

East Providence Public Schools

District Technology Plan

2011-2013

EXECUTIVE SUMMARY

Good instruction can be enhanced by thoughtful applications of technology and can engage and encourage all ages of students and teachers in learning. On-going professional development and a consistent investment in the technology infrastructure is crucial to make a systemic change from technology as an application that is taught a separate class that enhances student's basic technology skills to teaching environment that laces effective technology throughout the school day. Instructional use of technology is not limited to interactive whiteboards or the Internet, but to also use technology such as databases to accumulate and organize raw data into information that can be aligned to state standards while providing an avenue for teachers to analyze their own classroom data.

Over the last three years, the East Providence School District has worked to improve access to technology for all students, teachers, and staff. This new plan will serve as a review of our progress to date, and map a path to our future. A commitment has been made to provide funds to replace outdated computers and switching equipment, launch a new Student Information System, and hire a technology staff. Invigorated by this new commitment, the school district can begin to develop a comprehensive and equitable infusion of new and emerging technologies within all disciplines, at all levels and supported by the community both philosophically and financially.

The district has set as major goals to enhance the district's capacity to utilize technology both as an instructional and administrative tool. This goal is not an isolated goal but linked to other district goals. The yearly School Improvement Plans reflect the continued effort to integrate technology with the focus on maximizing teacher and student productivity, improve teaching and learning, improve communication skills, provide access to unlimited resources and to increase student achievement.

METHODOLOGY

1. Review district materials including:

- East Providence Schools Technology Plan 2000-2010
- Computer and software inventory
- Network configuration including local and wide-area network
- Existing technology staff organization including job descriptions
- Review SASI to PowerSchool conversion and implementation timeline
- Review 2004 SALT Survey
- Review 2008 NEASC report

2. Conduct site visits-equipment

- Review classrooms for existing technology including number of computers per classrooms, printers, data drops, telephones, intercoms, printers, interactive whiteboards, LCD projectors, T1 calculators.
- Review server areas to determine server capacity, electrical capacity and protections
- Review network switch closets or areas for port capacity, wiring (fiber/copper), electrical surge protection, adequate environmental factors
- Test bandwidth on internet connections
- Review telephone and fax equipment

3. Conduct site visits-personnel

- Review and discuss Central Office needs
- District Special Education leadership
- District Assistive Technology personnel
- Elementary principals
- Secondary principals
- Custodial and maintenance staff

REVIEW OF CURRENT TWO-YEAR TECHNOLOGY PLAN

2008-2009 Technology Plan Goals

Results

Infrastructure Goals:

1. Full Automation of high school, middle school libraries
2. Continue to maintain systems and equipment replacing obsolete technology.

1. Complete
2. Equipment repaired on an as needed or break/fix basis.

Professional Development Goals:

1. Provide training on computer use and software applications to support teaching and learning.
2. Revise Student Technology Benchmarks Grades 1-8.

1. Seven teachers attended summer 2008 RITTI training.
2. Not completed

Teaching and Learning Goals:

1. Implement Student Technology Benchmarks Grades 1-8
2. Implement digital student portfolios Grades 9-12

1. On-going
2. E-portfolios implemented in 9-12

Coordination, Planning & Evaluation Goals:

1. Continue to implement School Improvement Plans
2. Determine technology needs
3. Evaluate professional development opportunities
4. Review SALT Survey professional development request data

1. On-going
2. On-going
3. On-going
4. Complete

2009-2010 Technology Plan Goals

Infrastructure Goals

1. Continue to maintain systems and equipment replacing obsolete technology.
2. Increase the number of drops to classrooms
3. Add wireless connectivity

Professional Development Goals:

1. Provide training on computer use and software applications
2. Review formal professional development programs
3. Review Student Technology Benchmarks Grades 1-8

Coordination, Planning & Evaluation

1. Continue to implement School Improvement Action Plans
2. Determine technology needs
3. Review and possibly implement new Student Information System
4. Evaluate professional development opportunities
5. Review SALT survey professional development request data

Results

1. Replacement of RMS, MMS and Elementary switches and servers schedules for summer-fall of 2009.
 2. District filed for new hardwiring for 4 elementary schools Through 2009 E-Rate filing. No decision has been issued.
 3. Areas of wireless connectivity will be added to all schools Summer-Fall of 2009.
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1. Seven teachers attended summer 2008 RITTI training
 2. New Assistant Superintendent of Curriculum, Assessment and Professional Development currently reviewing program as of April 2009.
 3. New Supervisor of Instructional Technology to review Student Technology Benchmarks Grades 1-8
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1. On-going
 2. On-going
 3. New Student Information System to be rolled out September 2009
 4. On-going

AREAS OF STRENGTH

1. Individual technology success stories at all levels

Successful technology integration strategies can be found in a variety of formats currently available to students. Middle School curriculum offers robotics and state-standards aligned technology skill training in current office productivity software. A recent evaluation of eighth grade student proved that a majority of students had demonstrated technology proficiency as required by the state. While learning communities are informal and building-based, the collaboration has fostered increased use of instructional technology.

2. Teachers participation in RITTI every year.

Teachers take advantage of professional opportunities presented by Rhode Island's Department of Education.

3. Technology courses consistently available at Middle and High School. Technology has been included as a graduation requirement. Science Department at the High School has two mobile laptop labs.

Students have the opportunity to take technology courses at all Middle and High Schools. The courses include office productivity courses like Microsoft Word and Excel, but also a Robotics course. The Science Department at the High School has two mobile laptop labs which are available for use.

4. Implementation of Student digital e-portfolios.

The High School has implemented digital e-portfolios and has provided specific computer labs for e-portfolio work.

5. Library media resources at Middle and High Schools

The library staff has installed a computer based library catalog that allows students to use the Town or State resources. This resource is available on the internet for all students.

6. Assistive Technology personnel available to all schools.

Special Education students have access to assistive technology resources and personnel across the district. The Assistive Technology Specialists are included in Individual Education Plan (IEP) meetings to assess and monitor student progress using assistive technology. Evaluations for technology are provided on-site.

HARDWARE GOALS

East Providence will focus on building a network that supports current technology and allows the district to move forward in the delivery of technology services to students and staff.

Evidence of Need:

85% of current networking equipment is over 11 years old and unable to support existing technology standards.
 Computer inventory is limited and outdated. Computer to student ratio calculated with administrative/teaching computers.
 90% of servers are 10 years old and shackled with running an operating system beyond the server capacity.
 Internet bandwidth not acceptable at 3MB for middle and elementary schools.

Strategies (List all of the activities that will help you meet your improvement objectives)	Person(s) Responsible for Implementing Strategy	Resources Needed (Include staff development needs)	Dates of Activity		Success Indicators (How will we know the objective was attained?)
			Start	End	
Replace existing network equipment district-wide with Equipment wireless and VOIP ready. Increase internet access at all locations	Technology Staff	<ul style="list-style-type: none"> Budget 	9-09	9-11	<p>The district network can deploy wireless access units, run current capacity through all ports.</p> <p>Internet speeds at all locations run at 20MB or more to support effective business and educational needs.</p>

Replace current computer inventory. A standard service and replacements strategy is in place.	Technology Staff	Budget: Computer Hardware	9-09	9-11	Computers are current and in working order. A student to computer ratio of 1:3 is available district-wide. Plans are in place for 1:1 technology for students.
Replace server inventory.	Technology Staff	Budget item: Computer Maintenance	9-09		Servers are current, managed and running at optimal speeds.
Install proper backup, archival, Firewall technologies	Technology Staff	Budget:	9-09	9-11	Systems are properly backed up and stored. A rigorous security program is documented and followed.
Review existing electrical capacity for computer and server areas.	Technology Staff	Budget	9-09	9-10	Electrical sources are steady and managed properly. Black/Brownouts uncommon. District wiring follows proper electrical Code.
Inventory program is implemented.	Technology Staff	Budget	9-09	9-10	Computers, servers, TVs, laptops, software, and other equipment is labeled, entered into a database and managed. A process for entering, exiting and verifying inventory is in place.

SOFTWARE GOALS

A body of instructional software will be identified and evaluated in all K-12 core content areas. Software will be systematically evaluated, reviewed by teachers and accepted into the core curriculum as a tool to enhance the learning experience, engage students and teachers in the process of learning, and proven to increase student achievement.

Evidence of Need:

The district has lacked direction and financial resources to integrate software in the K-12 curriculum. The district's software resources are limited to office productivity, which while a necessary component of a successful technology plan, does not take advantage of the current body of instructional software which includes online math and science manipulatives, speech recognition based reading software, state-standards aligned streaming video portals and animations. A district standard for software purchases should be implemented, including technical specifications and an evaluation rubric that implements a scored assessment value as well as a narrative assessment.

Strategies (List all of the activities that will help you meet your improvement objectives)	Person(s) Responsible for Implementing Strategy	Resources Needed (Include staff development needs)	Dates of Activity		Success Indicators (How will we know the objective was attained?)
			Start	End	
Invite teaching staff to participate in software evaluations in all K-12 core content areas.	Assistant Super C.A.PD. Curriculum Coordinator Director of Technology Supervisor of Instructional Technology	<ul style="list-style-type: none"> Content areas prioritized Initial software previews Evaluation rubric Pre-test/Post-tests for students Software evaluations Analysis of student achievement and teacher recommendations 	9-09	9-11	<p>Curriculum will be enhanced by software in all content areas.</p> <p>Systemic change in delivery of instruction at all levels.</p> <p>Collaborative and data-based decisions for investments</p>
Increase access to research-based interventions using technology in the classroom to support district-wide Response to Intervention (RTI).	Assistant Super C.A.PD. Curriculum Coordinator Director of Technology Supervisor of	<ul style="list-style-type: none"> Analysis of current district test data Identify content area of focus Software evaluations Hardware/Computers/Softw 	9-09	9-11	<p>Teachers will have research-based intervention tools available in their classroom available for students.</p> <p>At-risk students will use technology-based interventions to support and remediate skill or</p>

	Instructional Technology	are installed in classrooms			content area.
Technology applications for Special Education students will be identified and implemented.	Director of Pupil Personnel Assistive Technology Specialists Director of Technology	<ul style="list-style-type: none"> Existing software and hardware to be catalogued. Evaluations of existing strategies to be reviewed Plan developed to increase opportunities for student use of assistive technology 	9-09	9-11	<p>Assistive Technology resources will be organized and catalogued.</p> <p>Students and staff will have access to assistive technology resources</p> <p>Professional development will be provided to support successful strategy.</p> <p>Data will be collected to identify success or failure of strategy.</p> <p>Data will be shared with appropriate parties and additional plans will be implemented.</p>

INSTRUCTIONAL TECHNOLOGY, PROFESSIONAL DEVELOPMENT AND DATA CULTURE

Good instruction can be enhanced by thoughtful applications of technology and can engage and encourage all ages of students and teachers in learning. On-going professional development is crucial to make a systemic change from technology as an application that is taught a separate class that enhances student's basic technology skills to teaching environment that laces effective technology throughout the school day. Instructional use of technology is not limited to interactive whiteboards or the Internet, but to also use technology such as databases to accumulate and organize raw data into information that can be aligned to state standards while providing an avenue for teachers to analyze their own classroom data.

Evidence of Need:

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Strategies (List all of the activities that will help you meet your improvement objectives)	Person(s) Responsible for Implementing Strategy	Resources Needed (Include staff development needs)	Dates of Activity		Success Indicators (How will we know the objective was attained?)
			Start	End	
District will investigate interactive whiteboards, LCD projectors, students response systems and document cameras as tools for each classroom to effectively engage students, improve instruction and increase student achievements .	Assistant Super C.A.PD. Curriculum Coordinator Director of Technology Supervisor of Instructional Technology	<ul style="list-style-type: none"> • Pilot testing of boards • Budget allocated for purchase and installation of classroom tools • Continual professional development in varied formats to support integration including classroom modeling, on and offsite training. 	9-09	9-11	Teachers use a variety of interactive tools to engage students in learning. Teachers have opportunities throughout the year to further their comfort level with using interactive tools Teachers collaborate and share lesson plans and teaching methods that integrate technology tools on an on-going basis.
District will provide substantial and sustained professional development to teacher and staff.	Assistant Super C.A.PD. Curriculum Coordinator Director of Technology	<ul style="list-style-type: none"> • Available computer lab to provide professional development. • Online professional development portal for 	9-09	9-11	Teachers engage in professional development in a variety of formats throughout the year. Professional development courses are easy to locate online and allows

	Supervisor of Instructional Technology	<p>course offerings, notification and management.</p> <ul style="list-style-type: none"> Professional development offered in a variety of time and instruction formats including in-class modeling, after school workshops, summer boot camps, PD portal and Instructional Technology website 			teachers to register online.
Data collection and assessment will be included in all levels of the district strategy.	Assistant Super C.A.P.D. Curriculum Coordinator Director of Technology Supervisor of Instructional Technology	<ul style="list-style-type: none"> Instructional software will include a database to record student achievement. Student information system will be fully utilized, including all grades and homework. Parents will have online access to gradebooks. District will provide access to administrative and principals to NECAP and other local assessment data for analysis and planning. 	9-09	9-11	<p>Instructional software purchased for student use will include databases to track student achievement.</p> <p>SIS system will contain current grade and homework information for parents and staff.</p> <p>District Administrator and principals will use NECAP and local assessment data to evaluate and plan district teaching strategies.</p>