



Schenectady City Schools

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Schenectady City School District

Technology Plan 2013-2016

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Mission Statement

The Schenectady City School District will incorporate technology as a natural part of education through an integrated, comprehensive framework to govern acquisition, application, and evaluation of technology. This will ensure that all students have the opportunity to be productive citizens in an information-driven, global society. The use of technology will be curriculum driven and will be equitably integrated into the total school environment. Technology needs to support the high quality instruction provided by our teachers.

Background

The Schenectady City School District is a large urban school district with a K-12 student population of 10,091. Approximately 67% of our students are minorities and over 70% of our students are eligible for a Free or Reduced Price Lunch. One indicator of wealth is the Combined Wealth Ratio, and Schenectady's is .036 with 1.0 being average. Our community has the 13th highest rate of poverty in the nation. We have 19 school buildings: 1 High School, 1 Alternative High School, 1 Middle School, four K/1 to 8 schools, nine K/1 to 6 elementary schools and two Prek/K schools.

The past several years, pursuant to the Technology Plan, the District has spent its efforts building a technology infrastructure which will enable the District to support a technology-enriched education for all of our students. Every classroom in the district is wired for Internet and Video Conferencing. As a result, our plan will focus on increasing student achievement through appropriate use of technology, professional development to use the resources we have, and exploration of new techniques based upon data to incorporate technology in the delivery of curriculum.

The Schenectady City School District is challenged by the underperformance of our students. During the 2012-13 school year, due to this underperforming status, the District was designated a Focus District, which has qualified the district for a \$2 million Systemic Support Systems Grant. Through this grant, the Schenectady City School District is engaged in a partnership led by New York University's Metropolitan Center for Urban Education to affect systemic turnaround, building capacity in all schools and closing student achievement gaps across all student sub-groups. Supporting partners for this systemic turnaround process include: the District Management Council, the New York State Technology Enterprise Corporation (NYSTEC), Learning Technology Visions, and the Northeast Regional Information Center (NERIC). Metro Center continues to train staff in how to lead and manage a system to close achievement gaps and improve instruction for all students. Our other partners help us create the quality elements of that system – instructional design elements, assessments and data systems.

In addition to the Systemic Supports Grant, all of our schools went through the Diagnostic Tools for School and District Effectiveness process as identified by the NYSED. Through this process, areas of strengths and challenges were identified by building, which also included instructional technology. Each school is now required to develop a School Comprehensive Improvement Plan in order to address the challenges and recommendations identified through this process. These recommendations also include the integration of instructional technology in the classroom.

During the 2012-13 year, the District's Technology Planning Committee (See Attachment _) met regularly to determine the technology objectives for the District in the next phase of technology planning and improvements. This plan is a product of those meetings, and the committee will continue to co-steer, design, and implement the technology vision for the District.

Current Program Status

Success Maker software is used for Math and Reading in grades 1-7. Students spend a certain amount of time per week working with the software under the supervision of the teacher. The software content aligns well with NY State Learning Standards.

Fast ForWord software is a reading intervention program for the K-12 environment where we have had success since its introduction in 2008. The Fast ForWord program develops and strengthens memory, attention, processing rate, and sequencing – the cognitive skills essential for reading intervention program success. The strengthening of these skills results in a wide range of improved critical language and reading skills such as phonological awareness, phonemic awareness, fluency, vocabulary, comprehension, decoding, working memory, syntax, grammar, and other skills necessary to learn how to read or to become a better reader.

At the Secondary level, the District is a CISCO Support Academy. In partnership with the Capital Region BOCES, the District offers CISCO certified courses to Schenectady students and other students who participate in the BOCES coser. In addition, the District has a staff member who is a certified CISCO trainer, and in partnership with RPI provides support to CISCO Academies throughout the region.

In addition, there are web-based software solutions that we currently use to support instructional decisions. These include:

- Performance Plus- manages our assessments and the data for DDI
- Curriculum Connector- curriculum mapping software to align curriculum to the Common Core Learning Standards; and
- Naviance: a college and career readiness platform that helps connect academic achievement to post-secondary goals. Its comprehensive college and career planning solutions optimize student success, enhance school counselor productivity, and track results for school and district administrators.

Telecommunications

Voiceover Asynchronous Transfer Mode, or ATM, is a multi-service, high speed, scalable technology. It is a dominant switching fabric in carrier backbones, supporting services with different transfer characteristics. ATM simultaneously transports voice, data, graphics and video at very high speeds. Every classroom and office in the district has a telephone connected to the ATM network. The district is looking to move away from the ATM platform over the next three years. In addition, Microsoft Outlook provides a graphical interface to interact with the voicemail and messaging features of the phone system.

Video Conferencing – The School Station 5 incorporates advanced data conferencing capabilities allowing you to turn any video conference into a fully interactive workgroup meeting with a click of the mouse. Utilizing the H.264 video standard the School Station 5 can be used as a multimedia workstation allowing an array of equipment to be used for class presentations, trainings and communication collaboration using various forms of interactive media.

Portable Video Presentations – Studio-2-Go is a portable live event system that is a turn-key solution for transmitting and recording presentations, morning announcements, commencements, sporting events, etc. The system consists of all the pieces needed to produce real-time events over the school network.

Video over Network – Vbrick solution allows the district the ability to deliver IP video from anywhere to anyone. This web-based solution allows us to stream video, manage and control content and display content to all various types of media equipment from your Windows or Mac computers or devices.

Windows 2003 & 2008 Steaming Media Servers - Currently using this technology – described by Microsoft as the “highest quality audio and video at any connection speed with the Windows Media Format for audio and near-broadcast-quality video, using less bandwidth compared to other formats; and integrated intelligent streaming that automatically adapts the quality of streaming broadcasts based on network availability and connection speeds” – to deliver professional development opportunities over the Internet.

Strategic Goals

Strategic Goal 1 - All teachers will have equitable access to technology.

In a school district with 19 school buildings, we recognize our economically challenged school district must focus on identifying what equitable access to technology for teachers means. Furthermore, we must maintain focus on ensuring the implementation of equitable access to technology. The committee's assessment was that equitable access by teachers is vital to providing equitable educational opportunities to all of our students.

Action Plan

1. The District will define what equitable access to technology means and then identify and prioritize the needs of each school building.
Target completion date: November 1, 2013
2. The District will purchase items needed using General Fund monies and General Purpose vouchers available to the District as a result of the Microsoft Corporation Antitrust Settlement for Schools in New York State (Cy Pres Fund).
Target completion date: December 1, 2013

Strategic Goal 2 – All students will successfully meet a core set of technology standards throughout the K-12 continuum.

The committee identified that students will need to have a core set of technology skills for them to perform successfully on the online assessments currently required to begin in September, 2014. Even beyond school assessments, technology skills will be critical for students to be career and college ready when they leave the Schenectady City School District.

Action Plan

1. The Technology Committee will be responsible for defining the core set of technology standards throughout the K-12 curriculum, with reliance on the NYS Technology Standards and the International Society for Technology in Education (ISTE) standards.
Target completion date: November 30, 2013
2. The Technology Committee will be responsible for identifying benchmarks, how to measure, analysis, data sources, analysis frequency and specific tasks and activities to implement the K-12 curriculum.
Target completion date: December 20, 2013

Strategic Goal 3 – All teachers will utilize technology to foster a student-centered learning environment encouraging creativity, inquiry-based learning, higher-level thinking, and the development of 21st Century Skills.

The committee was clear that high quality instruction provided by a teacher is a critical factor of a student's achievement. Technology is an effective tool to enhance high quality instruction, but will not replace a teacher's high quality instruction. With limited resources, professional development will need to be focused and highly effective. Focus areas will include, integrating technology, existing or new, with the Common Core Curriculum, addresses the needs

of diverse learners and the needs of our specific student population. All professional development will be supported by data and shall be research based. Teachers will continue to learn how to use data to inform their teaching and instruction, and monitor student progress.

The District shall build upon the existing professional development opportunities offered through the District's Teacher Center, which is funded by NY State and the District's General Fund to offer training and an array of resources to District staff.

Action Plan

1. The Technology Committee will be responsible for identifying areas in which professional development is needed.
Target completion date: November 30, 2013
2. The District will be responsible for implementing professional development opportunities for teachers.
Target completion date: December 20, 2013 for the plan, implementation will be ongoing.
3. The Technology Committee will be responsible for identifying areas in which resources can be provided to support teachers in their ongoing use of technology. These resources shall be readily accessible and communicated to all teachers.
Target completion date: November 30, 2013

Future Plans

The Schenectady City School District has initiated a pilot program to expand the use of virtualized desktops to students in two elementary schools. The District has had limited virtualized desktop environment, but based upon the successful pilot program will be implementing virtualized desktops for students in all the schools during the 2013-14 school year. This move will allow for upgrade to Windows 7, Office 2010 or better, as well as improved control of the increasing use of mobile devices including Ipad and Kindles.

The District will be looking to revamp its website and will be exploring ways for technology to assist with the non-instruction business support functions of the School District. District management will also be re-examining the printer and copier strategies of the district.

ATTACHMENT B

Technology Equipment Inventory By Building

	Grades	Students	Computers	Laptops	IPAD	LCD projectors	ELMOs	Printers
Blodgett	Pre-K	23	27			1	1	
Central Park	K-8	731	240	156		49	37	20
Elmer	1-6	385	110	10		16	19	7
FDR	K-6	158	22	41		6	6	8
Fulton	Pre-K	168	44	5		2	1	11
Hamilton		438	153	8		13	4	8
Howe		284	47	62		6	5	13
Keane		315	99	79		16	17	9
Lincoln		334	121	36		11	6	10
MLK	K-8	595	228	51		34	39	31
Paige	1-8	470	135	70		25	25	8
Pleasant Valley		510	131	42	20	26	2	5
Van Corlear		400	98	45		11	6	12
Woodlawn		448	167	8	1	9	8	11
Yates		393	116	58		13	2	9
Zoller	1-8	455	96	97		14	11	12
	Totals	6,107	1,834	768	21	252	189	174

ATTACHMENT B (Cont'd)

**Technology Equipment Inventory
By Building**

	Airliner	Laptop Carts 30 per cart	Smart boards	Smart Response	Smart Tables	Studio 2 Go
Blodgett			4			
Central Park	3	4	10			
Elmer			6			
FDR		1	4			
Fulton			3			
Hamilton			11			
Howe		1	2			
Keane		2	5			
Lincoln	1	1	4			
MLK	1	1	28	4		1
Paige		2	13	1		
Pleasant Valley		1	5			
Van Corlear		1	9			
Woodlawn			7		2	
Yates		1	13		1	
Zoller		2	5	1		
Total	5	17	129	6	3	1

ATTACHMENT C

Computer Software

<u>Software Title</u>	<u>Quantity</u>
Adobe Acrobat Professional 7.0	50
Adobe Acrobat Professional 9.0	5
Adobe Creative Suites Premium 1.0	30
Adobe Creative Suites Premium 2.0	28
Adobe Go Live CS2	50
Adobe In Design	39
Adobe Live Motion 2.0	50
Adobe PageMaker 6.5	120
Adobe Photoshop 4.0	100
Adobe Premiere 5.1	40
Adobe Premiere Pro 7.0	50
Adobe Web Design Suite	100
Altiris	3,900
Autodesk	30
Boardmaker	
CCC Success Maker	1,780
CO Writer 4000/ Writing Solution	
Companion Library Automation Software	430 5
Corel	1,200
Dyknow	1,170
Encore	15
Faronics Deep Freeze	208
Front Page	100
HP Learning Paq	411
Inspiration v6.0	204
Inspiration v7.5	284
Macromedia Web Design Suite	30
Math pert	30
MXM4.0	21
OPALS	21
Partnership for Innovative Learning Pro Desktop	300 29
Pearson Scott Foresman	2
PlanPlus	34
ReadingA-Z	36
Rockware mapping our World	11
Scantron Achievement Series	
SoftChalk	
TrendMicro	5,500
VB6	115

ATTACHMENT C (Cont'd)

District Licenses

Advenet Help Desk	Pentamation E-School Plus
Adventnet Op Manager	Part200
Adventnet Security Manager Plus	PD Express
Finance Manager	Turbo Psych Writer
Learning.Com	

Building Site Licenses

Adobe Creative Suites Premium 5.0	Global History & Geography DB
Basic Mathematics DB	IRM
Biology DB	Knowledge Adventure
BlackBoard	Living Environment
Chemistry DB	Math A/ Math B Database
Cognitive Tutor Integrated Math	Physics DB
Discovery Health	Read 180
Discovery Streaming (17)	Sunburst
Earth Science	Trusmart
Fast For Word (6)	US History & government DB
Geometer's Sketchpad	

ATTACHMENT A

Schenectady City School District Technology Planning Committee

Primary Charges

1. Formulate a vision for technology, develop a long-range plan, and ensure our school district has 21st century technology in all of schools; and
2. Develop goals, strategies, action plans and timelines for:
 - ✚ Standards-based Learning and Student Academic Achievement through Technology Use;
 - ✚ Access to Advanced Technology for Effective Teaching and Learning;
 - ✚ Technology Integration and Use through Effective Professional Development;
 - ✚ Research-based Technology Programs and Accountability Measures; and
 - ✚ Effective and Integrative Uses of Resources for Educational Technology Infusion.

Progress Reports

The work of this committee is very important, should not be rushed and could take many months to complete properly. Progress reports should be presented to the superintendent periodically.

Technology Planning Committee Members	
<u>Steering Committee Co-Chairs</u>	
Kimberly Lewis, District Director for Business and Finance	
Lori McKenna, District Director of Planning and Accountability	
✚ Andrew Yauchler	✚ Bruce Turek
✚ Kristen Majkut	✚ Jim Leupold
✚ Tracy Standhart	✚ Becky Cornick
✚ Danielle Bouton-Wales	✚ Heidi Murray
✚ Peter Robinson	✚ Gary Putman
✚ Chris Greco	✚ David Weiser
✚ Deb MacDerment	✚ Brian Hogan
✚ Diane Wilkinson	✚ John Mootoveren
✚ Gregory Fields	✚ Mai Cortes
✚ Laura Birchak	✚ Patrick McCloskey
✚ David Versocki	✚ Rick Reynolds