

# The Eleanor Briggs School - Technology Plan

This Technology Plan was created by Anthony P. Caetano, Coordinator of Special Education on September 1, 2010 and submitted on September 24, 2010.

The Eleanor Briggs School is presently at level:

TECHNOLOGY LEVEL – I  
TRAINING LEVEL – I

## TECHNOLOGY COMMITTEE MEMBERSHIP

- **Michael Foley**  
Director
- **Anthony P. Caetano**  
Special Education Director
- **Meredith Garrity**  
Elementary Special Education Teacher
- **David Phelps**  
Secondary Special Education Teacher
- **Paul Hartman**  
Computer Applications Instructor

## VISION STATEMENT

In keeping with the goals and objectives of the school's mission statement, "to provide a high-quality, individualized education for students with behavioral and emotional disabilities in a therapeutic environment that promotes learning and growth through excellence in teaching and learning," The Eleanor Briggs School is committed to meet the technological needs of all of its students. The Briggs School strives to graduate students who are proficient and comfortable in using educational technology, and possesses the skills needed to succeed in an increasingly complex information society. To accomplish this vision, several items need to be addressed:

## CURRICULUM

- Develop and implement a comprehensive computer curriculum scope and sequence from grades K-12
- Provide opportunities to unrestricted students an awareness of the variety of computer applications available, and develop skills for use in dealing with the information age.
- Use word processing, databases, and spreadsheets as learning tools across multiple content areas
- Use individual software applications to address specific subject areas (i.e. CD's for Science, History, English)

## TEACHER/STAFF TRAINING

- Provide on-going staff development and training in educational computer use.

## **■ HARDWARE/SOFTWARE**

- Determine needs and procedures to purchase appropriate hardware including network installation.
- Determine needs and procedures to purchase appropriate software and related materials.
- Develop and implement methods for housing, organizing, protecting, and replacing software and related materials.

## **■ SUPPORT**

- Establish and develop roles of each curriculum for purposes of integration, teaching, coordination, and maintenance of technology.

## **■ SECTION I EXECUTIVE SUMMARY**

### **INTRODUCTION**

The Eleanor Briggs School is a leader in the field of special education and psychiatric treatment for children ages 5-18, whose behavioral and emotional difficulties significantly inhibit their progress in public schools. Briggs students have a 2:1 student-to-staff ratio to ensure that each student receives the individualized attention necessary to capitalize on their strengths and abilities, while helping to improve their weaker skills. A total school census of no more than 40 students affords Briggs School the opportunity to provide each student with the most personalized and effective education possible.

The Eleanor Briggs School staff includes: special education teachers, clinicians, behavior specialists, teaching assistants, vocational, computer, physical education and health teachers, school nurse, child psychiatrist, administrative and support staff, and consultants in the areas of psychology, speech and language, and occupational therapy. Recognizing that technology has changed the way our society works, plays and learns, The Eleanor Briggs School Technology Committee has identified and constructed a vision for technology. In order for student to be able to utilize interactive technologies to problem-solve, create, communicate, and collaborate in meaningful contexts.

Since 1980, the Briggs School has provided intensive educational and clinical services to children and their families throughout Rhode Island. The primary goal of the Enhancing Education Through Technology (EETT) proposal is to take the program to the "next level" by improving student academic achievement through the use of Technology Education. It is designed to help students cross the digital divide by ensuring that every student is technologically literate by the time they graduate from Briggs School. EETT encourages the effective integration of technology with teacher training and curriculum development to establish successful research-based instructional materials.

Literacy today goes beyond the basic skill of reading, writing and arithmetic and includes computer and other technology-related skills in the context of the workplace. Literacy is defined as "...an individual's ability to read, write and speak in English, and compute and solve problems at levels of proficiency to function on the job and in society, to achieve one's goals and develop one's knowledge and potential." Technology education is a comprehensive experience based curriculum

in which students learn about technology and are provided applications for solving problems. By using such experiences in a "hands on," cooperative environment, students will become skilled decision makers and problem solvers.

The need for technical literacy is especially critical in today's environment. More than 3/4s of the approximately five million jobs added to the economy since 2003 require professional, management or technical skills. The technology explosion we are currently experiencing is not only altering our work requirements, but it is also altering every facet of our educational system. It is extremely important that we take the appropriate steps to ensure that the students at Briggs School are adequately prepared to meet the new demands that technology is making on their lives.

Literacy in our information and technology rich society requires that individuals not only be able to read and write, but also to employ effectively and efficiently information and technology for learning, research, problem solving, transition to work, and communications. Students must learn to use a computer as a tool to access new information.

Telecommunications can bring distant information resources, courses, programs and professional development to schools and make connections among schools, libraries, homes, and businesses. These linkages with other sources of information – domestic and foreign, private or public – are beneficial to learners and educators.

Equitable access to information and technology by teachers and students is a key factor in improving the quality of education in our State, promoting economic growth, and developing an enlightened citizenry for the twenty-first century.

Recently published reports by the United States Department of Education have stated that technology is the student's key to achieving world class standards in the learning environment. To achieve this goal, equal access to technology and information for our students and teachers is imperative. Our students must not be denied the opportunity to take advantage of the electronic networking opportunities available for on-line services, national and global learning; multimedia use and applications and inter-school collaboration.

We believe in the development of lifelong learning skills and process skills such as: flexibility, adaptability, critical thinking, problem-solving, and collaboration which is essential to be successful in our program and in our rapidly changing information age.

Lifelong learners are:

1. Responsible for their own learning
2. Skilled in assessing and processing information
3. Confident in using technological tools
4. Ethical in the use of information and information technology
5. Able to solve complex problems alone or collaboratively
6. Capable of being creative and innovative
7. Able to communicate locally, nationally and globally

In order to create and develop an environment through which our students can become lifelong learners and thrive in today's technological world, Harmony Hill School has produced this plan.

This plan is a "living document" and is therefore presented both on disk and in a three ring binder to allow the easy addition of new material and removal of old. It is a guide which not only provides the planning and infrastructure for its own execution, but which also provides the means for continuous evaluation of progress toward the stated goals. Throughout the implementation of this technology plan, we will use a process of continuous "pre-assessment" and "post-assessment" to maintain our direction as well as marking off our milestones as they are reached.

Our vision is to use appropriate classroom technology to create a collaborative, hands-on, curriculum and environment. To this end, we will attempt to describe the desired curriculum applications and required technology platform for each of the curriculum areas.

As one reads the plan, one should note the following priorities:

1. Learning and improved social behavior are the ultimate objectives. Use technology to enhance both the desire for students to learn, and their ability to discover new information through the proper integration of technology into the curriculum.
2. Teachers must be ready to continually learn new information. The teacher training process must be continuous and on-going.
3. Technology must be used in the day to day operations of the school to provide increased efficiency in all aspects.

## **SECTION II**

### **NARRATIVE: WHERE BRIGGS SCHOOL IS TODAY**

#### **TECHNOLOGY EDUCATION CENTER**

In 2007, The Eleanor Briggs School received a \$12,400 grant from The Champlin Foundation to purchase and configure 8 desktop computers, a lap-top computer, a SmartBoard and a color laser printer for the Technology Center. Each desktop system is a Pentium III with CD-ROM drive.

#### **TEACHER / STAFF TRAINING**

At this time it is estimated that most of our teaching staff do not possess adequate computer skills. Currently there is one Technology Teacher to handle all the requests that the staff present. Continued training and planning is needed to meet our goals.

## GOALS AND OBJECTIVES FOR FISCAL YEAR 2010

- To enhance student's reading, writing and communication skills through the use of state-of-the-art computer and classroom Internet technology as a tool for teaching and learning.
- To ensure that all students will meet or exceed national standards in reading, writing, and mathematics as measured by state performance tests.
- To develop technology support systems to ensure that all students receive the necessary interventions to guarantee their successful performance.
- To strengthen communication and family involvement in our school through development of an electronically connected learning community.

## WHAT IS TECHNOLOGY EDUCATION?

Technology Education is an integrated, experienced-based instructional program designed to prepare students to become knowledgeable about technology – its evolution, systems, techniques, utilization, and social and cultural significance. It results in the application of mathematics and science concepts in technology systems. Students discover, create, solve problems, and construct by using a variety of tools, machines, materials, processes, and computer systems.

The Technology Education goals listed below describe what students should be able to do, think and feel as the result of a Technology Education experience. The framework is composed of goals and sub-goals from which activities and lessons will be developed.

1. **Application of Technology Systems** – Students will demonstrate knowledge and skills regarding diverse technology systems, including their function and applications.
2. **Nature, Impacts and Evolution of Technology** – Students will demonstrate knowledge of the nature of technology and the relationships and impacts among technological achievement, the environment, the advancement of science, the individual, and society. The context for this knowledge shall be historical, current, and futuristic.
3. **Problem Solving Using Technology** – Students will demonstrate the ability to solve problems with technology using a systems approach, higher-order thinking skills, individual and collaborative ingenuity, and a variety of resources including information, tools and materials.
4. **Informed Decisions About Technological Issues** – Students will make informed decisions about technological issues, including the development and use of technology and technology resources.

5. **Use of Technology Resources** – Students will demonstrate in an experiential setting the safe, effective, and creative use of technology resources – including performing technological processes.
6. **Application of Technology To Other Academic Areas** – Students will apply science, mathematics, communications, social studies, arts and humanities to solve practical problems and extend human capabilities.
7. **Career Information** – Students will explore the multiple purposes of work and the range of career options, including entrepreneurship, and relate them to their individual interests, aptitudes and skills.
8. **Multicultural and Gender Diversity** – Students will recognize the multicultural and gender diversity included in past, present, and future uses of technology.

The Eleanor Briggs School's educational and technological goals are targeted to advance student learning and academic achievement in order to prepare students for the world of work. These goals promote skill, knowledge and performance. These goals are aimed at improving the effectiveness of classroom and school management in order to improve the school structure and learning environment.

In order to obtain this overall goal, with assistance of a technology rich curriculum, there must be certain benchmarks established to maintain the target as well as the direction. These benchmarks also help to measure against the timetable to monitor the Briggs School's progress.

### **3-YEAR GOALS FOR THE ELEANOR BRIGGS SCHOOL (GENERAL) INSTRUCTIONAL AND LEARNING TOOLS**

- Provide students with the best available technology to fully utilize the power of the information age.
- Keep technology adequately available for the use of the students and staff. Teach technology as a tool to help students learn, not just as a subject to learn.
- Provide students with appropriately selected software.
- Prepare students to leave Briggs School with a greater understanding of Technology.
- Establish accountability for the successful integration of technology into the curriculum with everyone from the student to the Director of Education.

### **STAFF DEVELOPMENT**

- Provide ongoing education for staff on how to use and integrate technology as an effective tool.
- Provide staff with "hands-on" practice time for what they learn in their lab sessions.
- Relate staff development to their immediate job responsibilities.
- Include all staff in the school in technology education.
- Help staff overcome any resistance to the use of technology.
- Provide staff with ability to perform document processing applications such as publishing, forms management and data base to promote record

keeping and information sharing.

## **SUPPORT**

- Provide support for hardware, software and personnel so that technology may be integrated effectively into teaching, learning, and management tasks.
- Maintain all documentation following installations in one area.
- Provide adequate curriculum and integration support on an ongoing basis.
- Include therapists, and youth care staff in training an access to technology.

## **OUTCOMES**

Fuller integration of technology into all aspects of education holds far reaching potential for students and staff. In general, The Eleanor Briggs School feels the benefits are as follows:

1. Increased effectiveness
2. Better budget / dollar costs
3. Improved access to and distribution of information
4. Improved student performance

## **STUDENT OUTCOMES**

- Improved student achievement
- Improved motivation of the student
- Promote computer literacy
- Prepare students for the future and turn them into lifelong learners
- Provide new experiences both locally and globally
- Help develop problem solving skills, critical thinking, and decision making
- Foster creativity
- Eliminate redundancy
- Provide immediate feedback for students, teachers, and parents
- Provide more active roles for students in the learning process

## **STAFF OUTCOMES**

The use of technology in the teaching and learning environment will enable teachers to:

- Assist teachers through efficient lesson preparation, revision, presentation, and evaluation
- Provide challenging learning opportunities to all students at all levels
- Increase motivation for teachers themselves
- Access and use instructional networks and cooperate on interdisciplinary learning units
- Improve access to student information, i.e. grades, attendance, schedules
- Keep more efficient records

## TRAINING LEVELS DESCRIPTION

### Level I:

- Teachers – No Training
- Students K-4 – No Training
- Students 5-8 – No Training
- Students 9-12 – No Training

### Level II:

- Teachers – Average Training
- Students K-4 – No Training
- Students 5-8 – No Training
- Students 9-12 – No Training

### Level III:

- Teachers – Advanced Training
- Students K-4 – No Training
- Students 5-8 – No Training
- Students 9-12 – Average Training

### Level IV:

- Teachers – Advanced Training
- Students K-4 – Average Training
- Students 5-8 – Average Training
- Students 9-12 – Average Training

### Level V:

- Teachers – Advanced Training
- Students K-4 – Advanced Training
- Students 5-8 – Advanced Training
- Students 9-12 – Advanced Training
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## TECHNOLOGY PROFILE

The following is a technological profile of The Eleanor Briggs School:

## APTITUDE LEVELS

	<b>Beginners</b>	<b>Average</b>	<b>Intermediate</b>	<b>Advanced</b>
<b>Teachers</b>	XXXXX	XXX	X	X
<b>Administrators</b>		XX		
<b>Staff</b>	XXX	XX	X	X

## EVALUATION DESIGN

The following are guiding questions for the development of the technology-supported objectives:  
 How will technology be used to provide and support instructional practices in a challenging curriculum?  
 What educational technology skills will be a part of the curriculum, and how will teaching these skills to students and staff enhance and support the broader instructional goals?  
 How will technology be used to support and provide meaningful professional development?

Goals	Indicators	Benchmarks	Measures
<b>Intermediate</b>			
Professional Development	<ul style="list-style-type: none"> <li>Increasing numbers of teachers will be trained to integrate technology into their teaching.</li> </ul>	<ul style="list-style-type: none"> <li>By the end of the school year, 50 percent of teachers will have had technology training.</li> </ul>	<ul style="list-style-type: none"> <li>Number and percent of teachers requesting and receiving training by type of training</li> </ul>
	<ul style="list-style-type: none"> <li>Teachers will learn how to integrate technology into their teaching.</li> </ul>	<ul style="list-style-type: none"> <li>After training, teachers will be able to devise at least three examples of how technology could be integrated into their lessons.</li> </ul>	<ul style="list-style-type: none"> <li>Lesson plans produced at professional development activities</li> <li>Teacher responses from professional development survey</li> </ul>
Availability of Technology	<ul style="list-style-type: none"> <li>Teacher: computer and student: computer ratios will steadily decline.</li> </ul>	<ul style="list-style-type: none"> <li>By next year, teacher: computer and student: computer ratios school-wide (counting all computers) will be 4:1 and 6:1.</li> </ul>	<ul style="list-style-type: none"> <li>Teacher :computer ratios</li> <li>Student: computer ratios</li> </ul>
	<ul style="list-style-type: none"> <li>Students will actively use computers for math and science projects and assignments.</li> </ul>	<ul style="list-style-type: none"> <li>All students will use computers at school at least 4 hours per week.</li> </ul>	<ul style="list-style-type: none"> <li>Percent of students who use computers at least four hours per week at school</li> </ul>
Curriculum Integration	<ul style="list-style-type: none"> <li>Technology will increasingly be incorporated into the curriculum in math and science.</li> </ul>	<ul style="list-style-type: none"> <li>In two years, Math, and science, curricula will have at least 25 percent of lessons incorporating technology.</li> </ul>	<ul style="list-style-type: none"> <li>By subject area, the percentage and frequency of lessons included in the curriculum that incorporate technology</li> </ul>
	<ul style="list-style-type: none"> <li>An increasing percentage of teacher lessons will incorporate technology.</li> </ul>	<ul style="list-style-type: none"> <li>All trained teachers will have at least 25 percent of lessons incorporating technology.</li> </ul>	<ul style="list-style-type: none"> <li>From classroom observations, the percentage of teacher lessons that incorporate technology</li> <li>Percentage of lesson plans that incorporate technology</li> </ul>
<b>Outcome</b>			
Math and Science	<ul style="list-style-type: none"> <li>Students will produce reports and presentations that teachers judge to be of higher quality.</li> </ul>	<ul style="list-style-type: none"> <li>Within two years, student grades on reports and presentations will increase, on average, by 10 points or one letter grade.</li> </ul>	<ul style="list-style-type: none"> <li>Student letter or numerical grades on reports and presentations</li> </ul>
	<ul style="list-style-type: none"> <li>Students will display increasingly higher performance on tests assessing math and science ability.</li> </ul>	<ul style="list-style-type: none"> <li>Within two years, student scores on standardized math and science tests will increase by 10 percent.</li> </ul>	<ul style="list-style-type: none"> <li>Student standardized test scores</li> </ul>
Computer Literacy	<ul style="list-style-type: none"> <li>Both teachers and students will display increased computer literacy.</li> </ul>	<ul style="list-style-type: none"> <li>After one year, at least 75 percent of teachers and students will display at least an intermediate level of computer literacy.</li> </ul>	<ul style="list-style-type: none"> <li>Student and teacher self-report of computer literacy</li> <li>Student and teacher results from a skills test requiring performance of various tasks on a computer.</li> </ul>

# 3-YEAR TECHNOLOGY BUDGET FOR THE ELEANOR BRIGGS SCHOOL

## 1st Year Infrastructure

Quantity	Item(s)	Unit Price	Total Cost	Comments
50	IT Structured cabling		16374	See quote for details
2	Switches	1400	2800	
4	N-Wireless 5 port gigabit Routers	60	240	
1	* Astaro (firewall)	4500	4500	
	Asg 220 Security appliance with Firewal,			
	VPN & Intrusion ProtectionWeb Security			
	Virus & Surf Protection 1 yr			
	Maintenance for ASG 220 appliance			
	<b>Total</b>		<b>\$23,914.00</b>	

\* Item has a reoccurring maintenance Charge

First year of Technology Plan should qualify for E-Rate discount

## 2nd Year Expand computer access for Teachers & Clinicians

Quantity	Item	Unit Price	Total Cost	Comments
1	UPS	670	670	
11	Thin Client Hardware	250	2750	
11	Monitor, keyboard, Mouse	210	2310	
1	Network Attached Storage(NAS) Device	1000	1000	
11	VM-Ware View	150	1650	
1	Windows 2008 R2	125	125	Charity License
11	Windows Server 2008 Device Cals	10	110	Charity License
11	Windows Remote Desktop	20	220	Charity License
11	Windows 7	157	1727	Charity License
11	Office 2010 Pro	75	825	Charity License
50	*Virus SW E-set 2 Year License	18.5	925	Non-Profit pricing
1	Main Domain / Virtual Desktop Server	5000	5000	
	professional development			there is free training available via E-Learning or Microsoft or you can add in training cost
	<b>Total</b>		<b>\$17,312.00</b>	

\* Item has a Reoccurring Maintenance Charge

### 3rd Year Expand and Upgrade student computers

Quantity	Item	Unit Price	Total Cost	Comments
1	Backup Network Attached Storage(NAS) Device	1000	1000	
1	Backup Domain / Backup Virtual Desktop Server	5000	5000	
1	UPS	670	670	
33	VM-Ware View	150	4950	
1	Windows 2008 R2	125	125	<i>Charity License</i>
25	Windows 7	157	3925	<i>Charity License</i>
8	Windows 7 upgrade for lab computers	65	520	<i>Charity License</i>
33	Office 2010 Pro	75	2475	<i>Charity License</i>
33	Windows Server 2008 Device Cals	10	330	<i>Charity License</i>
33	Windows Remote Desktop	20	660	<i>Charity License</i>
1	Projector	350	350	
1	26 bay Charging & Storage cart for netbook Terminals	1299	1299	You will need a 120 volt receptacle for this unit
	professional development			
25	Netbook Terminals	150	3750	Netbook will not have a harddrive or operating system
	<b>OR</b>			Netbooks will use a virtual machine
25	Laptops	1250		The \$31,250 cost for the laptops is not included in the total cost.
	<b>Total</b>		<b>\$21,304.00</b>	