

Canaan Schools

2009 ~ 2012

Technology Plan

Part 1

Executive

Canaan Schools' Technology Plan was created through the collaborative efforts of the administrative and teaching staff. This group was able to provide valuable input and fresh perspectives as to the use of technology in their specific areas of teaching as well as the schools as a whole. This plan was written with a vision beyond our immediate needs and focused on the importance that technology will play in the future of our staff and students. It was created with the purpose of guiding Canaan Schools in the many ways that technology can be utilized to support the educational needs of all members of our school and our community. This document was created in Google Docs for ease of access and collaboration between all parties.

These members are as listed:

- Christopher Masson - ENSU Superintendent
 - Debbie Lynch - Principal
 - Thomas A. Mays - Technology Coordinator
 - Jason Di Giulio - High School Teacher (English)
 - Timothy Gray - High School Teacher (Math)
 - Stephanie Lyons - High School Teacher (Business/Computer Apps)
 - Kenn Stransky - Adult Education (NEKLS)
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The Canaan Schools Technology Mission Statement

In order to prepare our students to become responsible and productive citizens of the 21st century, Canaan Schools will provide students with the knowledge and skills needed to access and utilize the information necessary to thrive in today's technology/information based society.

Canaan School's mission is to incorporate technology into the educational environment that will promote and encourage problem solving, exploration, the ethical use of technology and learning in the classroom and beyond.

We strive to:

- Promote student-centered learning.
- Provide access to appropriate technology for all students and staff.
- Encourage communication.
- Develop the skills and encourage habits to become lifelong learners.
- Encourage the ethical use of technology and respect for intellectual properties.
- Improve the faculty and staff ability to more fully incorporate technology into the curriculum by providing training and support in the appropriate use of modern technological tools.

Canaan's students are connected to the global community via Internet technology in a safe and responsible learning environment where technology is integrated into the learning and working process. In order to accomplish our vision for increased student learning with the use of technologies, our plan includes the following areas:

Development of Lifelong Learners

- Assures skillful use of technology to support the development of lifelong learning skills and process skills such as: flexibility, adaptability, critical thinking, problem solving, and collaboration. We believe these skills are essential for success in our rapidly changing information age.

Equal access for the learning community

- Provides high standards of hardware and software for all students and staff.
- Assures that all students and staff will be provided with and have equal access to hardware and software.
- Implement grade level technology goals identified to insure equity of delivery to all students.
- Provides the learning community with greater opportunity for interaction, collaboration and information exchange.

Integration of Technology in the Classroom

- Expands classroom tools for teaching and learning.
- Provides for the integration of multiple resources for existing and emerging curriculum.
- Enables the learning community to communicate more effectively, access and process information and work productively.
- Link the classroom with educational resources within the building, community and worldwide.
- Create a collaborative environment for project-oriented activities.
- Increases the productivity of students as they work toward attaining learning outcomes.
- Encourages the use of multimedia tools, enabling students to become active and experiential learners.

Build a Culture of Continuous Learning for Staff

- Provides introduction to networked systems.
- Develops school-based technology planning and learning.
- Builds online educational resources.
- Incorporates learning new curriculum with technology applications.
- Support for instructional change.
- Facilitates access to collegial support and best practice information from a wide variety of resources.
- Expands the variety of teaching tools and strategies to support diverse learning styles.
- Supports productive and efficient management of student assessment.
- Increases support for emerging instructional strategies: interdisciplinary, collaborative, and active learning options.

Note: Elements of this Technology Mission Statement come from the Kansas Technology Plans Template as provided by the Vermont State Dept. of Education.

Part 2

Goals

Data Collection

Canaan Schools currently practices data collection by utilizing several of the prescribed mechanisms. As a means of streamlining the explanation of data collection one or more of the following mechanisms will be listed in the Data Collection column of the Goals rubric. Further details will be provided when necessary.

Observations: Observations of teachers working in the course of their daily classes has been ongoing for many years.

Analysis: Analysis of work produced by students and teachers is one of the most common practices of collecting data that shows a true understanding of the effectiveness achieved through lesson plans and their goals.

Interviews: Interviews with teachers, students and staff provide valuable insights in how well that individual can articulate their understanding of technology, including the use and integration of that technology into the curriculum or assignments.

Surveys: Surveys and assessments will be preformed to ascertain individual understanding of technology and to isolate areas of weakness that may require additional training and professional development.

Goal 1: Student Centered Learning

Our SU will:

- Canaan Schools will work to create a learning environment where students have access to the available technological resources to engage in learning tasks that are not only meaningful and relevant but are unique to their individual style. This will engage student interest and creativity as well as promote independent and collaborative learning.
- Provide the appropriate professional development for teachers to become familiar with concepts and practices that make up 21st century skills.
- Provide an environment that promotes student-centered learning where users have access to technological tools that enable them to undertake independent and collaborative learning tasks.
- Utilize desktop and web based applications and services that will help develop activities that focus on student-centered learning practices.
- Create assessments that integrate technology skills and practices into a student's overall grade.

Action Step	Description	Staffing	Infrastructure	Budget	PD	Y1/Y2/Y3	Data Collection
1.1	VMath Live , provides a game-like environment that engages and motivates students.	Currently employs all staff needed	Availability of computers currently meets or exceeds student needs.	Approximately \$2,600 for annual access to this service.	The math teacher who is working with the software is fully trained on how to incorporate into the curriculum.	Y1/Y2/Y3	Observations Analysis <hr/> Teachers track student progress with online reports.
1.2	Students in English, Science, History and Social Studies will be provided with Glogster accounts for individual and collaborative projects.	Currently employs all staff needed.	While availability of computers currently meets or exceeds student needed, it will be necessary to increase the bandwidth of the Canaan School's Internet connection. See Goal 3 Action Step 1.	Glogster EDU is currently a free service to schools and will provide up to 200 student accounts per school.	Training of Glogster will be provided in-house.	Y1/Y2/Y3	Analysis <hr/> Digital posters will be evaluated for their content. Students will use these digital posters as part of their presentation.
1.3	Learn 360 , is an outstanding provider of streaming K-12 content from PBS, National Geographic, Standard Deviants, Slim Goodbody, Sunburst Visual Media and dozens of other educational video producers.	Currently employs all staff needed	Availability of computers currently meets or exceeds student needed.	The annual fee is based on the student enrollment and currently cost \$300 a year.	Training of Learn 360 will be provided in-house.	Y1/Y2/Y3	Observations Analysis <hr/> Admin Tools that allow the Learn 360 Administrator to track usage.
1.4	Develop a standard means for students to create Digital Portfolios that utilize digital media as well as web based resources.	Teaching candidates will be chosen based on the skills and abilities in the area of digital media.	Availability of computers currently meets or exceeds student needed.	Unknown at this time.	PD will be provided to help support and focus their efforts in this area.	Y2/Y3	Observations Analysis Interviews <hr/> Students will create and maintain an Assessment Portfolio that demonstrate overall competency and skill in specified subject areas and their outcomes.

Description Details:

1.1. Description: VMATH Live, <http://www.vmathlive.com/> is the premiere online math resource that creates a stimulating environment for all students. Students practice their math skills in a fun, web-based, environment. Game-like environment engages and motivates students. Teachers can assign specific skills. Skills aligned with Vmath and Vmath Summer curricula. Teachers track student progress with online reports. Students get instant support with built-in tutorials. Students can safely compete online with other students around the globe. V-mathlive is completely web-based with 24/7 access

1.2. Description: Glogster EDU, <http://www.glogster.com> is the educational side of the popular online service that allows students to create digital poster that consist of text, graphic images as well as digital media such as video and audio. Glogster accounts can be set up for users to work as individual and or in collaborative projects. Glogster is a safe and private environment that allows only the staff and students to view and of the student's posters. These posters will be blocked to the outside world.

1.3. Description: Learn 360, <http://www.learn360.com> is an online service that provides streaming K-12 video content that are based in grade level, subject area and state standards. It also provides printable teacher materials such as teacher notes, activities and hand outs for students. Learn 360 provides videos, audio files, stills and pdf based printed material from PBS, National Geographic and dozens of other educational video producers.

1.4. Description: Canaan School's will explore ways for students to develop Digital Portfolios that utilize digital media as well as web based resources. Students will create and maintain a total of three separate portfolios. A basic Notebook Portfolio where students can store random elements, the bits and pieces that will go into their finished portfolios. A Layout Portfolio, which will draw on the data stored in the Notebook portfolio. Here a student will edit and arrange the overall structure that will be assembled into the finished product. And an Assessment Portfolio that will demonstrate overall competency and skills not only in the specified subject areas but in the accumulation, manipulation and presentation of data that will become the final portfolio itself.

Indicators of Success for this Goal:

- Students will have a learning environment that offer technological resources that encourage independent and collaborative learning.
 - Teachers become familiar with concepts and practices that make up Student Centered Learning and understand the principals and practices behind 21st century skills.
 - Teachers develop lesson plans that will incorporate elements of Student Centered Learning.
 - Students will partake in assessments that focus on technology skills and practices and will be factored into a their overall grade.
 - Student scores on the NECAP math assessment should increase.
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Goal 2: Leadership

The administration at Canaan Schools understands fully that when planning for the future of educational technology in our school we are dealing with evolution not revolution. We realize that it takes time to fully implement a well thought out plan. The administrative support and guidance is greatly responsible for the technological successes that we have achieved here in Canaan.

School leadership (the Superintendent of Essex North Supervisory Union, the Principal and the Technology Coordinator of Canaan Schools) has worked toward developing strategies that will encourage all teachers to take a more proactive role toward integrating technology into the core curriculum and instruction. The leadership has and will continue to provide opportunities for training, support and other resources that will enable teachers to obtain this goal. The administration has and will continue to pursue strategies that promote the effective integration of technology into the curriculum by researching hardware solutions that can meet the need of the teaching staff as well as implementing the changes needed to bring technology resources to all of the students.

Our SU will:

- Develop strategies that provide a comprehensive assessment of an individual's technology proficiency and competencies.
- Develop strategies for professional development that promote the integration of 21st century tools into the curriculum and place an emphasis on student-centered learning in classrooms.

Action Step	Description	Staffing	Infrastructure	Budget	PD	Y1/Y2/Y3	Data Collection
2.1	The Canaan administration will take steps to increase the technology proficiency by the teaching staff through assessment, surveys, and subsequent training.	Currently employs all staff needed.	Availability of computers currently meets or exceeds student needs.	Services range in price from \$1,800 to \$9,500 annually.	Staff will receive all training needed.	Y1/Y2/Y3	<p>Surveys Analysis Interviews</p> <hr/> <p>It is in the nature for assessments to yield results in an on-going basis.</p>
2.2	Canaan School's will look at membership to such resources as the International Society for Technology in Education (ISTE) , for a better understanding on the changes in technology and how it can be integrated into the curriculum.	Currently employs all staff needed.	Availability of computers currently meets or exceeds student needs.	\$209 per participating, teacher, administrator and or technology Coordinator.		Y1/Y2/Y3	Surveys Analysis

Description Details:

2.1. Description: Canaan School's will continue looking at services that provide student centered testing and assessment, and will weigh their potential effectiveness based on their alignment to Vermont State Standards and Grade Expectations. Online Services currently under consideration are **Simple Assessment** www.simpleassessment.com, **The Northwest Evaluation Association (NWEA)** <http://www.nwea.org>, as well as a host of forums, blogs, wikis and other online educational resources and communities.

2.2. Description: Canaan Schools has recognized the importance of the **International Society for Technology in Education (ISTE)**, for a better understanding on the changes in technology and how it can be integrated into the curriculum.

Indicators of Success for this Goal:

- Collect data from assessment services that drive prescriptive training for individuals. A review and follow up assessment to show that individuals have achieved their goals by demonstrating proficiency and competency in the proper use and integration of technology.
 - Teachers are able to fully articulate their goals and demonstrate how they have integrated 21st century skills and tools into the curriculum and place an emphasis on student-centered learning in classrooms.
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Goal 3: Flexible Learning Environment

Flexible learning has many facets of meaning, and can be viewed many different ways. While the most common interpretation means that learning can be freed from the time and place dependencies of the traditional classroom environment, flexible learning can also offer elements that can be more closely integrated into the structure of the traditional educational environment.

Our SU will:

- Broaden our support and communications between students, staff and the community. For years we have sought to keep students from using email at schools, yet in the long run we have seen that these efforts are counterproductive. Some of the online services that are available such as Google Apps are integrated with G-Mail, if we setup student accounts to use these services we stand a better chance of monitoring their activities and providing a safer online environment. We will test this idea during the 2009-2010 school year.
- While DSL and other forms of high speed Internet access are not yet available to all the members of our community, we are working to provide access to information services by using new technologies such as wireless connectivity to provide greater access for our students on and around school grounds. But we are not looking to wireless technologies to just deliver information. They are being used to create channels of communication for our students so that they can interact with each other as well as their teachers and members of their community .
- We have and will continue to utilize distant learning opportunities such as those offered by the Virtual High School online services. In this way we can provide our students with learning opportunities with a wider range of ideas in a safe online environment.
- While we strive to find ways to balance the traditional classroom environment with ways that give students more control over their own learning, we have found services that take us firmly in the direction of utilizing technology to provide a more flexible learning environment.

Action Step	Description	Staffing	Infrastructure	Budget	PD	Y1/Y2/Y3	Data Collection
3.1	netTrekker , an online educational search service that delivers over 300,000 links of prefiltered educational web content.	Currently employs all staff needed.	Availability of computers currently meets or exceeds student needs.	netTrekker price is currently \$1,795.00 per year. Special \$395.00 through 6/30/09 for one year.	Being primarily a search engine netTrekker is very easy to use and will require little in any PD for teachers to become proficient with it.	Y1/Y2/Y3	Observations Analysis <hr/> Admin Tools that allow the netTrekker Administrator to track usage.
3.2	Brain Pop , animated, curriculum-based content that supports educators and engages students.	Currently employs all staff needed.	Availability of computers currently meets or exceeds student needs.	Unlimited Access to BrainPOP, BrainPOP Jr. (includes home access) for 12 Months. \$1,995.00	BrainPOP Educators, features free tips, tools, and best practices by and for our teachers.	Y1/Y2/Y3	Observations Analysis <hr/> Brain Pop comes with a set of Admin Tools that allow the Brain Pop Administrator to track usage.
3.3	K to the 8th Power , practical lessons designed to help teach essential 21st century skills. Students are assigned accounts that accessible 24/7 from home as well as school.	Currently employs all staff needed.	Availability of computers currently meets or exceeds student needs.	At \$11 per K-8 student that cost will vary from year to year. 2009/10 cost \$1,320 for 120 students	K to the 8th Power provides free web based PD to help teachers	Y1/Y2/Y3	Observations Analysis <hr/> K to 8 comes with a set of Admin Tools that allow teachers and administrators to track usage.
3.4	Google Apps GApps offers many features that provide students with a more flexible environment. With the integration of Google Doc, Google Calendar and G Mail students will be able to work on projects as individuals or in collaborative groups anywhere and anytime.	Currently employs all staff needed.	Availability of computers currently meets or exceeds student needs.	Free to schools and students, and doesn't require any budgeting.	Teachers have been using Google Apps for the past year and all seem to be fully up to speed.	Y1/Y2/Y3	Observations Analysis <hr/> It still needs to be determined if teachers and administrators have the right to access Student email accounts to help maintain safe and environment and insure students are following responsible practices.

Description Details:

3.1. Description: netTrekker <http://www.nettrekker.com> is an online educational search service partnered with the New England chapter of the International Society for Technology in Education (ISTE). It delivers over 300,000 links of pre-filtered educational web content based on grade level, subject area and state standards in a safe, relevant, easy-to-use format. The website is structured for easy access and navigation. Students and staff can create online personal folders to store and organize research materials. netTrekker provides a set of Admin Tools that allow the netTrekker Administrator to track usage and manage user names.

3.2. Description: BrainPOP creates animated, curriculum-based content that supports educators and engages students. This award-winning online educational resource includes [BrainPOP Jr.](#) (k-3), [BrainPOP](#), and their newest resource, [BrainPOP Educators](#), features free tips, tools, and best practices by and for our teacher community. Brain Pop now offers another feature that allows students to do work at home, thus providing a more flexible environment for learning as the student can access lessons from home as well as school. These lessons are available 24/7, and student progress can be monitored by teachers and administrators.

3.3. Description: K to the 8th Power www.kto8.com is an online service dedicated to providing educators with practical lessons designed to help teach essential 21st century skills. 21st Century Skills as defined at <http://www.21stcenturyskills.org/> A set of skills, included but are not limited to: Information and communication skills (information and media literacy skills; communication skills). Thinking and problem-solving (critical thinking and systems thinking; problem identification, formulation and solution; creativity and intellectual curiosity). Interpersonal and self-direction skills (interpersonal and collaborative skills; self-direction; accountability and adaptability; social responsibility). Global awareness Financial, economic and business literacy, and developing entrepreneurial skills to enhance workplace productivity and career options. K to the 8th Power presents these lessons in an engaging format that are relevant, up-to-date, and fun for the student. K to the 8th Power lessons are based on [ISTE NETS](#) standards for providing essential 21st century skills.

3.4. Description: Google Apps <http://www.googleapps.com/> offers many features that provide students with a more flexible environment for learning. With the integration of Google Doc, Google Calendar and G Mail students will be able to work on projects as individuals or in collaborative groups anywhere and anytime. Google Gears will be installed on all computers to provide access to work when the Internet is down. The use of G Mail for students still opens several issues surrounding a safe and secure online environment. It still needs to be determined if teachers and administrators will have the right to access student email accounts to help maintain safe environment and insure students are following responsible and ethical practices.

Indicators of Success for this Goal:

- Broaden our wireless connectivity to provide greater access for our students on and around school grounds.
 - Continue to utilize distant learning opportunities and search for more services and learning opportunities that can provide for a safe online learning experience.
 - Provide access to online services that free students from the time and place dependencies of the traditional classroom environment.
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Goal 4: Engaged Community

Canaan Schools understands the importance of reaching out to the local community. With Internet and communication technology available to our staff and students we have the means to reach out to our state, national, and global communities. The partnerships forged by these interactions provide and strengthen our understanding of who we are, and better define us as individuals among our local and global communities.

Our SU will:

- Canaan Schools provides online resources such as parental access to the Web 2 School student management system, Canaan School's Community Blog and the Canaan School's Website and even a Twitter page to inform and involve parents and members of our community.
- Students work with local area business and community organizations to design and develop advertising for the school's yearbook. Junior and senior students will engage in a special class to learn the digital layout and design of the school's yearbook as well as the business side of the multi thousand dollar venture.
- Students will continue taking part in the Tillotson Scholarship Award Program, creating interactive presentations on the value of local businesses to the economy of the North Country.
- Students will interview senior citizens in the community as part of a collaborative project. All of these materials are then digitally rendered into a final presentation. These materials are shared with the community.
- Increase student involvement and input with Canaan Schools' website.

Action Step	Description	Staffing	Infrastructure	Budget	PD	Y1/Y2/Y3	Data Collection
4.1	The Canaan administration has created the Canaan Schools Blog for teaching and support staff as well as school board and community members.	Currently employ all staff needed.	Availability of computers currently meets or exceeds student needs.	Blog Spaces is currently a free service, and doesn't require any budgeting.	Training in the basic use of the Canaan Blog will be provided in-house.	Y1/Y2/Y3	Observations <hr/> We will be able to see at a glance how much activity occurs on this blog and by whom.
4.2	Historical Preservation Project , students' record digital interviews with the senior citizens of the community.	Currently employ all staff needed.	Availability of computers currently meets or exceeds student needs.	Not fully known at this time.	Teachers will be trained to assist students in scanning, video editing and burning of DVDs.	Y1/Y2/Y3	Observations Analysis <hr/> Presentation materials are used as artifacts of the students' individual and collaborative work.
4.3	Canaan currently uses the Web 2 School student management system . Web 2 School allows parents to monitor their child's grades. Students can also monitor their grades so that they know at any given moment what subjects require more student attention.	Currently employ all staff needed.	Availability of computers currently meets or exceeds student needs.	Annual cost for this service is \$2,500.	Training on Web 2 School will be provided in-house.	Y1/Y2/Y3	Observations Analysis
4.4	A Twitter account will be created for members of the community. Students and staff will have an easy means of communicating with each other.	Currently employ all staff needed.	This service is not dependent on the school's Infrastructure.	Twitter is currently a free service, and doesn't require and budgeting.	Training on Twitter will be provided in-house.	Y1/Y2/Y3	Observations Analysis

Description Details:

4.1. Description: The Canaan School's Blog <http://canaanschoolsblog.ning.com/> was created with the intention of providing teachers and staff an accessible online service where they can share news, views and ideas. Another blog is currently in the discussion stage and is planned for a line of communication between students and teachers, both in and out of schools.

4.2. Description: Historical Preservation Project, Students interview the senior citizens of this community to form a bond that bridges generations. Interviews are recorded or even videoed as part of this collaborative project. Personal photos are brought to the school with care, scanned and returned to their proper owners. All of these materials are then digitally rendered into a final presentation and burned to DVDs. These materials are shared with the community and become part of the archive of the local library and the town offices as a means of preserving the history and growth of this town and its people.

4.3. Description: Web 2 School student management system allows parents to monitor their child's grades. Students can also monitor their grades so that they know at any given moment what subject require more attention.

4.4. Description: Twitter, <http://www.twitter.com> Canaan Schools will created a Twitter account so as to provide members of the community, students and staff an easy means of communications with each other. Twitter is one of the fastest growing means of communication on the planet.

Indicators of Success for this Goal:

- Canaan Schools has monitored a growing amount of activity with the Web 2 School student management system online resources by parents and student checking grades and attendance.
 - Canaan School's will monitor activity and usage of the Community Blog and the Canaan School's Website. Increased usage will indicate success.
 - As part of the Historical Preservation Project, students will produce DVDs and presentations of their final work. These DVDs and presentation materials are used as artifacts of the students' collaborative work.
 - Students will utilize technological tools to layout, design and develop the school's yearbook. These yearbooks will be used as artifacts of the students' collaborative work. Students will utilize these same skills on the school's webpage.
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Signature/Certification Page

General Information: The signature (below) certifies that this school, district, or supervisory union meets all requirements for Informational Technology planning as defined by the State of Vermont under the federal “No Child Left Behind” legislation.

Name of supervisory union or school(s) covered by this Technology Plan: Essex North Supervisory Union

Technology Contact Person: Thomas A. Mays Phone: (802) 266-8910

Title: Technology Coordinator E-mail address: tamays@canaanschools.org

Check here if you do NOT wish to be added to the Department of Education’s “Ed Tech” listserv. This listserv is one of the primary means of communication between the DOE and schools.

Contributors to this Educational Technology Plan and their affiliations. We recommend involvement by a breadth of stakeholders — including school administrators, community members, teachers, students, paraprofessionals, and other interested parties.

Christopher Masson - ENSU Superintendent

Debbie Lynch - Principal

Thomas A. Mays - Technology Coordinator

Jason Di Giulio - High School Teacher (English)

Timothy Gray - High School Teacher (Math)

Stephanie Lyons - High School Teacher (Computer Apps)

Kenn Stransky - Adult Education (NEKLS)

Certifications: Select one

This Educational Technology Plan was approved by our School Board on: _____

This Educational Technology Plan will be approved by our School Board on: July 6, 2009

Children’s Internet Protection Act (CIPA) certification: One box (below) must be checked for the school to qualify for funds under this program.

- The school certified CIPA compliance in it’s last E-Rate application
- The school did not certify compliance with CIPA in it’s last E-rate application, but does certify, as part of this technology plan, that it meets CIPA requirements
- The CIPA requirements do not apply because no funds made available under this program are being used to purchase computers to access the Internet, or to pay for direct costs associated with accessing the Internet.

Signature: _____ Date: _____
(Superintendent/CEO)

Mail this page only to: Peter Drescher, Vermont Department of Education, 120 State Street, Montpelier, VT 05620-2501