

**Bennington-
Rutland
Supervisory
Union**



{ Personalized Learning for Each Student }

2014
COMMUNITY
UPDATE

BRSU



AS A SMALL BUT FORWARD-THINKING SCHOOL SYSTEM, WE STAND TODAY AT THE THRESHOLD OF AN EXCITING AND UNPRECEDENTED OPPORTUNITY.

For the first time in our history, we have the resources and tools we need to achieve our educational ends. Now, I realize this is a fairly broad statement that could easily be misinterpreted to mean that we either haven't been achieving our educational ends up until this point, or that we've been doing so but only marginally. Nothing could be further from the truth. The BRSU has a long history of preparing its students academically, socially, and culturally for life in the real world.

What the statement means is that for the first time in the history of not just the BRSU, but also the State of Vermont, the United States, and the entire world, we now have the ability through the use of technology to connect our classrooms, curriculum, and professional development to the knowledge, experience, and expertise of educators from around the world.



Our ideal educational goal has always been to develop personalized learning plans (PLPs) for all of our students. Until now, however, this has largely been an unattainable goal. But with today's technology and leveraged access

to resources throughout the world, we are now able to design, implement, monitor, and assess a world-class, personalized learning plan for practically any student in any grade in any classroom in any one of our towns, irrespective of his or her age, grade level, or ability. That is both exciting and unprecedented.

Rather than (by necessity) confining our curriculum and teaching methods to the knowledge and experience base that exists within our relatively small school system and geographically isolated corner of Vermont, we now have the ability to offer an "open source" education to all of our students – open to the collective resources and wisdom of educators, scholars, and specialists from around the world. This is how our global society will soon operate, and this is how, going forward, we will be preparing our students to live and succeed in that world. And as we make the transition to this new way of learning, the role of our teachers will shift from being what has traditionally been called the "sage on the stage" (one size fits all) to being coordinators, guides, stewards and managers of our students' PLPs.

How will we make this transition quickly, responsibly, and effectively? Until now, school systems have based their curriculum and professional development strategies on top-down policies and approaches that rely on outdated standards and state-

level assessments, even though it is well known that there is a significant lag time—often several years—between the development of those standards and the implementation of their related assessments. But in today's quickly changing and evolving world, we simply cannot afford to take years to develop curriculum that may not only not keep pace with what's happening in the world at large, but that also may not be implemented consistently from school to school. We need to establish what author David Hargreaves (*Working Laterally*, see pg. 11) describes as "lateral networks" that can connect our teachers with available resources beyond our traditional organizational boundaries.

Using lateral networks, Hargreaves believes and we concur that curriculum and professional development become "open sourced," allowing best practices to be identified, implemented, and evaluated much more quickly, since teachers are no longer required to work in isolation within their own schools or districts. Of course, standards will remain an essential component of our educational system, if only to ensure quality. But rather than being driven from the top-down in a way that narrows and limits curriculum, they will become a method of building curricula from the ground up.

In the end, educating our children and preparing them for life in the modern world will come down to three basic things: Giving them the tools they need to thrive and succeed in the international society in which they will live; instilling in them a thirst for knowledge that will make them learners for life; and giving them access to the knowledge, experience and expertise of their peers, locally, statewide, nationally, and internationally.

This booklet has been prepared to give you a general idea of the direction in which we're headed; how we will approach and implement the changes that lie ahead; the scholars and experts whose work has inspired and excited us; and what we believe will be the long term benefits to students in the BRSU. I encourage and invite your participation in this exciting endeavor, and I welcome your thoughts and comments along the way.

Daniel M. French

DANIEL M. FRENCH, Ed.D., SUPERINTENDENT, BRSU

The Board members representing the districts within the BRSU embarked on a community engagement process to determine “Educational Ends” for their districts.

“Ends,” sometimes referred to as “Outcomes,” answer the question: What should students know and be able to do?

After gathering feedback from their communities, our Boards organized policies, both global and educational, that followed a general template developed by principals and administrators within the BRSU.

THE EDUCATIONAL ENDS POLICIES ESSENTIALLY STATE:

GLOBAL: All BRSU schools will educate all of their students so they become self-fulfilled people and active, civic-minded citizens of the world at a cost comparable to other Vermont supervisory unions of a similar size.

EDUCATIONAL: All BRSU students will demonstrate competence in the following areas:

Core Academics

- English Language Arts
- Mathematics
- Science
- World Ecology
- Visual and Performing Arts
- Physical Education and Health

Dispositions Towards Learning

- Creativity
- Resilience
- Self-motivation
- Curiosity
- Critical thinking
- Effective communications
- Flexibility

Civic Ethics

- Respect for individual differences
- Inclination to work with others for the common good
- Willingness to contribute time and expertise in service to the community
- Stewardship of the world’s resources
- Responsibility for making a positive contribution
- Democratic leadership



As a first step towards implementing our Ends policies, the BRSU established a Personalization Logic Model comprised of Inputs, Activities, Student Outcomes, and Organizational Outputs that we believe will guide us through the process, including:

INPUTS

- Haiku Digital Learning
- Google Apps
- Instructional Leadership Team
- Ends and monitoring policies
- 1:1 computing
- Computer network
- NWEA MAPS data
- Participation in Teaming for Transformation (T4T)
- Curriculum work: essential outcomes and priority standards
- Glossary of terms

STUDENT OUTCOMES

- Deeper learning, in which students are *using* their knowledge and skills in a way that prepares them for real life.
 - » Mastery of core academic content
 - » Think critically and solve complex problems
 - » Work collaboratively
 - » Communicate effectively
 - » Learn how to learn (e.g., self-directed learning)
 - » Learn tools and dispositions to make a positive contribution to a democratic society

ACTIVITIES

- Expansion of network infrastructure
 - » Fiber WAN
 - » Increased bandwidth
 - » Managed wireless
- Shift the Role of Teachers to be Designers and Managers of Student Learning
 - » Constructivist classrooms
 - » Just-in-time PD
 - » Leveraging Haiku and the Haiku library to address individual student learning needs irrespective of assigned grade levels
 - » Data teams and revised local assessment plan to acknowledge NWEA real-time data
- Create a new system for the authentic documentation of student learning–e-portfolio
 - » Student-directed planning and assessment tool
 - » A collaborative process that involves the student, teachers, and parents
 - » Focuses on the three domains:
 - 1) academic & personal
 - 2) social & career
 - 3) aspirations

ORGANIZATIONAL OUTPUTS

- Organizational structures support students owning their learning.
- A system of disciplined, lateral innovation that's known and well established among educators.



Among the networking technologies we will use to connect our classrooms to each other and to the wider world is a learning management system called **Haiku Learning**. The following description of Haiku Learning is taken largely from their web site, www.haikulearning.com.

Haiku Learning is a cloud-based system that allows teachers to create, edit, share, communicate, and assess both content and student performance in a contained and focused environment.

Reaching Global Learners

The first step in the process is for teachers to create their own online classroom pages, which will allow them to develop, organize and add content blocks; change layouts; and embed content from third-party services such as YouTube, Google Docs, Maps, Skype and dozens of others.

Once the classroom page is built, it can be shared with other Haiku users, both within the BRSU and throughout the world. As well, content created by other Haiku users can be imported into our classrooms. LTI (Learning Tool Interoperability) Modules such as flash cards, quizzes, and other interactive activities can also be accessed and integrated seamlessly into the classroom page.

Using Haiku Learning's WikiProjects, students can work together as a class, in small groups, or as individuals to post text, links,

photos, videos, and more to project pages within the classroom website. Teachers are able to monitor progress, leave feedback, and grade students' projects upon completion. Haiku Learning also allows students and parents to participate by leaving comments on the classroom page or by setting up discussions with classmates or one another.

Creating Personal Portfolios

Another integral component of Haiku Learning is the ability for students to create e-portfolios containing their work. Students can easily capture, track, review, and edit content from any of their classes to showcase in their personal portfolio. This will not only help us monitor and document student learning, but also help students think creatively and intuitively about their work and how it relates to their goals, interests, and future success. Teachers can create templates to help students kick-start the creative process, and portfolios can be exported as a portable website in HTML.

Enhancing Instruction

In essence, the Haiku Learning platform is designed to let teachers spend more time teaching and less time managing assignments, tracking down homework, and grading papers.

They can quickly create assignments, have students hand in digital files, provide online comments and feedback (to both students and parents), annotate digitally, and leave a grade. It's on the record and in the grade book with no extra steps required. When it's time for teachers to measure student progress with quizzes or tests, they can easily create and distribute them online with a variety of question and answer types.

It's an exciting new world out there, and the possibilities for our students are endless. We believe that Haiku Learning will not only help our students approach this new world confidently, but also give them the tools and resources they need to succeed.



WHAT IS DEEPER LEARNING? Deeper Learning is a student outcome that results in part from a learning management system like Haiku Learning. The following discussion of Deeper Learning is provided by the Hewlett Foundation, which developed and supports the concept in schools and communities nationwide.

In classrooms where deeper learning is the focus, you find students who are motivated and challenged—who look forward to their next assignment. They apply what they have learned in one subject area to newly encountered situations in another. They can see how their class work relates to real life. They are gaining an indispensable set of knowledge, skills, and beliefs, including:

- 1 Mastery of Core Academic Content:** Students build their academic foundation in subjects like reading, writing, math, and science. They understand key principles and procedures, recall facts, use the correct language, and draw on their knowledge to complete new tasks.
- 2 Critical Thinking and Problem Solving:** Students think critically, analytically, and creatively. They know how to find, evaluate, and synthesize information to construct arguments. They can design their own solutions to complex problems.
- 3 Collaboration:** Collaborative students work well in teams. They communicate and understand multiple points of view and they know how to cooperate to achieve a shared goal.
- 4 Effective Communication:** Students communicate effectively in writing and in oral presentations. They structure information in meaningful ways, listen to and give feedback, and construct messages for particular audiences.
- 5 Self-directed Learning:** Students develop an ability to direct their own learning. They set goals, monitor their own progress, and reflect on their own strengths and areas for improvement. They learn to see setbacks as opportunities for feedback and growth. Students who learn through self-direction are more adaptive than their peers.
- 6 An Academic Mindset:** Students with an academic mindset have a strong belief in themselves. They trust their own abilities and believe their hard work will pay off, so they persist to overcome obstacles. They also learn from and support each other. They see the relevance of their schoolwork to the real world and their own future success.

When students are developing knowledge, skills, and academic mindsets simultaneously, they learn more efficiently. They acquire and retain more academic knowledge when they are engaged, believe their studies are important, and are able to apply what they are learning in complex and meaningful ways. **Mastery of academic content is critical to a student's future success** in college, careers, and life, so it is the foundation of – and never overlooked in – deeper learning classrooms.



More information on Deeper Learning
can be found online at:
[hewlett.org/programs/education/
deeper-learning](http://hewlett.org/programs/education/deeper-learning)

After 18 months of pilot implementation, we have now begun full implementation of the Northwest Evaluation Association (NWEA) MAP assessment. The MAP assessment is a computer-based adaptive assessment tool that essentially describes what students are ready to learn next in reading, writing, and mathematics. The MAP assessment is administered three times a year for all students in grades K-8.

WHY ARE WE IMPLEMENTING THE NWEA MAP ASSESSMENT?



It will help us develop a Personalized Learning Program for each student.

Our district, like many districts around the world, is attempting to reconcile our new ability to personalize learning for all of our students with an industrial (traditional) model of schooling. We believe MAP Assessment supports personalized learning because it measures student growth on an equal increment scale irrespective of a student's grade level. It also provides data to students, parents, and teachers in a format that readily supports student goal setting, which is a key component to a personalized learning plan.



It will support continuous organizational improvement.

We assess student learning to help answer the fundamental question from our Ends policies: "How are our students doing?" We then decide what the next steps will be in the learning process. Having access to efficient and effective assessment data enables us to function at three organizational levels: the instructional level, the administrative level, and the policy level.

At the instructional level, assessment data provides teachers with formative data. Formative data gives teachers immediate feedback on student learning in order for them to modify their instructional approaches and to design programs for remediation or acceleration. At the administrative level, assessment data helps us evaluate instructional systems such as professional development and curriculum development. At the policy level, assessment data provides assurance to board members that district Ends for student learning are being met.



It will help increase the validity, reliability, and efficiency of our assessments.

Time is our most precious instructional resource. When instruction is interrupted for the purpose of assessment, we need to ensure the interruption is worth it. Unfortunately, our traditional assessment models are not only very time consuming, but they also do not necessarily provide us with results that can justify the loss in instructional time.

MAP = Measures of Academic Progress



It is a timely and effective alternative to the slow evolution of assessment models currently being rolled out by the state and federal governments.

Our traditional assessment test, the New England Common Assessment Program (NECAP), will be soon be replaced by the Smarter Balanced Assessment Consortium (SBAC) assessment. This will create a gap in our external assessment data for several years. Like NWEA MAP, the SBAC assessment will be a computer-based adaptive assessment, so it should produce results in a more timely manner. The SBAC has not been finalized, however, and will take a few years to stabilize. This uncertain political context for assessment led us to conclude we needed a new external assessment tool to bridge the gap between NECAP and SBAC. NWEA MAP is a well-established assessment tool that should serve us well in this purpose.

MAP is a complete set of assessments aligned to national and state curricula and standards.



Among the experts whose philosophies and ideas have inspired and excited us are Dr. David Silvernail and Dr. David Hargreaves.

Dr. David L. Silvernail is director of the Center for Education Policy, Applied Research and Evaluation, and professor of research and evaluation at the University of Southern Maine. He has over 25 years of research and education policy experience in school finance, school reform, and large-scale school assessment. Most recently he has served as the lead research analyst for the Maine State Board of Education and State Legislature in the development of a new school funding formula for Maine. Currently, Dr. Silvernail is conducting several research studies including ones related to laptops, mathematic education, and high performing schools.

Following are excerpts from a recent study undertaken by Dr. Silvernail and Erika K. Stump for the Maine Education Policy Research Institute. Ms. Stump is a research associate at the Center for Education Policy, Applied Research and Evaluation, and is currently working on her Ph.D.

“ American K-12 public education all across the nation is at a difficult but critical crossroads. In Maine, despite a three-fold increase in education spending over the last four decades, student performance has not significantly changed. In fact, high school graduation rates, as well as student achievement, have remained relatively flat. We are at a time when keen global competition, including increased competition from “the rise of the rest” countries such as Brazil, Russia, India, and China (Zakaria, 2011) underscores the need for exceptional performance in our primary and secondary schools, yet state and federal governments face unprecedented budget deficits and limited resources for the foreseeable future.

Petrilli and Roza (2011) put it this way:

After years of non-stop increases ...our schools now face the near certainty of repeated annual budget cuts for the first time since the Great Depression. In some states and districts, [the] reductions will be dramatic – well into the double digits. And these new revenue-trend-levels are likely to be semi-permanent. *(Marguerite Roza is a senior data and economics advisor at the Bill & Melinda Gates Foundation, and Michael J. Petrilli is an executive vice president at the Fordham Institute)*

As noted by the Center for American Progress (2011):

The economic downturn has dramatically changed the fiscal climate for schools and districts, and our education system is about to enter a time of profound fiscal austerity. Schools will be pressed to stretch their education dollars further for years, perhaps decades.

But even in the toughest of economic times, the role of state government in ensuring that every child receives a first-rate education is not diminished. Rather, despite these particularly tough times, public education is challenged to do even more with less: to raise student performance, to raise it for all students, and to do so in more efficient ways.

And in describing this situation further, Patrick and Sturgis (2011) conclude:

The increased global competition and economic pressures are of particular importance at the national and state level. Resource constraints are demanding that we find more cost-effective methods to educate our children. With the economic crises causing state budgets to tighten, the United States must find a way to do more with fewer resources, especially in K–12 education. *(Susan Patrick is the president and chief executive officer of the International Association of K-12 Online Learning, and Chris Sturgis is the founder of MetisNet, a philanthropic organization)*

Professor David H. Hargreaves is associate director for development and research at Specialist Schools and Academies Trust, and a fellow of Wolfson College, Cambridge. He has served for many years in teacher education, and he has been professor of education in the University of Cambridge and reader in education at the University of Oxford. He has also served in top-level positions with various organizations in Great Britain involved in educational administration and policy making.

The author of several major publications including *Education Epidemic* (2003), David believes teachers and groups of schools need to be connected in networks of “disciplined innovation” so that what works in education can be identified and rapidly spread from classroom to classroom in a manner similar to the way open source software is developed. Why innovation networks? Actually, we could ask two questions:

Why should teachers innovate at all?

- 1 Teachers do it anyway. As teachers adjust materials or ways of organizing lessons to help pupils learn, their improvisations are a form of innovation. Without this creative capacity to innovate, a teacher does not succeed in the profession.
- 2 Innovation is essential to improving one’s professional skills and adapting to meet changing circumstances. Innovation is a way of learning professionally.
- 3 Innovation empowers staff and is highly rewarding professionally. To see how being creative and innovative makes a difference for pupils is one of the joys of teaching.
- 4 In our knowledge-based economy, students need to be innovative to succeed at work and in life. When staff actively model innovative behavior in school, students learn why innovation matters and is something they can do too.

Hargreaves believes it is essential to connect teachers and schools in networks of innovation in order to personalize learning for students.

Why network?

- 1 To transform schools so that there is yet better teaching and learning, teachers must work smarter, not harder. Today, most innovation is the activity of networked teams, not individuals.
- 2 Teachers need to share good practice and transfer it rapidly. Lateral networks do this more effectively than top-down hierarchies.
- 3 Government needs to empower teachers to use their creativity in the task of transformation. Networks of peers feed the creative co-production of new knowledge that is the source of better professional practice and renewed professional pride.

A key to successful innovation is therefore combining innovation with networks (*Working Laterally*, 2003).



In Working Laterally, David Hargreaves argues that schools will be transformed when teachers embrace the culture of the open source movement, where people develop new knowledge and practices as a pooled resource, that is given away for free to all who are ready to improve it.





Bennington-Rutland Supervisory Union

- » Currier Memorial School
- » The Dorset School
- » Flood Brook School
- » Manchester Elementary-Middle School
- » Mettawee Community School
- » Sunderland Elementary School

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