

**Report on Act 58 of 2011: Section 26  
An Act Relating to Making Miscellaneous  
Amendments to Education Law:  
Education Technology Report**

**Report/Recommendations  
to the House and Senate Committees on Education**

**January 31, 2012**

**Submitted by:**



**Integrated Support for Learning Division  
Peter Drescher, Education Technology Coordinator  
(802) 828-5149**

# Vermont Department of Education Report on Education Technology 2012 Report Pertaining to ACT 58 Sec 26 of the 2011 Legislative Session

## Statutory Reference

*On or before January 15, 2012, the department of education shall report to the senate and house committees on education regarding the current and planned use of technology and Internet service in public schools designed to increase educational opportunities for students, including:*

- (1) each school's type of Internet service, speed of connection, service provider, and projected upgrades available or planned before July 1, 2015;*
  - (2) efforts to increase the availability of individual learning opportunities, dual enrollment, online, and other alternative learning programs;*
  - (3) expansion of flexible learning environments, including efforts to develop and increase opportunities with out-of-state providers;*
  - (4) results of the department's research concerning the possible development of a statewide open document format that could be standardized across the K-12 structure in Vermont, including consideration of tools available, security risk inherent in each, and the viability of state agencies to join efforts to help standardize systems and reduce costs on proprietary software and solutions;*
  - (5) implementation of the department's communication and collaboration tool during the summer of 2011, focusing on uses of the tool by both schools and department staff and addressing incentives and value-added aspects of the tool; and (6) review by the department and the state board of education of the school quality standards and consideration of amendments focusing on the continued evolution of teaching and learning supported by technology.*
- This report was requested during the legislative session of 2011. The report will cover a summary of activities from the Vermont Department of Education and will center on activities in the educational technology realm. Specific inquiries were made for the most part, and those are addressed in this document. This introduction will give a summary of the current state of education technology in the state of Vermont.*

## Introduction

The Vermont Department of Education has on staff a full-time position dedicated to education technology. The role of the Education Technology Coordinator is to provide necessary supports for schools in their use and integration of technology tools for learning. Tasks that have been undertaken by the Education Technology Coordinator over the past two years include:

- Working with schools and other state agencies to develop high speed broadband capabilities in ALL schools.
- Developing a vision for school technology programs in line with the Vermont Department of Education Transformation of Education and more recent work around personalization of learning.
- Overseeing and granting out funds to schools for innovative projects that integrate technology in classrooms.
- Working with other stakeholders, in particular, the Vermont School Boards Association, to define Acceptable Use Policy guidance for the use of technology in schools.

- Reporting on status of federal funds to the U.S. Department of Education and overseeing a large scale evaluation project measuring a variety of grant funded programs.
- Monitoring federal funding grants that have been sent out to schools.
- Representing Vermont in the State Education Technology Directors Association (SETDA), a national level organization working to provide national support for education technology at the classroom level. Vermont's representative serves as a committee co-chair for the Innovations and Partnerships Committee.

Title IID funding, the funding source dedicated to schools for the support of education technology, was eliminated in April of 2011 in the last minute compromises in Washington, D.C. over the budget issue. This funding stream, while much reduced over the last two years, did provide schools with a level of flexibility in overall federal funds with regards to school-wide programs. Through the status of school-wide programs, Local Education Agencies, (LEAs) had the ability to mix funds from Title I, and Title IIA with Title IID to leverage professional development and equipment needed for moving technology integration forward in classrooms.

Essentially, beginning July 1, 2011, schools did not receive any Title IID federal funds. All indications show this will not be restored in the future.

Though this has placed a burden on schools technology programs, schools have made adjustments to accommodate the shortfall. Unfortunately, one of the adjustments has been to cut technology support personnel from the staff. Many times these support personnel have been leaders in working with teachers as they learn how to best support student learning with technology. The role of the Department of Education is crucial at this time in assisting those schools with whatever tools and policy guidance can be provided so that continued integration of technology can be achieved.

Prior to the elimination of the Federal funds, Vermont was seeing an increase in schools purchases of personal learning devices in the form of laptop computers, netbooks, and iPads for their students. Successes were being seen within these programs around increased engagement of students in writing and researching for core subject areas. Many schools found that the devices allowed teachers to leverage a wealth of resources for their students and brought many classrooms closer to digital content rich with learning. Students could research on the Holocaust by visiting resources in European libraries as well as the Holocaust Museum in Washington, D.C. Science students could perform data analysis using Google spreadsheets that allowed multiple students to work at the same time. It allowed high school students to access teacher developed resources from the school web page from home at all hours of the day and night. In many cases, the devices allowed parents and other family members' access to the Internet that was not possible earlier that year.

These programs, referred to commonly as 1:1 programs, (one computer for one child) are continuing despite the lack of federal funding and more programs are being established using local funds. There is also an uptick in the number of computer carts being made available in schools that are used in mobile lab situations, free to be moved about the school building and provide access throughout the day for a variety of classrooms.

A recent survey on 1:1 computing programs across the state indicates that a little over 6,000 students were involved in 1:1 programs in SY2010-11. These programs took place in 75 schools. Of those 6,000 students, roughly 1,000 of those devices are iPads, a much more personal learning device. The growth in iPad deployment in this current school year has continued as schools and teachers develop more ways to use innovative “apps” for classroom instruction. The rapid movement towards “e-books” and educational “apps” continues to make the iPad a robust device in classroom settings.

The Vermont Department of Education supports these initiatives and in fact helped establish over 25 of the 1:1 programs with an innovative grant program that used stimulus or American Recovery and Reinvestment Act (ARRA) funds towards the end of 2010. These grants supported schools in a variety of subject areas, everything from a community history project in Londonderry to a digital research project in Barton and Brownington. The Department is exploring the possibilities of being involved in the Maine Laptop Initiative and partnering on their next Request for Proposals when they bid devices in Fall of 2012. A key area that must be considered in any initiative of this type is the teacher training that must be employed when a device is entered into a classroom situation. The role of the teacher changes dramatically when no longer do they “deliver” all of the information. Facilitation of learning is a skill that many teachers must learn when working with students and technology. Students can access a dizzying array of resources, but still need a teacher’s guiding hand in making sense of the information and using it ethically and wisely. As we open these doors, we must continue to provide support for our teachers as they gain knowledge on the best practices in implementing quality learning with Internet enabled devices.

Other initiatives outside the Vermont Department of Education are meeting with success as well and are being promoted by the Department when possible. The E-Vermont grant that provides 1:1 computing to 24 towns across the state has been quite successful. Organized from the Vermont Council on Rural Development, the initiative has provided training and netbooks for schools across the state. It is hoped that there will continue to be funding available as this initiative expands its reach. In any outside endeavor supported or promoted by the Department, the training and professional development aspect is a high priority.

### **Vermont Department of Education-produced Support Products**

On the curriculum front, the Vermont Department of Education has worked closely with the field to produce reference and guide materials that assist classroom teachers in their use of the standards for technology. Two documents have proven helpful to schools:

- Transformation and Technology: A New Way of Learning, Classroom Scenarios
- <http://transformation-technology.wikispaces.com/>

This online resource matches the 2007 National Education Technology Standards (NETS) by grade clusters and describes “model” lesson plans that may meet those standards. It uses a glossary to describe a host of applications and tools that teachers may use and allows for a framework of innovative practice a teacher may modify for their own classroom. It also provides matches to a variety of content standards that are met which teachers may pick and choose as they explore the scenario application in their own situation.

- 2010 Technology Grade Expectations Update

- <http://vermonttges2010.pbworks.com/>

This online resource updates the original Vermont Information Technology Standards and matches them to the 2007 National Education Technology Standards (NETS). Through a table template, the standards are identified and then rubrics indicate various activities that students should be addressing under each heading.

The Annual Technology Survey collected in January of 2012, indicated that 219 schools of 275 reporting are using the resources above in varying capacities. The Department continues to promote and support their use and has plans to connect this work to our Common Core work as well. Presentations to the Vermont Superintendents Association and the Vermont Principals Association indicating ways teachers may use the resources have been delivered during this current school year. A planned series of workshops in April with principals will highlight many of the tools available and provide supports on how schools can better avail themselves of broadband and 1:1 opportunities.

Other efforts to support education technology from the Vermont Department of Education include:

- The continued support and development of Vermont Virtual, the online system established to provide online courses for K-12 students statewide. (more detail contained in other heading within this report.)
- The continued expansion, support and development of the Learning Network of Vermont, a robust videoconferencing system available in almost 200 schools. This project is expanding by including a number of recent Rural Utility Service grants into the overall systems. These grants provide videoconferencing equipment for schools in all corners of the state.
- Developing partnerships with the Education Service Agencies around principal leadership for education technology. This partnership could include in the future Vermont inclusion in I-Tunes University, a national program bringing college level coursework to the K-12 classroom.
- Developing plans to support 1:1 computing across the state with professional development activities and the support of state conferences in promoting these activities.

### **Specific Inquiries of the Senate Education Committee on Education Technology:**

The following sections pertain to the specific inquiries made to the Department of Education in this report. The specific question or inquiry will be highlighted with a (#) description prior to the response.

#### **1. Internet Access at Vermont Schools**

(1) each school's type of Internet service, speed of connection, service provider, and projected upgrades available or planned before July 1, 2015;

In December 2011 and January 2012, a survey was delivered to schools that asked about broadband connectivity. The survey was returned on January 11, 2012, and the results are indicated below. Part of the request from the Senate Education committee was to provide projected upgrades to broadband services available or planned before July 1, 2015.

Local school districts ultimately make projected upgrade decisions based on the availability of services in their area or region. This may or may not involve the Vermont Department of Education. However, the Department of Education was initially involved to some degree with the implementation of the Broadband Technology Opportunities Program (BTOP) that is now underway in the state. This program provided funding for telecommunications builds across the state and focused on two of the state providers in the original request for proposals. Schools within the service areas of those providers are taking advantage of the program by and large. To date, there has been indication that only a couple of supervisory unions or schools have opted out of the offering. Essentially, schools on the “build” routes have been offered subsidized cost structures to build and deliver fiber connections to their door. The pricing for these builds is attractive in that it provides truly high-speed connectivity directly to buildings. There is a timeline for accepting these offers and the schools have been made aware of the consequences which include incurring the full cost of delivering fiber to their building on their own at a later time. This figure typically is in the 5-digit range, meaning small school locations may not be able to connect in the future.

The Vermont Department of Education also has put in place a contract on behalf of all schools that uses Education Networks of America (ENA) as the provider of choice. Education Networks of America works with many providers across the state and targets only K-12 schools in their work. They provide many services to schools around broadband acquisition including assistance with E-rate reimbursements<sup>1</sup> and funding mechanisms that allow for those reimbursements to be applied immediately instead of waiting for the year-long cycle to produce the reimbursed funds. They provide full time support and “up-time” for any network they serve and work on schools behalf with the various providers around the state. Many times Vermont schools must work with a variety of providers in one region. ENA helps to streamline this situation and many schools are now in negotiations with ENA. To date, it looks like at least a dozen supervisory unions have pending contracts, most contingent on school budget votes in March 2012.

Education Networks of America is involved in a new partnership with one of the Vermont providers involved in the BTOP program and through that partnership both entities are making progress in signing schools eligible for the stimulus funding program. Through the work of the Department, the state contract put in place is also streamlining the application process for E-rate reimbursement for the schools. This streamlining provides a relief for many small schools, some of which do not currently seek E-rate reimbursement at all. In fact, much of this work developing a state level mechanism for assisting schools in broadband acquisition was initiated in 2008 when it was determined that many small schools were not availing themselves of the E-rate reimbursement program.

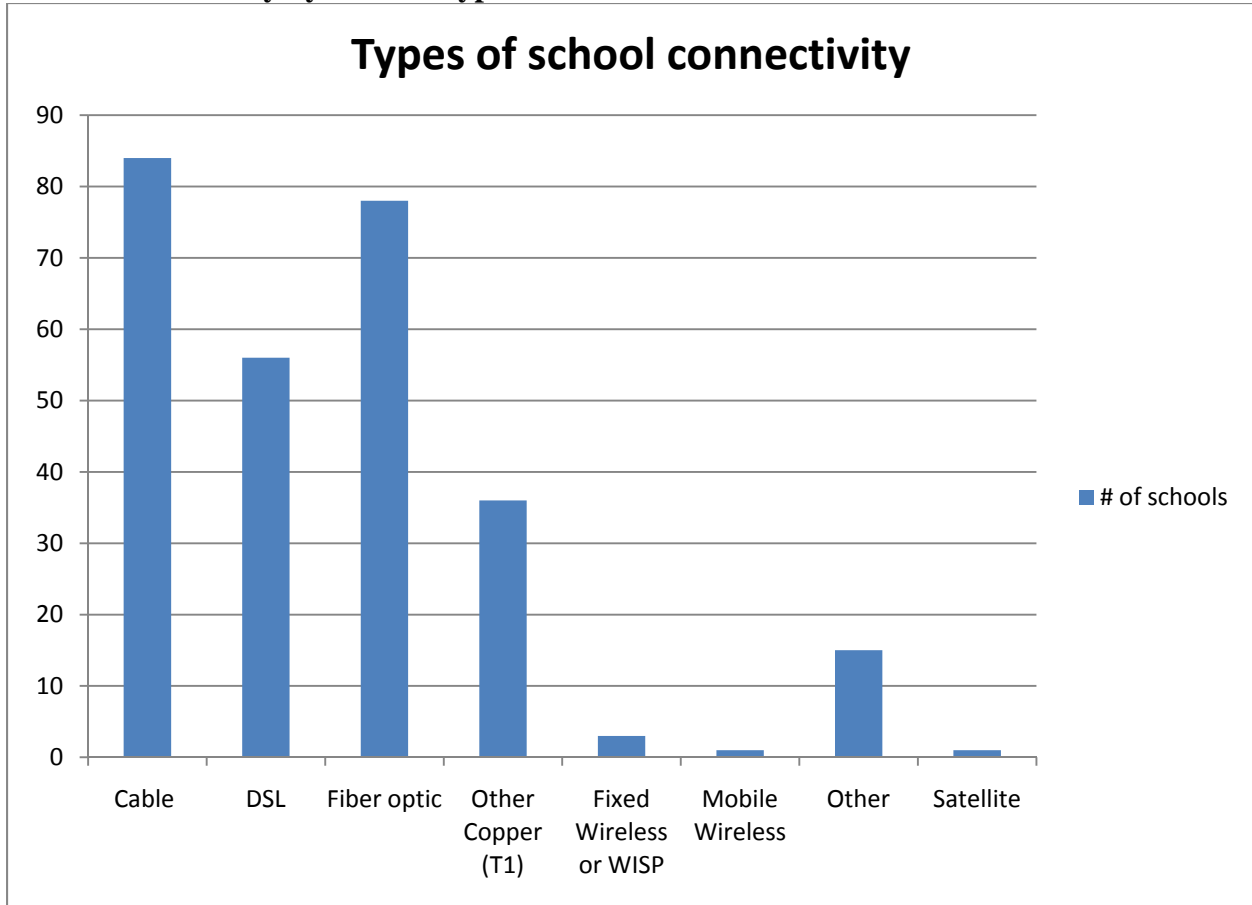
---

<sup>1</sup> E-rate is a federal program overseen by the Federal Communications Commission and operated by the Universal Service Administration Company (USAC). USAC has a specific program for Schools and Libraries called E-rate. This program allows schools and libraries to apply for reimbursement on telecommunications costs include Internet access and telephone charges. The reimbursements are based on schools Free/Reduced Lunch counts and schools may file the required documentation on line at <http://www.usac.org>

Before July 1, 2015, it is anticipated that 90% or more of all schools in Vermont will have access to fiber or other high speed connectivity now being built across the state. This projection is based on the known network availability and the speed at which new projects are being completed. The Vermont Department of Education continues to actively seek ways it can assist schools in this broadband acquisition and in finding opportunities to fund increased access.

The following statistics represent a current state of broadband connectivity in Vermont schools. A recent survey representing 275 of the 307 public schools reported the following:

**School Connectivity by Service Type:**



**Cable** denotes cable modem used in schools. Often, these existing connections are inadequate for large bandwidth applications. Many schools are slowly moving away from this model and moving to the Fiber Optic solution.

DSL = **Digital subscriber line (DSL, originally digital subscriber loop)** is a family of technologies that provide internet access by transmitting digital data over the wires of a local telephone network. In telecommunications marketing, the term DSL is widely understood to mean Asymmetric Digital Subscriber Line (ADSL), the most commonly installed DSL technology. DSL service is delivered simultaneously with wired telephone service on the same telephone line. This is possible because DSL uses higher frequency bands for data separated by filtering. On the customer premises, a DSL filter on each outlet removes the high frequency interference, to enable simultaneous use of the telephone and data.

**Fiber-optic communication** is a method of transmitting information from one place to another by sending pulses of light through an optical fiber.

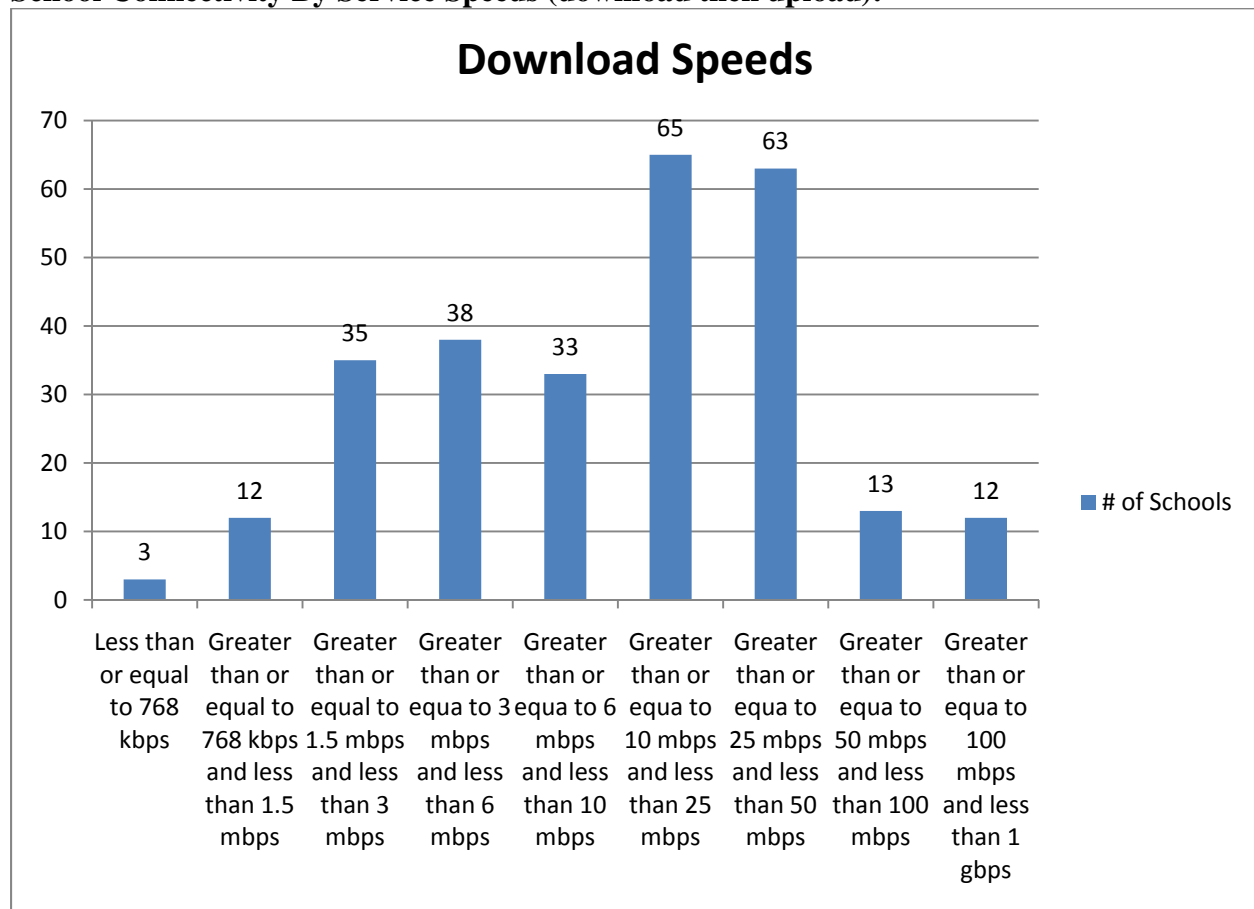
**Other copper (T1)** refers to copper line wires that are used to transmit telecommunications. This technology is being slowly replaced with Fiber optic lines, but many schools still use “T1” lines to connect to the Internet.

**Fixed Wireless and Mobile Wireless** refer to wireless connections either tethered to the building onsite providing a broadcast of telecommunications signals or provided in a mobile capacity where the delivery unit is attached to a cell phone or other device “tethered” virtually to an existing computer or Internet connection. This is the least used technology in Vermont schools.

**Satellite** refers to the purchase of satellite technology to bring signals from an orbiting satellite to the school through the use of a satellite dish mounted outside on the building. Again, very few schools are using this technology.

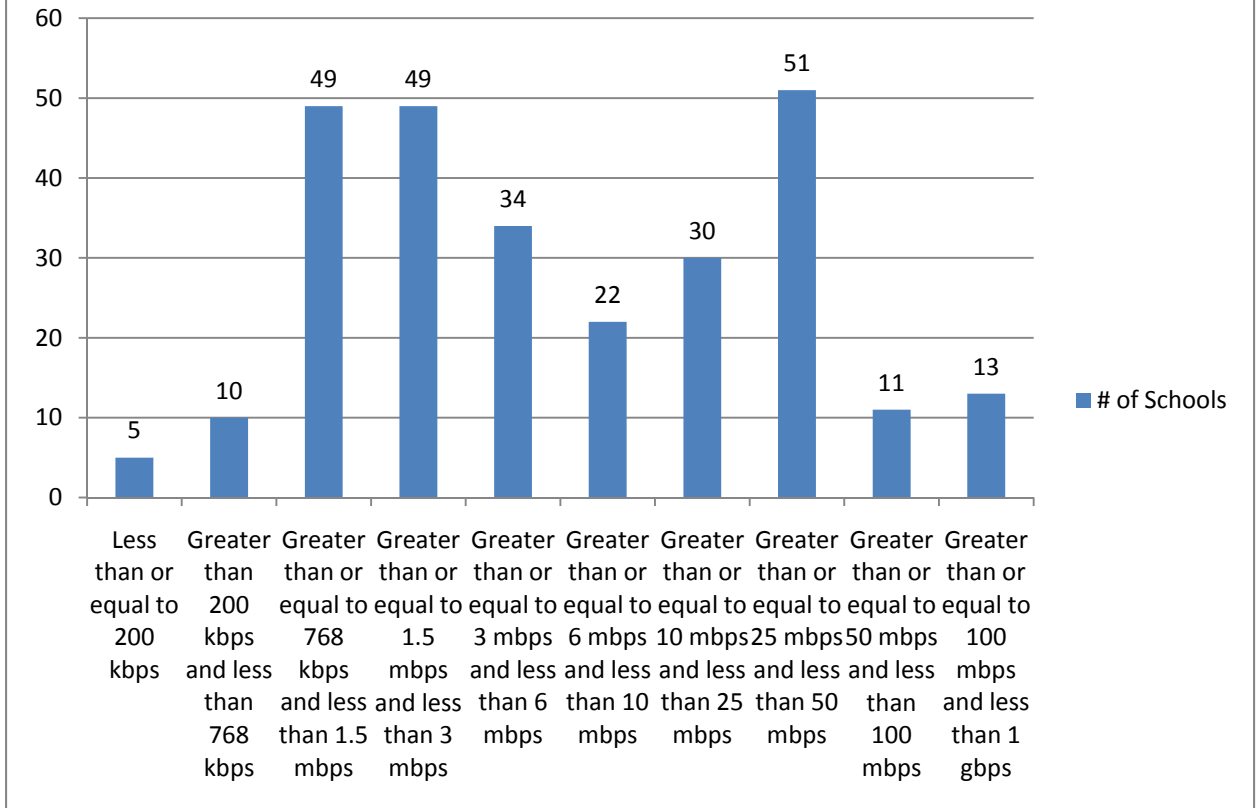
**Other** in this case refers to smaller carrier delivery systems. This may be a T1 combined with other services, or other combined connectivity schemes using a variety of the other above mentioned technologies.

**School Connectivity By Service Speeds (download then upload):**



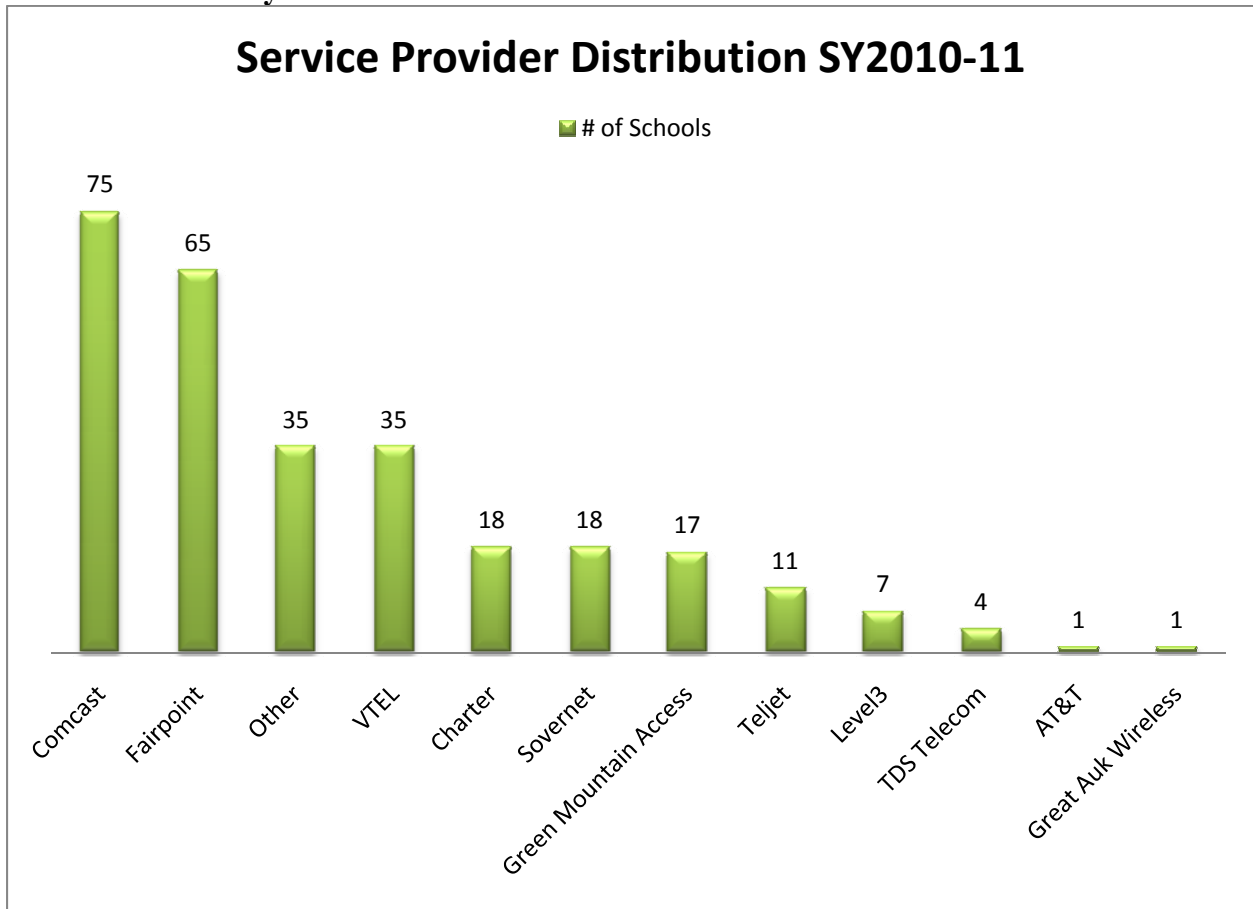
kbps = kilobytes per second  
 mbps = megabytes per second  
 gbps = gigabytes per second

## Upload Speeds



kbps = kilobytes per second  
 mbps = megabytes per second  
 gbps = gigabytes per second

## School Connectivity Based on Service Provider:



The Vermont Department of Education continues to support and encourage schools in their continued acquisition of truly high-speed broadband connectivity. As more service providers continue to be able to provide high-quality, high-speed service, the Department will encourage schools to sign on for a better connectivity rate for the use of technology in schools. A trend has been emerging over the last year that is to move schools away from connections that are low cost yet not adequate for the continued advances in computing that utilize “cloud” architecture.

Computing is moving to a place where large local hard drives will not necessarily be the norm and data in large part will be stored in the “cloud”, a virtual space that relies on servers in various locations across the globe. Smaller, more nimble computing devices in the hands of the students and consumer will be the norm as we continue to move deeper into the 21<sup>st</sup> century. These devices and their need to access remote data will drive the bandwidth need and allow for increasing speeds via the Internet connections.

### **2. Increasing Opportunities with Technology**

(2) Efforts to increase the availability of individual learning opportunities, dual enrollment, online, and other alternative learning programs.

The Vermont Department of Education continues to seek other avenues for learning advancement for all students across Vermont. These avenues include the following:

- Development of the Virtual Learning Cooperative of Vermont, an online repository of courses that are available to all schools and in many cases allows for a significant expansion of course offerings to student populations. (more detail on this program continues in another section)
- Dual enrollment offerings being orchestrated in the following ways:
  - A partnership between the Learning Network of Vermont and Vermont Interactive Television allows for students in Mt. Anthony Sr. HS to take part in an advanced Calculus course offered by Vermont Technical College. This offering provides credit for both college and high school and provides students with a much needed “edge” on their upcoming college career path.
  - The Learning Network of Vermont, a videoconferencing system now engaged in the development of online and interactive videoconferenced sessions from South Burlington and other supervisory unions receiving RUS grants.
  - The Vermont State Technology Plan, entitled, Technology for Personalized Learning is due to be released in early February and lays out a vision for moving learning to more personalized approach for all students. This technology plan, envisions classrooms developing ways that technology can address various learning styles and needs as more personal devices are placed in the hands of students. A copy of the released Technology Plan will be sent to the Legislature when completed in early February.

In addition, work commenced on a study in the fall of 2011 to look at different pathways for graduation. The resulting document, Policy Research Team Report, is attached as Appendix 1. This document laid the foundation for further work to be developed by the Vermont Department of Education around policies and strategies to increase opportunities for students.

**Survey results in January 2012 to the following question:**

How many students take online courses that your school provides them through outside online providers? 1,090 students reported from 275 schools.

**3. Expanding Flexible Learning Environments**

(3) Expansion of flexible learning environments, including efforts to develop and increase opportunities with out-of-state providers.

In 2009, the Vermont Department of Education put forth a Request For Proposal (RFP) for an entity to develop and manage a virtual environment for the purpose of offering high quality courses online for K-12 schools across the state. Through this RFP process, the Vermont Virtual Learning Cooperative was selected. The Vermont Virtual Learning Cooperative partnered with River Valley Technical Center as their fiscal agent has developed a network of schools across the state that partnered with the entity and are providing online courses for their students. The goal of Vermont Virtual is to have all middle and high schools across the state as partners by SY2013-14. Elementary schools will avail themselves of virtual learning but not in the same fashion as middle and high school.

Vermont Virtual Learning Cooperative, now known simply as Vermont Virtual continues to grow and build its offerings in terms of courses, online professional development and summer

credit recovery courses. Vermont Virtual is self-sustained at this point, although the need for additional staffing as the program grows will require some level of funding so that support for more schools can be continued in a quality manner. There are plans from the office of Integrated Support for Learning to continue this funding from existing programs.

The Department of Education understands the role out of state providers can play in the continued education needs of schools. While the Department is continuing to urge schools to join the partnership of Vermont Virtual, there is understanding of the unique needs that schools have for course offerings. Sometimes, out-of-state perspectives provide a new window on learning. A prime example is that of schools learning about environments unlike Vermont. Desert Ecology for example, would probably best be taught by an educator living in Arizona, or New Mexico, rather than one living in Bennington, Vermont. It is for that reason that the Department does not limit opportunities schools may seek. Vermont Virtual does provide a unifying structure for seeking these alternative paths, and in fact has reached out to out-of-state providers to broker courses from those entities for Vermont schools. (One entity being negotiated with is Virtual High School from Massachusetts). This effort has met with success so far and negotiations are underway at this time. Again, the Department continues to encourage schools to join with Vermont Virtual and help build the program in the image schools across the state wish to see. Vermont Virtual represents a significant component of the Vermont Department of Education's efforts to expand learning opportunities for schools in Vermont. With declining enrollments and fiscally challenging times, schools may not be able to afford academic courses that schools may wish to offer their students.

Pages follow in the Appendix that contain more information on the current status of Vermont Virtual.

#### **4. Open Document Research and Development**

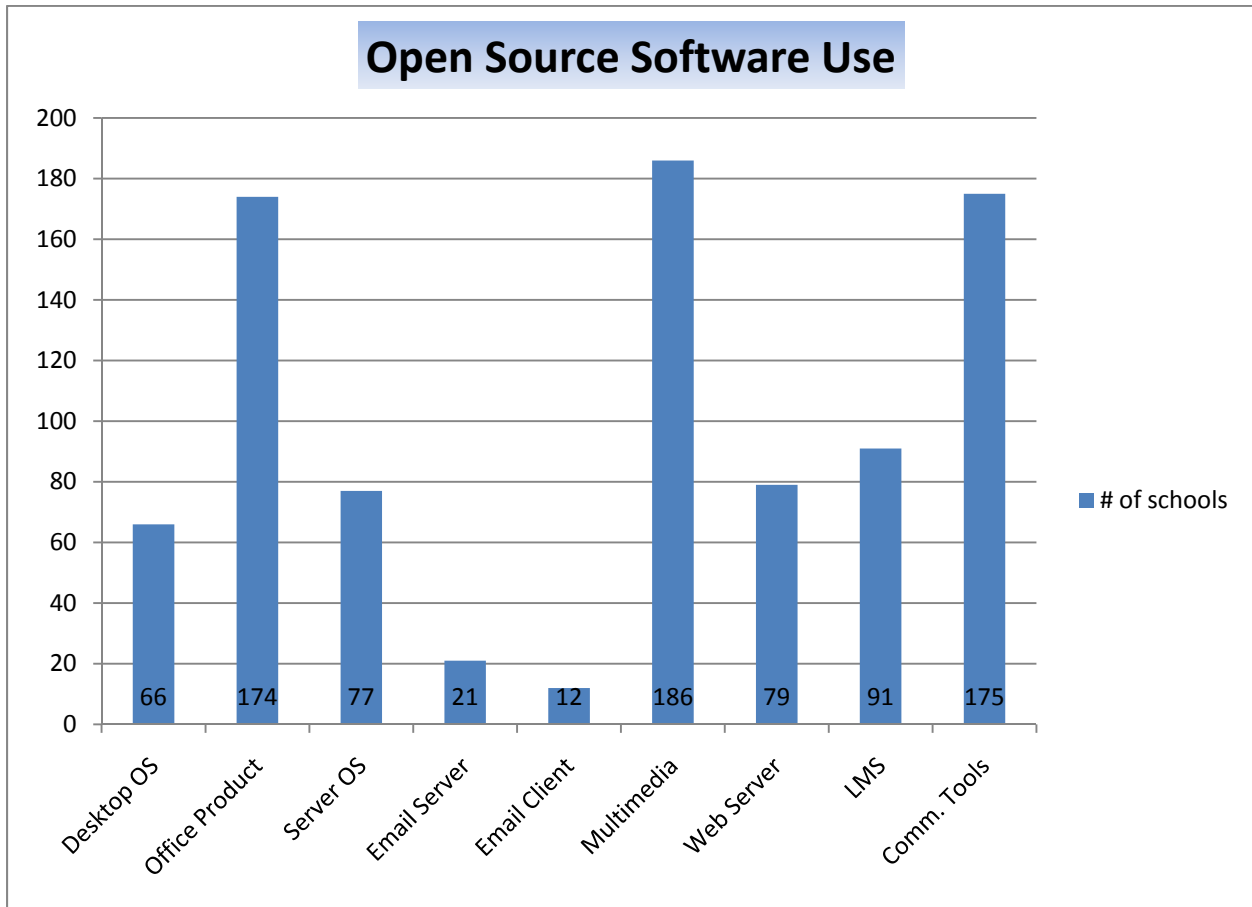
(4) results of department's research concerning the possible development of a statewide open document format that could be standardized across the K-12 structure in Vermont, including the consideration of tools available, security risk inherent in each, and the viability of state agencies to join efforts to help standardize systems and reduce costs on proprietary software and solutions.

Some research into this area has been conducted in the past and the department continues to consider all paths in regards this issue. Many state systems do not employ an open document format and in lieu of that and the myriad of reporting that the Department must do with national vendors, providers and the USDOE, Vermont, while considering this move, must continue to provide the required formats (often Microsoft-based) to comply with national requirements on reporting.

This has gained ground locally and essentially become an area where schools have begun moving forward on their own with the move towards more open source solutions. From the perspective of the Department, a trend we do see is towards large scale tools having more inherent open source protocols in place. For example, the Longitudinal Data System being applied for via a federal grant is built on XML, which is an open source platform. This complies with a national standard of SIF, Schools Interoperability Framework, which is becoming an industry standard. At the local level, a move towards open source tools and formats has taken

hold, though not universally. In many cases, this trend is seen more readily in schools where a strong technical individual can support and ease the transition. In most cases though, we still see many schools purchasing licensing on Microsoft products.

A recent survey to schools on their use of open source software can be found below:



Desktop OS = Desktop Operating System

Office Product = This might denote, Open Office or other word processing/office productivity toolsets.

Server OS = Server Operating System, a popular one being Apache.

LMS= Learning Management System, (Moodle, Sakai, etc.)

Comm. Tools means Communication tools. This may include free or shareware tools.

This chart indicates that well over half of the schools polled, 174 of 322 indicated that open source office products were used in their schools as opposed to proprietary software for the same purpose, for example, using Open Office in place of Microsoft Office. (Microsoft Office licenses, per seat are approximately \$80.00).

## **5. Implementation of Communication and Collaboration Tool**

(5) Implementation of the department's communication and collaboration tool during the summer of 2011, focusing on uses of the tool by both schools and department staff and addressing incentives and value-added aspects of the tool.

In 2005, the Department of Education began using Riverdeep Learning Village, an online portal system for educators across Vermont. Riverdeep Learning Village, provided an adequate interface for educators to upload units of study and access the NECAP Item Assessment Bank, a significant project built by the Department of Education. Riverdeep Learning Village began outliving its usefulness in 2008-09 when more educators began accessing it with a variety of needs. The system was not popular amongst educators and a move to another tool was desired. A Request For Proposal was put forth and a company from Toronto, CA was chosen; Intrafinity. They have a robust portal website they are developing with the Department at this time. The Vermont Education Exchange (VE<sup>2</sup>) website will provide a statewide solution that builds collaboration and instructional resources through communities of practice, an instructional resource repository, state standards databases, and collaboration tools including ranking, rating, and review systems. This easy-to-use website will serve as an educational portal that will support educators in their efforts to disseminate and build on best practices for meeting the learning needs of all students, effectively communicate with all school staff, and leverage the expertise of educators. We are very enthusiastic about the launch of this portal in Summer 2012 not just for the development and dissemination of instructional materials that it will provide but because it will enable broad communication with stakeholders, and foster collaboration at the local and state levels.

This tool has so far exceeded expectations on what was thought possible. The state technology plan process will be one of the first processes to use the Vermont Education Exchange. With this tool, school leaders will be able to view one another's plans, and hopefully spur a regular dialogue about how to approach technology planning in the best way possible.

## **6. Review by Department and SBE on school quality standards and possible amendments**

(6) Review by the department and the state board of education of the school quality standards and consideration of amendments focusing on the continued evolution of teaching and learning supported by technology.

A separate review of a particular component of the school quality standards for this study was not undertaken given that school quality standards are under review in general. The state educational system is placing a new emphasis on measuring and supporting student progress over his or her public school career and providing multiple pathways toward high school graduation. Teaching and learning supported by technology is a key component to the states' education goals and is integral to this review of the standards.

Respectfully submitted February 1, 2012  
Peter Drescher, Education Technology Coordinator

## **APPENDIX**

Includes

1. Latest statistical information packet from Vermont Virtual Learning Cooperative
2. Policy Research Team document





With almost 1200 enrollments in its first two years, the Vermont Virtual Learning Cooperative is providing students with more availability, accessibility and flexibility for learning.

## The Vermont Virtual Learning Cooperative

The Vermont Virtual Learning Cooperative (VTVLC) is a partnership of Vermont's schools working together to offer online courses and programs. Originally created using ARRA/Title II-D funds, VTVLC now is supported by partnership fees and funding from various grants and resources provided by the Vermont Department of Education. Schools that join the Cooperative pay a \$3,500 annual membership fee and provide at least one teacher to facilitate an online course. In return, the partner school earns 25 tuition-free enrollments each semester in any VTVLC courses offered by the other partner schools. VTVLC coordinates and supports the efforts of the partner schools using an online Learning Management System (LMS) and a customized Student Information System (SIS). These tools provide local implementation and control of the programs, while the oversight of VTVLC administration and staff ensures seamless integration with the schools' local courses and programs. This program allows students greater access to programs and courses while allowing schools to maximize teacher resources for low and under-enrolled classes.

**Vermont's Largest K-12 Online Provider**

- Provides virtual solutions to all of Vermont's Supervisory Unions and Districts
- Serves K-12 public, independent and home school students
- Offers 70+ online courses, including NCAA approved core academics, Learning Recovery, electives, world languages, honors, and Advanced Placement®
- Provides Flexibility and personalized instruction to all Vermont students
- Provides a variety of custom solutions for schools and districts to meet students' needs
- Provides online professional development for Vermont's educators



According to the 2011 Final Evaluation Report conducted by the American Institutes for Research for Vermont's Title II-D Enhancing Education Through Technology Program, 86% of students completed their VTVLC online courses with an average course grade of 82%. Science and Health courses had a 100% completion rate, as did all students from ten (10) partnering Vermont high schools. The number one reason partnering school Principals noted student enrollment in VTVLC courses was opportunity to enroll in courses not otherwise available.

Contact: Jeff Renard, VTVLC Director 307 South Street, Springfield, VT 05156



## Other Highlights:

### 1. VTVLC Learning Recovery:

The VTVLC Learning Recovery Program/Virtual Summer School has assisted almost 200 students to stay on track to graduate on time. Students pre-test standards and “test out” by demonstrating competency in material they already know. This allows students to work with their VTVLC teacher to gain better understanding of standards they need more help learning, improving their ability to succeed.

### 2. VTVLC Algebra Readiness

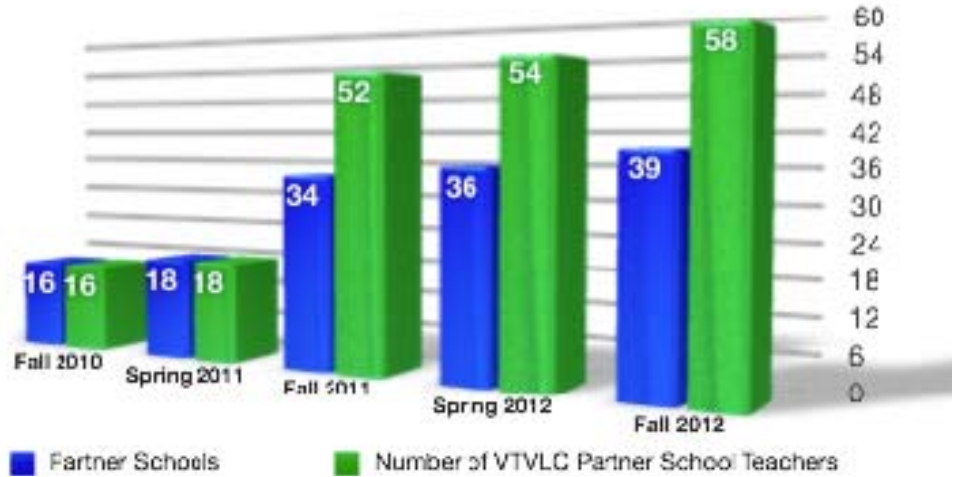
#### Program

The VTVLC Algebra Readiness Program, new next year, will provide students who have been identified as struggling learners, not making AYP, or students with disabilities in math, the opportunity for self-paced alternative pathways for gaining competency in Pre-Algebra concepts. This program will support thousands of students to gain confidence in math, while demonstrating specific growth in math concepts aligned with Common Core.

### 3. e-Curriculum Support for Schools

As 1 to 1 computer initiatives and textbook replacement cycles merge, VTVLC is assisting schools to use e-Curriculum that is aligned to Common Core Standards so that students can access learning materials 24/7 from anywhere, anytime. In addition, VTVLC's custom Student Information System allows all members of the learning team (students, teachers, school counselors and parents) total integration and access to the child's learning activities. Providing real-time data allows much more efficient student support.

## VTVLC Partner School Growth



### Growth of VTVLC Partner Schools

Since the creation of VTVLC two years ago, the number of partner schools has grown 244%. Because partner schools earn 25 tuition-free seats for every course they offer, many schools have additional VTVLC teachers. The number of online teachers facilitating courses during this same two year period has grown more than 362%. It is expected that all Vermont high schools and middle schools will be partnering through VTVLC by 2014.

## VTVLC Online Course Growth



### VTVLC Courses

The course a new VTVLC partner school will offer depends on many factors, such as; teacher availability and desire to teach online, content availability and statewide-need. VTVLC works closely with the new school to identify a course that is low/under-enrolled so that schools can work more efficiently and cost effectively, saving many thousands of dollars in under-utilized classrooms. In addition, providing students access to courses not offered locally, but offered from other schools, provides students with a much larger opportunity to enroll in classes not otherwise available.

### Statement of Non-Discrimination

The Vermont Virtual Learning Cooperative does not discriminate on the basis of race, color, religion, national origin, gender, sexual orientation, age, or disability in admission or access to, or treatment or employment in, its programs and activities. Any person having inquiries concerning the Vermont Virtual Learning Cooperative's compliance with the regulations implementing Title VI, Title IX, Section 504 or other state or federal non-discrimination laws or regulations is directed to contact:

Judith Pullinen, Superintendent  
River Valley Technical Center, 307 South Street, Springfield, VT 05156

802-888-1100

# POLICY RESEARCH TEAM FINAL REPORT

Bellows Free Academy | Brattleboro Union High School | Essex High School



## Purpose

The Vermont Department of Education is committed to graduating every student prepared for success in the colleges, careers, and communities of the 21<sup>st</sup> century. To accomplish the state’s ambitious goals, the Department is working to build support for new ways of teaching and learning among educators, policy makers, parents, and community leaders across the state. This report, which presents research on several innovative policies and practices currently being employed in Vermont schools, is a first step toward shifting public perceptions about education, public schools, and the learning needs of today’s students. The purpose of this informal study is to uncover both opportunities and challenges related to two major policy directions that are currently driving high school transformation in Vermont: flexible learning pathways and proficiency-based graduation models. The goal of this report is to investigate the intersection of policy and practice in three promising schools, and present a series of concrete recommendations based on the findings.

## Background

The Department of Education’s Policy Research Team was composed of experts in secondary education and policy, including two principals, a former superintendent, two legislators (both of whom sit on Vermont’s House Committee on Education), three Department staff members, and two representatives from statewide organizations that serve Vermont students and schools—the Vermont Student Assistance Corporation, a public nonprofit agency that assists Vermont residents with collegiate preparation and postsecondary training, and Vermont Adult Learning, a private nonprofit that provides adult education and literacy services to Vermont residents age sixteen and older who are not enrolled in school. The team was jointly facilitated by John Fischer, Director of the High School and Adult Division of the Vermont Department of Education, and Greg Young, the Vermont liaison to the New England Secondary School Consortium.

Three primary criteria were used in selecting the research sites:

- A willingness and capacity to improve learning opportunities for students through innovative strategies such as concurrent enrollment, virtual/blended learning, work-based learning, and/ or career and technical education (CTE).
- A recognition that shared governance systems can foster more integrated learning experiences among high schools, CTE centers, and institutions of higher education.
- Proven success in school improvement.

The Policy Research Team held half-day meetings in October 2011 at three secondary schools that are implementing promising policies or practices related to flexible learning pathways and proficiency-based education. Each visit began with a review of high-leverage policies and practices currently in place in the school. All the discussions included school and CTE administrators, teacher-leaders, and other staff members, and two included student participation and perspectives. The conversations were interactive, and team members engaged fully in the discussions, which involved both information gathering (asking participants detailed questions about their models) and supportive feedback (offering recommendations for consideration). The interactive approach encouraged more robust, in-depth conversations about the role of delivery models, facilities, funding mechanisms, and CTE integration. The groups also explored necessary “next steps” for implementing flexible learning pathways and

proficiency-based practices, including modifications to or elimination of specific policies. The participating sites were also encouraged to discuss support and funding options that might help them advance their work and achieve their goals.

## Glossary of Terms

**Personal learning plans** are developed by students in collaboration with teachers, mentors, counselors, and parents to help they get from where they are in their educational journey to where they want and need to be. Personal learning plans are integrated with a student's academic or CTE courses and address long-term learning goals—from specific academic deficits to collegiate and career aspirations. Personal learning plans help students proactively consider postsecondary goals, take more responsibility for and ownership over their education, and document and track what they have learned, while also making educational experiences more relevant to individual interests, aspirations, and learning needs.

The term **high-leverage policy** was developed by the New England Secondary School Consortium to describe education policies that (1) increase academic aspirations, achievement, or attainment for all students; (2) promote greater equity in learning, performance, or life outcomes for students; and (3) generate positive ripple effects throughout an educational system. The purpose of this report is to help identify potential high leverage policies in Vermont schools. For more detailed information on high leverage policies, see the Consortium's [High Leverage Policy Framework](#).

**Flexible learning pathways** empower students to pursue their passions and take a more active role in designing their own education. Sometimes called personalized pathways, flexible learning pathways encourage students to blend a variety of educational experiences, both inside and outside of the school building, to satisfy graduation requirements and meet state-required standards. Rather than selecting from a list of predetermined course options offered according to a fixed schedule, students pursuing a flexible learning pathway work closely

## Bellows Free Academy

**Location:** St. Albans, Vermont

**District:** Franklin Central Supervisory Union

**Website:** [www.bfasta.net](http://www.bfasta.net)

**Serving cte:** Northwest Technical Center

**SenDing toWns:** St. Albans City, St. Albans Town, and school-choice towns

**gRaDe span:** 9–12

**StuDeNt enroLLment:** 1,061

**tEaching facuLty:** 127

Bellows Free Academy (BFA) is located in Franklin County, an agricultural area in the Champlain Valley located about 30 miles north of Burlington. Sixty-five percent of BFA students are defined as “first generation” (neither parent earned a four-year college degree). The high school operates on a semester basis with a three-day rotating schedule. Each school day has five 70-minute class periods and a 25-minute advisory. Students take seven courses each semester that rotate through the three-day period with each class being taken twice (the additional time slot is filled by a class advisory meeting).

### Practice Discussion

Bellows Free Academy received a “21<sup>st</sup> century innovative programming” grant from the Department of Education for the 2011–2012 school year. The school is working toward two goals as part of its grant: (1) increase the use of personal learning plans for more students, which includes new ways to document evidence of learning in proficiency-based settings, and (2) increase the number of students engaging in innovative, nontraditional pathways to graduation, postsecondary learning, and careers. BFA takes advantage of the High School Completion Program to help more students graduate. A group of teachers has been meeting to discuss the use and value of formative and summative assessment, with the goal of increasing the use of formative-assessment strategies in the classroom—which the faculty considers to be essential to the process of moving the school toward proficiency-based graduation requirements. BFA has also been increasing the use of online high school courses, which are accessible to both middle school and high school students. The presenting team discussed a variety of modified organizational structures they believe would

support greater innovation, flexible learning pathways for all students, and the implementation of a proficiency-based

with teachers, counselors, advisors, and mentors to develop a customized curriculum that meets specific learning needs, expectations, and aspirations. Flexible pathways can incorporate career-and-technical courses, collegiate learning, online education, internships, apprenticeships, volunteer opportunities, and other diverse educational experiences. Importantly, flexible pathways are distinct from multiple pathways, which can be defined as a predetermined selection of program offerings or pathways that may not offer students the opportunity to customize their learning experiences. While multiple pathways provide students with an expanded set of learning options, they may not allow for the kind of flexibility in design that would make them truly personalized to a specific student's learning needs, interests, and aspirations.

A **proficiency-based diploma** is a graduation decision that is based on students demonstrating what they have learned. In practice, it means that every student must show—by writing papers, delivering presentations, or completing challenging projects, for example—that they have acquired a minimum level of proficiency when it comes to the mastery of essential knowledge and skills. In more traditional educational systems, graduation decisions are typically based on course credits and grades, both of which can be unreliable indicators of knowledge and skill acquisition. The general goal of proficiency-based graduation policies is to certify that all students who receive a secondary diploma have been sufficiently prepared for success in college, work, and adult life.

The **Vermont High School Completion Program** (HSCP) was initiated on July 1, 2006 in compliance with Act 176, which was passed during the 2006 legislative session. The goal of the HSCP is to provide a flexible pathway to a high school diploma for Vermont students who are between

diploma, including changes to scheduling, licensing, and advisory systems.

## Policy Discussion

Several policies were discussed with BFA staff and administration, including licensing issues related to various non-traditional, non-core subject areas—specifically, how to ensure that work-based mentors and other non-traditional teachers would meet expected standards for teaching quality and effectiveness. Various challenges associated with offering concurrent-enrollment opportunities on-site or off-site were also discussed, from transportation issues to monitoring students enrolled in these programs. The discussion also addressed funding complications related to enrollment status, which were generally related to the logistics of funding learning activities, including off-site college classes, High School Completion Program options offered by off-site providers, or CTE courses. While state policy dictates how these options are paid for, there is often confusion among the schools and providers about the funding and enrollment status of students. The discussion also addressed the role that the High School Completion Program plays in providing learning opportunities for students. While the High School Completion Program was seen as a successful practice, questions were raised about the quality of alternative pathways and concurrent-enrollment options when compared to the traditional high school experience. The principal acknowledged that some students enrolled in the High School Completion Program were more disconnected from the high school, and that differences in enrollment status may contribute to this situation. Higher-education learning expectations also appear to have an impact on secondary policies and practices. While it may be an inaccurate perception, participants expressed the belief that many existing secondary policies (such as Carnegie Unit graduation requirements) are an extension of higher education's demand for standardization across high schools. Participants felt that students, parents, and teachers would benefit from a greater understanding of proficiency-based models and how they connect with college-admission requirements.

16 and 21 years of age and have left school. The HSCP is administered by the Vermont Department of Education through a contract with Learning Works, a consortium of Vermont's adult education and literacy providers. Act 44 of 2009 also enabled the HSCP to serve students still enrolled in high school. Personalized "Graduation Education Plans" are a cornerstone of the program. The plans are based on graduation requirements, student skill levels, and long-term educational goals, and students develop them in collaboration with their high school and adult education provider.

**Concurrent enrollment** describes programs that allow students to take courses at other educational institutions—particularly colleges and universities—while they are still enrolled in high school. This general educational strategy is also called dual enrollment, early college, or dual credit (which specifically describes programs through which students can earn both high school and college credit for taking college courses). The term concurrent enrollment will be used in this report to describe both dual-credit and dual-enrollment programs.

The **Accuplacer** is a placement test used by many community colleges, including the Community College of Vermont, to determine the academic preparation level of incoming students. Developed by the **College Board**, the test covers reading, writing, and math, and it is typically used to determine academic placements or eligibility for certain courses.

The **Vermont Virtual Learning Cooperative** coordinates online learning options across Vermont public schools. Funded by a grant from the Vermont Department of Education, the organization provides a broad range of professional development in online learning to teachers and coordinates online courses and learning opportunities to make them available to teachers and students throughout the state.

## Brattleboro Union High School

**Location:** Brattleboro, Vermont

**District:** Windham Southeast Supervisory Union

**Website:** [www.buhs.k12.vt.us](http://www.buhs.k12.vt.us)

**Serving cte:** Windham Regional Career Center

**Sending towns:** Brattleboro, Dummerston, Putney, Vernon, Guilford, and school-choice towns

**Student enrollment:** 900

**teaching faculty:** 75

### Practice Discussion

Brattleboro Union High School offers a concurrent-enrollment system called the Windham Regional Collegiate High School. The program's college-level classes are taught by high school teachers and, in some cases, postsecondary instructors, and they are credited by various schools, including the Community College of Vermont, Union Institute, Running Start of New Hampshire, and the School for International Training. The Policy Research Team had the opportunity to hear directly from students who have taken part in the Collegiate High School classes. Students spoke about the more rigorous learning expectations, the independence the classes demand, and how the courses improved their general readiness for college. In addition to the dual-credit opportunities provided through the Collegiate High School program, students can also take Advanced Placement and online high school courses.

### Policy Discussion

A consistent issue raised during the discussion was access to college courses—particularly the use of Accuplacer as the sole indicator of readiness and course eligibility, which some participants felt was overly restrictive. In the past, eligibility was also determined by other means, such as a faculty recommendation, and the awarding of college credit at the end of the course was based on passing the Accuplacer test. Several participants expressed a desire to revive the abandoned eligibility policies. In addition, Accuplacer is not used by all of the participating collegiate institutions, which suggests that there is a need to clarify readiness expectations for secondary students who want to take college courses, and to identify the various indicators that will be used to make the determinations. It was suggested

that the Community College of Vermont's  
"Introduction to  
College Studies" course might be able to  
inform the college-  
readiness conversation, and that college  
courses taught at

the secondary school should be treated as “transitions” between secondary learning and college. In other words, the courses should be seen as an opportunity to embed college preparation, guidance, and academic support in ways that would not be offered in first-year college courses. While the course content and learning expectations would not be diminished in any way, the courses could still address the specific preparatory and developmental needs of secondary students. The discussion also touched on a related issue: how secondary teachers are deemed qualified to teach college courses. The existing expectation—a master’s degree in the relevant subject area—may be too limiting, since it doesn’t take into account the experience, teaching expertise, and mentoring abilities that may be just as important as subject-area knowledge when it comes to preparing students for success in college. Participants also discussed expanding the High School Completion Program as a way to offer greater personalization of learning to more students, specifically in terms of concurrent-enrollment programs, work-based learning opportunities, and virtual/blended courses.

Another key area that seemed to have a direct impact on options for students within Windham Southeast Supervisory Union was the funding formula used for schools and for students attending CTE programs. Participants believed that the current funding formula limits access to flexible learning pathways. Schools are reluctant to allow students to move between the CTE center, concurrent enrollment with higher education institutions, and other learning options—an example of how state policy concerning funding and enrollment status can be interpreted in a variety of ways. It was suggested that a conversation among school district business managers could help resolve funding issues across sending schools and billing towns. Participants also expressed a desire for policy to address the connection between higher education and enrollment, and specifically the fees associated with taking courses. Currently, the colleges that participate in the Vermont Dual Enrollment Program use a fee structure that is based on the Community College of Vermont rate. Other dual-credit courses offered by the CTE center, and taught by high school faculty, are assessed a \$100 fee that is paid by the Vermont Department of Education—a model that may help to improve access and equity by enabling high schools to offer courses for more students.

## Essex High School

Location: Essex Junction, Vermont

District: Chittenden Central Supervisory Union

Website: [www.ccsuvt.org/ehs](http://www.ccsuvt.org/ehs)

Serving cte: Center for Technology

Sending towns: Essex Junction, Essex Town, and school-choice towns

Grade span: 9–12

Student enrollment: 1,380

Teaching faculty: 99.6 FTE

Essex Junction and Essex Town, which make up the majority of the high school’s students, are two separate towns with a combined population of 19,065 located ten miles from Burlington—Vermont’s largest city. Essex High School uses an A/B block schedule with four 83-minute blocks on a two-day alternating cycle. Students take standard course offerings in addition to online courses through the Vermont Virtual Learning Cooperative and concurrent-

enrollment courses with local colleges and universities. Students can earn academic credit from the CTE center or through community learning opportunities, workplace internships, teacher-aide programs, and other options.

## Practice Discussion

Essex High School has created multiple learning pathway options, including the development of “concentrations” and “academies.” The high school’s Academy for Visual and Performing Arts is an integrated arts program that offers students a more intensive arts education while maintaining much of the school’s traditional educational structures and course offerings. The arts academy is open to sophomores who want to enroll in the program for three years. Participating students have an advisor and participate in a seminar course with a cohort of peers that includes field trips and other arts-related learning experiences. Students take a three-year course of study that provides broad-based education in the arts that also allows every student to pursue a concentration in a specific artistic discipline. Essex High School plans to start a STEM (science, technology, engineering, and mathematics) academy in the 2012–2013 school year. All ninth-grade students take a selection of core academic courses designed to provide foundational content and skills. In addition, the ninth-grade core program is intended to foster a stronger sense of community among incoming students and provide equitable preparation for and access to the multiple-pathway and academy options available in the later grades. At this time, the high school’s learning pathways are not connected to the regional CTE center.

During the discussion, the participants suggested that the school facility may pose obstacles to pathways and personalized learning for students. Since it was designed to house more traditional educational experiences, the existing facility doesn’t support more innovative and personalized learning pathways. The CTE director mentioned that creating satellite CTE centers might help extend programs to more students in the region, while also increasing awareness of CTE programs and learning opportunities (satellite centers are used throughout Vermont, but not in Chittenden Central Supervisory Union).

While not a practice at the high school, the district is exploring the development of “next generation learning environments,” which may include a one-to-one laptop implementation in all grades. The Essex Town School District, which accounts for a significant percentage of the high school’s incoming freshmen, already announced that it is pursuing a one-to-one laptop initiative in the middle grades. When these middle school students begin matriculating into Essex High School, it will likely become increasingly evident that existing pedagogical practice will need to adapt to the changing skill sets and learning needs of incoming students.

## Policy Discussion

Essex brought up challenges related to the way students participate in concurrent-enrollment options. As with Bellows Free Academy, a lack of clarity about how funding and enrollment status are connected to student-selected learning options, such as off-site college courses, has created some confusion and challenges. The conversation also addressed barriers that students encounter when trying to access higher education offerings, including the testing gateways that institutions of higher education can impose on students. The group also discussed teacher licensure and the implications of moving to a proficiency-based graduation model. Specifically, the school might need to consider certifying teachers—and non-traditional teachers such as mentors or work-based instructors, as well—in interdisciplinary practices, or taking advantage of certifications such as cooperative learning coordinators (through CTE center), if it wants to ensure high-quality education for all students.

## Findings and Recommendations

The site visits conducted by the Policy Research Team have served to confirm a growing impression regarding the desire, willingness, and ability of Vermont schools to engage in meaningful innovation. That is, our schools and school leaders are eager to move to a model that better meets the needs of learners in the 21<sup>st</sup> century. They may feel hampered in their efforts to realize that goal and they seek help and support from the Department of Education, the State Board of Education, and the State Legislature. Students are also becoming more vocal in seeking a more challenging and relevant educational experience.

The Department, the Board, and the Legislature all share these desires and have expressed this explicitly in recent years. The Legislature, through Act 44 of 2009, has made clear its expectations for school improvement and the closing of student achievement gaps. The Board and the Department share a Strategic Plan that also reflects an understanding that we must make changes in order to achieve these shared goals. These recommendations and conclusions are also informed by the Policy Framework of the New England Secondary School Consortium, which has been adopted by the Commissioners in each of the five member states. Now, we must remove the obstacles and provide the support needed to accomplish the change we seek.

Act 44 introduced into law the phrase “Flexible Pathways to Graduation.” That phrase can serve as a useful organizing principle for the action steps that are recommended. To begin this process, it is recommended that the phrase be codified in statute (it now appears in session law) as the title of a section designed to describe and fund a variety of innovative practices and programs leading to secondary graduation through non-traditional, flexible pathways. The practices and programs described would be those operated or contracted for by high schools, and meeting quality standards developed by the Department of Education. High schools would be required to encourage and enable students to pursue such pathways in compliance with the expectations of Act 44. Innovative pathway elements that might be described under such statute would include work-based learning, virtual/blended learning, early college opportunities, and career and technical education.

It will also be important to define flexible pathways as distinct from the concept of multiple pathways. As the phrase is often used, multiple pathways are offered as a finite menu of programmatic offerings, one of which may be chosen by a student. Flexible pathways are limited in number only by the number of students pursuing them. That is, we should not define pathways in advance of development. Rather, we should continually develop elements that are determined to be of sufficient quality to be used within an approved pathway. Therefore, it will be essential that statute regarding “Flexible Pathways to Graduation” encourage the exploration and use of innovative practices. The goal of this legislation should be development and dissemination of the most promising innovations.

Work-based learning experiences have been used for years through our career and technical centers. In this scenario student learning expectations, student safety, and oversight are managed through Co-op Coordinators, a licensed position. If we are to encourage such experiences through the high schools, we must learn from that existing infrastructure. This may not require a new licensure or endorsement category, but simply an expectation that high school personnel overseeing work-based learning experiences hold the existing

endorsement. The professional development needed to create a corps of qualified personnel can be provided or incentivized through the Department's school improvement efforts, the Statewide System of Support, and engaged partners with relevant expertise.

Virtual/blended learning opportunities are expanding exponentially. Ensuring that these opportunities meet quality standards and are available equitably is essential. The Department has made a significant investment in the Vermont Virtual Learning Cooperative. While the structural model supports equity and sustainability on a limited scale, it does not enable the kind of growth that is needed in order to make these opportunities available to all students who might benefit. This is an initiative that now requires an ongoing financial commitment by the State so that every Vermont school will be able to make virtual learning available to students. This also represents an important resource for our smaller schools. Courses that cannot be offered on site for one or two students can be accessed virtually. It is recommended that a sustainable funding mechanism be developed, and administered in collaboration with the Department for the purpose of continuing its support of Vermont Virtual Learning Cooperative while encouraging its growth.

In the 2010 legislative session, statutory language was enacted for the purpose of defining “dual enrollment” (i.e., early college, concurrent enrollment) and establishing the guidelines under which it would be offered (Act 58). This did not initiate concurrent enrollment in Vermont, but did intend to ensure equity of access. Funding for concurrent enrollment is currently available through the “Next Generation” legislation, and administered by the Vermont State Colleges. This has provided the opportunity to explore and demonstrate the value of early college. That limited funding, and funding model, has not been adequate to ensure the growth and level of access needed to take full advantage of this important innovative practice. It is recommended that a sustainable funding mechanism be developed, and administered through the Department for the purpose of continuing its support of concurrent enrollment opportunities in compliance with the guidelines established in Act 58.

The improvement of and expansion of access to technical education is an essential element of the effort to provide flexible pathways to graduation. Career and technical education has historically not been seen or used as an equal partner with high schools. In some cases CTE centers have become magnets for our lowest achieving students. We must engage in a partnership with CTE to design challenging pathway elements addressing a broad range of student interests, including those pursuing STEM fields. Current funding structures and accountability measures tend more to encourage competition between CTE centers and high schools for students. It is recommended that meaningful collaboration and sharing of students be incentivized through changes to the way we pay for education in an environment in which the lines between providers are blurred, and financial obstacles to pathway selection are removed.

The description of pathway elements above is not intended to suggest that this represents the universe of flexible pathways. As stated earlier, only the number of students pursuing personalized pathways should limit the number of pathways. However, there are tools that should be common to any pathway. At its essence, this approach to education in the 21<sup>st</sup> century places the individual student at the center of the experience. That in turn implies a commitment to personal learning plans and proficiency-based graduation requirements for all students. In such an environment student voice is essential. It is recommended that support for Youth and Adults Transforming Schools Together, and other student voice initiatives, continue and be expanded.

Currently, local school boards, within parameters established by the State Board of Education, determine graduation requirements. Those parameters allow local boards to approve proficiency- based graduation

requirements aligned to the Vermont Framework of Standards. It is unclear the extent to which this may have occurred as these decisions are made locally and are not required to be reported to the state. There is certainly growing interest on the part of school leaders in making

the transition from reliance on a Carnegie Unit/seat time model, and increasing requests for help in doing so. However, local boards ultimately make this decision, a decision that represents a significant change from a long-established norm. It is recommended that technical assistance and support be provided to interested schools. But it must be recognized that this strategy may not effect the desired change in a timely fashion. Therefore, it is also recommended that consideration be given to a requirement that all schools convert to a proficiency-based graduation system for all students.

With a system in place that encourages flexible pathways to proficiency-based graduation it is likely that personal learning plans will quickly become the accepted structure for ensuring that individual students are achieving graduation with career and college readiness. But as we move toward such a system, we should also be learning how to facilitate and implement personal planning. It is recommended that a portion of the funding made available through “Flexible Pathways” legislation be earmarked for the support of action research designed to explore the implementation of this essential element.

An ongoing process of messaging and constituency building is important for facilitating the communication and advocacy envisioned in the preceding conclusions. The conversations begun during the site visits should now be continued, involving the broader stakeholder community.

We are very grateful to the staff and students who shared their time, experience and thoughtful analysis during our site visits. The desire and willingness of our schools to engage in meaningful innovation has been confirmed. Students have made clear their desire for a more rigorous and relevant educational experience. We can help to effect the desired changes by establishing clear outcomes-based expectations, removing obstacles to innovation, and providing financial and technical support to schools engaged in innovation.

## Essential Recommendations

1. Codify in statute the phrase “Flexible Pathways to Graduation” as the title of a section designed to describe and fund a variety of innovative practices and programs leading to secondary graduation through non-traditional, flexible pathways.
2. Require that graduation requirements be proficiency-based.
3. Develop a funding mechanism that supports the expanded use of CTE and removes the financial obstacles to its selection as a flexible pathway element.
4. Develop a sustainable funding mechanism for the purpose of supporting the growth of concurrent enrollment opportunities for secondary students.
5. Develop a sustainable funding mechanism for the purpose of supporting the growth of the Vermont Virtual Learning Cooperative.
6. Develop a sustainable funding mechanism for the purpose of supporting the growth of Youth and Adults Transforming Schools Together and other student-voice initiatives.
7. Provide the professional development needed in order to create a corps of personnel, endorsed as Co-op Coordinators, and qualified to implement work-based learning experiences within secondary schools.



# TEAM FINAL REPORT



120 State Street  
Montpelier, VT 05620-2501

Questions related to this report should be directed to  
John Fischer, Director High School and Adult Division [john.fischer@state.vt.us](mailto:john.fischer@state.vt.us)

