

Brooklyn Schools



**Technology Plan
2006-2009**

EDUCATIONAL TECHNOLOGY PLAN – July 1, 2006-June 30, 2009

District/Agency:	Brooklyn Public Schools	
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Signature of Superintendent:		Date: April 12, 2006
Date Submitted to Board of Education:		
Date Approved by Board of Education:		

For RESC/SDE Use Only:

RESC Regional Reviewer:		Date:
RESC Recommendation for Approval:	Yes / No / Conditional	Date:
SDE Authorization:		Date:

Technology Plan Preparation Check-Off Page

The submitted plan has the following:

- Cover Page
- Technology Plan Preparation Check-Off Page
- LEA Federal Grant Program Compliance Form
- LEA Profile
- Technology Planning Committee
- Vision Statement
- Needs Assessment
- Goal 1
- Goal 2
- Goal 3
- Goal 4
- Goal 5
- Goal 6
- Goal 7
- Technology Funding Sources and Costs
- CIPA Certification

Signature of Authorized LEA Agent

April 12, 2006

Date



LEA Federal Grant Program Compliance Form

Brooklyn Public Schools

Name of Local Education Agency (LEA), i.e. School District, Consortium or Charter School submitting this plan.

Developing a comprehensive technology plan based on the educational goals of the school system will ensure that the most appropriate technologies are effectively infused into your instructional and/or administrative programs. Thorough planning also ensures that all parties have equitable access and achieve the greatest benefit from routine use of educational technology. The comprehensive technology plan should demonstrate clear targets for technology use, spell out desired goals for learners, create visions for future directions, build "buy-in" from stakeholders, and demonstrate to those who might provide funding that a district or charter holder is ready to act.

School Districts, Consortia or Charter Schools (LEAs) who apply for technology funding through any Federal grant program are required to have developed a comprehensive, three-year plan, which outlines how the agency intends to utilize and integrate educational technology.

The applying agency (check all that apply)

is compliant with the provisions of the Children’s Internet Protection Act (CIPA). [Elementary and Secondary Education Act (ESEA) P.L. 107-110, Section 2441]

_____ will be CIPA compliant by this date. _____

_____ has applied for E-Rate Funding for FY 2006.

The LEA’s comprehensive technology plan must be approved by the local board of education.

Date the plan was approved: _____

OR

Date the plan is to be submitted for board approval: May 24, 2006

Certified by:

Signature of Superintendent

April 12, 2006
Date of Signature

Dr. Louise S. Berry
Printed Name of Superintendent

LEA Profile

This information should provide a “snapshot” of your district and help planners and reviewers to understand areas of need. This information will also assist the State to establish priorities in the provision of resources to districts. The SDE is particularly interested in the capability that each LEA has to access resources that will be placed onto the Connecticut Education Network (CEN) and additionally, the capability of each district to access online versions of the CMT and CAPT.

LEA NAME: Brooklyn Public Schools	
<p>If CMT and CAPT are administered online at some point in the future, certain testing conditions would be desirable at every school. Ideally these include the following:</p> <ul style="list-style-type: none"> ▪ All of the students in each grade level have access to the state assessment at the same time; ▪ Students are grouped in clusters of no more than thirty and all have access to the assessment at the same time (<i>classrooms with only one or two computers would not be appropriate for testing</i>); ▪ Students remain in their own school; and ▪ The computers have high-speed internet access. <p>Your completion of the chart below will help the CSDE to better understand the state’s technical readiness for online testing.</p>	
Maximum number of grade 4 students who could be accommodated under the above conditions	24
Percentage of grade 4 students who could be accommodated under the above conditions (number accommodated/total number of grade 4 students)	24%
Maximum number of grade 6 students who could be accommodated under the above conditions	70
Percentage of grade 6 students who could be accommodated under the above conditions (number accommodated/total number of grade 6 students)	70%
Maximum number of grade 8 students who could be accommodated under these conditions	70
Percentage of grade 8 students who could be accommodated under the above conditions (number accommodated/total number of grade 8 students)	70%
Maximum number of grade 10 students who could be accommodated under the above conditions	NA
Percentage of grade 10 students who could be accommodated under the above conditions (number accommodated/total number of grade 10 students)	NA

TECHNOLOGY PLANNING COMMITTEE

The Technology Planning Committee should represent all stakeholders. Development of the technology plan and implementation of the plan should enable parents, educators, students and community members to benefit from the investment in technology and all should have representation on the committee.

Member	Title	Constituency Represented
Dr. Louise S. Berry	Superintendent	Brooklyn Public Schools
Matthew Carroll	Principal	Brooklyn Middle School
Peg Muscente	Principal	Brooklyn Elementary School
Glen Lessig	Teacher	Brooklyn Middle School
Kathryn Stellitano	Teacher	Brooklyn Middle School
Patty Ryan	Teacher	Brooklyn Elementary School
Jeff Kelleher	Teacher	Brooklyn Middle School
Sara Guimont	Teacher	Brooklyn Elementary School
Denise Nault	Teacher	Brooklyn Elementary School
Sharon Loughlin	Teacher	Brooklyn Middle School
Holly McCarthy	Special Ed. Director	Brooklyn Public Schools
Jim Bejma	Teacher	Brooklyn Middle School
Chris Boyle	Board of Education	Brooklyn Public Schools
Deb Cornman	Board of Education	Brooklyn Public Schools
Pam Gagnon		Community
Rebecca Pilver	EASTCONN consultant	
Jim Huggins	EASTCONN consultant	

Long-term role of the Committee:

As a result of the community and staff support for utilization of technology, the Board of Education established a Technology Committee in 1997 to develop a long range technology plan to provide a vision for the Brooklyn Public Schools which incorporates technology into our mission and school programs. While the members of this committee have changed throughout the years, they group continues to comprise a cross-section of our community including Board of Education members, elected officials, business leaders, parents and community members, and school administrators and staff.

This committee of dedicated parents, community members and educators meets quarterly throughout the school year to review and monitor the progress toward realizing

the technology vision for Brooklyn. Quarterly status reports are provided to the Technology Committee to use in evaluating goals and objectives to assess the impact of the identified plan strategies.



VISION STATEMENT

Mission & Vision of Brooklyn Public Schools

Literacy in the 21st century requires more than the ability to read write and compute. The Brooklyn School believes that every student must develop strong technological skills and continually use them in order to function successfully in our 21st century world. Brooklyn School must ensure that technology resources are integrated across the curriculum in preK-8 and become part of the fabric of instruction. Students must use appropriate technologies to access worldwide resources in order to become more productive learners as part of their regular classroom routine. They must be able to use the many forms of technology to access, understand, manage, interpret, evaluate and create information. They also must be able to analyze information for content, relevancy and accuracy and be able to present that information in a variety of formats, including those with technology platforms.

An education that is technologically rich produces students with the tools, competencies and level of sophistication necessary to be successfully employed in an ever-changing global economy. Such an education enables all students to understand and use current and emerging technologies in their personal, academic and work environments.

Brooklyn School plays an essential role in ensuring technological literacy by:

- establishing high standards and developing a preK-8 technology plan that is integrated across all content areas and incorporates 21st century skills and competencies;
- providing ongoing professional development that uses technology to support student learning;
- assessing technological literacy of students and educators;
- providing equal access to technological tools provided by the district for all students;
- providing up-to-date equipment and programs and prompt, expert technical assistance;
- implementing policies for safe and acceptable use of technology resources; and
- informing families of ways in which technology can be used effectively and safely by their children.

NEEDS ASSESSMENT

Curriculum Integration

- *current curriculum strengths and weaknesses and the process used to determine these strengths and weaknesses;*
- *how curriculum strategies are aligned to state standards;*
- *the current procedures for using technology to address any perceived curriculum weaknesses;*
- *how teachers integrate technology into their lessons - including ways technology is presently used for entire classroom and for small group instruction; and*
- *how students use technology - including ways students presently use technology for purposes beyond practice of skills.*

Brooklyn teachers currently integrate technology into their lessons using a variety of strategies and techniques. All Brooklyn teachers have access to technology in their classrooms and also have access to bring students into a computer lab. Brooklyn teachers have access to LCD projectors for classroom presentations. Some of the ways teachers integrate technology into their lessons include

- Developing and using graphic organizers, such as Inspiration and Kidspiration, to help students organize and synthesize information
- Conducting research on the internet to incorporate current information into classroom projects and activities
- Using presentation software, such as PowerPoint and HyperStudio, and LCD projectors to make classroom presentations that support instruction
- Using spreadsheet and graphing software as part of student activities
- Using word processing software to develop instructional materials
- Using web development software to communicate with students and parents
- Integrating digital images and digital video into the curriculum
- Using online resources, such as MIC Online, to support and extend the curriculum

Brooklyn students use technology throughout the curriculum. Students have access to computers in the classroom as well as the computer labs. Middle School students are required to take technology information literacy classes as part of their Middle School schedule. Some of the ways students are using technology include:

- Analyzing and interpreting data by constructing charts, graphs and data tables
- Conducting internet research and searching for information
- Searching information data bases such as iConn, Groliers and Athena
- Evaluating information and web sites
- Presenting information using presentation software such as PowerPoint
- Creating multimedia presentations using digital video and audio programs
- Creating graphic organizers
- Word Processing
- Using technology tools for note-taking
- Communicating online through blogs
- Participating in tele-collaboration projects

While Brooklyn students are engaged in a variety of activities that utilize technology, a curricular weakness that has been identified is the lack of an organized and systematic approach to technology integration across the curriculum for all grade levels and all students. This technology plan will address that weakness through the development of assured experiences with technology for all students at all grade levels. These experiences will be aligned to the State Frameworks and incorporate all curricular areas.

Brooklyn currently uses EASTCONN technology specialists to provide onsite coaching and support for classroom teachers. This just-in-time model of professional development has proven to be successful with Brooklyn teachers and students in supporting the integration of technology into the curriculum.

Professional Development

- Brooklyn conducts regular technology interest surveys and uses the results to plan for technology professional development to teachers and staff. The surveys help to identify areas of need and interest for continued technology professional development.
- Brooklyn uses EASTCONN Technology Integration Specialists to provide quality technology professional development, technology coaching and classroom support to assist teachers in attaining proficiency as indicated in the CT Teacher Technology Competencies.
- Technology professional development in Brooklyn is always connected to the curriculum. During the last 3 years professional development activities have included the following:
 - Web page development
 - Internet research
 - Identification of internet content for classroom use including Marco Polo website
 - ICONN
 - Using digital cameras and digital images in the curriculum
 - Using *iMovie* and digital video cameras in the curriculum
 - Spreadsheets and graphing
 - Using presentation software in the classroom with tools such as *KidPix*, *HyperStudio* and *PowerPoint*
 - Word processing applications
 - Online collaborative curriculum tools such as *TaskStream*
 - Online course building tools such as *eSchool Builder*
 - Data analysis using the CT Data Warehouse
 - Integrating graphic organizers into lessons with software such as *Inspiration* and *Kidspiration*
- Effectiveness of professional development activities will be assessed through workshop evaluations, follow up surveys and through evidence of successful practices in technology integration.

Equitable Use of Technology

Brooklyn students and staff have equal access to technology. All classrooms in Brooklyn have computers available to students and teachers with network and high-speed internet access provided by the CEN (CT Education Network). In addition to classroom access, Brooklyn Schools have open computer labs available to all classroom teachers and their students. These computer labs are fully networked and connected to the internet through the CEN. Additional technology equipment, such as LCD projectors, laptops, AlphaSmarts, scanners, digital cameras, digital video cameras and printers are available throughout the district for student and staff use.

Assistive technology is available, as needed, to students including *UltraKey*, Apple Computer's *Universal Access* and AlphaSmarts.

2 out of 5 Title I classrooms have 4 computers for student use.

The following matrix illustrates the extent technology is available to staff.

	Please include information about the type and availability of staff access both on and off campus.
Administrators	Desktop PC connected to school network, internet, email and school information system
Teachers (pre-school)	Desktop PC connected to school network, internet, email, attendance and grading systems.
Teachers	Desktop PC connected to school network, internet, email, attendance and grading systems. Teachers have access to computer labs for instruction and to laptops and LCD projectors for classroom use. Teachers have access to digital video cameras, scanners and networked printers.
Non-certified staff	Administrative staff have Desktop PC connected to school network, internet, email and other school data systems as appropriate to their role. Paraprofessional staff have access to computers in classrooms and computer labs connected to school network, internet, and email.

The following matrix illustrates the extent technology is available to students.

	Please include information about availability in classrooms, the library-media center and all other areas where students have access. Mention the extent of supervised access before and after school.
Students (pre-school)	Pre-school classrooms have one computer per classroom.
Students (elementary)	All elementary classrooms have 1-3 computers connected to school network and internet for student use. All elementary classrooms have access to computer lab for instruction and to digital cameras.
Students (middle school)	All middle school classrooms have 1- 3 computers connected to school network and internet for student use. Students have access to computers labs for instruction, scanners and digital video cameras. Students have access to computer labs before and after school
Students (high school)	NA
Students (with disabilities)	As needed students have access to assistive technology including UltraKey, Universal Access and AlphaSmarts. 2 out of 5 Title I classrooms have 4 computers for student use.

Infrastructure and Telecommunication

The current technology infrastructure of each school includes:

- Every instructional and administrative space has CAT-5 data wiring to support a minimum network connection of 100 Mbps.
- Every instructional space has coax wiring to support connections to local video cable channels at the PreK-4 level and to a school video head-end with local cable access at the 5-8 level.
- Every instructional and administrative space has access to high-speed Internet through the building LAN. Each school has fiber-optic connections to the Connecticut Education Network (CEN).
- Every instructional and administrative space has access to an outside phone connection and voicemail. All staff has access to e-mail accounts.
- The present infrastructure is effective in meeting the data, video, and telecommunications needs of the schools. All three of these services are reliable with minimal downtime and widespread usage by staff and students.
- The District applies for E-Rate funds annually and effectively uses available E-Rate funds to support the Districts telecommunications and internet access.

Administrative needs

The superintendent, principals, assistant principal, and special education director of the Brooklyn School use technology for communicating (email), analyzing data, filing reports etc. Administrators may participate in professional development with their staff and/or participate in professional development designed to meet the specific needs of administrators. Examples of the administrators' use of technology are listed below:

- Administrators have access to certain common databases and individual school databases. Electronic data is used to assist the administrators in gathering data, examining trends, evaluating programs, developing reports etc. The district continues to examine its data needs, to convert data to electronic format and to upload data to the warehouse.
- Administrators use EASTCONN technology consultants and other venues to continue their professional development.
- Administrators have participated in technology workshops on accessing data in the data warehouse and using Excel.

- Administrators participate in regional meetings such as EASTCONN'S Staff Development Council and Regional Technology Council.

In order to move forward with administrative uses of technology several things need to be addressed in the coming years including:

- Improving the replacement cycle of computers in the central office.
- Development and purchase of a comprehensive electronic assessment management system
- Additional professional development in the using a variety of technological tools for making decisions based on data (i.e. Data Warehouse, Excel, Scantron, etc.)
- Additional professional development and technical support to central office staff responsible for managing and using student information and other data systems
- Increasing the use of the Brooklyn Web site as a means of communicating with students, parents and the community.

PLAN IMPLEMENTATION

LEA Technology Goals and Strategies

The goals listed below are the State Goals as identified in the State Technology Plan (*draft of new plan is expected to be available by September 2005*). The LEA technology plan should be aligned to the State Plan and include the State Goals. The LEA may include any additional goals that apply to their technology plan.

Goal 1: Improve student academic achievement through the use of technology in elementary and secondary schools with a target of fully integrating technology into the academic curriculum by December 2006.

Goal 2: Ensure that all educators are proficient in the use and integration of technology and ongoing professional development activities are provided.

Goal 3: Ensure that all K-12 educational institutions have the capacity, infrastructure, staffing, and equipment to meet academic and business needs for effective and efficient operations.

Goal 4: Ensure that K-12 resources are available for all students, regardless of race, ethnicity, income, geographical location, or disability, so they can become technologically literate by the end of eighth grade and achieve their academic potential.

Goal 5: Develop a continuous process of evaluation and accountability for the use of educational technology as: a teaching and learning tool, a measurement and analysis tool for student achievement, and a fiscal management tool.

Goal 6: Develop a schema of current and future financing requirements to support the LEA's Technology Plan.

Goal 7: Develop a telecommunications services plan that will support both instructional needs and administrative requirements.