

# **Brooklyn Schools**

## **EDUCATIONAL TECHNOLOGY PLAN**

**July 1, 2009-June 30, 2012**

Cover Page  
**EDUCATIONAL TECHNOLOGY PLAN – July 1, 2009-June 30, 2012**

District/Agency:	Brooklyn	
LEA Code:	051	
Technology Plan Contact:	Glen Lessig	
Phone:	860-774-9153	
Fax:	860-774-6938	
Email:	<a href="mailto:lessig@brooklynschools.org">lessig@brooklynschools.org</a>	
Address:	119 Gorman Road Brooklyn, CT 06234	
Name of Superintendent or Director:	Dr. Louise S. Berry	
Email:	<a href="mailto:berry@brooklynschools.org">berry@brooklynschools.org</a>	
Signature of Superintendent or Director:		Date:
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:
CSDE 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
- ✓ Children's Internet Protection Act (CIPA) Certification
- ✓ Optional Reporting

---

Signature of Authorized LEA Agent

---

Date

**LEA Federal Grant Program Compliance Form**

Brooklyn

Local Education Agency (LEA) 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)

X is compliant with the provisions of the Children’s Internet Protection Act (CIPA) [20 U.S.C. § 6777]

\_\_\_\_\_ will be CIPA compliant by this date. \_\_\_\_\_

\_\_\_\_\_ has applied for E-Rate Funding for FY 2008.

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: \_\_\_\_\_

**Certified by:**

\_\_\_\_\_  
Signature of Superintendent or Director

\_\_\_\_\_  
Date

Dr. Louise S. Berry  
Printed Name of Superintendent or Director

## 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 CSDE to establish priorities in the provision of resources to districts. The CSDE is particularly interested in the capability that each LEA has to access resources that will be placed onto the Connecticut Education Network (CEN). The new questions about technological literacy and professional development are asked as a result of additional federal reporting requirements.

LEA NAME: Brooklyn Schools	
How many Grade 8 students were evaluated for technological literacy, based on your district's standards, during the 2007-08 school year?	106
Based on that evaluation, how many of those students were considered technologically literate?	106
How many hours of technology related professional development were offered to certified educators in 2007-08? <i>(Include workshop hours that are offered to all of your educators-both teachers and administrators. These sessions may be online and may include full-day or partial-day sessions provided by RESC personnel. Although both mentoring and coaching are considered very effective methods of offering pd, do not include any of those hours.)</i>	120
How many hours of technology related professional development were offered to administrators in 2007-08? <i>(Count only those pd hours offered specifically for administrators.)</i>	15
What fraction of your certified staff in Grades K-8 does your district consider technologically literate? <i>(Do not reduce the fraction to lowest terms; the fraction's denominator should reflect the actual number of professional K-8 staff. For example, if out of 120 certified staff, 110 are considered technologically literate-the answer would be 110/120. )</i>	76/84
What fraction of your certified staff in Grades 9-12 does your district consider technologically literate? <i>(Do not reduce the fraction to lowest term. The fraction's denominator should reflect the actual number of professional 9-12 staff.)</i>	NA

When filling out the table below, please consider the following conditions:	
<ul style="list-style-type: none"> <li>▪ the number and percentage of each grade level of students that can have high-speed internet access at the same time;</li> <li>▪ that students are grouped in clusters of no more than thirty and no less than ten; and</li> <li>▪ that students remain in their own school.</li> </ul>	
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).	24/100
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).	70/100
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).	70/100
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.

<b>Member</b>	<b>Title</b>	<b>Constituency Represented</b>
Dr. Louise S. Berry	Superintendent	Brooklyn Schools
Joanne Gerardi-Voccio	Board of Education	Brooklyn Schools
Valerie Downs	Board of Education	Brooklyn Schools
Al Yanku	Principal	Brooklyn Middle School
Brenda Keefe	Principal	Brooklyn Elementary School
Glen Lessig	Teacher	Brooklyn Middle School
Kathryn Stelitano	Teacher	Brooklyn Middle School
Patty Ryan	Teacher	Brooklyn Elementary School
Jeff Kelleher	Teacher	Brooklyn Middle School
Sharon Loughlin	Teacher	Brooklyn Middle School
Denise Nault	Teacher	Brooklyn Elementary School
Sara Guimont	Teacher	Brooklyn Elementary School
Pat O'Rourke	Teacher	Brooklyn Elementary School
Diane Wimmer	Teacher	Brooklyn Middle School
Jim Bejma	Teacher	Brooklyn Middle School
Kathleen Green	Teacher	Brooklyn Middle School
Trish Dehls	Teacher	Brooklyn Middle School
Jim Huggins	EASTCONN consultant	

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, the 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.

The Brooklyn Technology Committee evaluated the schools' technology by using questionnaires, classroom observations and the analysis of student projects. The committee developed the vision and a technology needs assessment for this plan.

This committee of dedicated parents, community members and educators meets 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.

## **MISSION & VISION STATEMENT of Brooklyn Public Schools**

### *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**

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. Several classrooms have begun to integrate the use of SmartBoards, interactive whiteboards, into classroom lessons and the curriculum. 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 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, to support and extend the curriculum
- Using wikis, podcasts, voice threads and other Web 2.0 tools to develop and deliver curriculum
- Using technology, Scantron, to develop, collect and analyze student assessments
- Using online curriculum mapping software to align curriculum to CT standards

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. All Elementary students have time scheduled in the computer lab every week. 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 to use in projects and reports
- Searching information data bases such as iConn and NetTrekker
- Evaluating online information and web sites
- Presenting information using presentation software such as PowerPoint, podcasts and voice threads
- Creating multimedia presentations using digital video and audio programs
- Creating graphic organizers
- Using word processing software
- 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, an ongoing curricular weakness is the lack of consistency for technology integration across the curriculum for all grade levels and all students. Due to limited EASTCONN resources this year, not enough time was available for students to complete projects. This technology plan will address that weakness through the continued development of assured experiences with technology for all students at all grade levels. These experiences will be aligned to the CT 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. Administrators have also used the EASTCONN on-site support, as well as technology workshops specifically for administration that are offered regionally. Non-certified staff are provided with technology instruction as it applies to their job.

Technology professional development in Brooklyn is always connected to the curriculum. During the last 3 years professional development activities have included the some of following:

- Web page development
- Internet research
- Identification of internet content for classroom use including Thinkfinity website

- iCONN
- Digital cameras and digital images in the curriculum
- *iMovie* and digital video cameras in the curriculum
- Spreadsheets and graphing
- Presentation software in the classroom with tools such as *KidPix* and *PowerPoint*
- Word processing applications
- Online collaborative curriculum tools such as *TaskStream*
- Online course building tools such as *eSchool Builder*
- Online text access
- Data analysis using *Scantron Achievement Series*
- Curriculum mapping
- Online grade book software
- 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 at the Middle School, but not at the Elementary School.

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 interactive whiteboards, digital video cameras, scanners and networked printers.
Non-certified staff	Administrative staff has Desktop PC connected to school network, internet, email and other school data systems as appropriate to their role. Paraprofessional staff has access to computers in classrooms and computer labs connected to school network, internet, and email. Training has been provided to Paraprofessionals as needed for their duties.

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 3 computers 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 scanners, digital cameras and interactive whiteboards.
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, interactive whiteboards, 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 partially effective in meeting the data, video, and telecommunications needs of the schools. Occasionally, network usage causes slowdowns on connectivity.
- 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.
- Administrators use EASTCONN technology consultants and other venues to continue their professional development.
- Administrators have participated in technology workshops on accessing data 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.
- Additional professional development in the using a variety of technological tools for making decisions based on data (i.e., 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.
- Providing a full-time library media specialist at both schools.

## PLAN IMPLEMENTATION

### LEA Technology Goals and Strategies

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.

**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.