or product in a curriculum area. (1, 2, 6)
5. Find and evaluate information related to a current or historical person or event using digital resources. (3)
6. Use simulations and graphical organizers to explore and depict patterns of growth such as the life cycles of plants and animals. (1, 3, 4)
7. Demonstrate the safe and cooperative use of technology. (5)
8. Independently apply digital tools and resources to address a variety of tasks and problems. (4, 6)
9. Communicate about technology using developmentally appropriate and accurate terminology. (6)
10. Demonstrate the ability to navigate in virtual environments such as electronic books, simulation software, and Web sites. (6)

Grades 3–5 (Ages 8–11)
The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 3–5 (ages 8–11):

1. Produce a media-rich digital story about a significant local event based on first-person interviews. (1, 2, 3, 4)
2. Use digital-imaging technology to modify or create works of art for use in a digital presentation. (1, 2, 6)
3. Recognize bias in digital resources while researching an environmental issue with guidance from the teacher. (3, 4)
4. Select and apply digital tools to collect, organize, and analyze data to evaluate theories or test hypotheses. (3, 4, 6)
5. Identify and investigate a global issue and generate possible solutions using digital tools and resources. (3, 4)
6. Conduct science experiments using digital instruments and measurement devices. (4, 6)
7. Conceptualize, guide, and manage individual or group learning projects using digital planning tools with teacher support. (4, 6)
8. Practice injury prevention by applying a variety of ergonomic strategies when using technology. (5)
9. Debate the effect of existing and emerging technologies on individuals, society, and the global community. (5, 6)
10. Apply previous knowledge of digital technology operations to analyze and solve current hardware and software problems. (4, 6)

**Grades 6–8 (Ages 11–14)**
The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 6–8 (ages 11–14):

1. Describe and illustrate a content-related concept or process using a model, simulation, or concept-mapping software. (1, 2)
2. Create original animations or videos documenting school, community, or local events. (1, 2, 6)
3. Gather data, examine patterns, and apply information for decision making using digital tools and resources. (1, 4)
4. Participate in a cooperative learning project in an online learning community. (2)
5. Evaluate digital resources to determine the credibility of the author and publisher and the timeliness and accuracy of the content. (3)
6. Employ data-collection technology such as probes, handheld devices, and geographic mapping systems to gather, view, analyze, and report results for content-related problems. (3, 4, 6)
7. Select and use the appropriate tools and digital resources to accomplish a variety of tasks and to solve problems. (3, 4, 6)
8. Use collaborative electronic authoring tools to explore common curriculum content from multicultural perspectives with other learners. (2, 3, 4, 5)
9. Integrate a variety of file types to create and illustrate a document or presentation. (1, 6)
10. Independently develop and apply strategies for identifying and solving routine hardware and software problems. (4, 6)

**Grades 9–12 (Ages 14–18)**
The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 9–12 (ages 14–18):

1. Design, develop, and test a digital learning game to demonstrate knowledge and skills related to curriculum content. (1, 4)
2. Create and publish an online art gallery with examples and commentary that demonstrate an understanding of different historical periods, cultures, and countries. (1, 2)
3. Select digital tools or resources to use for a real-world task and justify the selection based on their efficiency and effectiveness. (3, 6)
4. Employ curriculum-specific simulations to practice critical-thinking processes. (1, 4)
5. Identify a complex global issue, develop a systematic plan of investigation, and present innovative sustainable solutions. (1, 2, 3, 4)
6. Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs. (4, 5, 6)
7. Design a Web site that meets accessibility requirements. (1, 5)
8. Model legal and ethical behaviors when using information and technology by properly selecting, acquiring, and citing resources. (3, 5)
9. Create media-rich presentations for other students on the appropriate and ethical use of digital tools and resources. (1, 5)
10. Configure and troubleshoot hardware, software, and network systems to optimize their use for learning and productivity. (4, 6)

The Pawtucket School Department will work to provide all its students adequate technical resources to support all curricular areas in all grade levels to meet the above grade level expectations.
SECTION III: Support for Instruction and Learning

A combination of essential conditions is required for teachers to create learning environments conducive to powerful uses of technology. The most effective learning environments meld traditional approaches and new approaches to facilitate learning of relevant content while addressing individual needs.

Based in part on the ISTE Standards Essential Conditions for Teacher Preparation, the Pawtucket School Department’s policy for support and usage of educational technologies will provide the following resources:

<table>
<thead>
<tr>
<th>Category</th>
<th>Assurances/Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Vision</td>
<td>The district will provide proactive leadership and administrative support.</td>
</tr>
<tr>
<td>Access</td>
<td>Educators have access to current technologies, software, and telecommunications networks.</td>
</tr>
<tr>
<td>Skilled Educators</td>
<td>Educators are skilled in the use of technology for learning.</td>
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<tr>
<td>Professional Development</td>
<td>Educators have consistent access to professional development in support of technology use in teaching and learning.</td>
</tr>
<tr>
<td>Technical Assistance</td>
<td>Educators have technical assistance for maintaining and using the technology.</td>
</tr>
<tr>
<td>Content Standards and Curriculum Resources</td>
<td>Educators are knowledgeable in their subject matter and current in the content standards and teaching methodologies in their discipline.</td>
</tr>
<tr>
<td>Student-Centered Teaching</td>
<td>Teaching in all settings encompasses student-centered approaches to learning.</td>
</tr>
<tr>
<td>Assessment</td>
<td>There is continuous assessment of the effectiveness of technology for learning.</td>
</tr>
<tr>
<td>Community Support</td>
<td>The community and school partners provide expertise, support, and resources.</td>
</tr>
<tr>
<td>Support Policies</td>
<td>Policies, financing, and structures are in place to support technology in learning.</td>
</tr>
</tbody>
</table>

**Instructional Support > Network**

All educators and staff within the Pawtucket School Department are issued a Network Account which provides them with the following resources:

1. School/remote access to personal documents and files
2. School/remote access to district email
3. School/remote access to information portal services
4. School/remote access to personal web hosting and building tools
5. School/remote access to employee directory
6. Whole school and or classroom access to Internet resources
7. Whole school and or classroom access to productivity applications including wordprocessor, spreadsheet, presentation, database, publishing, and web-publishing, graphic organizer.
8. Whole school and or classroom access to targeted curriculum applications specifically chosen and aligned to enhance student learning
9. Whole school and or classroom access to testing and evaluation applications designed to measure student improvements or target areas that need improvement.
**Instructional Support > Hardware**

Every Educator has access to a networked computer in his/her classroom or school-based computer lab or library. Every educator has access to a local or networked laser printer.

**Instructional Support > Software**  *[UPDATED 2011-2012]*

Every Educator has access to a core set of tools: Internet, email, wordprocessor, spreadsheet, database, presentation, publishing, and graphic organizer. The Pawtucket School Department’s schools and office currently have access to applications via the network. While many software titles vary from school to school, many have been strategically purchased and are uniformly available across the district.

<table>
<thead>
<tr>
<th>Category</th>
<th>Current Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Suite: Wordprocessor</td>
<td>Microsoft Word / Google Apps for Education</td>
</tr>
<tr>
<td>Office Suite: Spreadsheet</td>
<td>Microsoft Excel / Google Apps for Education</td>
</tr>
<tr>
<td>Office Suite: Database</td>
<td>Microsoft Access</td>
</tr>
<tr>
<td>Office Suite: Presentation</td>
<td>Microsoft Powerpoint / Google Apps for Education</td>
</tr>
<tr>
<td>Office Suite: Publishing</td>
<td>Microsoft Publisher / Google Apps for Education</td>
</tr>
<tr>
<td>Email</td>
<td>Google Apps for Education</td>
</tr>
<tr>
<td>Instant Messaging</td>
<td>Google Apps for Education</td>
</tr>
<tr>
<td>Personal Calendar, Tasks</td>
<td>Google Apps for Education</td>
</tr>
<tr>
<td>Graphic Organizer</td>
<td>Inspiration</td>
</tr>
<tr>
<td>Student Publishing</td>
<td>Microsoft Publisher, KidWorks Deluxe</td>
</tr>
<tr>
<td>Reading Management</td>
<td>Accelerated Reader</td>
</tr>
<tr>
<td>Remedial Reading Intervention</td>
<td>Scholastic Read180</td>
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<tr>
<td>Mathematics</td>
<td>UK Flash Math Applications for all grades, FASTT Math</td>
</tr>
<tr>
<td>Grading and Attendance</td>
<td>MMS Generations</td>
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<tr>
<td>Other applications</td>
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</table>

**Instructional Support > Communication**  *[UPDATED 2011-2012]*

All district educators are issued an email account through the district’s Google Apps for Education, Google Mail. Educators can access this account from any Internet-enabled computer via the district’s homepage and standard Google Login. Through the Google Mail all educators can Instant Message colleagues across the district.

**Instructional Support > Professional Development**

The Pawtucket School Department believes that in order for technology integration to be effective, all administrators, faculty and staff, must be provided ample opportunities for professional development. Technology integration must also be evident at all levels. All district administrators, educators and staff are welcome and encouraged to attend school-wide and district-level technology workshops, offered during common planning periods, professional development days, and after school.

Ongoing professional development opportunities, in the past, as well as the future, include usage of multiple applications, integration of applications into the curriculum, creating a classroom website, evaluation means, processes and tools, and utilizing Internet resources. With the adoption of electronic portfolios, professional development in their use is expanding. Customized departmental or school specific workshops can be requested by contacting the Office of Technology.
Utilizing the train-the-trainer model, building-level technology coaches receive professional development throughout the school year, and then provide support and training to the teachers, staff and administrators in their buildings.

Additionally, the district provides technology support through an extensive library of online tutorials, manuals, guides, and instructions.

**Instructional Support > Futures  UPDATED 2011-2012**

It is the goal of the Pawtucket School Department to provide the best resources, foster an understanding of usage and possibilities, and utilize technology to enhance instruction and learning. Pawtucket’s Instructional future for technology will target affordability, sustainability, security, and accessibility and focus much of it development and application support and distribution via the Internet and Remote Desktop Access and Cloud Computing. The Browser has become the universal interface and the Internet is the most efficient means of application distribution and access between classrooms, schools, and school to home. We will focus on expanding STEM-based learning. We will focus on developing on our students 21st century skills and application.
SECTION IV: Support for Administration

Administrative Support > Standards

The Pawtucket Schools Department has adopted the NETS for Administrators, specifically; in their role as educational leaders administrators must exhibit the certain core technical competencies as well as work towards the following goals:

- inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision
- ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching
- apply technology to enhance their professional practice and to increase their own productivity and that of others
- ensure the integration of technology to support productive systems for learning and administration
- use technology to plan and implement comprehensive systems of effective assessment and evaluation
- understand the social, legal, and ethical issues related to technology and model responsible decision-making related to these issues

Administrative Support > Resources

Pawtucket’s district administrators have access to a wealth of technology-based tools and resources. These resources are standardized for all administrators and are targeted to provide information, communication, and improve efficiency.

Administrative Support > Hardware

Every administrator has access to a networked computer in his/her office. Every administrator has access to a local or networked office printer. Every administrator is extended home access to these technical resources, applications, files, and data via Remote Desktop Server via any web browser.


Every administrator has access to a core set of tools: Internet, email, word processor, spreadsheet, database, presentation, publishing, graphic organizer, and student information system.

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<td>MMS Generations</td>
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<tr>
<td>Graphic Organizer</td>
<td>Inspiration</td>
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Computer access for administrators to software above is via a thin-client computer in all school front offices and guidance. Administrators and other office workers use thin-client devices to connect to a Windows Remote

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Desktop Servers for their applications, files, documents, and shared data. Additionally, school administrators can access their Remote Desktop from home or any other location via the Remote Desktop Client.

**Administrative Support > Communication**  **UPDATED 2011-2012**

All district administrators are issued an email account through the district’s Google Apps for Education, Google Mail. This email is available from any Internet-enabled computer via the district’s homepage and Google’s Standard Login. Each school has a STAFF mailing list for electronic forwarding of email, messages, memo’s etc. Through Google Mail, all administrators can Instant Message colleagues across the district.

**Administrative Support > Professional Development**

The Pawtucket School Department believes that in order to maximize technology utilization among all teachers, students, and staff, technology integration must also be evident at the school leadership level. As a result all administrators are welcome to attend school-wide and district level technology workshops.

Additional support is planned through a series of day-long administrator’s workshop covering technical resources available to all students and teachers, as well as administrators to foster communication, office applications, data management, and data-driven decision making. Additional Student Information Systems workshops will be available during the summer. Administrators will also be provided with adequate online and print tutorials, guides, and instructions.

**Administrative Support > Data Management**  **UPDATED 2011-2012**

The Pawtucket School Department uses the MMS Generations Student Information System. MMS Generations is centralized and is accessible by all school administrators via the Remote Desktop Client and the Internet.

<table>
<thead>
<tr>
<th>Information Systems</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMS Generations Core</td>
<td>Biographical, Attendance, Discipline, Grading, Scheduling, Health, Assessment, local, State and Federal Reporting</td>
</tr>
<tr>
<td>MMS Generations Portal Services</td>
<td>Teacher, Staff, Parent, and Student web-based information access</td>
</tr>
<tr>
<td>ePASS</td>
<td>Web-based Personal Literacy Plans and instructional data access.</td>
</tr>
<tr>
<td>TIENet</td>
<td>Special Education Case Management</td>
</tr>
<tr>
<td>AESOP</td>
<td>Employee Attendance Management</td>
</tr>
<tr>
<td>AlertNow</td>
<td>Home to School Voice Messaging System</td>
</tr>
</tbody>
</table>

**Administrative Support > Futures**  **UPDATED 2011-2012**

Our focus over the next year covered by this technology plan is to evaluate advancements in Student Information Systems and the Rhode Island Department of Education Instructional Management System. This may mean replacing currently used systems and adopting new systems, in whole or part. The overall goal is to effectively continue expanding our local data management capacity and integration.

The Pawtucket School Department will continue to focus on “anywhere, anytime” access for its administrators. The Pawtucket school department will expand access to information and information systems to enhance data-driven decision making. The Pawtucket School Department will provide professional development opportunities and documentation to adequately support administrations understanding and use of technology, data, and data systems, and communication and collaboration systems.
SECTION V: Networking, Hardware, Software, Services

The Pawtucket School Department, Office of Technology currently maintains over 80 servers across Pawtucket’s 17 schools and the Administration Building. Each location has a core Novell Server providing common data, storage, print, management, security, authentication and other network functions. Each secondary school and larger elementary school has multiple Microsoft Remote Desktop Servers for application hosting. The Administration building has multiple specialty servers centralizing the district’s web hosting, messaging infrastructure as well as other services. These 80 servers support approximately 2000 desktop computers and 11,000 users.

Infrastructure > Networking > Principles

- Provide a networking environment for students, teachers, staff, and administration that is stable, manageable, and secure.
- Support a networking environment with minimal staffing.
- Build a networking environment that is resistant to budget fluctuations.
- Provide an end user experience that is both simple to utilize and full featured in capability.
- Centrally manage servers, workstations, user accounts, and applications.
- Automate all networking functions such as application distribution, upgrades, and configuration and workstation imaging.

Infrastructure > Networking > Standards  UPDATED 2011-2012

Encompassing a “a best of breed” approach, the Pawtucket School Department will be migrating from Novell networking technologies to those designed and supported directly by Microsoft Corporation.

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migration from Novell Open Enterprise Server to Microsoft Windows Server 2008R2</td>
<td>Core file/data/storage system, print handler, web services, DHCP, etc. Core client/server application environment.</td>
</tr>
<tr>
<td>Migration from Novell eDirectory to Microsoft Active Directory</td>
<td>Core Directory Service provides user authentication, security and management of all employees and students. LDAP enabled for protected web services</td>
</tr>
<tr>
<td>Close out Novell ZEN Management</td>
<td>Server and Desktop Management</td>
</tr>
<tr>
<td>Microsoft Windows Remote Desktop Server</td>
<td>Primary application delivery</td>
</tr>
<tr>
<td>Migrate from Citrix XenServer to Microsoft Hyper-V</td>
<td>Server virtualization and virtual machine management</td>
</tr>
</tbody>
</table>

Infrastructure > Networking > Virtualization and Consolidation  UPDATED 2011-2012

The Pawtucket School Department has extensively tested virtualizing server workloads and systems using Citrix XenServer virtualization management system. Currently XenServer provides server virtualization including intelligent virtual machine mobility, high availability, rapid recovery and performance load balancing.

Going forward, we will continuously access virtualization technologies choosing the most cost effective hypervisor and management technologies to enable server consolidation, simplify server management, improve application development and test, business continuity, reduction in power, cooling and floor space, and easy virtual desktop infrastructure implementation.

Infrastructure > Networking > Local Area Network
**Elementary:** Seven elementary schools have four direct Ethernet connections per classroom. Three elementary schools have a single Ethernet drop in each classroom split by a multi-port switch. All elementary schools have wireless coverage.

**Secondary:** All secondary schools have Ethernet connections to every computer in every lab and a single drop to most classrooms in the school. All Secondary Schools have wireless coverage.

**Infrastructure > Networking > Wide Area Network**

The Pawtucket School Department will continue its migration to Fiber Optic transport for its building to building connections. The goal is to have Local Area Network speed and flexibility over a Wide Area Network. Beginning in the 08-09 school year, Pawtucket Schools began consolidating and virtualizing servers and services at the Administration Building.

In the 09-10 school year, the school department will begin reducing the numbers of physical servers we currently maintain throughout the elementary schools and consolidating them to the administration building. Additional bandwidth between our schools will afford us additional cost reductions and management capabilities...essentially we will be able to “do more for less.”

---

**Consolidation and Virtualization Timetable and Estimated Bandwidth Requirements**

<table>
<thead>
<tr>
<th>Location</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
<th>Bandwidth 09-10 -&gt; 11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration Building</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>100mb -&gt; 1gb</td>
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<tr>
<td>Baldwin</td>
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<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>50mb -&gt; 100mb</td>
</tr>
<tr>
<td>Cunningham</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>100mb -&gt; 100mb</td>
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<tr>
<td>Curtis</td>
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<td>✔</td>
<td>50mb -&gt; 100mb</td>
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<tr>
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<td>✔</td>
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<tr>
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<tr>
<td>JMW</td>
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<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>100mb -&gt; 1gb</td>
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<tr>
<td>Slater</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>50mb -&gt; 1gb</td>
</tr>
<tr>
<td>Tolman</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>100mb -&gt; 1gb</td>
</tr>
<tr>
<td>Varieur</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>50mb -&gt; 100mb</td>
</tr>
<tr>
<td>Winters</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>50mb -&gt; 100mb</td>
</tr>
</tbody>
</table>

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**Infrastructure > Workstation > Standards for Clients and Connectivity**

The PSD technology deployment uses a combination of “thin” computing utilizing Remote Desktop Servers to remotely host and run applications, and “thick” computing to locally host and run applications on individual computers.

Numerous studies show that a thin-client model is the most cost effective offering the greatest TCO (Total Cost of Ownership) and ROI (Return on Investment) as compared to traditional client/server computing. Due to budgetary and staffing constraints, thin-client computing in Pawtucket’s schools will continue to expand.

**Dedicated Thin-Client:** Inexpensive devices designed to connect, and only connect, to a dedicated Remote Desktop Server. Benefits to thin-client devices: no moving parts, very fast
setup time, inexpensive, no virus, no local files to be altered or corrupted, silent, low power consumption, small footprint on desktop. Thin client devices can handle the majority of computing needs and access required by students, instructional, administrative, and supporting staff.

**Traditional Full-Client Desktop/Laptops:** The Pawtucket Schools will deploy a traditional desktops or laptops only when a dedicated thin client is not feasible. Instances may involve special-case scenarios such as an integrated or peripheral device which is not compatible with a thin client, the computer is to be used for advanced design work or intensive multimedia.

**Infrastructure > Workstation > Standards for Distribution**

**Elementary:** Each regular-education classroom has 4 HP Thin Clients connecting to a Windows Remote Desktop Server for application delivery into the classroom. Other classrooms, resource rooms, have one to three thin clients based on need and student count.

**Secondary:** Each computer lab will have at least 28 HP Thin Clients. Each (homeroom/Advisory) classroom has at least one thin client as an academic resource (Internet and applications) and administrative function (messaging, attendance, grading, etc.)

**District:** Any additional equipment as allocated by the district due to grants and other needs are distributed accordingly. Such equipment can include but is not limited to laptops, multimedia desktops, digital projectors, cameras, scanners, networked printers, additional computers or thin client devices, etc.

**Infrastructure > Workstation > Printing**

All network printing will be directed towards shared laser printers. Due to expense and support issues, the district cannot support and afford individualized ink-jet printers. Numerous studies show that a shared printer environment is the most cost effective, offering the greatest TCO (total cost of ownership) and ROI (return on investment), as compared to individualized printing using ink-jet printers. Due to budgetary and staffing constraints, shared laser and workgroup-based printing will continue to be the model. Additionally, all networked printing will be HP JetDirect and Novell NDPS/iPrint compliant for remote printer installation and management via eDirectory.

**Infrastructure > Development Plan**

Where feasible, Pawtucket Schools will deploy thin client devices, both wired and wireless, as the preferred means of general application and resource delivery. Where necessary, the Pawtucket School Department will deploy full client or mobile devices for specialized application or resource delivery. Lowering cost, maximizing security and efficiency, and consolidating resources is paramount.

The rule is simply to run thin, virtual, and remotely. All decisions, purchases, and designs will be weighed against this model.

**Infrastructure > Web Services  Updated for 2011-2012**

The Pawtucket School Department has focused considerable effort in expanding resources hosted and or maintained at the local level. Most of these resources are based on open source code and are no cost to the district. Other systems mentioned are generally considered and carefully selected to be the best and lowest cost in its class.

<table>
<thead>
<tr>
<th>Web Service</th>
<th>System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Site and Webhosting</td>
<td>SchoolCenter</td>
</tr>
</tbody>
</table>
The district’s web services will be the area of considerable future growth as the district’s primary means of communication, information, access to network resources from school and from home, and application delivery. The table below illustrates the district’s current web services.

**Infrastructure > Futures Updated for 2011-2012**

The Pawtucket School Department technology program focuses on Servers and Services. We will work towards universal access (via Terminal and Browser), connectivity (LAN, WAN, Wireless, and Internet) extending technical services and resources throughout the district and from home. The Pawtucket School Department will continue to develop supports for STEM - Science, Technology Engineering and Mathematics.

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>Google Apps for Education</td>
</tr>
<tr>
<td>Personal File Access</td>
<td>Remote Desktop Services / Google Apps for Education</td>
</tr>
<tr>
<td>Shared Document Access</td>
<td>Remote Desktop Services / Google Apps for Education</td>
</tr>
<tr>
<td>Student Information</td>
<td>MMS Generations Web Portals</td>
</tr>
<tr>
<td>Special Education</td>
<td>TIEnet</td>
</tr>
<tr>
<td>ePortfolio</td>
<td>ePass</td>
</tr>
<tr>
<td>Personal Literacy Plans</td>
<td>ePass</td>
</tr>
<tr>
<td>Local Assessment</td>
<td>Various</td>
</tr>
</tbody>
</table>
Policy A: Software Purchasing, Licensing, and Installation

Software > Policies

In addition to the above software purchasing considerations the following policy is in effect to better track licensing and prevent software piracy district: No unauthorized personnel is allowed to install software on any district computer.

For those teachers and support staff who need access to specific applications not otherwise available over the network, a Software Purchase/Installation Request Form is available. On this form you must list the software requested, teacher, student, or computer to access, a demonstrated curricular/academic need for the software, and attach copies of purchase order/receipt and license agreement. You must also seek your Principal's or Director's signature for Academic Approval. The Office of Technology must also grant Technical Approval based on license, platform, hardware and configuration requirements.

Software>Purchase

All future software purchases must be approved by your school principal or departmental director to verify that the software being considered supports the curriculum. In addition, all future software purchases must be approved by the Technology Department to assure system compatibility and licensing requirements. Software will not be installed otherwise. Before to selecting software, please review the Items to Consider When Purchasing Software FAQ.

Approval can be obtained by sending the following information to the Technology Department, Attention: Michael St. Jean:

- Proof of purchase (if available)
- Original license
- No license with purchase-- the Technology Department will make a photocopy of
  the CD to have on file and one license per CD will be assumed
- Media (Disks, CDROM)
- Software Request Form

Any software with the purchase price of $50 or more, should be fully tested to ensure compatibility with the Pawtucket School Department’s systems before multiple licenses are purchased. To purchase software in this category, please send in the completed software request form with minimum system requirements noted. Upon approval, please purchase one license (or obtain a demo) to send to the IT Department to be fully tested. If approved, software will be returned for multiple licenses to be purchased.

Software>Purchase Considerations

1. **Does the software directly correlate with the curriculum and meets or supports standards?** There are thousand of programs vendors want you to buy. Consider only the best, with a direct purpose, focus, and targeting a direct curricular need.

2. **Will the vendor be in business next year?** Please choose a vendor with a history of successful business operations. New vendors should be avoided at first, no matter how innovative the product, due to how volatile and short term the industry tends to be.
3. **What warranty will be provided?** Software must have a warranty. Vendors that do not provide some sort of warranty for their product are to be avoided.

4. **Will the software integrate with other software in use by The Pawtucket School Department?** This is crucial. Although some needs may dictate new systems within the Pawtucket School Department, this is to be avoided as much as possible as it incurs additional costs and time on The Pawtucket School Department’s support infrastructure.

5. **Will the software adapt to The Pawtucket School Department’s Instructional systems standard?** Will the software integrate with the current systems and meet the guidelines for acceptable software in use at The Pawtucket School Department? If you are unsure of these questions, seek the assistance of the Technology Department to help you determine the answer.

6. **What flexibility will it provide?** The software should be "expandable" or easily reconfigured/ updated to meet your future needs. It should also be able to meet projected needs/capabilities that you may have in the near future.

7. **Is the Pawtucket School Department’s current hardware compatible?** Our equipment should be able to run a very broad range of software. However, check with the vendor to ensure basic compatibility with the deployed hardware in The Pawtucket School Department.

8. **Will documentation provided be user friendly?** The software should come with solid, easy to read and understand manuals and help pages. Printed form is preferable over electronic format. Additionally, online web support is a plus.

9. **What training is offered?** Does the vendor provide on-site, train the trainer, or some other training? It is recommended by the Technology Department that any software vendor being considered should be able to provide some form of training, or that training resources be readily available.

10. **What other expenses will be incurred?** Consider the costs of additional hardware, hardware upgrades, training, licensing, ongoing maintenance and support contracts, and re-licensing on a schedule prior to committing to a software product. These costs can sometimes be hidden, thus adding unknowingly to the final cost for the product.

11. **Can the vendor provide modifications?** This is important if the software is "close" to meeting your needs and the vendor is acceptable under The Pawtucket School Department standards. The option, usually at some cost, of modifying a software program should be considered and the vendor questioned to ensure this is a possibility.

12. **Is there an upgrade planned in the near future?** If a vendor plans on a major software revision or upgrade in the near future, waiting for the next version may be something to considered. If the need is immediate, disclosure by the vendor should be made of what impact the upgrade or revision will have on training, usage, hardware requirements, and overall cost (long term).

13. **Is there a vendor helpdesk?** Typically a helpdesk support option is the first, and easiest step, in acquiring support should a problem arise with a product. Make sure your vendor has adequate initial support available to their customers prior to any purchase.

14. **What is the vendor’s reputation?** Any vendor considered by The Pawtucket School Department should have a good business and product reputation. Ask other users of the product and look for third party reviews to help establish this reputation prior to any purchase.
15. **How complex is the installation?** The Technology Department wishes to support all of its users in a timely fashion. Please ensure that the installation of the software is relatively standard. If not, please let the Technology Department know in advance what special actions or activities will be needed to install a particular software product. This will help the IT department prepare adequately and schedule accordingly.

16. **Will the vendor supply names of current users?** When reviewing the reputation and history of a vendor to determine their suitability for providing a product to The Pawtucket School Department, ask for a list of current users of the product you are interested in. The vendor should provide this freely and without hassle. If the vendor does not provide this list, weigh their lack of cooperation accordingly.

17. **Is there a user’s support group(s)?** Determine if groups of users exist and how to contact them. These may range from simple online groups to complicated associations of users across the country. These are sometimes key points for acquiring support on difficult usage issues or problems, as well as good places to cull ideas for further integrating the vendor product into your day to day operations.

**Software > Request Form**

The purpose of this form is to relay your software needs to the Technology Department. Software being purchased must be compliant with the Pawtucket School Department’s systems. To assure that you will receive technical support and/or training, please make sure that you complete the software request and the request is approved by your principal or director and the Technology Department before any purchases are made. Please review the FAQ here, as well as the remainder of the guidelines on this page **BEFORE** submitting a software request form.

**Software > Procedure for Installation**

1. Before software can be purchased, you must do the following:
   - Review the [Items to Consider When Purchasing Software FAQ](#) to ensure that the software will meet your needs and is a good selection for the district.
   - **Complete Software Request** form and submit to your school principal, departmental director, and then to the Technology Department.
   - Receive Software Request form marked Approved.

2. Once approved, after purchase and before software is installed on district computers, the following items must be sent to Michael St. Jean in the Technology Department:
   - The original license agreement.
   - Copy of the Purchase Order (Includes Software titles, Vendor purchased from, and amount of licenses.
   - Media (Disks, CDROM) and installation instructions
   - A list of the school(s), room(s), of the computer the software will be installed on. If it is floating software, it must be removed from one location before it is installed on the next.
   - Your name, department, and phone number should be included.

Correspondence and coordination regarding software installation will take place via email. Software **will not** be installed without prior approval, proof of purchase, and original licensing. If you have any questions, please contact Michael St. Jean (stjeanm@psdri.net) or Lynn Cristina (cristinol@psdri.net).

**Miscellaneous Licensing Terms:**
Standard Licensing - One piece of software to one computer
Site Licensing - One piece of software to many machines
The Software Approval Form and the Software Purchase/Installation Request Form is also available on the district’s website at http://www.psdri.net.
Policy B: Hardware Purchasing, Donations, and Personal Computer Usage

Computer Purchasing

All hardware purchases must be standardized for network integration and support and approved by the Office of Technology. The following are approved platforms:

For Client/Server, or Windows Desktop, purchases must be Tier-One business computers (as opposed to consumer grade) as tested and approved by the Office of Technology running Windows 7 or greater as the desktop operating system.

For Thin-Client, or Remote Windows Desktop, purchases must be tested and approved by the office of technology. The Pawtucket School Department currently approves HP series thin clients.

Benefits: The Dell Optiplex, for example, and other tier-one business model computers are: network ready (with remote management capabilities), 3-yr next business day standard warranty, fully modular design for quick replacement of components and upgrades, and proven reliability. The HP T Series has similar coverage. Additionally, both Dell and HP, for example, are on State of Rhode Island Master Price Agreement guaranteeing educational discounts and, as such, eliminating the bid process.

Printer Purchasing

The office of Technology does not support, configure, or supply cartridges for individual ink-jet printers except in approved scenarios. District printing is standardized on HP Laserjet Printers.

All network printing will be directed towards shared laser printers. Due to expense and support issues, the district cannot support and afford individualized ink-jet printers. Numerous studies show that a shared printer environment is the most cost effective, offering the greatest TCO (total cost of ownership) and ROI (return on investment), as compared to individualized printing using ink-jet printers. Due to budgetary and staffing constraints, shared laser and workgroup-based printing will continue to expand.

Donated Computers

Computers or other equipment donated to an individual classroom, school, department, or program must be approved by the Office of Technology. Often these “free” computers come with great hidden costs in licensing and support. If such equipment meets the district’s standard for networkability, driver and parts availability, and manufacture support, the computer can be fitted for network and Terminal Server access.

Using Personal Laptops in School

Teachers and Staff may use personal laptops in their school or classroom under the following conditions:

- It is understood the Pawtucket School Department retains no responsibility for personal computing equipment which is lost, stolen, or damaged.
- Network access is limited to Wireless and Internet use only.
- All personal laptops must have legally licensed and updated antivirus software installed.
- Employee Wireless Configuration Application form can be found on the district’s website at http://www.psdri.net.
Policy C: ACCEPTABLE USE POLICY

OVERVIEW

The Pawtucket School Department’s network provides access to a wealth of technological resources for the educational advancement of the Pawtucket educational community. All members of the community are expected to act in a responsible manner when using these School Department resources, just as they would in any aspect of their daily conduct at any and all Pawtucket Schools.

Technology has an ever-changing landscape, and new resources present themselves continually. When we engage in the use of The Pawtucket Public School network, ethical standards guide us in its appropriate use, rather than the capabilities or potential applications of the software, computing tools, and devices that we may use. In the online environment, our actions reach far beyond the walls of the Pawtucket Schools, and the consequences of these actions may have far-reaching effects.

DEFINITIONS

- **Users** are members of the Pawtucket educational community—the students, faculty, administrators, staff, alumni, parents, volunteers, coaches, and others—who share the Pawtucket Public School network, Internet, data, and telephone systems.
- **The Pawtucket School Network** comprises all computers, terminals, printers, networks, contracted systems, online and offline storage media and related equipment, software, and data files that are owned, managed, or maintained by the school for use to support academic and administrative activities.
- **Intellectual property** refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. Intellectual property is divided into two categories:
  - **Industrial property**, which includes inventions (patents), trademarks, industrial designs, and geographic indications of source; and
  - **Copyright**, which includes literary and artistic works such as novels, poems and plays, films, musical works, drawings, paintings, photographs and sculptures, and architectural designs.

A. EXPECTATIONS

1. Access to The Pawtucket School's network is a privilege intended to facilitate education, school-related communication, research, and other school business. The Pawtucket School Department reserves the right to limit or prohibit user access to the network in its efforts to maximize network use for academic purposes or as a result of violation of the Acceptable Use Policy.
2. All users are responsible for appropriate use of the Pawtucket School’s technological resources, which include the computer network, computer labs, hardware peripherals, a-v systems, digital boards, communication systems (telephone, email, e.g.), databases, etc.
3. All employees must maintain personal email accounts for non-school related business.
4. Employees must register personally owned computers and personal devices used on school grounds with the technology department prior to connection of any such computer or device to the Pawtucket School network.
5. Any computer or electronic device connected to the Pawtucket School network may be required to have approved anti-virus or system security software installed. Computers or other devices not meeting these requirements may be restricted from the network.
6. Pawtucket School databases that secure information about academic life, community members, and school business are the property of The Pawtucket School Department. Information contained therein is confidential and cannot be distributed or used for personal gain. The Pawtucket School Department reserves the right to restrict access to such databases.
7. Illegal activities utilizing the Pawtucket School network—such as drug or alcohol related activities; threatening the safety of another; vandalism; libel; gambling; promoting a pyramid scheme; distributing illegal obscenity; receiving, transmitting, or possessing child pornography; infringing copyrights; making bomb threats; unauthorized access to another’s computer—are strictly forbidden and may be reported to the authorities.

B. RESPONSIBLE USE OF THE PAWTUCKET SCHOOL NETWORK

1. Engaging in any activity that threatens the integrity of The Pawtucket School network is prohibited. Physical or electronic tampering with computer resources is not permitted. Personal networking equipment such as servers, routers, switches, hubs, and wireless access points, mobile hotspots are not permitted on The Pawtucket School network without approval of the Technology Department. Unauthorized or inappropriate access to password-protected data, intentionally damaging computers, technology peripherals or computer networks is subject to disciplinary action. Suspected abuse of network systems should be reported immediately to the technology director, principal or other administrator.

2. Users must not attempt to fix, re-configure, disconnect, or relocate any of the school’s equipment, including data or voice jacks, printers, wireless access points, peripherals, etc. Please contact the Pawtucket School Department’s Technology Department for assistance.

3. Online entertainment activities such as video game playing, non-academic video and audio streaming, and instant messaging compete with academic uses of network resources and are prohibited on school or personally owned equipment in the libraries, computer labs, and classrooms without teacher permission. This prohibition will be extended to the hallways and other public spaces in order to free up bandwidth for educational purposes, if necessary.

4. Users will respect all copyright, trademark, and other laws governing intellectual property. No software may be installed, copied, or used on School equipment except without academic permission by the school principal or review by the Technology Department staff, and as permitted by law. All software license provisions must be strictly adhered to.

5. Use of The Pawtucket School network for personal purposes, commercial purposes, advertising, personal profit, unauthorized fundraising, or political lobbying/campaigning is prohibited.

C. ELECTRONIC COMMUNICATIONS

1. The contents of any electronic communications, including email, instant messaging, listservs, blogs, wikis, social networking sites (Facebook, MySpace, LinkedIn, Twitter, etc.), should be composed with utmost care. Because many of these tools occupy online public spaces, the potential to bring harm to oneself, to others, and to the Pawtucket Educational Community must be recognized, as recipients may forward messages to locations where there is no control over future dissemination. Please respect the rules and regulations required of any communication representing the Pawtucket Schools in the electronic environment. Please also refer to Pawtucket’s Social Networking Guidelines for guidance.

2. The Pawtucket School Department reserves the right to review Internet usage and access data files, email, and other communications utilizing the Pawtucket School network. Accordingly, members of the Pawtucket School community should have no expectation of privacy with respect to any such usage, files, or communications.

3. All users must respect and value the privacy of others, behave ethically, and comply with all legal restrictions regarding the use of electronic data. All users must also recognize and avoid violating or infringing the intellectual property rights of others.
D. SAFETY

1. Using online resources to threaten, intimidate, or harass an individual or group will not be tolerated and will be subject to disciplinary action.
2. Using electronic communication tools to invade an individual’s privacy, harass an individual, or offend an individual could result in criminal and/or civil action.
3. Information contained in student or personnel records is confidential and in many cases that information is protected by federal and state law. Concerns about confidentiality should be discussed with the appropriate administrator or supervisor.

E. APPLICABLE SCHOOL POLICIES AND FEDERAL/STATE LAWS AND RESOURCES:

- Pawtucket School Student Handbook
- Federal Copyright Law: Intellectual property, the works of authors and artists, is protected by federal copyright laws which restrict the reproduction, performance, adaptation, and distribution of literary works, sound recordings, art work, video recordings, and films in any format without the expressed consent of the author/artist. Fair use guidelines for educational purposes permit use of limited amounts of material for teaching purposes. Please check on applicable rules and regulations before using any such material in classes and always cite the source.
- United States Copyright Office
- What is Copyright? (U. S. Copyright Office)
- Understanding Copyright and Related Rights (World Intellectual Property Organization-UN)
- Copyright and Fair Use in the Classroom, on the Internet and the World Wide Web (University of Maryland University College)
- Federal Wire Fraud Law: Federal law prohibits the use of interstate communications systems (phone, wire, radio, or television transmissions) to further an illegal scheme or to defraud.
- Federal and Rhode Island Child Pornography Laws: Federal and state laws make it a crime to produce, possess, distribute, or sell pornographic materials that exploit or portray a minor. Increasingly, child pornography laws are being utilized to punish use of computer technology and the Internet to obtain, share, and distribute pornographic material involving children, including images and films. (From FindLaw)

The Pawtucket School Department respectfully acknowledges the following schools whose policies were utilized with permission in developing this comprehensive policy for the Pawtucket Public School Educational Community: The Pingry School, The Hotchkiss School, The Lawrenceville School, The Peddie School, Phillips Exeter Academy, Yale University, Stanford University, and Cornell University.
Policy D: SOCIAL MEDIA GUIDELINES FOR STUDENTS AND STAFF

OVERVIEW

The Pawtucket School Department recognizes the rights of students, faculty, and employees who want to participate in online social networking. While there are numerous benefits to be derived from social networking, we wish to remind our staff and students that there have been a number of problems associated with their use that could negatively affect the educational environment. We promulgate these guidelines to help staff and students alike from encountering these problems.

STUDENTS

The Pawtucket School Department encourages students to set and maintain high ethical standards in their use of social networking and also wishes to give students the knowledge and the tools to protect themselves while online.

- Social media venues are public and information can be shared beyond your control. Be conscious of what you post online as you will leave a long-lasting impression on many different audiences. Therefore, you are strongly advised not to post or link anything (photos, videos, web pages, audio files, forums, groups, fan pages, etc.) to your social networking sites that you wouldn’t want friends, peers, parents, teachers, college admissions officers, or future employers to access. What you present on social networking forums represents you forever.

- Privacy settings can help you to control access to your network, web pages, profile, posts, blogs, wikis, podcasts, digital media, forums, groups, fan pages, etc.

- Online stalkers and identity thieves are a real threat. Never share personal information, including, but not limited to, social security numbers, phone numbers, addresses, exact birthdates, and pictures with parties you don’t know or on unsecure sites.

- Users should keep their passwords secure and never share passwords with others. If someone tampers with your blog, email, or social networking account without you knowing about it, that person can misrepresent himself or herself as you, and engage in activities that might cause people to develop a negative impression of you.

- While on school grounds or during school activities, no student shall post, forward, or otherwise disseminate any data, documents, photos, images, videos, or other information using any technology medium, including social networking sites (e.g., Facebook, MySpace, Twitter, Flickr) that is abusive, obscene, vulgar, threatening, harassing or defamatory.

- The above prohibition also applies to conduct off of school property has materially and substantially disrupted the educational process, or is reasonably likely to do so.

FACULTY & STAFF

- Always remember that any information that you post or share online can be accessed by current and prospective students, faculty, staff, alumni, parents, school counselors, the media, or future employers. This information may have a negative effect on your relationships with these individuals, and may affect your ability to perform your job duties.

- One way to protect information that you would not wish the school community to see to establish separate personal and professional social network accounts.
• Another way to protect information that you do not wish to share with the school community is to utilize privacy settings to control access to your network, web pages, profile, posts, blogs, wikis, podcasts, digital media, forums, groups, fan pages, etc.

• Another way to protect information that you do not wish to share with the school community is to accept social network invitations only from people you know. Remember that one of the pitfalls of the online community is that people are not necessarily who and what they claim to be.

• Recognize that many former students have online connections with current students. Information shared with school adults and former students may be seen by current students.

• Remind your network friends of your position as an educator whose profile may be accessed by current or former students. Regularly monitor posts linked to your network, in the event that one of your network friends posts inappropriate information on your network.

• Always remember that none of these methods are foolproof. In the end, it is always possible that the information that you post or share online may be circulated to an unintended audience, or that unauthorized persons may obtain access to your social networking accounts.

• To protect your privacy and the School, and to avoid any question of inappropriate fraternization, “friending” students or alumni under the age of 18 is strongly discouraged.

• In order to avoid the appearance of favoritism, “friending” current parents is discouraged.

• Never post private or confidential information online about Pawtucket Schools, parents, or students.

Resources: socialmediaguidelines.pbworks.com
Faculty, staff, and students should also refer to the Pawtucket School Department Acceptable Use Policy for further guidance.