Roots of Success
Effective Practices In Vermont Schools
ACKNOWLEDGEMENTS

State Board Members

Fayneese Miller, Chair
South Burlington

Ruth Stokes, Vice Chair
Williston

Kathy Larsen, Vice Chair
Wilmington

Donald Collins
Swanton

John Hall
West Danville

Robert Kelley
Brandon

Judith Livingston
Manchester

Alex Melville
Woodstock

Stephan Morse
Newfane

Brian Vachon
Middlesex

Study Advisory Panel

Barbara Bourne
Principal, Mary Hogan School

Jeanne Collins
Superintendent, Burlington School District

Adrienne Fisher
Director of Support Services, Franklin West S.U.

Joseph Mark
Academic Dean, Castleton State College

Bob Pequignot
Principal, Missisquoi Valley Union High School

Theodore Riggen
Principal, Barre Town Middle/Elementary School

Mary Lynn Riggs
Curriculum Coordinator, Franklin West S.U.

Becky Sausville
Special Educator, Mt. Anthony Middle School

Katharine Shepherd
Professor of Education, University of Vermont

Paul Smith
Curriculum Coordinator, Windham Southeast S.U.

Katie Sullivan
Teacher, Warren Elementary School

Otho Thompson
Principal (Retired), Peoples Academy

Pam Toof
Reading Specialist, Georgia Elementary/Middle School

Research Team

Glenn Bailey, Department of Education
Survey analysis

Noel Bryant, Department of Education
Site visit team member

Susan Hayes, Department of Education
Study author

Michael Hock, Department of Education
Study design

Stephen Magill, Department of Education
Survey analysis

Ken Remsen, Department of Education
Site visit team member

Heather Schneider, Department of Education
Site visit team member

Gail Taylor, Department of Education
Site visit team member

Otho Thompson, Advisory panelist
Site visit team member

The Vermont Department of Education does not discriminate on the basis of race, color, national origin, creed, marital status, sex, disability, age, or sexual orientation in its programs or activities.

Art Direction: Ryan Hayes   ||  Photographs by iStockphoto.com
Introduction
Demographics are not destiny

It’s true. While research has established the strong link between students’ socioeconomic status and achievement, a school’s demographic profile does not necessarily predict performance. In fact, there are examples of schools across the country whose students excel academically even though many of them come from low-income families. The challenge to researchers, policymakers, and practitioners is to identify such success stories, learn from them, and establish similar systems in other schools. What makes these schools more successful than others, particularly with students from low-income backgrounds? How did they beat the odds with children who are more likely to struggle than their advantaged peers? How can we help other schools improve outcomes for students?

Fortunately such success stories are not only evident across the country but right here in our own backyard. The Vermont Department of Education, with the help of an advisory panel representing K-12 schools and higher education, studied what it takes for schools—and therefore students—to succeed (SEE FIGURE 1). A combination of quantitative and qualitative research methods was employed to identify the characteristics common to effective schools. Through a large-scale survey of more than 2000 Vermont teachers in 87 schools across the state as well as intensive site visits to three schools that are “beating the odds” (schools whose Reading and Mathematics scores on state assessments defy expectations and exceed those of other schools with similar demographics), we discovered a set of attitudes and beliefs as well as specific school practices that are associated with student, particularly low-income, success. These characteristics form the foundation for school effectiveness and are essential to ensuring that all children, regardless of background or socioeconomic status, reach their full potential.

In addition to these core characteristics, the effective schools studied also benefited from two distinct types of external resources: supervisory union/district office and local school board support as well as assistance from the larger community.

The results of this study do not differ from the large body of national research on effective schools (for a full literature review see www.rootsofsuccess.wordpress.com). However, the value of this work is that it confirms the existing body of knowledge on effective schools but applies it to a Vermont context. We now have state-specific information, aligned to national research, on how to improve outcomes for students. And perhaps more importantly, we have a chorus of Vermont teacher, administrator, and parent voices telling us what it takes to meet the needs of all students.

Overwhelmingly, what their experience teaches us is that schools matter. While student characteristics, such as socioeconomic status, undeniably affect academic achievement, our survey and site visit findings demonstrate that schools are capable of altering that relationship through the development of an effective, cohesive, responsive education system. Not only must we hold students to high expectations, we must hold ourselves to the creation of effective educational systems that support students to meet these high expectations in each of our schools.

EIGHT CHARACTERISTICS OF EFFECTIVE SCHOOLS:

1. The belief that all students can succeed
2. The belief that school staff are ultimately responsible for students’ success and must therefore continually improve their practice
3. Effective school leadership that helps translate these beliefs into practice
4. Ongoing use of data to provide feedback to staff as well as monitor and support students
5. A professional teaching culture that supports high-quality instruction and is characterized by staff collaboration, trust among staff members, strong staff commitment and dedication, and effective paraprofessionals
6. A comprehensive and highly functioning support system for students who struggle academically, emotionally, behaviorally, or socially, including early intervention programs
7. A supportive school climate that makes all students, as well as adults, feel valued and safe
8. A commitment to building constructive relationships with families and involving them in their child’s learning

For more information on this report, visit www.rootsofsuccess.wordpress.com
1. High expectations
Effective systems believe that all students can succeed.

2. Continuous improvement
Effective systems take responsibility for students’ achievement and therefore work to continually improve their own practice.

3. Leadership
Effective systems are guided by strong leadership.

4. Use of data
Effective systems use data in an ongoing way to provide feedback to staff as well as monitor and support students.

5. Professional teaching culture
Effective systems establish a professional teaching culture that supports high-quality instruction.

6. Student supports
Effective systems have a comprehensive and highly functioning support system in place to address students’ academic, emotional, behavioral, and social needs.

7. School climate
Effective systems create a supportive climate that makes all students, as well as adults, feel valued and safe.

8. Family engagement
Effective systems build constructive relationships with families and involve them in their child’s learning.
Summary of Findings
Internal and External Factors

Internal Factors

1. Effective systems believe that all students can succeed.
   1.1. Every child, regardless of socioeconomic background, is held to high standards.
   1.2. Poverty is never used as an excuse for low student performance.
   1.3. Staff have realistic understandings about the challenges of life in poverty.
   1.4. Teacher candidates’ beliefs about student potential are considered when making hiring decisions.
   1.5. Student supports are not based on socioeconomic status; the needs of all students are addressed, regardless of subgroup category.
   1.6. Staff strives to give students a vision for the future and help them see beyond high school.

2. Effective systems take responsibility for students’ achievement and therefore work to continually improve their own practice.
   2.1. Staff feels responsible for students’ success and failure.
   2.2. Staff are committed to ensuring that all students excel.
   2.3. There is a school-wide culture of continuous improvement; entire staff are always asking, “How can we do better?”
   2.4. Staff are never satisfied with the status quo.

3. Effective systems are guided by strong leadership.
   3.1. Effective leaders are compassionate and supportive of staff, both professionally and personally.
   3.2. Effective leaders are accessible, visible, and approachable.
   3.3. Effective leaders prioritize three primary responsibilities: setting a vision for the school; creating a safe, positive school climate; and hiring, supervising, and evaluating staff.
   3.4. Effective leaders set visions that are measurable and attainable. They do not jump on bandwagons.
   3.5. Effective leaders hold tightly to their vision but allow staff flexibility in determining how best to achieve it.
   3.6. Effective leaders ensure that all staff have access to the training and professional development required to implement any reform or initiative.
   3.7. Effective leaders build a sense of community in their buildings and stay in their positions long enough to create a stable school culture.
   3.8. Effective leaders recognize the criticalness of hiring the right people and implement hiring practices that fully and effectively screen candidates.

3.9. Effective leaders conduct frequent classroom observations and/or hire coaches who provide teachers with feedback on their instruction.
3.10. Effective leaders use a formal teacher evaluation system to identify teacher weaknesses, support improvement, and remove ineffective staff when necessary.

4. Effective systems use data in an ongoing way to provide feedback to staff as well as monitor and support students.
   4.1. Staff collect and analyze data, at the building and classroom level, to continually refine their practice.
   4.2. Faculty engages in analysis of results from school-wide assessments like NECAP to determine where they need to improve.
   4.3. Schools take specific actions (including changes to curriculum and instruction) based on what they learn from data analysis.
   4.4. Students are provided optimal testing conditions for the NECAP including appropriate accommodations. Instructional decisions made by teachers at the classroom level are data-driven.
   4.5. Teachers assess continuously and formatively to inform their instruction.
   4.6. Teachers assess to guide decisions about student groupings as well as to identify appropriate interventions (both for students who struggle and those who need enrichment).
   4.7. Teachers use a variety of assessment strategies and approaches to address a range of student learning styles.
   4.8. Instruction and classroom assessments are fully aligned to the state standards (Grade Expectations).

5. Effective systems establish a professional teaching culture that supports high-quality instruction.
   5.1. Staff are dedicated to their jobs and do whatever it takes to meet the needs of students.
   5.2. Teachers respect and trust one another.
   5.3. Teachers do not work in isolation but collaborate regularly to share instructional strategies and refine their practice.
   5.4. Formal structures, like extended time in the school day, are provided for teachers to collaborate.
   5.5. Teachers seek out time informally, such as the lunch hour or after school, to work together.
   5.6. Teachers observe each others’ classrooms and offer feedback and advice.
   5.7. Teachers align their curriculum and instruction vertically and horizontally (within grades and across grades) to ensure there are no gaps in skills or content.
   5.8. Teachers use consistent terminology and language across classrooms and grades so that students are not confused.
5.9. Paraprofessionals are highly trained and given access to the same professional development and resources as classroom teachers.
5.10. Schools use paraprofessionals strategically to support students and teachers.

6. Effective systems have a comprehensive and highly functioning support system in place to address students’ academic, emotional, behavioral, and social needs.
6.1. Schools prioritize students’ academic needs but recognize it is also necessary to address other needs (emotional, social, physical).
6.2. Educational Support Teams (ESTs) have clearly established norms, roles, and responsibilities.
6.3. ESTs respond quickly and thoroughly to any identified student need.
6.4. Schools stress early literacy skills and have a variety of early interventions to detect and support young students who struggle.
6.5. Schools understand the importance of early educational experiences and either offer pre-kindergarten or are considering offering it in the future.
6.6. Schools extend students’ learning opportunities through after school and summer school programs.
6.7. After school and summer school programs include a mix of academic support (e.g. homework help) as well as general enrichment activities.
6.8. Schools establish a safe place for children with emotional or behavioral problems to go during the day to process with the help of professionals.
6.9. Schools hire a cadre of support professionals to work with students and families.
6.10. Students are provided access to healthy and nutritious food throughout the day, including before, during, and after school.

7. Effective systems create a supportive climate that makes all students, as well as adults, feel valued and safe.
7.1. The culture of the school is caring and supportive.
7.2. Students feel safe, protected, and secure at school and have trusting relationships with adults.
7.3. Schools are clear in their behavioral expectations for students and consistent in their response to infractions.
7.4. Teachers work to build community in their classrooms (e.g. through programs like Responsive Classroom*).
7.5. The school’s positive climate attracts and retains teachers.

8. Effective systems build constructive relationships with families and involve them in their child’s learning.
8.1. Schools believe it is their responsibility to engage parents in their child’s learning and publicly state their commitment to involving families.
8.2. Parents are seen as partners with the school in their child’s education.
8.3. Schools make their building a welcoming place for families and reach out with empathy and compassion to all parents, paying particular attention to the needs of low-income families.
8.4. Schools hire liaisons (e.g. a home-school coordinator) to engage families, communicate information and volunteer opportunities, make home visits, and provide other support as needed like transportation to/from meetings.
8.5. Teachers regularly communicate with parents about classroom activities and their child’s progress using a variety of communication strategies (e.g. newsletters, email, phone calls, and homework folders).
8.6. Parents are provided multiple opportunities and venues to be involved in school activities.

---

**External Factors**

**Effective systems receive support from their supervisory union/district office and local school board.**

- a. The supervisory union/district office supports schools to align their curriculum, instruction, and assessment with the state standards (Grade Expectations).
- b. The supervisory union/district office provides resources and support for the development of such tools as aligned curriculum guidance, common assessments, and standards-based report cards.
- c. The supervisory union/district office provides needs-based professional development to teachers.
- d. The supervisory union/district office researches and chooses a teacher evaluation model for administrators.
- e. School boards are supportive and child-centered.
- f. School boards trust the professional expertise of staff and do not try to micro-manage school activities.
- g. School boards do not advocate for particular agendas.

**Effective systems actively reach out to their communities and benefit, in return, from community support and resources.**

- a. Schools have a positive relationship with their surrounding community.
- b. Schools actively reach out to their community and serve as a hub for community activities.
- c. Towns are supportive of education and consistently pass school budgets.
- d. Families, particularly those living below the poverty line, depend on community-based resources such as health services, food shelves, and mental health facilities. ▲
Teacher Survey Results

As part of this study, the Vermont Department of Education was interested in determining the school characteristics associated with high student performance and whether effective schools truly look different from less effective schools. With support from the University of Vermont and the Center for Comprehensive School Reform and Improvement in Washington, D.C., we developed a survey instrument to gauge teachers’ perceptions of their school on seven different dimensions national research has identified as common to successful, high-poverty schools (see Table 1 below). In total, the survey included over 60 questions related to the seven themes. A full copy of the survey instrument as well as a review of the national research used to develop it is available on the study website (www.rootsofsuccess.wordpress.com).

All schools in the state with at or above the state average for poverty (29 percent) and at or above the state average for grade size (19 students) were invited to take part in the survey. Out of 91 schools that met both these criteria, 87 agreed to participate. In the end, more than 2000 Vermont teachers completed the survey, representing a response rate of over 83 percent.

Teachers were asked to rate their school on these seven themes. Teachers’ ratings were then matched to their school’s Reading and Mathematics scores on Vermont’s state assessment (the New England Common Assessment Program or NECAP) to see if schools with a better performance track record looked different, according to their teachers, than schools with lower achievement.

### TABLE 1: RELATIONSHIP OF SURVEY THEMES TO OVERALL FINDINGS

<table>
<thead>
<tr>
<th>SURVEY THEME</th>
<th>CONNECTION TO OVERALL FINDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on student achievement</td>
<td>Finding 2: Effective systems take responsibility for students’ academic achievement and therefore work to continually improve their own practice.</td>
</tr>
<tr>
<td>Frequent assessment of student progress</td>
<td>Finding 4: Effective systems use data in an ongoing way to provide feedback to staff as well as monitor and support students.</td>
</tr>
<tr>
<td>Support for struggling students</td>
<td>Finding 6: Effective systems have a comprehensive and highly functioning support system in place to address students’ academic, emotional, behavioral, and social needs. Finding 7: Effective systems create a supportive climate that makes all students, as well as adults, feel valued and safe.</td>
</tr>
<tr>
<td>Staff collaboration</td>
<td>Finding 5: Effective systems establish a professional teaching culture that supports high-quality instruction. Finding 7: Effective systems create a supportive climate that makes all students, as well as adults, feel valued and safe.</td>
</tr>
<tr>
<td>High expectations for all students</td>
<td>Finding 1: Effective systems believe that all students can succeed.</td>
</tr>
<tr>
<td>Effective school leadership</td>
<td>Finding 3: Effective systems are guided by strong leadership.</td>
</tr>
<tr>
<td>Parental involvement</td>
<td>Finding 8: Effective schools build constructive relationships with families and involve them in their child’s learning.</td>
</tr>
</tbody>
</table>
FINDING 1: EFFECTIVE SCHOOLS ARE DIFFERENT FROM OTHER SCHOOLS

The results from the teacher survey prove that a strong relationship exists between school characteristics and student achievement. Teachers’ ratings of their school and NECAP scores were highly related to one another. Specifically, teachers in schools with better student outcomes were more likely to agree that: their school has a strong focus on student achievement, students are assessed frequently, struggling students are adequately supported, teachers collaborate on a regular basis, teachers have high expectations for students, the principal is an effective leader, and parents are engaged in their child’s learning.

FINDING 2: SCHOOLS MATTER

While the first finding established that effective schools are different from other schools on these seven measures, an important question remained. How much do school-level characteristics like leadership or support systems impact achievement relative to other student-level factors like socioeconomic status? Our analysis revealed that socioeconomic status has a powerful effect on student outcomes, which is not inconsistent with national research. Yet each of the seven themes explored by the survey was found to be related to student achievement even after accounting for the effects of poverty. In other words, while a school’s NECAP performance was related to its demographic profile, it was also related to the ratings its teachers gave it. This means that the school a child attends has an effect on his performance, regardless of his own personal background. So while schools cannot change students’ socioeconomic status, they have the potential to improve students’ academic outcomes by focusing on factors within their control.

FINDING 3: EFFECTIVE SCHOOLS ARE EFFECTIVE SYSTEMS

At the outset of the study, we sought to identify the specific characteristics associated with student achievement but realized through the teacher survey, and later through site visits, that it was not any single program or strategy that mattered. It is a systems approach that brings about positive student outcomes. Effective schools are active on multiple fronts and teachers who rated their school highly on one practice typically rated their school highly on other practices, as well. Rather than implement one effective practice in isolation, schools with higher NECAP scores have a web of successful practices in place. For example, schools whose teachers continually assess student progress are more likely to provide time for teachers to analyze the results of those assessments collaboratively. Similarly, schools that continuously monitor students’ progress are more likely to have a comprehensive support system in place to assist students when data indicate they are slipping.

FINDING 4: TEACHERS’ ATTITUDES AND BELIEFS ARE VERY IMPORTANT

Of the seven school characteristics explored by the survey, one in particular stands out—high expectations for students. Teachers’ attitudes and beliefs about student potential had more of an impact on NECAP scores than any other theme and were the most powerful predictor of school performance. This suggests that the beliefs and attitudes of staff are critical, perhaps foundational, to student success. Four survey questions about high expectations emerged as especially important:

8a. Teachers in this school have high expectations for all students
8d. Teachers in this school are able to successfully teach the most difficult students
8e. Teachers in this school believe every child can learn
8g. Teachers in this school believe that instruction determines students’ academic success

For a full copy of the survey instrument, visit www.rootsofsuccess.wordpress.com
Voices from the Field: Site Visit Results

To gain a more in-depth understanding of effective school characteristics identified via the teacher survey, we chose three sites in the state whose student performance histories defied expectations and whose NECAP scores trumped those of other schools with similar demographic profiles. We visited these schools that are “beating the odds” to learn from them what it takes to ensure that all students, particularly those from low-income backgrounds, succeed. An interesting note about these schools is that although their staff are aware of the challenges students living in poverty face and have initiated programs in response (e.g., healthy foods available throughout the day, transportation provided for after school activities), the bulk of their success is not the result of special poverty-related programs. Rather, they succeed because they have created a cohesive, responsive education system that ensures that each and every child excels. As a result, the lessons learned from these schools are universal and applicable to any building, regardless of its demographic profile.

The first-hand knowledge and experience of the schools visited are invaluable to other educators and leaders hoping to replicate their success. It is their voices that give life to the teacher survey and the characteristics it identified. What do high expectations really look and sound like? How do teachers find time to collaborate during the school day? What supports help students who struggle academically or behaviorally? What follows is a compilation of real-life accounts of persistence, determination, and caring from Vermont educators, administrators, and parents.

It is also worth mentioning that none of the three schools has completely closed the achievement gap. Students from low-income families still lag behind their wealthier peers, even in these strong systems. We have included some of the issues schools continue to battle in their efforts to close the achievement gap. It is important that the education community and social service providers and agencies work collaboratively and creatively to provide the range of supports these children and their families need.

Although they face challenges, what distinguishes these schools from others is their tenacity in addressing them and their refusal to accept student failure, regardless of extenuating circumstances. Rather than blame low performance on family strife or lack of resources, the adults in the schools profiled acknowledge and accept the influence they have on students’ success. The result is a highly functioning system that helps all of its members—students and adults alike—thrive. Instead of looking to students’ demographic profiles to predict their future or explain their past, these schools support students to create new destinies.

School Profiles

To better understand how schools could effectively support low-income students, we went in search of sites in the state that had evidence of stronger student achievement with this population. Through an analysis of the fall 2008 NECAP Reading and Mathematics scores, we identified three schools that with levels of student performance that well exceeded Vermont norms. All three schools had higher average scale scores than one would predict based on their student demographics and, in addition, demonstrated strong growth over the past four years. For more information on how these three schools were selected, please visit the study’s website (www.rootsofsuccess.wordpress.com). Since we felt it was important to use multiple years of NECAP data to identify these success stories, high schools (with only one year of NECAP data available at the time of site selection) were not included. We hope to conduct a similar study at the secondary level in future years.

All schools have been given pseudonyms to protect their identity. The assurance of anonymity allowed staff to speak freely during interviews. The site visit team included five Department of Education employees as well as a member of the study’s advisory panel who is also a retired Vermont school principal. The team spent two full days at each school and interviewed all staff (including administrators, classroom teachers, support personnel, and paraprofessionals) as well as students, parents, local school board members, supervisory union/district staff, and superintendents. Interviews followed semi-structured protocols and were digitally recorded and transcribed for analysis purposes. All interview protocols are available on the study website (www.rootsofsuccess.wordpress.com).
### MAPLE ELEMENTARY SCHOOL

<table>
<thead>
<tr>
<th>SCHOOL STATISTICS</th>
<th>COMMUNITY STATISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade span</td>
<td>K-6</td>
</tr>
<tr>
<td>Total student enrollment (2009)</td>
<td>310</td>
</tr>
<tr>
<td>Percent free/reduced lunch (2009)</td>
<td>61%</td>
</tr>
<tr>
<td>Average grade size (2009)</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td></td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>Population (2007)</td>
</tr>
<tr>
<td></td>
<td>Median income (2007)</td>
</tr>
<tr>
<td></td>
<td>Unemployment rate (2009)</td>
</tr>
</tbody>
</table>

### SPRUCE ELEMENTARY SCHOOL

<table>
<thead>
<tr>
<th>SCHOOL STATISTICS</th>
<th>COMMUNITY STATISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade span</td>
<td>K-6</td>
</tr>
<tr>
<td>Total student enrollment (2009)</td>
<td>210</td>
</tr>
<tr>
<td>Percent free/reduced lunch (2009)</td>
<td>47%</td>
</tr>
<tr>
<td>Average grade size (2009)</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td></td>
<td>Town</td>
</tr>
<tr>
<td></td>
<td>Population (2007)</td>
</tr>
<tr>
<td></td>
<td>Median income (2007)</td>
</tr>
<tr>
<td></td>
<td>Unemployment rate (2009)</td>
</tr>
</tbody>
</table>

### PINE TREE ELEMENTARY SCHOOL

<table>
<thead>
<tr>
<th>SCHOOL STATISTICS</th>
<th>COMMUNITY STATISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade span</td>
<td>PK-6</td>
</tr>
<tr>
<td>Total student enrollment (2009)</td>
<td>120</td>
</tr>
<tr>
<td>Percent free/reduced lunch (2009)</td>
<td>29%</td>
</tr>
<tr>
<td>Average grade size (2009)</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
</tr>
<tr>
<td></td>
<td>Population (2007)</td>
</tr>
<tr>
<td></td>
<td>Median income (2007)</td>
</tr>
<tr>
<td></td>
<td>Unemployment rate (2009)</td>
</tr>
</tbody>
</table>