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Burlington and Winooski Public Schools
Burlington and Winooski, Vermont
Annual Report

Nellie Mae Education Foundation
District Level Systems Change
Building New Models
Submitted by Education Development Center
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Preface- Additions to this report

This annual DLSC report builds upon an interim report shared on March 20, 2013. The interim report drew from data collected over a portion of the 12-month evaluation data collection cycle, covering events from June, 2012-February, 2013. Subsequent data collection to complete the reporting cycle has been added for this report. The inclusion of additional data is represented in different ways: some sections from the interim report are unchanged; some sections have been revised and updated to account for additional data and analysis; and new sections have been added on topics that had not been reported on in the interim version.

New sections

With the completion of the data collection cycle, sections have been added in this report that address aspects of the DLSC framework that had been omitted in the interim report due to lack of data at that time. New sections are:

- The Cities of Burlington and Winooski
- Embracing Community Assets
- Proficiency-based Pathways, Demonstration of Mastery, and Personalization
- Data systems
- Student Voice and Leadership

Updated sections

Findings and summaries of site activities have been updated in several sections to reflect the entirety of data collected during this 12-month cycle. Updated sections and subsections include:

- Burlington and Winooski School Districts (new superintendent information)
- Policy Context (with information on new legislation related to proficiency-based learning)
- 21st Century Knowledge and Skills
- Year End Studies
- Human Capital/Professional Development
- Summer Development Institute
- Teacher Collaboration and Professional Culture
- Management and Infrastructure
- Steering Committee, Family School Partnerships, and Other Outreach Efforts
- Collaboration Across Districts
- Technology
- Conclusion

Unchanged sections

Some sections that appeared in the interim report are included without any substantive changes.

- Burlington High School and Winooski Middle/High School
- Work Plan – Year 1 Implementation
- Flexible Use of Time
- Academies
- Lead Community Partner
- Public Demand

Background Information

The Cities of Burlington & Winooski

Burlington, Vermont is the largest and most diverse city in the state with a population of 42,417 (2010 U.S. Census). This represents nearly a quarter of Vermont's population. Burlington and Winooski are sites for the Vermont Refugee Resettlement Program (VRRP), which was established in 1980. Thus, both communities serve families and students from diverse backgrounds who arrive in this country with varying literacy skills and a wide range of formal education backgrounds. In Burlington, 8.1% of the population is foreign born, compared to just 3.7% in the state, and 9.9% of residents speak a language other than English at home (compared to 5.1% in the state; see Table 1). Almost 4% of the population is Black or African American (compared to 1.0% in the state), and 3.6% of the population is Asian (compared to 1.3% in the state).

In the 1850s Burlington was an active lumber and manufacturing center. Today the economy is based on education and health services. Burlington is home to some of the state's largest employers, including Fletcher Allen Health Care, as well as four colleges and universities: University of Vermont, St. Michael's College, Champlain College, and the Community College of Vermont. The city is on the eastern shore of Lake Champlain, between the Green Mountains and the Adirondacks. The median household income ($38,598) is less than the state ($51,219), and the percentage of people and families living in poverty is higher than the state (25.1% compared to 11.5% and 14.4% compared to 6.9%, respectively; see Table 1). The city's residents are well educated, with 41.4% attaining a bachelor's degree or higher, compared to 32.9% in the state. Burlington has been named one of the prettiest cities, one of the top four "places to watch" in the United States by the AARP, and one of the best places to raise children by *Children's Health Magazine*.

Winooski's population is 7,267 (2010 U.S. Census). As with Burlington, the city is extremely diverse: 6.9% of the population is Black or African American and 6.2% are Asian (see Table 1). Foreign-born residents make up 9.6% of the population (compared to 8.1% in Burlington and 3.7% in the state) and 12.9% of residents speak a language other than English at home (compared to 9.9% in Burlington and 5.1% in the state). About 33% of residents have a bachelor's degree or higher. According to the city's website, Winooski was a thriving mill town but the mills closed in 1954, devastating the community. Since the 1980s there has been a movement to rehabilitate deserted mill buildings and revitalize the city's downtown area. Two centrally located mills have been converted to office, living, and retail commercial space. The economy is based on education, health, and social services, as well as manufacturing and retail trade. Winooski's median household income ($43,385) is lower than the state and the percentage of people living in poverty (20.4%) and families living in poverty (22.7%) is much higher than the state (11.5% and 6.9% at the state).

Table 1: *Community Characteristics: Burlington and Winooski*

Community Characteristics	Burlington	Winooski	Total	State
Population (2010 Census)	42,417	7,267	49,684	625,741
Under the age of 5	4.1%	6.2%	4.4%	5.1%
Under the age of 18	13.5	18.0	14.2	20.7
65 years or older	9.4	10.7	9.6	14.6
White	88.9	82.6	88.0	95.3
Black or African American	3.9	6.9	4.3	1.0
American Indian/Alaska Native	0.3	0.3	0.3	0.4
Asian	3.6	6.2	4.0	1.3
Hispanic or Latino	2.7	2.2	2.6	1.5
Foreign born	8.1	9.6	8.3	3.7
Language other than English spoken at home	9.9	12.9	10.3	5.1
High school diploma	90.3	87.6	90.0	90.1
Bachelor's degree or higher	41.4	33.1	40.2	32.9
Economic Characteristics				
Per capita income (2009 dollars)	$23,231	$24,492	--	$27,036
Median household income	$38,598	$43,385	--	$51,219
People of all ages living in poverty	25.1%	20.4%	24.4%	11.5%
Families living in poverty	14.4%	22.7%	--	6.9%
Unemployment rate	4.5%*	--	--	4.8%

Note: The source for this table was the 2010 Census. The source for the unemployment rate for Burlington and Vermont is the Bureau of Labor Statistics' unemployment for Metropolitan areas, July 2013.

Burlington and Winooski School Districts

The Burlington School District serves nearly 4,000 students in nine schools from Pre-K through Grade 12 (see Table 2). The school district serves the most diverse group of students in the state of Vermont, in part because the city of Burlington hosts a refugee resettlement program. Current activities in the district include a vote passing the school budget on March 6, 2013. The School Board settled on a 5.3% budget increase for the next fiscal year, which included $1 million in cuts absorbed by eliminating two administrative positions, 12 paraeducators, two Burlington High School teachers, one K-6 Spanish teacher, .5 wellness teacher, and cuts in athletics and co-curriculars.[1] Included in the school budget is funding for a 1:1 technology initiative in the high school and middle schools. The proposal included budget modeling that projected sustaining the technology program over time.[2]

The Winooski School District is the smallest geographic school district in the state of Vermont. Grades Pre-K through 12 are housed in a single building serving 852 students.[3] The State Board of Education recently voted to conduct a consolidation study. According to the Winooski School District website, "the purpose of this study is to look at educational opportunities for students while containing costs." Under consideration are options such as sharing a central office with another school district. The report will be completed in May 2014, with an interim report submitted in

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[1] Burlington School District 2013-2014 Budget Information: http://bsdweb.bsdvt.org/Board/BoardBudget.php

[2] Burlington One-to-One Initiative: https://sites.google.com/a/bsdvt.org/one-to-one/home

[3] Vermont Department of Education, Chittenden County Enrollment Report, 2012-2013: http://edw.vermont.gov/REPORTSERVER/Pages/ReportViewer.aspx?%2fPublic%2fEnrollment+Report

December 2013.[4] The Winooski School budget was voted upon and passed on March 5, 2013. The School Board proposed a budget increase of 2.1% for the 2014 fiscal year to account for increases in costs for utilities, central office costs, contractual obligations, and training for selected staff. Similar to Burlington, this budget reflects a 1:1 technology initiative in the middle and high schools as well as professional development for teachers in literacy and math.[5]

On July 1, 2013, Sean McMannon replaced Mary Lundeen as the superintendent of the Winooski school district. The hiring process was led by a search committee, which met several times to develop search criteria, define interview protocols, and review candidates. The new superintendent received a two-year contract and was selected after interviews with the school board, district faculty and staff, families, and community members.[6]

Table 2: *District, School, and State Information: Burlington and Winooski*

District Characteristics (2012-2013)	Burlington High School	Burlington School District	Winooski High School	Winooski School District	State
Total Enrollment	1,072	3,989	237	852	86,133
9th grade enrollment	295	295	58	58	6,280
10th grade enrollment	260	260	44	44	6,232
11th grade enrollment	279	279	55	55	6,100
12th grade enrollment	236	236	48	48	6,046
Racial/Ethnic Breakdown					
White	69%	68%	50%	57%	92%
Black/African American	15%	14%	25%	20%	2%
Asian	12%	9%	21%	15%	2%
Hispanic	2%	4%	1%	2%	2%
Multi-racial	2%	5%	3%	6%	2%
Native Hawaiian/ Pacific Islander	0%	0%	-	-	0%
American Indian/ Alaska Native	0%	0%	-	0%	0%
Other Student Demographic/School Services Info					
ELL enrollment	16%	15%	34%	25%	2%
Free or reduced lunch	41%	44%	71%	79%	39%
Special education services*	19%	24%	17%	20%	25%
Teacher Characteristics					
Total teachers**	101	382	34	85	9,092
HQT teachers in core classes**	97.9%	97.3%	100%	100%	96.5%
Student: Teacher Ratio	11.85	11.83	9.13	10.19	10.62
Average Salary	$63,673	$63,543	$49,877	$49,819	$54,420

Note: The source for this table is the Vermont Department of Education enrollment data reports for 2012-13.
*Special education services includes students on IEP's, education support team, and 504 plan
**Source: 2009-10 VT LEA, School, & State-Level Highly Qualified Teacher (HQT) and Emergency License Data Reports

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[4] Winooski School District Announcements: http://www.winooski.k12.vt.us/site/default.aspx?PageID=1
[5] Winooski School District FY2014 Budget Presentation: http://www.winooski.k12.vt.us/cms/lib03/VT01001251/Centricity/Domain/5/FY%202014%20Budget%20Presentation.pdf
[6] Winooski School District, Superintendent Search: http://www.winooski.k12.vt.us/Page/1350

Burlington High School and Winooski Middle/High School

Burlington High School (BHS; founded in 1964) is the only high school in the district. This comprehensive high school served 1,072 students in the 2012-2013 school year. Students came from diverse socioeconomic and language backgrounds: 21.6% of students were from non-English language backgrounds and 16% of students took English language learner classes (see Table 2). The school employs 105 faculty and staff and offers over 180 college preparatory and honors level courses across 12 disciplines.[7]

Winooski Middle/High School (WMHS; founded in 1864) is also the only high school in the district and served 237 students in the 2012-2013 school year from diverse ethnic, language, and socioeconomic backgrounds. Thirty-four percent of students were designated English language learners and 71% qualified for free or reduced lunch. The school has 44 faculty and staff.[8] WMHS welcomed a new principal in the 2012-2013 school year.

Work Plan – Year 1 Implementation

Burlington/Winooski's work plan for the first year of the implementation grant includes developing structures, habits, and procedures to engage in system-wide change that supports student-centered learning for all students, especially New American and historically marginalized learners. Programs in the initial year were to focus on developing relationships within the schools and community, cultivating shared ownership and leadership, and engaging in critical conversations about change within the school systems. Three major structures were proposed: the creation of Partnership for Change, whose staff would support the implementation of funded programs; the Transformation Academy, which would include five fellows, five implementation teams, and a dean of transformation; and a Steering Committee, which would provide oversight of budget and programmatic decisions for the Partnership. Each of these structures would serve both BHS and WMHS communities.

Hiring a director for the Partnership for Change and a project manager to help coordinate and guide the work of the implementation teams, fellows, and Steering Committee was in the work plan for Year 1. In terms of the Transformation Academy, the work plan called for developing credit/degree-bearing pathways for teachers who participated in academy professional development. According to the Burlington/Winooski proposal narrative, the Transformation Academy would provide all educators with embedded credit-bearing learning opportunities "to establish and facilitate an ambitious model for teacher learning and career development; and to support and coordinate stakeholder engagement in the inquiry-based work needed to generate the practices and policies of a student-centered learning system." The work plan included designing an RFP process and selecting five fellows. Establishing the implementation teams, including student and union representation from each school on each implementation team, and regular meetings of the implementation teams was another goal in the work plan for Year 1. The implementation teams were identified as key structures for engaging diverse stakeholders, including students, educators, families, and community members, on five topics central to student-centered learning: 1) youth leadership and involvement, 2) family school partnerships, 3) community-based learning, 4) personalized and proficiency-based learning, and 5) effective teaching and learning environments

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[7] Burlington High School: School Profile 2012-2013:
http://bhs.bsd.schoolfusion.us/modules/groups/homepagefiles/cms/2383201/File/BHS%20Profil%202013.pdf
[8] Winooski Middle/High School: School Report 2011-2012, Vermont Department of Education:
http://edw.vermont.gov/ReportServer/Pages/ReportViewer.aspx?/Public/School%20Report&orgid=PS351&schoolyear=2011-2012&codevalue=6

(formerly effective teaming practices). These teams are to conduct participatory action research around a guiding question that is relevant to the fellowship topic. Each implementation team would have a fellow and two co-chairs: one who sits on the Steering Committee and another who develops agendas and facilitates meetings. In addition, each of the five fellows would work with the corresponding implementation team and support the participatory action research. Establishing, populating, and providing training for the Steering Committee was another major element in the work plan.

Several initiatives geared directly at changing teaching practice were also included in the Year 1 implementation work plan: designing and planning the Year End Studies (YES) program; devoting common planning time for teachers; and launching a 1:1 technology initiative by soliciting bids, installing wireless hardware, hiring a technology support and integration specialist, providing professional development, and rolling out the devices among the freshman classes at both schools. Organizing teacher teaming structures and grade-level academies was another component in the first implementation year. In this teaming approach, cohorts of students have the same group of teachers for all of their core classes (English, math, history, and science). Special education and ELL teachers would meet with the teaching teams too as scheduling allowed. Selecting ninth grade teachers at BHS and ninth and tenth grade teachers at WMHS, providing professional development for teaming teachers, and implementing teaming starting in fall 2012 were all elements of the Year 1 implementation plan. Another element featured in the Year 1 work plan was providing instruction for ELLs and other student groups to help close learning gaps. The plan calls for conducting research on effective models for these students; piloting models for summer instruction for ELL and low-income students; increasing college counseling services for ELL, low-income, and first generation students; and piloting accelerated learning programs for ELLs and low-income students.

Aside from references to structures like the Steering Committee and implementation teams that cut across districts, the work plan does not lay out a plan for how the two districts will collaborate.

Policy Context

Several policy initiatives in Vermont could have an impact on student-centered initiatives at BHS and WMHS, including a move to proficiency-based graduation requirements and new standards for teacher professional learning.

In 2013, the state legislature passed Flexible Pathways Initiative (Act 77) to "promote opportunities for students to achieve postsecondary readiness through high-quality educational experiences that acknowledge individual goals, learning styles, and abilities." The act includes dual enrollment and established a personalized learning plan process and implementation working group. The working group, consisting of teachers, principals, superintendents, and other interested parties, will consider which effective personalized learning plan processes "enhance the development of the evolving academic, career, social, transitional, and family engagement elements of a student's plan" and shall identify best practices that can be replicated in other schools. The working group will publish a report with guiding principles and practical tools for implementing personalized learning plans by January 2014. The stipulation for flexible pathways in the legislation creates a clearer path toward a graduation system aligned with proficiency-based, student-centered learning.

In addition, newly released recommendations from the Vermont Department of Education's Education Quality Standards Commission support key components in the student-centered learning core. School level implementation of these recommendations is expected in September 2014. The Education Quality Standards Commission reviewed graduation requirements and in June 2013

released final recommendations that include moving toward a proficiency-based graduation requirement, as well as implementing multiple, flexible pathways and personalized learning plans.[9] For example, the commission recommended eliminating current graduation requirements that outline courses that students must take or demonstrate attaining or exceeding standards. The commission recommends that each secondary school board should be responsible for setting graduation requirements, including defining proficiency-based graduation requirements based on standards adopted by the State Board of Education. In addition, the recommendations stipulate that students should be expected to demonstrate learning through flexible and multiple pathways (e.g., career and technical education, virtual learning, internships, service learning, dual enrollment, and early college) by presenting multiple types of evidence (e.g., teacher- or student-designed assessments, portfolios, performances, exhibitions, projects). The commission based these recommendations in part on a review of John Everitt's Nellie Mae Education Foundation report on superintendent and school board member support for proficiency-based learning and multiple pathways as well as documents from the Great Schools Partnership on proficiency-based learning, graduation and performance indicators, and learning pathway assessments.

The Education Quality Commission is also making recommendations on professional learning for teachers across the state. Draft language of the policy includes an emphasis on "ongoing, embedded, collaborative team professional development" within each school, new teacher mentoring, and common professional learning time for all teachers in each school. In addition, teachers must demonstrate progress in their understanding of differentiated instruction, assessment practices, and data analysis.[10] Many of these recommendations, including common time for professional development and an emphasis on differentiated instruction, are key areas of support that could have a direct impact on student-centered instruction.

Data Collection

EDC researchers collected data at BHS and WMHS in spring and fall of 2012 and in spring 2013. Two members of the EDC evaluation team conducted a site visit during the Summer Development Institute on June 25th and 26th, 2012. In addition, evaluators visited BHS and WMHS on October 2nd and 3rd, 2012. The purpose of these visits was to collect data about the districts' progress in their first year of implementation. Across these two site visits, 21 interviews were conducted and transcribed (see Data Collection Activities summarized below). Observations were conducted of 10 different classes and ranged from 20 to 80 minutes in length.[11] In spring 2013, two additional visits were conducted: on June 5, 2013 a single member of the evaluation team observed the Year End Studies program, and on June 17, 2013 a member observed the 2013 Summer Development Institute.

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[9] Vermont Education Quality Standards Commission, Graduation Requirements Draft Language: http://education.vermont.gov/new/html/board/eqs.html

[10] Vermont Education Quality Standards Commission, Professional Development Draft Language: http://education.vermont.gov/documents/EDU-EQS_2013_02_06_Professional_Development.pdf

[11] EDC modified an observation protocol originally used by ITL/SRI International, and sponsored by Microsoft Partners in Learning, to conduct classroom observations in the U.S. and in other countries. This protocol captures activity structures, teacher roles, student participation and collaboration, and use of technology in the classroom. Tallies of what were observed include what we captured from partial-period observations so that we may have observed more than one activity structure, teacher role, student activity, and so forth during a single class observation. Our observation data distinguish entire *observations* (lasting 10 to 40 minutes or more) and *instances* of SCL-related practice within those observations. An instance may be brief or sustained but clearly reflects one of the measured domains.

A teacher questionnaire was administered to all faculty in the two high schools in November 2012 and again in June 2013. The questionnaires collected information about teachers' preparation, instructional practices, participation in Partnership for Change activities, and attitudes about and involvement in professional learning. In total, 34 teachers participated in the survey in 2012, including 15 teachers from WMHS and 19 teachers from BHS. Seventy-eight teachers participated in the June 2013 administration of the questionnaire, including 24 WMHS teachers and 54 BHS teachers. Responses from the 2013 questionnaire are reported by school because the number of completed surveys represents a large majority of the faculty in each school. Results from 2012 are reported in the aggregate because the low number of responses could misrepresent actual beliefs and practices at the school level. While we have chosen to include these data to draw comparisons in the report, we nonetheless encourage caution in interpretation. Given the low number of responses in the 2012 administration of the survey, we are not confident that the data accurately represents teacher opinions, behaviors, and practices. The high response rate in 2013 creates the promising possibility of further analysis and comparisons in future years.

Administration of an online student questionnaire occurred in May 2013. The questionnaire provided an account of student-level data on student-centered learning activities in classrooms, student engagement, and school culture. A selected sample of students at BHS and WMHS were invited to take the questionnaire. The sample represented key subgroups of students in each of the schools: students with special needs, English language learners (ELL), students receiving free or reduced price lunch, and students in honors or Advanced Placement classes. As a result, data from the student questionnaire offer a reliable source of information about school-level activities and student perspectives from a representative range of students in each of the schools and how they are learning in their classes. Unique identifiers were assigned to students at BHS. Evaluators matched the unique identifiers to information provided by the school on the key subgroups outlined above. This enabled analyses of the data based on subgroup populations. The evaluation team reviewed questionnaire responses to ensure that those used in the final analysis were complete and valid. In some cases, students did not answer a significant number of questions on the survey and/or provided responses that were not valid (e.g., students provided the same responses to each of the questions). In these cases, these data were not used in the final analysis. Adjustments were made to the BHS sample, randomly eliminating 20 student questionnaires to ensure that the subgroups were in proper proportion to the student body. A total of 334 students participated in the questionnaire, 188 of which provided useable data for analysis in this report (68 from WMHS and 120 from BHS).

Data collection activities are summarized below.

Spring 2012 data collection included:
- Observations of the Summer Development Institute 2012 and Burlington and Winooski team meetings
- Teacher interviews
- Project leader interview
- Community member interviews

Fall 2012 data collection included:
- Administrator interviews (Burlington and Winooski principals, vice principals, and superintendents)
- Teacher interviews
- Project leader interview

- Student focus group interviews
- 10 Classroom observations (5 at WMHS and 5 in 9th grade classes at BHS)
- Leadership event observation (Steering Committee meeting)
- LCP interviews
- LCP meeting observation
- Teacher questionnaire

Spring 2013 data collection included:
- Observation of the Year End Studies program at BHS
- Observation of the 2013 Summer Development Institute
- Student questionnaire
- Teacher questionnaire

Despite a full schedule of interviews and observations over the site visits, we wish to acknowledge at the outset that our dataset is small relative to the scope of the programs at the sites, and that insight into the Burlington/Winooski's implementation of the SCL core is still limited. During our fall site visit in Winooski, opportunities to conduct observations and student focus group interviews were limited due to testing. *In Burlington, fall 2012 data collection focused on 9th grade only.* With this in mind, the goal of this document is to reflect what was seen and heard during these site visits and to report what was learned from analysis of the questionnaire data, while acknowledging that there is much more to see and understand than could possibly be captured in such a limited time. As in all the Building New Models (BNM) sites, the work around student-centered learning is in the beginning stages. This report presents findings from the first year of implementation.

Findings: Student-Centered Learning Core

Findings for this section are organized according to the four key features of SCL practice that NMEF identified for the District Level Systems Change (DLSC), Building New Models (BNM) initiative: 21st Century Knowledge and Skills; Embracing Community Assets; Flexible Use of Time; and Proficiency-based Pathways, Demonstration of Mastery, and Personalization. In addition, there is a section reviewing findings on student voice and leadership. The NMEF theory of action posits that changes in the core are critical to improving students' opportunities for a broader and more engaging educational experience.

21st Century Knowledge and Skills (Curriculum, Instruction, and Assessment)

School administrators from both schools identified the development of 21st century skills as an important focus of their work. For example, one administrator explained, "My vision for the school is to define 21st century skills - clearly define what those skills are and make those skills the central part of where we're going as a school community. Then [we need to] commit to make sure that the students graduate demonstrating those skills" (BW12SD5).

Two areas within 21st century skills - knowledge building and problem solving and collaborative work - were present in many classroom observations and interviews. At WMHS, the move to a block schedule helped create more opportunities for students to work collaboratively, according to one teacher: "This year I am actually finding that I can do a lot more. The kids have more of a chance to work in groups and in teams to really challenge each other a lot more than with the shorter [period]" (BW12SD11). One WMHS teacher explained a recent project where students worked in groups to create a media presentation (TV talk show). Students had to agree on a topic of interest (that the

teacher then approved). The project was "not teacher-guided; it was student-centered." This teacher explained, "That's pretty much what I do with a lot of students. We may be reading together and there will be some explicit teaching first, but then the rest of it is mostly done in group or teamwork – and I hope as much as possible using technology as well" (BW12SD11) - despite the fact that the classroom is not included in the 1:1 MacBook initiative.

Students were often asked to work in **collaboration** with others across the classroom observations conducted. Overall, researchers observed seven instances of students working in small groups and this was the dominant activity in 5 out of 10 of the observations across both schools (3 instances in WMHS, including 1 where this was the dominant activity; 4 instances in BHS, including 4 where this was the dominant activity). In a BHS English class, students were asked to identify elements of romance in short stories and work in a small group to determine the genre of the stories, citing evidence. In two BHS observations and one WMHS observation, students worked together to create products that included contributions from each student in the group. For instance, in a WMHS English class, students worked together in small groups to identify poor, good, and great writing traits. Each student in the group had to contribute to the final list.

Teacher and student questionnaire data supported that collaboration is a frequent activity in classrooms. In the 2013 administration of the teacher questionnaire, 77.2% of WMHS teachers (m = 2.91) and 73.6% of BHS teachers (m = 2.89) reported that they provide instruction that requires collaboration among students often or all the time, similar to results in the combined fall 2012 responses (72.4%, m = 2.93). Of the five major areas associated with student-centered learning, collaboration received the highest mean (see Graph 1). Many students reported that they work with other students to complete projects or make presentations in their math and English classes (m = 2.52 in math and m = 2.74 in English at WMHS; m = 1.70 in math and m = 2.71 in English at BHS; see Graph 2).

In six classroom observations across both schools students engaged in **knowledge building and problem solving** (KBPS; 3 instances at WMHS and 3 at BHS). In the observation protocol, we identify several KBPS activities, including working on tasks with no single correct answer or previously learned solution, thinking about information in order to build ideas (rather than repeating information learned), participating in an activity that requires students to make a claim and support it with evidence, using information from multiple sources, receiving instructions to complete a task or an activity based on the student's individual needs, and engaging in creative or innovative thinking. Evaluators keep track of each instance these are observed; thus, within a single classroom observation multiple instances could be noted. Across the six classrooms where KBPS were observed there were 13 instances of students engaging in KBPS activities, including working on tasks with no single correct answer (2 instances at WMHS and 2 at BHS), assignments that required students to make a claim and support it with evidence (2 instances at WMHS and 2 at BHS), and tasks that required using information from multiple sources (1 instance at BHS). Students were also observed thinking about information in order to build their own ideas (3 instances at WMHS and 1 at BHS). For example, in a BHS biology class, students worked individually and used their iPads to explore 3-D models of cells. Students responded to a mix of closed- and open-ended questions requiring them in some cases to make claims and support them. Students were encouraged to conduct research on the web to help answer the questions on the worksheet.

Graph 1: Frequency of SCL-Related Instruction: Teacher Questionnaire Results
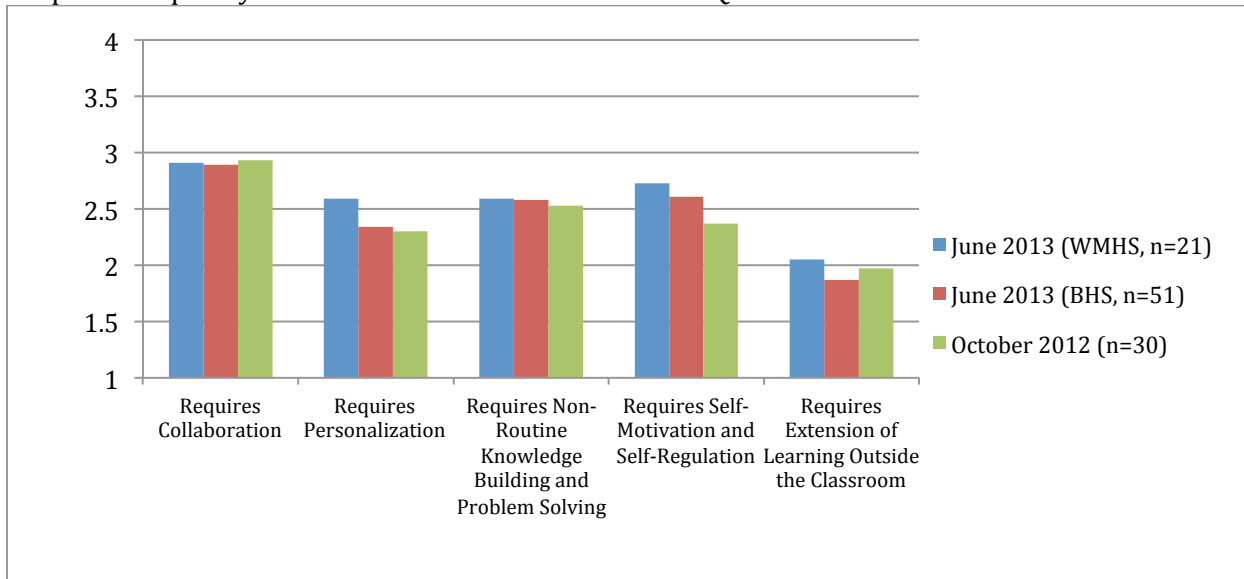
Note: Average response values: How often do you provide instruction that requires:
[1 = Never, 2 = Occasionally, 3= Often, and 4 = All the Time]

These findings correspond to teacher questionnaire data in which 59.0% of WMHS teachers (m = 2.59), 48.1% of BHS teachers in 2013 (m = 2.58), and 54.6% of the combined respondents in 2012 (m = 2.53), said that they provide instruction that requires non-routine KBPS often or all the time (see Graph 1). In the questionnaire, teachers identified instructional activities that were "quite important" or "most important" to their lessons. Several activities that could support problem-solving in lessons were frequently cited: providing oral feedback on student work (95.5% of WMHS teachers, 90.6% of BHS in 2013, and 100% of combined responses in 2012); asking open-ended questions (100% of WMHS teachers, 82.4% of BHS teachers in 2013, and 96.6% of combined responses in 2012); and modeling for students how to reflect on a problem or analyze results from an experiment and write up results of research (90.9% of WMHS teachers, 92.3% of BHS teachers in 2013, and 89.7% of combined responses in 2012).

Classroom observation data revealed fewer instances of **personalized and individualized instruction**. In 4 out of 10 observations evaluators observed instances of personalized or individualized instruction. In two observations at BHS, students engaged in making decisions about how they would approach a problem or complete an assignment. In one observation at BHS students worked according to deadlines that were different for each student and in one observation at WMHS students received instructions to complete a task or an activity based on the student's individual needs. For example, in a civics class at BHS, students had until the end of the week to complete their assignment and were given the freedom to use their time in class as they thought best. The teacher encouraged the students to use their class time well, providing students with examples of how they could take advantage of peer editing during class and then work on the essay at home after school. Teacher questionnaire data mirror observation findings: 45.5% of WMHS teachers (m = 2.59), 34.0% of BHS teachers 2013 (m = 2.34), and 30.3% of combined results in 2012 (m = 2.30) responded that they provide instruction that requires personalization often or all the time (see Graph 1).

Looking at these results, there are clear areas of strength as well as room for growth. It is interesting to note that in comparing WMHS and BHS teacher responses on the teacher questionnaire, across all five main components of student-centered learning in the survey WMHS teachers had higher mean scores. In several instances, the differences were very small (for example, for KBPS there is just a 0.01 difference in means). In others, though, the differences are larger, especially for personalization. As these two schools continue to work together to improve on some of these core components of SCL, the teacher questionnaire data suggest that BHS might stand to gain from observing and learning from their WMHS colleagues.

Teacher Role and Activity Structure

Evaluators also observe and note teacher role in the classroom (e.g., presenting information, facilitating a whole-class discussion, supporting student progress and behavior, providing in-depth guidance, participating in a student-led activity, and supporting student progress and behavior) as well as classroom activity structures (e.g., whole-class, teacher-led activity; whole-class, student taught activity; student presentation; small group or pair activity; individual activity; and flexible use of time). Sometimes teacher roles and activity structures are more traditional and teacher-centered. For example, in 6 out of 10 classroom visits, researchers observed teachers presenting information, giving instructions, lecturing, reviewing assignment or tests, demonstrating how to do something, or otherwise giving information (3 instances at WMHS, 3 at BHS) and teachers facilitating whole-class discussions (4 instances at WMHS, 2 at BHS). In addition, in 8 out of 10 observations evaluators witnessed activity structures that were more traditional, including eight instances where students worked individually on a learning activity (e.g., completed a worksheet, worked on a problem or project, read; 5 instances at WMHS, 3 at BHS) and seven instances of students engaged in whole-class, teacher-led activities directed by the teacher or another adult (e.g., lecture, teacher-led discussion; 5 instances at WMHS, 2 at BHS). For example, in an ELL class at WMHS, students worked individually to build their literacy skills by rotating through three stations that included completing READ 180 instruction on the computer, reading silently, and participating in a teacher directed activity.

Results from the teacher and student questionnaires corroborate that many teachers rely on more traditional, teacher-centered instructional approaches. In 2013, 87.0% of WMHS and 73.6% of BHS teachers, and 89.3% of combined respondents in 2012 reported that students "participate in discussions led by the teacher" often or every day. Among WMHS responses this was the highest mean, and second highest among BHS responses, compared to other common classroom activities such as working individually on an assigned task, working together in small groups on an assigned task, and working to solve real-world problems. Students reported that in their math and English classes, teachers often take on traditional roles and that they engage in teacher-centered activities. For example, students reported that in math and English classes the teacher leads classroom discussion and activities often or everyday (m = 3.94 in math and m = 4.21 in English at WMHS; m = 4.12 in math and m = 4.25 in English at BHS; see Graph 2), and that teachers lecture or give a presentation (m = 3.30 in math and m = 3.57 in English at WMHS; m = 3.57 in math and m = 3.56 in English at BHS). In addition, many students reported that they review homework assignments in class (m = 3.24 in math and m = 3.42 in English at WMHS; m = 4.21 in math and m = 3.00 in English at BHS).

Graph 2: Math and English Instructional Approaches: Student Questionnaire Results
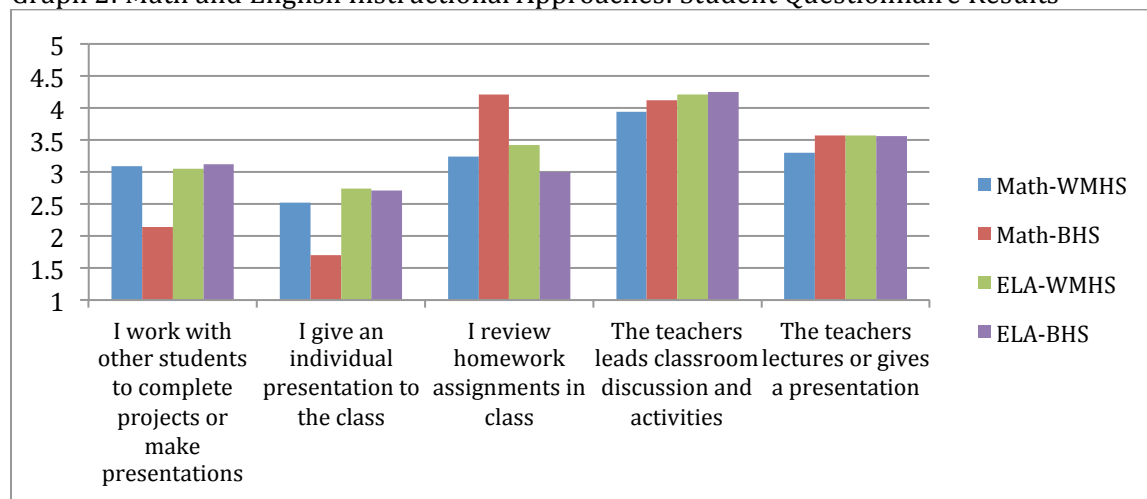
Note: Average response values: How often do the following things happen in your classes:
[1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Every day]

To be clear, these teacher roles and activity structures in and of themselves do not indicate whether instruction is traditional. For example, often in student-centered instruction there is a need for teachers to present information and for students to engage in individual activity. Taken together though and noting the context in each of these observations, traditional, teacher-centered instruction was observed more often than student-centered instruction. Evaluators did observe instances of teachers supporting student learning and providing in-depth feedback, two important teacher roles that align with the need for constant feedback and support that is critical to SCL. In 9 out of 10 observations teachers supported student progress and behavior by answering procedural questions, giving encouragement, or ensuring students were on task, including 5 where this was the dominant activity (4 instances at WMHS and 5 at BHS). In 4 observations teachers provided in-depth guidance by having conversations with individual students or groups to help guide student thinking, provide feedback, or suggest improvements (2 instances at WMHS and 2 at BHS).

These findings reveal some differences between subjects and between the schools in terms of teacher role and activity structure. For example, at WMHS math instructional approaches are often more aligned with student-centered learning than in English, with more students reporting that they work with other students in math classes and fewer students reporting that they review homework in class and that the teacher leads classroom discussion or lectures. Conversely, at BHS, data indicate that English classes are more aligned with student-centered learning than math classes, with more students reporting that they work collaboratively with other students and give individual presentations, and fewer students reporting that they review homework in class and that the teacher leads classroom discussion or lectures.

Looking at different subgroups of students at BHS and how they responded to survey questions revealed some interesting patterns. For example, students receiving free or reduced lunch more often reported that math teachers used student-centered instructional practices compared to students who do not receive free or reduced lunch (see Graph 3). Honors students, however, more often reported teacher-centered instructional practices in math, with fewer honors students reporting that they work collaboratively with other students and give presentations to the class, and more honors students reporting that they review homework assignments in class and that the

teacher leads classroom discussion or lectures. Finally, English language learners were also more likely to report receiving student-centered instructional approaches in their math classes. There were no consistent patterns among sub populations of students when looking at English instructional practices, including for ELLs. This is an interesting finding about ELLs because both Burlington and Winooski serve large populations of ELL and new immigrant populations. These students often require intensive literacy instruction and there was a sense among teachers we interviewed that incorporating higher level thinking skills was difficult to accomplish in these foundational classes that focus on providing students with the basic skills needed to succeed. One teacher at WMHS explained,

> I teach very low levels. Sometimes it's a little harder to do these areas [21st century skills and critical thinking] when they are working on a word-to-word level, when you just basically show pictures and try to work and it's phonics awareness. So, I think in my class, it's less than any others just because it's a foundational class. (BW12SD11)

In many ways it is encouraging to know that ELL students and students receiving free or reduced lunch report that they experience more student-centered instructional approaches in their math classes, especially given their need for this type of intensive instruction. These survey findings reveal limitations, however, when taken together with teacher interviews and classroom observations. Sometimes these student-centered approaches may not engage students on higher level thinking skills. It is also in many ways not surprising that honors students would experience more traditional instruction given the nature of Advanced Placement exams and the amount of material to cover. Administrators, teachers, and the school community need to be aware of these findings and work to ensure that the schools are not creating different tracks of educational experiences for different types of students, but rather are engaging in student-centered instructional practices that help all students achieve 21st century skills and knowledge.

Graph 3: Math Instructional Practices - Free/Reduced Lunch and ELL Students Compared: Student Questionnaire Results
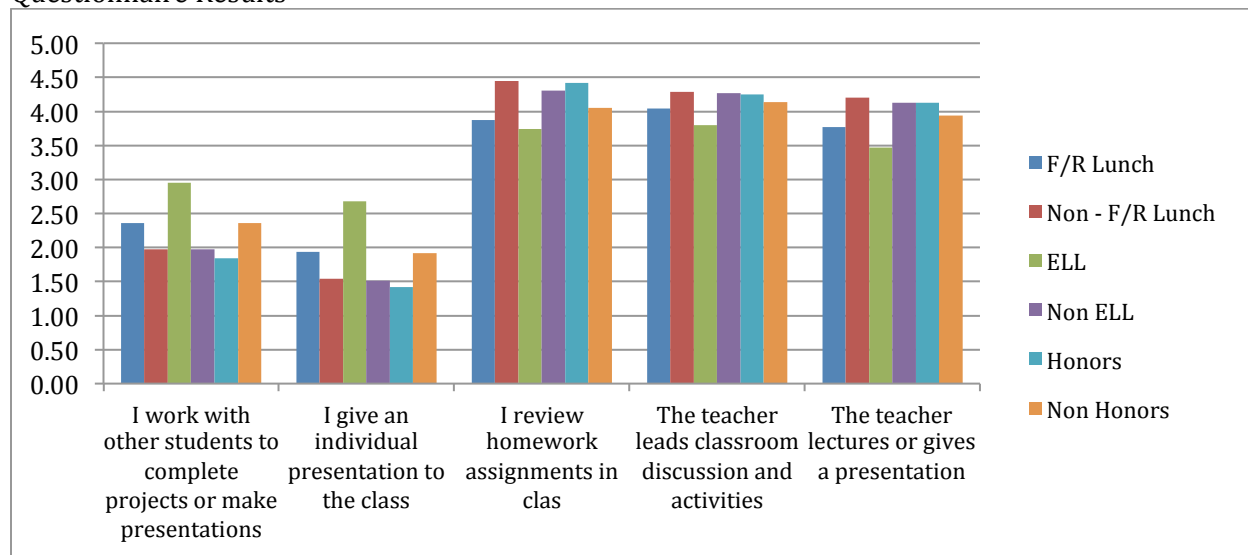

Note: Average response values: How often do the following things happen in your classes:
[1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Every day]

Student Engagement

One of the main goals of student-centered learning is to increase student engagement. Results from the student questionnaire demonstrate that most students are interested in what they are learning and feel well supported by adults in the school. For example, the majority of students agreed or strongly agreed that they were interested in the work they get to do in most of their classes (70.0%, at WMHS and 58.6% at BHS; see Graph 4). Most students reported that they work very hard on their schoolwork (83.3% at WMHS and 80.9% at BMHS) and feel that they are a real part of the school (62.8% at WMHS and 63.0% at BHS). Students also reported that they were well supported at the school, where teachers work hard to make sure all students are learning (83.9% at WMHS and 76.5% at BHS), teachers notice if students have trouble learning something (76.1% at WMHS and 73.1% at BHS), and teachers and counselors provide support in deciding what classes to take and preparing for life after graduation (76.5% at WMHS and 79.6% at BHS; see Graph 5). The majority reported that they feel that most teachers care about how they are doing (78.4% at WMHS and 70.9% at BHS).

Graph 4: Student Engagement at WMHS and BHS: Student Survey Results
Percentage of students who agreed or strongly agreed with the following statements
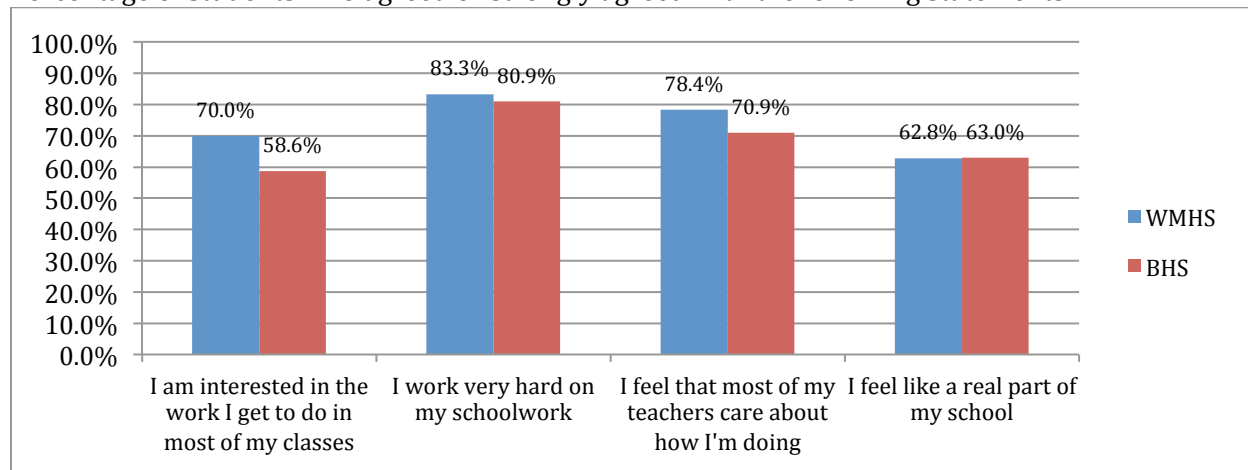

Graph 5: Student Support at WMHS and BHS: Student Questionnaire Results
Percentage of students who agreed or strongly agreed with the following statements
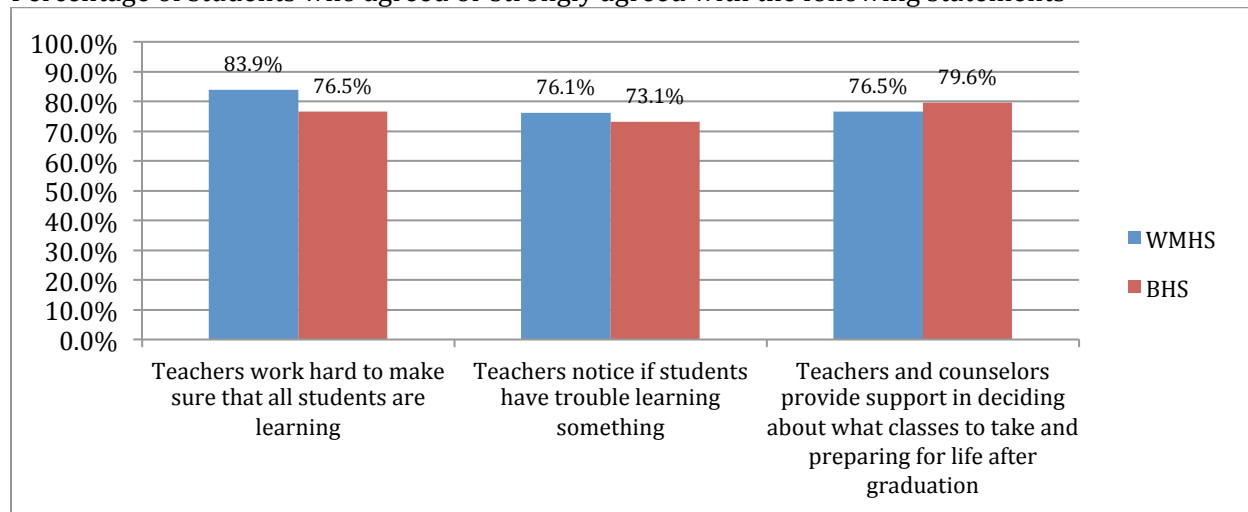
Comparing the two schools, at WMHS more students believed that teachers work hard to make sure all students are learning and that teachers notice if students have trouble learning compared to BHS students. This is likely in part due to the fact that WMHS is a smaller school, where teachers likely have more frequent interaction with students. More WMHS students reported that they were interested in the work they do in most of their classes, that they work hard on their school work, and that they feel that most teachers care about how they are doing compared to BHS students. Overall, however, these numbers for both schools are impressive and indicate that while there are still some students to reach, the majority feel well supported.

Looking at subgroups within the BHS student population, more ELL students believed that teachers work hard to ensure all are learning (85.0% agree or strongly agree) and provide support in deciding about what classes to take and preparing for life after graduation (89.5%) compared to non-ELL students (74.7% and 77.7% respectively; see Graph 6). In addition, more ELL students reported that they were interested in the work they get to do (84.2%), that they work very hard on their schoolwork (82.3%), that they feel that most teachers care about how they are doing (68.4%), and that they feel like a real part of the school (73.6%; see Graph 7). Many ELL classes are smaller and instruction requires more student-teacher interaction, which might help explain some of these results. The large difference between ELLs and non ELLs about level of interest in their schoolwork, where nearly 84% of ELL students agreed or strongly agreed that they were interested in most of what they do in their classes compared to just 54% of non ELL students is a little surprising. Given the large ELL population in the school, these findings demonstrate that the school has made strong efforts to support these students and their needs.

Graph 6: BHS ELL Student Perspectives on School Characteristics: Student Questionnaire Results
Percentage of ELL and Non ELL students who agreed or strongly agreed with the following
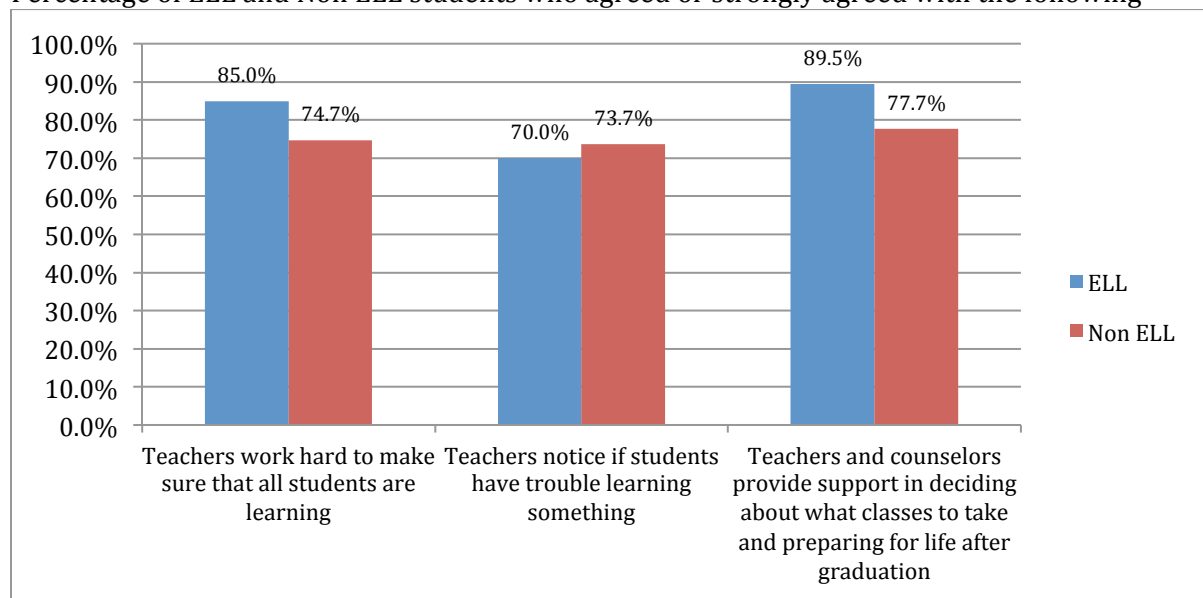
Graph 7: BHS ELL Perspectives on Student Engagement: Student Questionnaire Results
Percentage of ELL and Non ELL students who agreed or strongly agreed with the following:
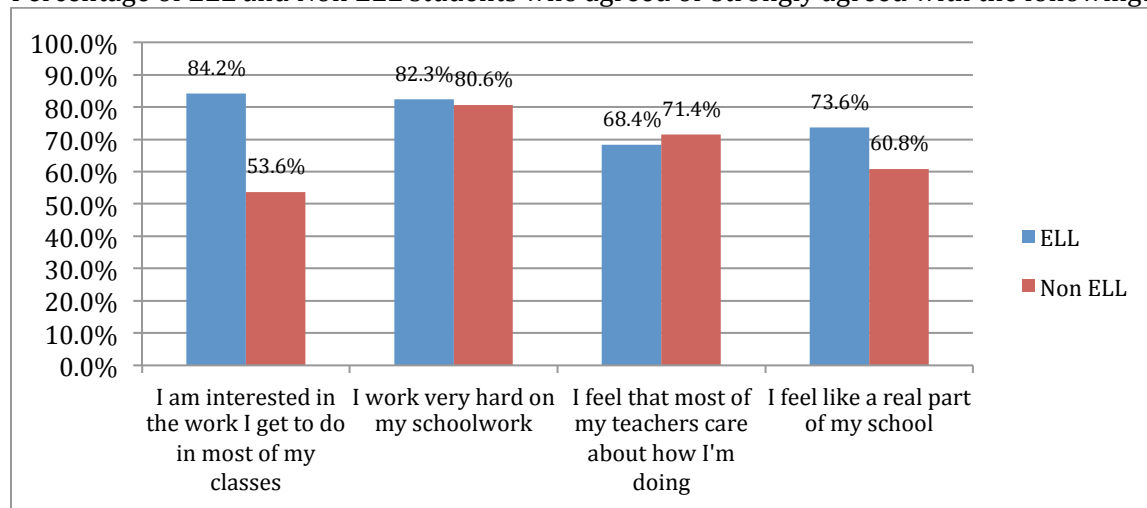
Flexible Use of Time (School Day, School Week, and School Year)

Several programmatic changes have been made in the course schedules at BHS and WMHS to promote flexible use of time: block scheduling at WMHS and the launch of Year End Studies at BHS (see more information in next section) . These changes allowed more opportunity for in-depth study in lessons and greater opportunities for learning outside of the traditional school walls.

Winooski adopted a 90-minute block schedule this year, which teachers reported helped them use time more creatively; for example, now there is enough time to leave the classroom and go out into the community during a single period. One teacher explained,

> For project-based [learning], 90 minutes works a whole lot better. Just getting them out of the school last year–I really struggled. When we had field trips I would only take the classes that had lunch and the class before or the class after. We will be able to do field trips in the 90 minutes. (BW12SD12)

Block scheduling certainly is a start, but WMHS administrators and teachers agreed that there are limited opportunities for flexible use of time.

Year End Studies

The Year End Studies (YES) program was launched at BHS during the final two weeks of the 2012-2013 school year, enabling teachers to design and teach an intensive class on subjects and through activities not typical during the regular school year. The creation of the program required substantial shifts in the school calendar. To accommodate YES, the school year began earlier and mid-term exams and a study week that preceded final exams were eliminated.

Planning and oversight of YES was conducted by a committee, led by two BHS teachers who served as co-chairs. The committee included 14 teachers and administrators and met throughout the year. During the 2012-2013 school year, teachers were provided with time to prepare their course proposals during professional half-days. Proposals for courses, including budgets, were submitted to the YES committee for feedback and approval. Teachers were encouraged to develop courses

based on personal interests that they wanted to share with students and topics that could not typically be taught during the school year. Teachers were given great latitude in selecting the format and focus of their courses and were allowed to collaborate with colleagues in other departments to co-teach a course.

All courses had two requirements: a writing component and a connection to the community. Courses comprised of either half-day or whole-day sessions. Nearly all courses were located in Burlington and held during the school day, but some were similar to study-abroad programs and involved extended travel to other cities and countries (these courses required an additional fee). A catalogue with over 100 course selections were provided to students who selected their top choices for courses. The selection of courses offered a great variety of interests such as:
- "Coaching Youth Soccer" in which students worked with K-5 grade children and learned basic coaching techniques. Students who completed the course were encouraged to volunteer in the local youth soccer league.
- "History of Math" covered different algebraic and number systems through history and the world.
- "Installation Art and Documentary" in which students researched installation artists and created projects for the BHS campus.
- "The Future of Burlington" where students designed and researched a project for making civic improvements in the city.

The launch of YES was accompanied by changes in school graduation policies: completion of four years of YES classes is a graduation requirement for BHS students. This policy change reflects the expectation that all students must participate in YES. During YES, the school follows a different schedule. Students who are at risk of failing classes are required to attend credit recovery periods at the beginning and end of the day. Students who are passing their courses have a shortened day, with a two-hour YES period in the morning and a second two-hour period in the afternoon. One teacher who was involved in the planning of YES stated that the program, including the interesting course selection and appealing schedule, was intended as an incentive for students to do well in their courses and to continue to encourage students to come to school during the final days of the academic year.

A member of the evaluation team conducted a full-day visit during the second week of YES in which five classes were observed. On the particular day of the visit, all classes were engaged in day-long activities (even though some of the classes were half-day courses on other dates during YES). The following paragraphs provide detailed descriptions of some of what was observed. It is important to note that only a small portion of each class was observed (30-75 minutes), therefore, these descriptions provide a snapshot of the types of activities in YES courses.

One observation was of a class titled "The Future of Burlington." This class was led by the Community Based Learning Fellow (and part-time BHS teacher) and had a group of seven students involved in efforts to redesign the Burlington waterfront. The class was based not at BHS but at Burlington City Hall, where students reviewed submitted proposals and met with many of the community and business stakeholders involved in the redesign. The observation occurred at the offices of the only company that offers ferryboat service across Lake Champlain, where students were interviewing the owner of the company and two of his leaders. Students asked questions about the owner's opinions on different proposals to change the waterfront, some of which involved moving the ferryboat company's location. The students showed a good understanding of the public and private concerns at play in the discussion and referenced different issues that they

had learned about through earlier interviews and review of proposals. The interview lasted over an hour. The teacher stated that students would be preparing a list of criteria that would be applied to different proposals and used as part of the city's process for deciding which plan to pursue. Students engaged in real-world problem-solving that was greatly enriched by being out of school, in an authentic business setting, in discussions that mirrored the pace and tone of real-world decision-making.

Another observed class was the "Zombie Studies" course. During the observation, the class traveled inside and outside the building throughout the BHS campus, filming a short video of a zombie invasion. Students filled the roles as actors, with a few students also doing the make-up for the actors. In addition to the teacher (who was playing a zombie), there were three adults from a local film company who were leading the direction and filming of the video. Students were very excited about the film and the class moved swiftly from location to location, creating roughly outlined scenes, operating apparently without a script. The teacher explained that creating the film followed classes that explored zombies in popular culture and that the class had created the outline of the story for the video.

The final observation was of the "Installation Art and Documentary" class. Students worked in two groups to create installation pieces: one would be placed in the hallways of BHS and the other outside the building. Students had studied artists such as Andy Goldsworthy, designed their own installations, and worked collaboratively to create and assemble the artwork while recording and documenting the progress of their work. In the class, students were engaged in hands-on work and appeared to collaborate seamlessly. Notably, the teacher had students working in two separate locations, so students displayed great independence and self-monitoring skills as the projects were both clearly moving toward completion. It is also worth noting that when the school day ended during this observation, several of the students stayed to continue working, even though it was a beautiful June afternoon with only three days of school remaining.

Overall, these classes reflect how YES courses departed from traditional classes in the subject matter content, connection to the community, and flexibility in the use of time. Courses were observed in classrooms, outside on the school grounds, in the art and music rooms of the school, and in the offices of a Burlington Ferry company. All five observations included clear connections to the Burlington community. While caution is warranted when generalizing conclusions about instruction based on data collected from such a small, unrepresentative selection of courses, these observations suggest that the classes promoted a greater connection to the community and more flexibility in the where, when, and how instruction was delivered than lessons during the rest of the school year. While student and teacher engagement appeared high, there remained unanswered questions for assessing the contributions of YES to student success. For example, it is unclear how the content of the YES courses connect to subject matter standards and how students can connect their interests and experiences from YES to their coursework during the school year.

Winooski is hoping to adopt the YES program in the 2014-2015 school year, learning from BHS's experience as they move to incorporate the program. One WMHS student accompanied a Partnership for Change staff to observe a day of YES courses, so that this student can become an advocate for YES programming at her school. An administrator from WMHS explained that they are not only interested in learning how to implement the YES program, but also learning from the program to incorporate innovative practices throughout the school year:

> I'm not excited about the YES project as kind of a stand alone part of the school year; I am interested in it as a way to think differently about what learning can be when students have

more voice in it. I'm more excited about it as a way to learn about things we might take and embed into the entire school year, not just the last two weeks of the year. (BW12SD5)

Overall, in terms of flexible use of time, administrators and teachers at both schools admitted that while the block scheduling at WMHS and the YES program at BHS provide exciting opportunities, more is needed to remove barriers to flexible use of time during the entire school year. As one Winooski teacher explained,

> Flexible use of time–we are not there yet. We are at the beginning of this whole thing. So eventually, I think that down the road, we will like to be more flexible, but at this point, we're just not. We're still structured around the class schedule, an 8:00 to 3:00 schedule. (BW12SD11)

Embracing Community Assets

Administrators and teachers discussed community assets as resources that are available to be tapped for student learning. A BHS administrator described the local area as "resource-rich" in terms of the organizations that want to partner with BHS and bring a relevancy to student learning. In an interview, one WMHS teacher explained that they "are right at the very beginning of [connecting students to the community] but talking about what makes sense….We don't want to just shove kids out there and say, 'Gee, this looks like a good opportunity.' We have to have it really well structured" (BW12SD12).

Classroom observation data reveal that very few teachers, however, are taking advantage of these community resources. There was a single observation at WMHS where extension of learning outside the classroom was observed. Students were engaged in information about other countries and cultures, learning about the Chinese immigrant experience in the United States. There were no instances of looking outside the walls of the school, relating extended learning opportunity (ELO) experiences to classroom content, or reflecting on cultural and/or historical perspectives across both schools. In the 2013 administration of the questionnaire, 18.2% of WMHS (m = 2.05) and 21.2% of BHS teachers (m = 1.87) reported that they provide instruction that required extension of learning outside the classroom often or all the time, and a similar rate was found in the combined results of the 2012 administration (27.2%, m = 1.97). Of the core areas associated with SCL, extension of learning outside the classroom received the lowest mean.

Both schools are beginning to develop opportunities that integrate community assets. For example, as described above, courses in the YES program at BHS required a community connection component as part of student learning. WMHS students engage in a senior project, which centers on an area of new learning and requires students to partner with a community member or utilize community resources as part of their learning. In addition, teachers at WMHS described ways that they already access community assets as part of instruction, such as business classes where people from the community are brought into the classroom as speakers, and in math classes, where students travelled to a local mall as part of an algebra investigation.

Another structure to support ELOs is the Community Based Learning Fellow. The fellow for 2012-2013 was a BHS teacher who worked with both schools to design opportunities for teachers and students to expand their use of community resources in the classroom. Two WMHS teachers expressed interest in working with the fellow to develop opportunities during our fall 2012 site visit, including one who had contacted the fellow about getting students into the community,

discussing what that might look like and what steps must be taken. The teacher explained that they were at the very beginning stages of working through some of these details.

During the 2013 Summer Development Institute, the Community Based Learning Fellow described some of the projects that had taken place over the course of the school year, including a partnership with the Vermont Youth Conservation Corps (VYCC) where a group of students learned to farm at the VYCC every day after school for six weeks. This project specifically focused on reaching out to New American groups in the school. BHS offered a credit-bearing course in summer 2013 on growing local food. The Community Based Learning Fellow closed his presentation by saying that he envisions that in the future, with the shift to robust graduate expectations, there will be increased ways to honor different types of learning opportunities that happen in different settings and teachers will have the tools to explore and assess that learning.

At WMHS, the staff spent an in-service day prior to the 2012-2013 school year going out into the community. Teachers were broken up into six groups, each focusing on a specific lens (e.g., culture, religion, history, educational institutions). Each group was assigned to go out into the community to gain a better understanding of what resources are available that the school could use to support student learning as well as the perceptions community members had of the school. Teacher groups then presented their findings to the staff. Teachers met with city leaders, community organizers, religious leaders, community service providers, business leaders and other community members. According to one administrator, "The feedback we got was it was the best in-service that anybody had ever attended" (BW12SD3). As a result, teachers started to develop relationships with community members. One administrator explained,

> Teachers have started to connect with people within the community who have either a set of skills or an interest area or something that they're doing that connects to what they're working with students on, so teachers are starting to access those resources more. It really is just at the starting level, but at least it's happening. (BW12SD5)

Embracing community assets and developing extended learning opportunities are areas of growth for both schools. BHS and WMHS seem to have a strong foundation for this work, including existing partnerships, proximity to valuable community resources (e.g., colleges, organizations like VYCC), and new and existing programs (e.g., YES, WMHS's senior project).

Proficiency-based Pathways, Demonstration of Mastery, and Personalization

During the fall 2012 site visit, observations and interviews suggested that while some teachers had incorporated proficiency-based learning into instruction, these practices were not widespread. Throughout the year, however, Partnership for Change fellows worked with school and community members to develop graduate expectations in each school, which will serve as the foundation for proficiency-based learning models going forward.

Winooski teachers described lessons that allowed student choice in what they studied and how they demonstrated what they had learned. For example, in a business class students selected a career and researched it. An ELL teacher described an example lesson of having an essential question and students deciding how to approach the question (working within a set of given requirements). In addition, several WMHS teachers described proficiency-based learning approaches that they used in their classes. For example, the business teacher provided students with a Google Doc listing the objectives for the entire unit. After each lesson, students had to demonstrate understanding of the objectives and explain what they learned from the lesson to help

them achieve mastery of the objective. A math teacher explained that they are trying to move toward proficiency-based learning by allowing students to make corrections to homework until they achieve proficiency. Two teachers in the math department went from assigning letter grades for assignments to using "complete" when students had demonstrated mastery or "incomplete" when students were still working toward mastery. The math teacher explained that they instituted this five years ago:

> That year was amazing – a huge amount of work, but the very next year we saw a huge shift in student understanding. They were understanding what it means to be proficient. You are not just going to scrape the surface. You have to really prove it. You have to talk about it. You have to use it in simulations.

The school board objected to this practice and letter grades were instituted again, but this teacher is hoping to go back to this approach to learning.

Classroom observation data revealed few instances of proficiency-based learning. In four classroom observations students were engaged in **self-regulation and mastery** (2 instances at WMHS and 2 at BHS). At WMHS, there was 1 instance of students using an assessment rubric to guide their work and 1 instance of students receiving feedback from teachers or other adults about their learning. At BHS, students received feedback from peers (2 instances) and students revised their work during the lesson that was observed (1 instance). For example, in classroom observations the use of iPads in BHS classrooms was the most prominent aspect of self-regulation observed during the site visit. As noted above, in two classrooms, students used the iPads to move through content at a self-determined pace to write essays in a civics class and complete worksheets on three dimensional models in a science class. This approach was noted in an interview with administrators at BHS who discussed that while teachers were not required to use the iPads, it had been suggested that these technologies be used for personalizing instruction and allowing students to work at their own pace.

Results from teacher and student questionnaire data confirm that providing opportunities for self-regulation and mastery and greater student choice is an area for growth. For example, on the latest administration of the teacher questionnaire, 59.1% of WMHS teachers ($m = 2.73$) and 53.0% of BHS teachers ($m = 2.61$) reported that they provide instruction that requires self-motivation and self-regulation often or all the time (see Graph 1). In the student questionnaire, students reported that math and English teachers often relied on traditional assessment practices with many reporting that they take quizzes and tests often or everyday (54.5% in math and 45.4% in English at WMHS; 85.7% in math and 22.7% in English at BHS; see Graph 8). Fewer students reported that they get to choose how they show what they have learned (41.2% in math and 33.9% in English at WMHS; 14.6% in math and 39.5% in English at BHS). Students reported that teachers provided written feedback, though, which is an important component in student-centered learning approaches and proficiency-based learning (53.1% in math and 67.2% in English at WMHS; 38.8% in math and 59.3% in English at BHS).

According to WMHS students, math assessment approaches were more often aligned with student-centered learning than in English, with more students reporting that the teacher gives written feedback and fewer students reporting that they take quizzes and tests. More students reported SCL assessment methods in math at WMHS when compared to BHS as well. Conversely, at BHS, in general assessment practices in English classes were more aligned with SCL compared to math classes, with more students reporting that they choose how they show what they have learned and fewer students reporting that they take quizzes and tests.

Graph 8: Math and ELA Assessment Practices: Student Questionnaire Results
Percentage of students who reported that the following assessments occur often or every day
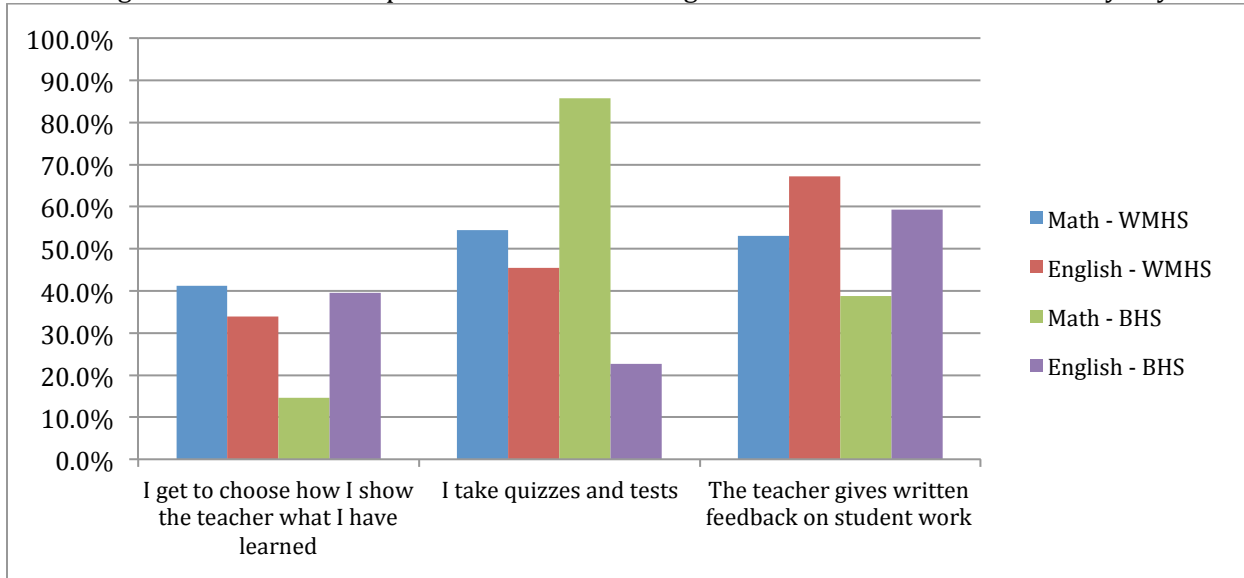
Students receiving free or reduced lunch more often reported that math teachers use student-centered assessment methods compared to students who do not receive free or reduced lunch: more students receiving free and reduced lunch reported that they get to choose how they show the teacher what they have learned often or every day (27% compared to 6%; see Graph 9). Honors students, however, more often reported traditional assessments methods in math compared to non honors students, with fewer honors students reporting that they choose how they demonstrate what they have learned often or every day (6% compared to 21%) and receive written feedback from teachers (37% compared to 41%) and more honors students reporting that they take quizzes and tests (98% compared to 76%). ELL students were more likely to report receiving student-centered assessment methods in their math classes compared to non ELL students, with more ELL reporting that they get to choose how they demonstrate understanding (47% compared to 8%) and receive written feedback from teachers (42% compared to 38%). In addition, fewer ELL students reported taking quizzes and tests (40%) compared to non ELL students (95%). These subgroup comparisons are interesting and mirror findings above about instructional practices. The differences reported here likely reflect the differences in assessments for ELL and honors students in math courses. Teachers of ELL students must accommodate their developing English skills and can not rely on the traditional quizzes and tests that are more common in honors courses, which prepare students for high stakes tests.

Graph 9: Math Assessment Practices among BHS Student Subgroups: Student Questionnaire Results
Percentage of students who reported that the following assessments occur often or every day
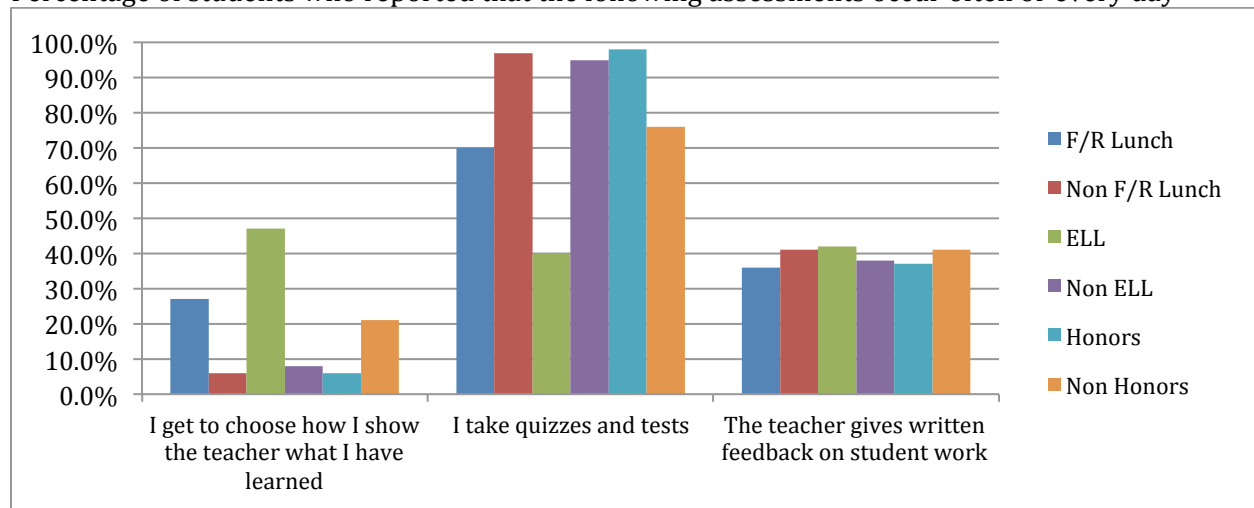
Graduate Expectations

One major focus during the first year of implementation in the sites has been the development of graduate expectations. Efforts to identify graduate expectations that reflected the values of the community were led by Sarah Bertucci, the Personalized and Proficiency-Based Learning Fellow, and Jill Jacobelli, the Family School Partnership Fellow. The fellows worked across both sites and held 35 neighborhood learning conversations with over 400 students, teachers, family members, and community members discussing what graduates need to succeed. These one-on-one and small group meetings resulted in a list of 19 common expectations. A Community Learning Conversation event was held with over 300 teachers, students, family members, business leaders, school administrators, and community members from Burlington and Winooski. During the event, participants met in groups to rank these 19 expectations. A graduate expectation team was created at each school, including students, teachers, parents, family members, and community members. These teams reviewed the expectations, the rankings, research on proficiency-based learning and graduation requirements, model schools, and standards to create first drafts of the graduate expectations. Students played a crucial role in the wording of these expectations. These drafts were shared with teachers and the larger community. Sarah explained, too, that they were intentional in their approach of presenting these as drafts and making it clear that they did not have all the answers for what these graduate expectations should be. Sarah and Jill engaged in another round of 32 neighborhood learning conversations, getting feedback from the community on the drafts of the graduate expectations. This feedback was incorporated into the latest draft (see Table 3).

During the 2013 Summer Development Institute, proficiency-based graduate expectations were described as the lynchpin that ties all of the other programs and activities in the Partnership for Change together. Incorporating extended learning opportunities, expanding student voice and leadership, and personalizing instruction requires an agreement on what students should learn from these experiences.

Table 3. *Graduate Expectations*

Winooski	Burlington
Effective oral and written communication	Effective communication
Critical thinking and problem solving	Critical thinking and problem solving
Cross-cultural understanding and community engagement	Cross-cultural understanding and civic engagement
Engagement in learning	Curiosity and creativity
Physical, social, and emotional well-being	Personal development
Persistence	

The graduate expectations will serve as the foundation for the development of proficiency-based learning in both districts. Next steps include providing short descriptions of each of the expectations as well as a list of key skills and concepts students must know or demonstrate. During the Summer Development Institute in 2013, teachers began planning how to incorporate the graduate expectations into their teaching. The graduate expectations will be piloted in the 2013-2014 school year in select classes and programs. Sarah and the Partnership For Change staff will continue to conduct research and look for models of proficiency-based learning, helping the districts to make decisions about which models might work best. In addition, the group will be researching how best to teach and assess graduate expectations that are not easily measured through traditional means, like curiosity and creativity. Continued conversations with community members, students, and teachers will seek further input and feedback throughout this process.

Student Voice and Leadership

Another area of focus for the Partnership for Change is providing opportunities for student voice and leadership. These efforts are led in part by the Youth Engagement and Leadership Fellow. Last school year this fellow helped coordinate a number of initiatives aimed at giving students at both schools a chance to share their opinions and take leadership roles in promoting SCL. For instance, on April 7-9, 2013 a group of 12 students and the Youth Engagement and Leadership Fellow went on a student-led visit to Providence, Rhode Island. The purpose of the trip was to provide students opportunities in community building and leadership, especially related to crossing cultural, racial, and economic barriers that often divide people in their communities and classrooms. The trip included a visit to the MET school, which has some innovative practices related to personalized learning, as well as a partnership with the Providence Youth in Action group that has been working on issues of diversity and equity. Students had to apply to be included on the trip. Two students from BHS created the application and selection criteria for choosing applicants, and then facilitated the selection process. Nearly 40 applications were received from both schools, half of which were from New American students.

During the 2013 Summer Development Institute, a group students led sessions focused on student leadership. During one of these sessions, "The Future of Student Leadership and Engagement," seven students from BHS and WMHS served on a panel, several of whom were involved in student government at their respective schools. Nine teachers and administrators attended the session. The goal was to provide a forum for those in the room to talk about student voice and leadership and how it might be improved. After a quick round of introductions, teachers and administrators asked questions of the student panel about their leadership experiences. Several issues arose during the course of the conversation, including the need to include more diverse students in organized student government. Students reported that language barriers can make it difficult to become involved and one student reported that she did not like organized student leadership because the roles often "seem fake" and are "not authentic." Another issue was that students often do not feel

like they are trusted to handle tough issues in school or make important decisions. Teachers and administrators need to trust the student government in order to make it more authentic. Students reported that when it came to actually changing the school, they had very little power. Teachers and administrators asked probing questions throughout the discussion, including asking students for their input on how to resolve these issues.

Other opportunities for leadership during the 2012-2013 school year included the Youth and Adults Transforming Schools Together (YATST) program, which is a statewide initiative where selected students at both schools meet with students across the state to attend workshops and trainings with the goal of helping students talk with administrators and teachers about school change. The Partnership for Change has also sought to include students on each of the implementation teams and the Steering Committee, which is the main governing body.

Results from the student questionnaire revealed that at 53.5% of students at WMHS and 48.7% at BHS agreed or strongly agreed that their ideas and opinions can influence decisions made at the school (see Graph 10). In addition, 60.0% of WMHS students and 45.6% of BHS students agreed that students are seen and treated as leaders by adults in the school. Looking at subgroups of students at BHS revealed that the majority of ELL students agreed or strongly agreed that their ideas and opinions can influence decisions made at the school (68.4%) and that students are seen and treated as leaders by adults in the school (68.4%; see Graph 11). More ELL students believed their ideas could influence decisions compared to non-ELL students (68.4% compared to 44.9%) and more ELL students believed students are treated as leaders (68.4% compared to 41.2%). Comparing between honors and non-honors students, more non-honors students agreed that their ideas and opinions can influence the school (52.3% compared to 44.2% of honors students) and more non-honors students agreed that students are seen and treated as leaders (51.7% compared to 38.5% of honors students). While we cannot say with certainty what explains this difference, one plausible explanation is that the difference lies in smaller class size and more personalized attention that ELL students receive and thus the perception (and perhaps the reality) that students have more influence over decisions. Conversely, AP and honors students may experience the school as highly structured and not subject to their influence. AP courses, in particular, provide very little room for student decision-making.

Taken together, these findings indicate that while there have been opportunities for students to take leadership roles and help in decision making, there is room for growth in terms of engaging more students, especially different subgroups of the student population. It is encouraging that ELL students at BHS report feeling empowered, especially given some of the barriers that students discussed during the forum on the Future of Student Leadership and Engagement. Still, the majority of students at BHS do not feel that their ideas can influence decisions and that students are treated as leaders, indicating there is more work to be done.

Graph 10: Student Voice and Leadership at WMHS and BHS: Student Questionnaire Results
Percentage of students who agreed or strongly agreed with the following statements:
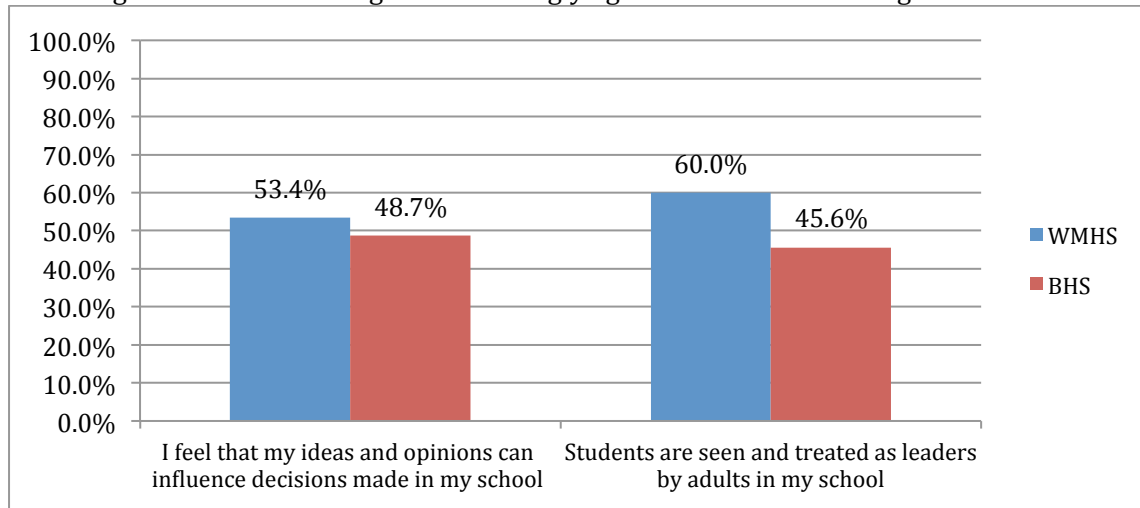
Graph 11: Student Voice and Leadership Among Subgroups at BHS
Percentage of BHS ELL, Non ELL, Honors, and Non Honors students who agreed or strongly agreed with the following statements:
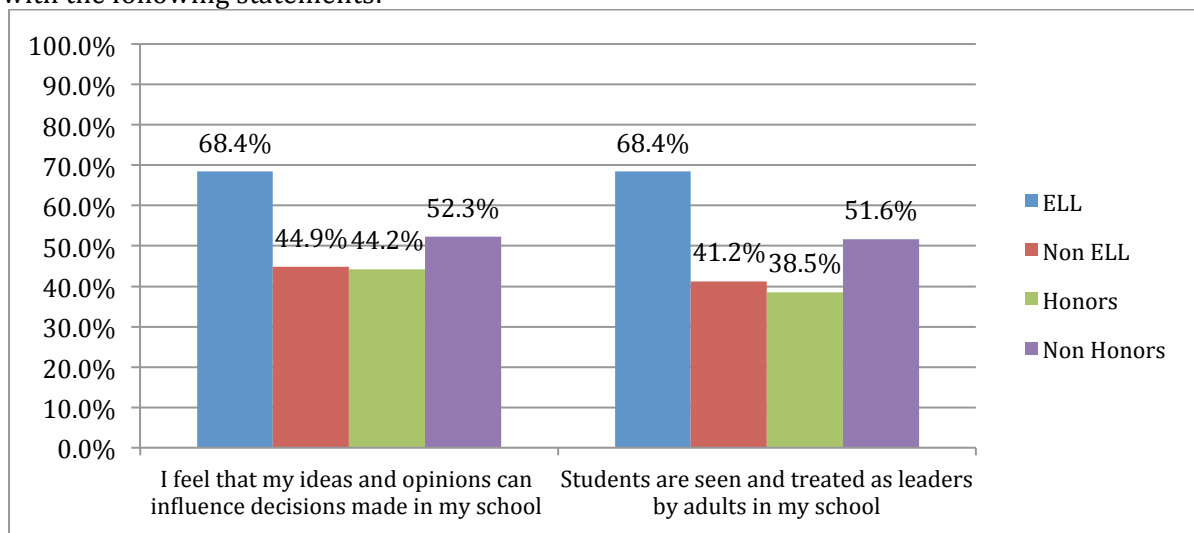
Findings: Resources and Supports

Findings for this section are organized according to the four major resources and supports that NMEF identified as critical for accelerating or deepening progress in the SCL Core. These include: Human Capital/Professional Development, Data Systems, Technology Systems, and Management and Infrastructure. Changes in these resources and supports can improve the organizational and professional learning environments that have a direct effect on students' learning opportunities.

Human Capital/Professional Development

During Year 1 of implementation, Burlington and Winooski provided separate, school specific professional development responsive to teachers' expressed needs as well as the 2013 Summer Development Institute and a technology integration specialist that provided teachers from both sites support and professional development opportunities. In addition, each school worked to develop teacher collaboration and professional culture through teacher teams at WMHS and professional learning communities (PLCs) and the Freshman Academies at BHS. Subsections on professional development, the Summer Development Institute, and teacher collaboration and professional culture provide descriptions of these main areas of work during the 2012-2013 school year.

Professional Development

At WMHS, professional development focused on aligning curriculum K-12 and defining proficiencies. This professional development coincided with and helped to reinforce teacher teaming efforts at the school (see "Teacher Teams" section below). In addition, it met teacher's stated needs. During our 2012 site visit as the school year started, Winooski teachers voiced that more professional development was needed on proficiency-based learning, specifically "how to really approach the teaching under proficiency-based learning" (BW12SD11). Support for the Common Core was also highlighted by teachers as a needed area for professional development during interviews. In addition to the technology integration specialist, which is shared with BHS, Winooski had Teaching All Secondary Students (TASS) professional development for teachers. TASS is a program that seeks to support improving teacher practice and systems changes in secondary schools. A TASS professional works with the school, providing an array of coordinated and integrated services designed specifically to address the needs of the school.

At BHS, professional development focused on integrating technology and differentiated instruction (DI). The school moved to condense the levels of classes from three levels to just two levels (college preparatory and honors), increasing the need to use DI to meet student needs. The 1:1 Technology initiative also made professional development in technology integration a priority, especially for grade 9 teachers. During our fall 2012 site visit, administrators and teachers both agreed that more professional development and support was needed in both of these areas. For example, one teacher explained that she would like more hands-on training in DI:

> I think a lot of us have been trained in DI, but the training's often ineffective because it's not practical….What I would really love to see is someone who is an expert in DI who can come in and work with one team for an extended period of time where that person can come into our classrooms, say, 'Here's how I see you doing DI. Here are some other options that can make that better.' So it's really practical, hands on, on-the-fly, as-we-go training that allows us some time for reflection on what is working and what isn't working. (BW12SD10)

Teacher questionnaire data demonstrated that teachers themselves see a need for more professional development related to student-centered instruction. Responses indicated that teachers felt a greater confidence in their preparation to provide instruction that required collaboration than the other four domains of SCL-related instruction. Teachers felt adequately or very well prepared to provide instruction that requires collaboration among students (m = 2.81 at WMHS and m = 2.65 at BHS in 2013, and m = 3.20 for combined responses in 2012; see Graph 12). In 2013, the majority of teacher respondents in WMHS (m = 2.57) and minority of teachers at BHS (m = 2.26) indicated that they were adequately or very well prepared to lead instruction that requires non-routine knowledge building and problem solving (and m = 2.67 combined responses

in 2012). Responses revealed that only a minority of teachers believed they had adequate preparation to provide instruction related to the domains of personalization, self-motivation, and self-regulation and extension of learning outside classroom. Notably, responses from faculty members at BHS indicated that they felt less prepared compared to WMHS teachers to lead SCL-related instruction in all five domains.

Graph 12: Preparation to Support SCL-Core Instruction: Teacher Questionnaire Results
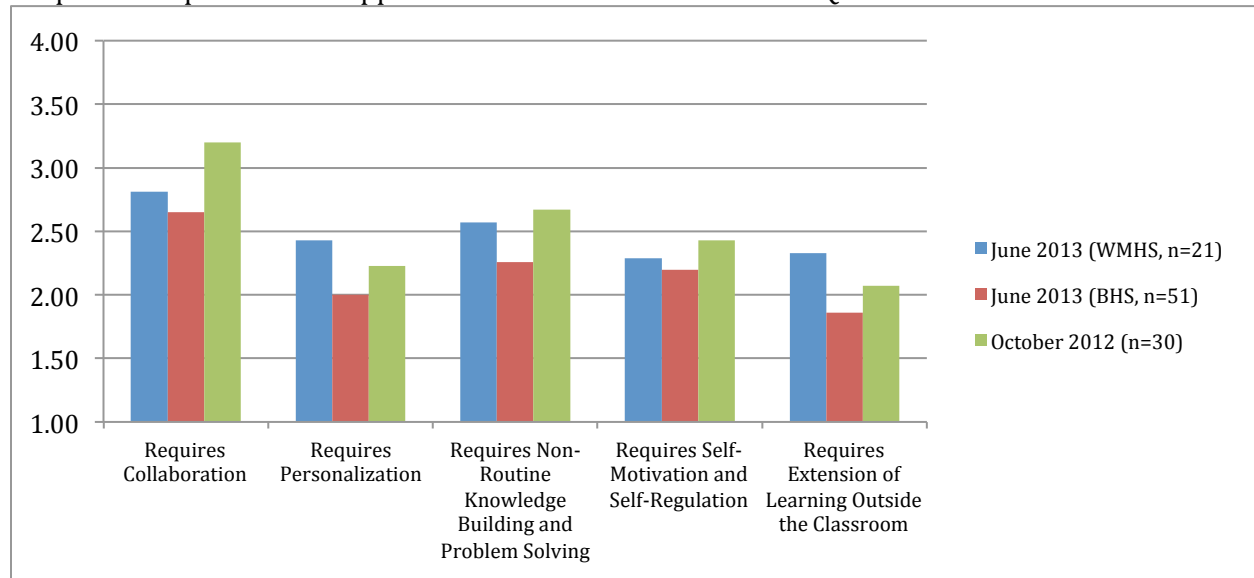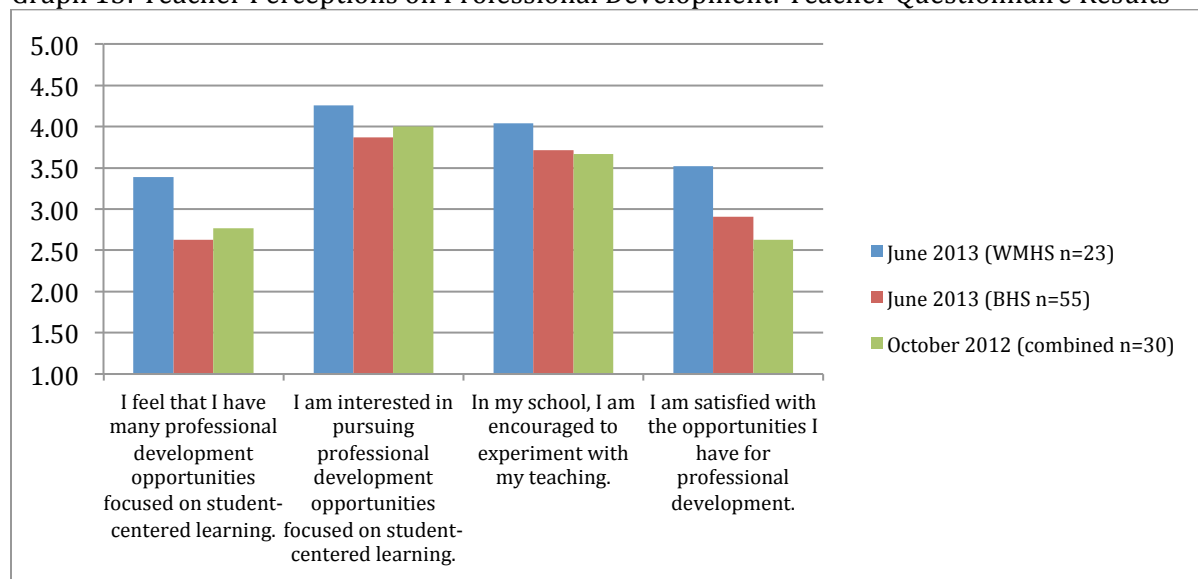

Note. Average response values: How well prepared do you feel to support student learning that [1 = Not at all prepared, 2 = Minimally prepared, 3 = Adequately prepared, and 4 = Very well prepared]

Teacher responses to questions on their professional development indicated an interest in learning more about SCL-related instructional strategies. In the 2013 administration of the questionnaire, more WMHS teachers (m = 3.39) and than BHS teachers (m = 2.63) agreed or strongly agreed with the statement "I feel that I have many professional development opportunities focused on student-centered learning" (and m = 2.77 for combined responses in 2012; see Graph 13). Many WMHS teachers (m = 4.26) and BHS teachers (m = 3.84) in 2013 (and m = 4.00 for combined responses in 2012) agreed with the statement "I am interested in pursuing more professional development opportunities focused on student-centered learning." These responses suggest that while teachers do not believe they currently have the skills to consistently lead SCL-related instruction, they are interested in pursuing professional development to support SCL instruction.

Thus far, the two districts have not been able to capitalize on district in-service time as a way to provide shared professional development and collaborative time for teachers across the two schools. Timelines made it difficult to submit proposals for professional development in time to implement in the 2012-2013 school year (all of the in-service time for the 2012-2013 school year was spoke for in March 2011). Another challenge is that the two districts have separate teacher contracts that provide different levels of financial support for professional development. Burlington teachers were given $1500 for professional development, which the school has used to provide courses through the University of Vermont. Winooski teachers did not have this funding, which made planning common professional development opportunities difficult.

Graph 13: Teacher Perceptions on Professional Development: Teacher Questionnaire Results

Note. Average response values: To what extent do you agree with the following statements?
[1 = Strongly agree, 2 = Disagree, 3 = Neutral or mixed, 4 = Agree, and 5 = Strongly agree]

Summer Development Institute (SDI)

The Partnership for Change held a week-long Summer Development Institute (SDI) in June 2012 and June 2013. These included teachers from both BHS and WMHS, providing professional development to support teachers implementing student-centered learning approaches. EDC evaluators conducted observations during both of these institutes.

The 2012 SDI focused on the following essential questions that were meant to guide teachers during the institute: 1) What does teaching look like when it centers on students? 2) What learning environments give access to all students? 3) How can we put our best thinking together regarding working with students of different backgrounds and with different needs? The institute included 62 BHS teachers and 11 WMHS teachers. After an opening presentation on project-based learning on the first day of the institute, teachers attended concurrent breakout sessions as well as team meeting sessions throughout the week. Most of the sessions offered were on technology, especially the use of iPads and iPad apps, like Good Reader and adaptive technologies for students with special needs. Teachers were told that technology is a means of supporting personalization and proficiency-based approaches. For example, the Good Reader application allows teachers to give feedback to students. One problem, however, was that BHS teachers all had iPads and WMHS teachers had MacBooks. iPad apps are not compatible with MacBooks, so many of the sessions, which were related to iPad apps and resources, were not applicable to Winooski teachers. This limited opportunities for collaboration between teachers from each of the two schools as well as learning opportunities for Winooski teachers.

During our fall 2012 visit, teachers and administrators expressed that the SDI was not very successful in terms of bringing Burlington and Winooski teachers together and that the sessions need to focus more on helping teachers develop student-centered approaches. One teacher explained,

Next year I'd like to see the SDI not only better at integrating Winooski and Burlington teachers but also saying this is really about transformation. If you want to become better at doing a traditional social studies curriculum, then there are a lot of other places you can go….Eventually I think we need to say this is really about certain kinds of transformation. (BW12SD13)

Administrators interviewed in fall 2012 remained committed to the SDI as a way to promote teacher learning and collaboration between the two schools. For example, one administrator explained,

[The SDI] is an opportunity for professional development to happen in a way that is really focusing the professional development on the partnership and the Partnership for Change initiatives - bringing those into practice in the school and getting teachers from Winooski and Burlington talking together. It didn't work all that great this past summer, but I know that they're working to improve it for this next year. There is a lot learned from the experience last year. (BW12SD5)

These quotes highlight not only a commitment to making the SDI better, but also an openness to learning from past experiences to improve opportunities for collaboration and challenge teachers to transform their practices to more student-centered approaches. In planning for the 2013 SDI, Partnership for Change staff were focused on improving upon the previous SDI, responding to the needs of teachers, and providing an infrastructure for learning throughout the 2013-2014 school year. Teachers reported that they wanted large amounts of time to work together and were especially interested in differentiation instruction, integration of technology, personalizing instruction, and brain-based research as it relates to education. Partnership for Change staff used these as guiding principles for planning the 2013 SDI and structured the institute to feature presentations and breakout sessions on the first day that addressed topics of interest. For example, the opening presentation by Kim Carter from the QED Foundation focused on brain research and the need for radical change in how we teach students. Teachers also participated in a workshop on differentiating instruction for a variety of learners led by Daniel Baron of "The Project School" and the School Reform Initiative. Afternoon breakout sessions included workshops on teaching in a 1:1 technology environment, the future of student leadership and engagement, family and community partnerships, constructivist learning, problem-based learning, graduate expectations, and personalizing for proficiency.

The next three days of the SDI were dedicated to teachers working in small groups on their own, approved projects related to student-centered learning. Prior to the SDI, teachers submitted applications, proposing a project as well as members of their team. The plan had to include ways in which teachers would be thinking about integrating the graduate expectations into their instruction. In addition, teachers had to reflect on how their learning during the SDI would connect to their professional development throughout the coming year. Teachers met with administrators prior to the SDI to discuss and strengthen the applications. There were about 16 groups and subgroups of teachers working together. During the three days dedicated to teacher group time, the WMHS staff met as a whole group in the morning and then small groups met in the afternoon. All of the BHS teachers met in small groups. Throughout the three days, administrators met with each team, checking on progress and providing needed support. On the final day of the SDI, groups reported out to the larger group. Teachers were given tools to guide this reflection process that challenged teachers think about where they are on a continuum of professional learning and how they can continue to work and support their learning in the fall 2013.

Approximately 115 teachers and administrators from both schools attended the first day of the SDI, which was nearly all teachers from both schools. Snow days pushed the end of the school year back into the week of the SDI. As a result, the first day of the SDI was unintentionally a required work day for teachers. In some ways this made planning more challenging: the first day had to appeal to both those teachers who chose to participate the entire week as well as those who were required to attend the first day but would not take part in subsequent activities. About 70 teachers continued throughout the week, including 12 Winooski teachers.

Teacher Collaboration and Professional Culture

Facilitating collaboration among teachers has been a major area of emphasis within each school as part of a larger effort to provide professional development and learning opportunities for educators. Two major structures have served to promote collaboration: teacher teams (PLCs in BHS and committee meetings in WMHS) and academies.

Teacher Teams

Teacher teams at both schools have been important venues for teacher collaborative decision-making on instructional issues. WMHS established teams to promote vertical alignment from grades 6 through 12, particularly around defining proficiencies to determine whether students can advance to the next grade. In talking with administrators in Winooski, including the principal, vice principal, and superintendent, a key goal of these teacher teams is to get teachers to work together. As one administrator explained,

> Part of it is really empowering them and that vertical alignment team. The more empowered they are to solve problems together, the more they're going to be able to move out of a mindset of private practice into a collaborative problem solving mode. (BW12SD5)

To support teacher collaboration, Winooski moved to a block schedule allowing for shared planning time where teachers meet bi-weekly in grade related meetings and bi-weekly in committee meetings. Committees include the 1:1 laptop initiative, Positive Behavioral Interventions and Supports, proficiency-based learning, individual pathways and exit criteria, scholarship and awards, parent and community, communication and involvement, and literacy. Teachers chose their committees based on their own interest. When talking with teachers about the committees just as these were getting started in fall 2012, there was some confusion about the work of these groups because there were no clear objectives. One teacher explained, "Initially, we are just settings goals to figure out what we are going to get out of these committees" (BW12SD11). Another teacher said, "We never really talked fully about what we should expect people to have for goals. So a step was maybe left out and people were very unclear in many committees yesterday what to do. So I'm hoping that will be revisited" (BW12SD11). It will be important to see how these committees evolved over the course of the 2012-2013 school year during our next site visit.

One administrator admitted that the collaborative culture among teachers at WMHS is "in its infancy" (BW12SD3). Interviews with teachers also indicated that the efforts are in beginning stages. Teachers reported that the collaborative culture has improved recently, though, through the focus on writing across the curriculum where teachers worked together to develop common rubrics.

At BHS, teachers meet in weekly PLC meetings within grade-level departments and the Freshman Academy teams meet once or twice per week (see section below for more details). During the fall 2012 visit, EDC researchers observed two PLC meetings at BHS. In the PLC meetings observed, there were norms of practice with identified leaders and note takers. Administrators discussed how

they have worked to build those structures and norms of practice so teachers can engage in deeper questions about school change. In one PLC meeting, teachers worked together to define a common assessment for the end of the term. Teachers debated about the objectives, came to a consensus, and discussed materials they could share. In another PLC meeting, the principal was invited and teachers voiced concerns about managing students and the need for more training on differentiated instruction, especially now that the levels were compressed. Teachers felt they had too many students and the students' needs were too varied for instruction to be effective. During the PLC meeting the principal offered to look into redistributing some students into other classes and encouraged teachers to visit a nearby school with a strong reputation for implementing differentiation instruction effectively.

Overall, teacher questionnaire data from spring 2013 revealed further insight into the professional culture at both schools. Comparing responses from the two schools suggests differences in the opportunities for collaboration and sense of collegiality among teachers in WMHS and BHS (see Graph 14): a large majority of WMHS teachers agreed or strongly agreed that teachers in their school "ask for assistance from one another" (78.3%) and "believe we share responsibility for the success of all students" (78.3%). These percentages are much higher than responses from BHS in which 43.6% and 47.2% of teachers agreed or strongly agreed to the same statements, respectively. In addition, 47.8% of WMHS teachers agreed or strongly agreed that teachers "have similar ideas about how students learn," compared to 20.0% of BHS teachers. These data suggests that a stronger professional culture exists in WMHS than in BHS. A likely contributing factor is the size of each school, as WMHS is a smaller school with fewer faculty members, who probably have more frequent opportunities to collaborate and interact than BHS teachers, and, therefore, develop personal and professional relationships among teachers.

Graph 14: Teacher Professional Culture: Teacher Questionnaire Results
Percentage of teachers who agreed or strongly agreed with the following:
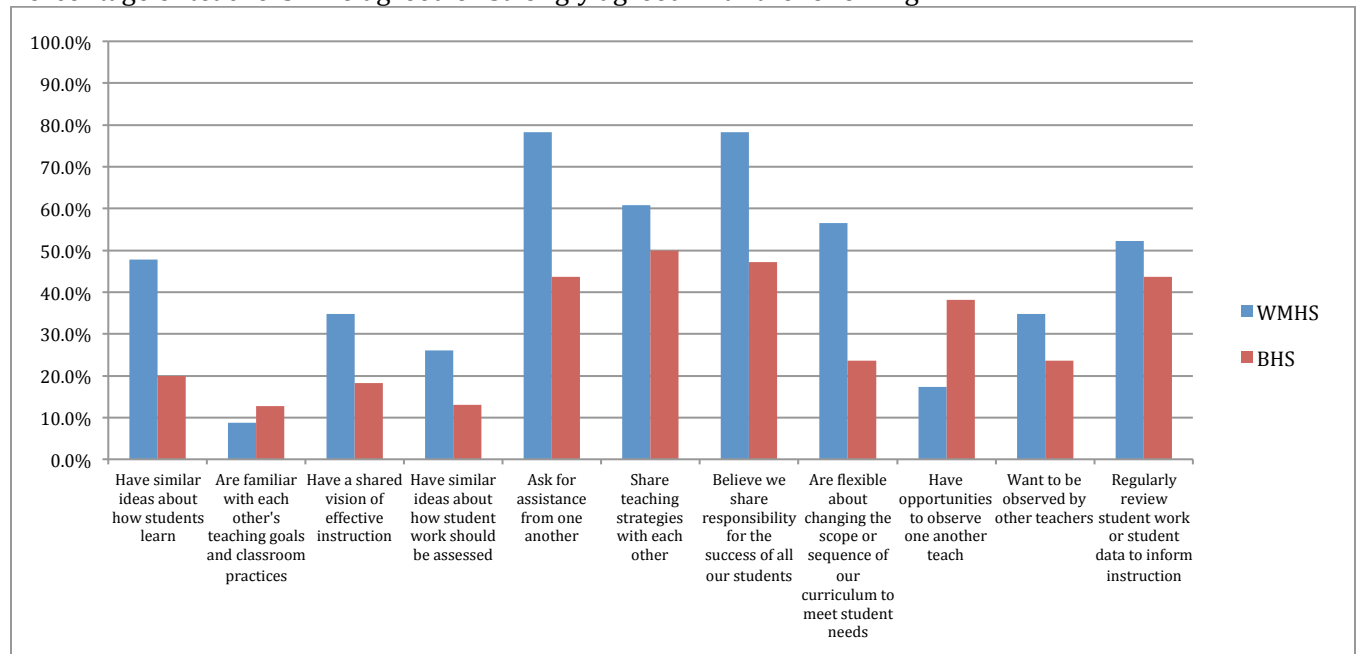
Academies

BHS established three 9th grade academies in the fall of 2012. Each academy comprised of one teacher from each of the core disciplines: science, math, English, and history. In addition, a special educator and an ELL teacher worked with each academy as well. These teachers teach the same group of students and work together as a team to plan curriculum, discuss student progress, and intervene when students are struggling. As one teacher explained,

> The goal of the academy was to plan together, work together, discuss students together, be able to have a time where you could work together and better suit the needs of the kids and make sure these freshmen aren't falling through the cracks. (BW12SD10)

Teachers met with their academy colleagues once a week. A school administrator rotated through each of the academy teams, attending each academy team meeting once or twice a month. This structure allowed for more collaboration between teachers, according to teachers and administrators. One teacher explained,

> Physically we've been quite separated, and professionally we've been very separate. So this is the first time, really, besides like a summer SDI or maybe some social connection that we have, where I've actually been able to sit down with teachers from other disciplines and discuss curriculum or discuss students. So that's a radical change in that. (BW12SD10)

During a focus group interview, students said that having classes with the same students allowed them to "get to know people better than if you had classes with all grades" (BW12SD8). They thought this was a positive outcome of the academies, but also lamented that they were not able to spend as much time with friends in other academies. Many had worried that academies would limit some of the independence they were hoping to experience in high school. Students reported that this had not been the case and that they even forgot sometimes that they were in academies: "I feel like I don't realize I'm on a team" (BW12SD8).

The academy structure has not been implemented in WMHS, but there are some teachers who team teach classes. For example, the American Studies course is team taught by an English teacher and social studies teacher. The two teachers have the same group of students and their classrooms are connected to one another. During one observation, however, the teachers divided the students and were essentially teaching two different classes. In the English class, students reviewed anonymous peer writing samples to identify elements of great, good, and poor writing traits. Students had to cite examples and explain why elements were great, good, or poor. In the social studies class, students were introduced to a new unit on the experiences of immigrants, specifically Chinese immigrants in the 1870s. Students would be engaging in an investigation for the next two 90-minute class periods around a set of focus questions about the Chinese immigrant experience. Both teachers had students engage in small group work and asked open-ended questions, two instructional approaches that are more student-centered. It was unclear, however, if these two class sessions were related to one another. In talking with these teachers afterward, both said they are not able to team teach every lesson. During an interview with WMHS teachers, one teacher explained that more is needed to support teaming practices:

> So we're not necessarily teaming as much as could be done, but I think we need more professional development on some of this. I think a lot of teachers know the key word of teaming but I don't think anybody had very directed focused professional development on how to exactly do that. (BW12SD11)

These findings indicate that the will to experiment with team teaching seems to be present among WMHS and BHS teachers, but more support is needed. Teachers in both schools saw the advantages of these approaches, despite experiencing challenges in implementation.

Technology

During the fall 2012 site visit, administrators from both districts voiced their belief that technology could be used as a means for personalizing instruction, making learning more relevant for students, and supporting the development of 21st century skills. As one administrator explained,

> It's not really about the computer or laptop or whatever the device is. What that tool has allowed us to do is change the way teachers are teaching and students are learning, where the teacher becomes the facilitator of the learning and the students are more collaborative in their learning. (BW12SD2)

Administrators also envisioned the 1:1 technology devices providing students with opportunities to learn important research skills and that these devices could be powerful tools to support collaboration among students, especially outside the classroom.

BHS distributed iPads to ninth graders at the beginning of the 2012-2013 school year. Administrators reported that teachers and students have adopted these tools quickly:

> Whether at the student side of things or the teacher side of things, I think both have come along really quickly with some of those [technology] skills and really asking students to take more responsibility for their learning....They are just more fluid about the use of technology and support of learning, which I'm pleased about. (BW12SD1)

Interviews with teachers and students revealed that some teachers have worked to incorporate the iPads into their instruction, while others are still trying to learn the technology. Students said that use of iPads in class was mixed. In some classes, like civics and English, iPads were often used. In other classes, including science, math, and languages, it was not used at all (though it is important to note that the interviews took place shortly after the iPads were distributed). One teacher who has embraced iPads explained,

> I use multiple apps in my class. In the beginning they [iPads] are going to be a distraction because you have to learn how to use them. It's like teaching for the first time where you've got to get your style, or you've got to get your norms down, your protocols. But I have a lot of success with it. So for me it works great. I like it a lot. There are a lot of negatives to the iPad that people can identify with, but in my room I've had a lot of positives. I really enjoy the use of it and having access to it. It just makes a lot of things a lot easier if you're ready to use it. (BW12SD10)

Students at BHS said that they liked having iPads as an instructional tool, giving them access to resources like Khan Academy and allowing them to highlight books as they read and find word definitions instantly. One student liked using the Nearpod app, where students take a quiz and get immediate results so they know which questions they answered incorrectly. Students said they liked having the immediate results and felt it was much easier and more effective than taking a traditional quiz where they have to wait a couple of days before getting results, and by then have forgotten the material. Students said they often use the iPads as a journal and some teachers allow

them to turn in assignments online or through e-mail, which is much easier, according to students in the focus group. Students said they would like to have more of their books available on the iPad. Some admitted that students play games and instant message during class, which is a distraction. "Teachers need to find a way to keep on top of that. When used correctly, this can be a great asset" (BW12SD8).

During classroom observations at BHS, evaluators witnessed examples of how iPads had been integrated into instruction in the freshmen classes, including having students use iPads to conduct research, view models of cells, read required texts, take quizzes, and write and peer-edit essays. There were 10 instances in the 5 classroom observations conducted at BHS of students engaged in using technology to support their learning, all of which occurred in freshman classes where students were using their iPads.

On the student survey, 27.3% of students said they had a school-issued iPad to use, 18.2% had a personal laptop they could use at school, and 53.6% had a computer they could use at home. Looking at just BHS freshman responses, 73.0% reported that they had a school-issued iPad to use. The majority of BHS students reported that they use computer programs like Excel, Powerpoint, Publisher, Visio, Word, or Prezi to write stories and reports, create models, or complete assignments, projects or labs often or every day in their classes (49.6% of all BHS students participating in the survey, $m = 3.27$, and 29.0% of freshman). Many students also use computers to turn in their homework (31.3% of all students, $m = 2.99$, 32.4% of freshman), use the internet to do research or find information for school assignments (72.0% of all students, $m = 3.81$, 52.7% of freshman), and use other technology tools in class (e.g., graphic calculators, smartboards, smartphones, clickers; 49.6% of all students, $m = 3.33$, 28.9% of freshman).

During the fall site visit in October 2012, Winooski had not finalized the student technology contract, which delayed the distribution of MacBooks to 9th grade students. Administrators reported that they worked with BHS comparing notes on student contacts. Classroom observations took place in the fall, prior to the roll out of the MacBooks, thus, limited use of technology was seen by evaluators at WMHS. There were four instances of teachers using technology to deliver instruction or present information to students, 1 instance of teachers demonstrating class content using multimedia, and 1 instance of teachers conducting classroom administration using technology (taking attendance). Among students, observers only saw one instance of students using technology to practice skills or procedures. In this case, ELL students were using computer programs to practice vocabulary and reading skills.

On the student survey, 50.9% of WMHS students reported that they had a school-issued MacBook to use in the 2012-2013 school year. In addition, 18.9% had a personal laptop they could use at school, and 28.3% reported that they had a computer at home they could use. In terms of technology use in the classroom, 72.3% of WMHS students reported that they use a computer to turn in their homework often or every day; 60.3% said they use the internet to do research or find information for school assignments; 39.4% said they use computer programs to write stories and reports, create models, or complete assignments; and 34.4% said they use other technology in class (graphic calculators, smartboards, smartphones, clickers, etc.).

It will be important to see how the iPads and MacBooks have been integrated into instruction during our next site visit. While the use of technologies can present a lever for advancing 21st century skills, especially collaboration, communication, and problem solving as administrators at both schools have promoted, it will be important for administrators and teachers to view use of

these technologies as a means toward improving these skills and not as an end in itself.

Management and Infrastructure

Central to the Burlington/Winooski work plan and change initiative is developing a number of structures to drive instructional, policy, and community change. This point was underscored at a presentation during the 2013 SDI in which the fellows explained that the "Partnership is NOT a creator of programs – it's an investment in human capital." The fellows, corresponding implementation teams, Partnership for Change staff, and Steering Committee (see Steering Committee, Family School Partnerships, and Other Outreach Efforts section below) provide the foundation for the Partnership for Change efforts in these two districts.

The establishment of five teacher fellows who "will be our research arm," according to one administrator, was a major emphasis during the first year of implementation. The fellows were each assigned to one of five topics that are central to student-centered learning: 1) youth engagement and leadership, 2) personalized and proficiency-based learning, 3) teaching and learning environments, 4) community based learning, and 5) family school partnerships. During the spring 2012 site visit, fellows talked enthusiastically about their work as a process of organizing, collaborating, and reflecting. They hope to "provide a new vision," "engage in questions about what's important," and "think differently about time and curriculum" to establish "different ways of looking at being a teacher." The fellows explained that they see themselves as support staff for teachers, administrators, parents, and community members. According to Partnership staff, the work of the fellows should align with that of the implementation teams where the fellow provides needed knowledge and research to the team.

Specific goals about the fellows' work, end products for their first year, and how success would be measured were less clear because the focus of the work was on creating these structures and defining roles. One fellow explained, "part of our job is to sort of figure out what [the job of a Fellow] looks like" (BW12SD13). Each fellow developed an individual work plan detailing expected activities for the upcoming year and indicators to measure progress. In May 2013, new fellows were announced for each of the positions except the Personalized and proficiency-based Learning Fellow, who will stay on for another year. It will be important to observe the transition for these teachers during our site visit this coming fall, both in terms of the former fellows transitioning back to their classroom responsibilities as well as new fellows taking on their new roles.

Similarly, the work and objectives of the implementation teams were emergent. An administrator said, "I think we're feeling our way and I think we're all just a little bit curious about how these implementation teams, which are still being formed, and how people's ideas will overlap" (BW12SD1). The expectation was that the implementation teams would identify indicators of progress as the work unfolded. Implementation teams were launched in October 2012. The initial work focused on populating each of the implementation teams (with at least 10 members each) and ensuring that each had a diverse set of members, including teachers and staff from both BHS and WMHS as well as members from different community groups (e.g., New Americans, low-income).

Another major structure in the Burlington/Winooski work plan is the Partnership for Change. The goal of the Partnership for Change staff, which includes the project director and project manager, is to ensure that "key stakeholders have a common vision of the future of where we are going with the partnership" and express a consistent message. Spreading positive news and information about the work of the Partnership is another major task. Two interim co-directors provided leadership for the Partnership during the 2012-2013 school year, as a search for a single director was unfilled. A re-

opening of the search led to the hiring of Hal Colston in May 2013, who had served as a co-chair on the Steering Committee.

The Transformation Academy language in the work plan has shifted over the 2012-2013 school year. In the work plan, the Transformation Academy was central to the change effort but over the past year and in working with communication consultants, the group has realized that the work of the implementation teams is "the heart of what we are trying to do, especially in the first 18 months, first two years" (BE12SD7). They hope that this shift in their language and in the organization of the work will "help people to see the importance of that work." Learning and experimental research are still central to the effort, there has just been a shift in how this is organized.

Developing all of these structures has taken time. It took longer than anticipated to chair the implementation teams, for example. Interviews with teachers and administrators revealed dedication to taking the time to do this work well. As one teacher explained,

> We're really at the beginning here. We are really in those starting stages, so the work is going to reflect that. And I think if you could come and talk with us in February, you might get a really different snapshot. And then come back next June, get another really different snapshot….One of the gifts of Nellie Mae is the gift of time. You've got three years, so we can actually take our time to try and do this right. A lot of things have slowed us down. (BW12SD13)

As the fellows, implementation teams, and Steering Committee begin their work and as the new director for the Partnership for Change assumes his role, it will be important to continue capturing these snapshots and observing progress toward identifying objectives. The absence of clear goals and objectives threaten to minimize the impact and change effort. At the same time, the concerted effort to include all stakeholders in decision-making could be extremely powerful in making this change happen.

Data Systems

An administrator from Winooski reported in the fall of 2012 that they were working to implement a new student data management system: VCAT, a comprehensive system housing everything from state assessment data to grades from individual classes and historical data for each student across time. Once set up, teachers can upload results from their locally developed common assessments and use that data in their PLCs to make decisions about student learning, especially for struggling students. Math teachers at Winooski talked about how over the past two years they have been collecting pre- and post-assessment data for all their units and were excited that they would have two years of data this year that they could work with to make determinations about student needs.

During our fall 2012 visit, data systems were not a major point of emphasis in our interviews with BHS administrators and teachers. With the implementation of academies, YES, integrating technology, and de-leveling the school, these took precedence during our conversations. The 2013 SDI featured breakout sessions on learning management systems geared especially for BHS 9th and 10th grade teachers (as well as WMHS teachers interested in exploring web-based software applications). The session reviewed three software applications. During our fall 2013 visit it will be important to follow up with both sites to determine what data systems are in place, how data is being used, and what plans are in place to ensure proper data use in the future.

Community Engagement and Public Demand

The "outside change strategy" for Burlington and Winooski included developing capacity within the larger community (e.g., parents, community organizations, community members) to become involved in school change. Engaging the New American, refugee, and immigrant community members as well as families in economic hardship in Burlington and Winooski has been a key component of the work. In interviews, it was clear among many constituent groups that community members have a vital role in the Partnership for Change effort. For example, a WMHS teacher said, "If we don't have the community work behind us, we can never change the school. It's a lot of community support. I think without the community there is no way we can do this" (BW12SD12).

Three main efforts have been used to engage the community: the Lead Community Partner (LCP), which employed a variety of strategies to connect with families from one-to-one meetings, to group meetings at community centers and events, to talking with parents at school activities; the Steering Committee, which brought together diverse groups within the community to lead the Partnership for Change effort; and the work of the Family-School Partnerships Fellow to reach out to families in both school communities.

Lead Community Partner

The LCP for Burlington and Winooski has been active within the community, working to engage all members of the community in the Partnership for Change efforts, in the schools, and with the Partnership for Change staff. The LCP role was filled by the statewide non-profit Voices for Vermont's Children. One responsibility of the LCP during Year 1 of implementation was to find a local organization or coalition to take over as the LCP. A community member explained, "Voices For Vermont's Children, who is the lead community partner…their expectation and our expectation is that it's in an interim, incubating capacity - that this work should transition" (BW12CL1).

One of the main areas of work during the 2012-2013 school year has been the development of two "Parents for Change" action groups. Each group – one in Burlington and one in Winooski – identified a topic of interest and worked to gather information by meeting with school leaders and teachers. The LCP provided coaching during monthly meetings, including role-playing, offering information about the education system, and helping community members understand how to conduct interviews and research in order to become informed and make recommendations about an issue. These coaching sessions were based on the PICO community organizing model with the goal to develop capacity so parents can organize and work toward their goals on their own. According to one community member, "[A] big part of the work is about how people learn to become leaders by doing things that leaders do" (BW12CL1).

The LCP worked closely with about 30 leaders in the Burlington Parents for Change group for their Public Action Meeting on November 12, 2012. (The Parents for Change group in Winooski got off to a slower start, but identified transportation as the issue they would like to address.) The Burlington Parents for Change group identified the student placement system for New American youth as an issue because, according to parents and community members, many of these students are graduating from high school without the skills needed to make them ready for college. In preparation for the Public Action Meeting, the parent group conducted interviews on student placement procedures at BHS with the English Language Learner Director and the Equity Director for the Burlington School District, and the Director of Guidance at BHS. According to a community member, efforts were made to empower the parent leaders: "They call and they set up a meeting. They set up the agenda. They ask the questions" (BW12CL1).

The parent group worked with the LCP to prepare a written report, a summary of which was presented during the Public Action Meeting. The Parents for Change group presented student and parent testimonials about current student placement practices as well as recommendations for student placement policies. Burlington's superintendent, Equity Director, and English Language Learner Director as well as Burlington High School's principal were all asked a series of questions during the meeting about whether they would help with each of these recommendations. All committed to working with the group. Parents ran the entire meeting. The audience mainly listened to the presentations. There was a script for the entire meeting. The meeting itself was not an opportunity to engage community members in decision-making and problem solving; the decision-making came prior to the meeting when parents conducted the research and prepared the report, with the help of the LCP.

A second major area of work for the LCP was supporting the Partnership for Change staff and school leaders on community outreach and communication strategies. The LCP staff met weekly with the Partnership for Change staff to check in, strategize, and coordinate their efforts. During the meetings, LCP staff provided insight on how to engage the community and work together to solve problems and discussed challenges they were experiencing in the work. For example, during an observation of one of these meetings in the fall of 2012, LCP and Partnership for Change staff discussed the agenda for the upcoming Steering Committee meeting, coordinated calendars of upcoming events, and discussed how to get community members involved in the implementation teams. LCP staff warned against using academic language, which is not accessible to many in the community, especially families where English is not a native language. LCP staff also voiced concern over getting community members involved in the implementation teams because the goals of each group were emergent, which made it difficult to communicate to community members the purpose of the work and why their participation was needed. There was a sense that the flexible and emergent nature of the goals conflicts with the goal of accessibility. Staff engaged in a rich discussion about how to resolve these issues, but this is a clear tension and challenge to the work.

Steering Committee, Family School Partnerships, and Other Outreach Efforts

The Steering Committee is an important part of the infrastructure for the Partnership for Change and includes 30 members representing many subgroups of the communities (e.g., parents, business leaders, school administrators, community members, union representatives, school board members, students from both schools, LCP staff, and BHS and WMHS teachers). During the Fall 2012 site visit, evaluators observed the second Steering Committee meeting, which largely focused on creating a shared understanding of the work of the committee among its members. The goal of the meeting was to ensure that every member would be able to answer two questions: 1) What is the Partnership for Change? And 2) what is my role as a member of the Steering Committee?

The meeting focused on reviewing the goals of the Partnership for Change, the implementation teams and fellows, and the roles of the Steering Committee. During future meetings, the structure will consist of a budget report, updates from each of the implementation teams, discussion on how to communicate the work, and oversight of projects and requests for funds. Updates and reports from two of the fellows and the LCP were presented during the meeting observed, modeling how these updates will be conducted at future meetings. The co-chairs made it clear that the role of the Steering Committee is to make connections between the implementation teams – not do the work of the implementation teams. Several subcommittees that would be established were discussed, including a subcommittee on the budget and one on communication. There was some talk among the group on whether it would be useful to have an executive committee. In discussing the possible make-up of the executive committee, concerns were raised about equal representation of youth and teachers from each of the two schools. Other members were concerned that adding too many

representatives to the executive committee would be counterproductive; the executive committee should be small so they can make decisions more easily than the larger group. Another suggestion was creating task forces that would work on issues briefly, rather than establishing permanent subcommittees. No final decisions were made about these issues during the meeting, but it was a lively discussion that brought attention to important issues, challenges, and concerns. Overall, members were engaged throughout the meeting and asked many questions about the work. It was clear that while many structures have been developed, there is still more work to do, especially in terms of populating the different committees and teams. The Steering Committee was observed as a structure that was in the process of determining what its role will be and how it will make decisions.

In addition to the work of the LCP and the Steering Committee, outreach efforts have been conducted by individual schools and the fellows. In an interview in summer 2012, the fellow for family-school partnerships explained that during the 2011-2012 school year she and a few other teachers hosted Saturday morning events for parents to talk about topics such as understanding the report card, learning about the Jupiter grades system, and exploring the issue of safety on the internet. The Personalized and Proficiency-Based Learning Fellow worked with Partnership staff and consultants from Eagle Rock School in Colorado to conduct the first Community Learning Conversation discussed earlier as part of the process of developing the graduate expectations. Over 300 parents, teachers, students, business leaders, school administrators and community members from Burlington and Winooski attended the meeting. Volunteer facilitators helped organize the conversation and translation services were provided across nine different languages to ensure all members of the community could participate.

Public Demand

When asked whether the community and the school share the same goals, community members believed that the goals are the same but the pace of change has been a source of frustration among some in the community. Others imagined that prioritizing as the work gets underway and determining details of how to implement changes could present sticking points. For example, according to one community member, both groups seek improvement in the school system so that all students get the skills they need to succeed after graduation. What has been difficult for some community members is the slow process of change: many want the changes to happen quickly. Another community member explained, "Parents want their kids to have access to skills and opportunities and be prepared for the future and for their learning to be individualized and their individual child to be challenged and supported so they can reach their goals." Another community member agreed, saying:

> I think at the hundred thousand foot level where we all want all of our young and not-so-young people to not only succeed, but be prepared to succeed - I think at that level the shared vision is pretty good. I think the particulars and the specifics of what that looks like is where the interpretation begins. So the vision is fairly clear. The how is what will remain unclear. I think in some ways wisely and maybe in some ways a little less wisely we postpone some of those deeper, harder, specific related community questions until after some participatory research. I think the hope is that that work will give us more clarity, which allows for a better sharing of the how and the vision of that. (BW12CL2)

There have been great efforts to reach out to the community and examine the goals, wishes, and desires of the community for graduates. Effective communication has been challenging because there are so many diverse groups in the community speaking many different languages. The Partnership for Change has worked hard to address this barrier to participation. More work is certainly needed, especially in terms of reaching out to generational poor populations and

continuing to engage immigrant groups, but, as one community member explained, "I think the schools and the districts and the agencies in the community actually have a very good relationship. There is good collaborative work and the quality of work" (BW12CL2). The quotes from community members above highlight the importance of monitoring the work as it unfolds to see how potential divergent priorities are managed.

Collaboration Across the Districts

This BNM site is unique from the others because it is a partnership between two districts. Collaboration across districts has brought added complexities and benefits to the work. Fellows and administrators voiced that both schools are working to address similar challenges and the partnership provides an opportunity to learn from one another. For example, Winooski was able to learn from Burlington in terms of rolling out the 1:1 technology initiative because Burlington distributed their technology devices, prior to Winooski. Winooski also stands to gain from Burlington's experiences implementing the YES program.

There was a sense, however, that collaboration across schools has been limited and that expectations for collaboration are not clear. One factor has been the difference sizes of the schools and communities, which may create a greater emphasis on Burlington and inequities in how resources are distributed between the two sites. Several of the fellows teaching at BHS said one of their goals is to reach out to WMHS teachers and spend more time there. Fellows admitted that they had to remind themselves that this is not just a BHS initiative.

Administrators explained that they are in conversation about how to build collaboration between the two districts: "It's recognizing what we can do together and what has to be separate [due to contracts, SIG status at WMHS, etc.] and then really being conscious about the potential of Burlington overshadowing Winooski and talking about it" (BW12SD2). One administrator voiced that the two schools are largely working as two separate entities with the Partnership for Change working to coordinate efforts. Strides have been made to bring the two districts together, especially in terms of capitalizing on the long-term professional relationship between the two superintendents who have been working together for many years. This will likely shift since Winooski hired new superintendent for the 2013-2014 school year. Some structures and activities have been created that bridge both districts, including the fellows (which include teachers in both districts), the Steering Committee and implementation teams (which draw members of both communities), and the Summer Development Institute. These structures are new and are just beginning to gain traction. While there are some opportunities for collegial sharing between staff in the two districts through these activities, there did not appear to be a formal plan beyond the structures already in place to promote learning and collaboration between the sites or guidelines for how to share resources. One administrator commented,

> I don't think that there is a real comprehensive plan at this point for what that is going to look like between the two schools but there are a lot of opportunities right now for us to be working and thinking together. It's not clear to me what it's going to actually turn into….where it's leading is not as clear. (BW12SD5)

During the 2013 SDI, for example, there were no teacher teams that included teachers from both schools. The two schools seemed to be working on separate initiatives and even used different structures to meet, with the entire WMHS staff meeting in the morning and BHS teachers only meeting in small groups. There was little integration between the two staffs during the first day of

the institute. It will be important to track progress on how these structures aid in collaboration between the two schools as the work continues.

Long-Term Outcomes

Long-term outcome data revealed gains in 2012 NECAP achievement scores for both schools, though in different subject areas. For example, there were gains in reading and writing for Winooski eleventh graders compared to last year (see Table 4). In particular, there were increases among students receiving free or reduced lunch and White students. BHS experienced gains in math assessment scores compared to last year (see Table 5).

The graduation rate for BHS was 82.5%. ELL students had a higher graduation rate (85.2%) than non-ELL students (82.0%; see Table 6). Seventy-nine percent of students enrolled in 2- or 4-year colleges post graduation (see Table 7). WMHS's graduation rate was lower, at 65.6% and fewer students enrolled in 2- and 4-year colleges after graduating (49.2%).

It is important to keep in mind that standardized test scores often fluctuate within and across student subgroups from year to year, sometimes due to significant cohort changes (particularly in a small school like Winooski) or because of changes in the test itself. It is, therefore, extremely difficult to tell if changes in test score results originate from programmatic changes. It will be important to continue to track changes in achievement scores as the change effort continues to help identify broader trends across time.

Table 4: *Vermont Assessment Summary using Fall 2012 NECAP Assessment scores Reading**

	Burlington High School	Winooski High School	State-Wide
All Students	71% (--)	46% (+20)	74% (+2)
Gender			
Male	67% (+5)	48% (+24)	69% (+3)
Female	75% (-3)	41% (+12)	79% (-1)
Race/Ethnicity			
African American	34% (+18)	13% (+4)	51% (-1)
White	85% (+3)	74% (+30)	75% (+2)
Family Income			
Not Free/ Reduced Lunch	89% (+1)	44% (-6)	81% (+2)
Free/Reduced Lunch	45% (-2)	46% (+25)	60% (+5)
Disability			
No Special Ed	75% (+1)	-	82% (+3)
Special Ed	22% (-7)	-	20% (-3)
English Language Learner			
Not ELL	79% (-3)	62% (+18)	75% (+1)
ELL	4% (+1)	6% (+3)	9%

Note. Source: Fall 2012 NECAP Assessment Results

* Numbers represent percent of students who scored proficient or proficient with distinction.

Table 5: *Vermont Assessment Summary using Fall 2012 NECAP Assessment scores Mathematics**

	Burlington High School	Winooski High School	State-Wide
All Students	44%(+11)	9% (+1)	38% (+2)
Gender			
Male	42% (+7)	6% (+1)	39% (+1)
Female	45% (+15)	14% (+4)	38% (+3)
Race/Ethnicity			
African American	9% (+6)	6% (+3)	15% (+5)
White	56% (+18)	11% (-1)	38% (+2)
Family Income			
Not Free/ Reduced Lunch	61% (+15)	13% (-1)	47% (+4)
Free/Reduced Lunch	18% (+3)	8% (+2)	21% (+2)
Disability			
No Special Ed	47% (+11)	--	44% (+3)
Special Ed	6% (+1)	--	3% (+1)
English Language Learner			
Not ELL	49% (+12)	14%	39% (+3)
ELL	4% (-2)	6% (+3)	7% (-1)

Note. Source: Fall 2012 NECAP Assessment Results
* Numbers represent percent of students who scored proficient or proficient with distinction.

Table 6: *Four-Year Graduation/Dropout Rates for the Class of 2011*

	Burlington High School	Winooski High School
All Students	82.5%	65.6%
Gender		
Male	80.9%	62.9%
Female	84.2%	69.2%
Race/Ethnicity		
African American	82.1%	--
Asian	85.0%	--
White	82.2%	65.9%
Family Income		
Not Free/ Reduced Lunch	92%	80%
Free/Reduced Lunch	75%	58.5%
Disability		
No Special Ed	85.9%	72%
Special Ed	63.0%	36.4%
English Language Learner		
Not ELL	82.0%	67.4%
ELL	85.2%	58.3%
Dropout Rate*	3.2%	7.5%

Note. Source: State of Vermont Department of Education Website
*Dropout rate is the number of dropouts in a particular grade range, divided by the
adjusted enrollment for that range in a single school year.

Table 7: *Post-Secondary Enrollment for the Class of 2012*

	Burlington High School	Winooski High School
4-Year College	56%	23.81%
2-Year College	23%	25.39%

Note. Source: Report on the Effectiveness of the Winooski School District May 2013 and Burlington School District 2012-13 Annual Report

Conclusion

Strengths

- Throughout interviews with teachers, administrators, and community members there was a strong sense of willingness to engage in this change process. In the 2012 administration of the teacher questionnaire, the majority of BHS and WMHS teachers combined (88%) believed that the Partnership for Change initiative would have a moderate or substantial impact on their instruction in the next two years. In both the 2012 and 2013 administrations of the teacher survey, participants reported that they would like more professional development opportunities to support student-centered learning practices. Both of these responses from the teacher questionnaire indicate a willingness on the part of teachers to engage in the Partnership for Change efforts. Administrators and teachers embraced that these changes will take time. Administrators, teachers, and Partnership staff were dedicated to developing goals as the work unfolds – and were willing to remain patient with this grassroots approach. For example, the committee work in WMHS was not especially clear to some teachers as it began, but they were excited about the work. Community participation in meetings, including the Burlington Public Action Meeting and Community Learning Conversation, and on the implementation teams and Steering Committee demonstrate a willingness to engage in this process. Burlington and Winooski worked closely with EDC staff to administer the student questionnaire, making them the first of the DLSC sites to use the student questionnaire, and worked with EDC staff to launch their own teacher survey to augment and in conjunction with EDC's teacher questionnaire. This again highlights a sense of willingness to engage in these change efforts. It will be important to maintain this sense of commitment over time.

- Data revealed that many teachers are engaging students in instructional activities that promote collaboration and knowledge building and problem solving, two key components in the student-centered learning core. Many teachers were observed supporting student progress and providing in-depth feedback, two important teacher roles that align with the need for constant feedback and support that is critical to an SCL approach.

- Both schools have a strong foundation for teacher collaboration. PLCs and teacher teams have been up and running for several years in both schools with dedicated time for teachers to meet within subject areas. Teachers received training and there are norms of practice in place to help ensure that PLC time is used effectively. This reflects a significant effort among administrators and teachers to build trust and improve practice. The committee work in WMHS and Freshman Academies in BHS introduce new ways for teachers to collaborate across disciplines.

- The implementation of 1:1 technology devices in both schools provided opportunities for increased personalization of learning, flexibility in the use of time for learning, and other

student-centered learning instructional practices. Classroom observations were conducted just as this initiative was beginning at BHS and before the devices were distributed in WMHS. While evidence of the impact of these devices is yet to come, administrators across both schools share a common vision about how these technologies can be used as important levers for personalized learning and student-centered approaches.

- Results from the student questionnaire and student focus group interviews demonstrate that most students feel well supported by adults in the school who care about how they are doing. The majority of students also reported that they work very hard on their school work and feel that they are a real part of the school. This was especially true for ELL students. Students described teachers who would meet with students after school and provide additional help to ensure that students were learning the material. Strong relationships between students and teachers are a critical element in student-centered learning and could become a strong foundation upon which the Partnership for Change efforts could build.

- Both schools have established graduate expectations through an intensive process that involved students, parents, teachers, administrators, and community members. The process used to create these expectations sought out community feedback, especially from underserved and underrepresented populations in the community (e.g., New American families, families in poverty). These graduate expectations have been heralded as the lynchpin for the work of the Partnership for Change and will serve as the foundation for proficiency-based learning. While there is still more work to be done to establish proficiency-based learning, these graduate expectations could be a powerful start for this reform effort, especially given the importance of communicating and gaining the support of the community for the success successful implementation of proficiency-based learning.

- Outreach to the community and efforts to break down barriers for participation (e.g., translation services, LCP members consulting with Partnership staff to discuss how to engage community members) have led to strong community engagement as well as the development of leadership capacity among community members. The Partnership for Change has worked to promote student and community voice in project decision-making, particularly through the implementation teams, steering committee, and work of the fellows. This is especially impressive given the diverse needs of these two communities. Both schools have begun to implement programs that promote greater community involvement, including YES at BHS and Winooski's professional development session at the beginning of the 2012-2013 school year where teachers interviewed community leaders in efforts to make connections between the school and the community. Embracing community assets is clearly at the beginning stages, but BHS and WMHS seem to have a strong foundation for this work, including an appreciation for the community and what they can offer students, existing partnerships, and proximity to valuable community resources, including several colleges in the area.

Challenges

- In terms of instructional practices, data revealed fewer instances of teachers engaging students in activities that required personalization, self-motivation and self-regulation, and extension of learning outside the classroom. Classroom observation as well as teacher and student questionnaire data revealed that teachers still rely on teacher-centered approaches. Personalization and self-motivation and self-regulation are key components in a proficiency-based learning model. There is potential for the 1:1 technology devices to support

personalization of instruction and both BHS and WMHS have invested in professional development for teachers to help them use these devices as tools for these students-centered approaches. It will be important to continue to monitor progress as these devices continue to be rolled out. In terms of extension of learning outside the classroom, the YES program provided these types of opportunities for students, but this was confined to the final two weeks of the school year and without a clear connection to subject matter in the core content areas. There is a need for these types opportunities to be integrated throughout the school year at both schools.

- Results from the student questionnaire revealed that over a third of students at both schools disagreed or strongly disagreed that they were interested in the work they get to do in most of their classes. In addition, nearly half of all students at both schools disagreed or strongly disagreed that their ideas and opinions can influence decisions made at the school. While both schools have worked hard to establish opportunities for student leadership and voice, including student-led trips, student-run student council at BHS, and participation on the implementation teams and Steering Committee, both schools need to work on establishing an environment where all students feel they can voice their opinions and that they can make important changes in the schools.

- Many changes were implemented this year, including the 1:1 technology initiative for freshmen students at both WMHS and BHS. In addition, BHS implemented Freshman Academies, compression of class levels (college prep and honors), and the YES program. At BHS, the changes were particularly concentrated and impacted ninth grade teachers. This has placed great demands on these teachers and there was a sense that some were overwhelmed. Teachers we spoke with could see how these changes are positive for students, but also reported that further support is needed. Monitoring and ensuring that "change fatigue" does not set in will be important as the work continues. Being pulled in so many directions may threaten how well these programs are implemented. This roll-out process also means that not all teachers and students are affected by the changes taking place. Data collection was limited in BHS to the ninth grade, so it is unclear whether teachers and students across the school are knowledgeable of the efforts underway.

- The Partnership for Change effort has aimed for transforming the work of schools and involving community members by creating a number of new structures, including the fellows, the Partnership for Change, implementation teams, Steering Committee, YES, and the SDI. Constructing these structures from the ground up required a tremendous amount of investment and time. The number of structures that were built this first year created challenges in coordinating among the different groups as well as establishing a firm footing for each. The implementation year was a time of hiring and recruiting for newly created positions. Often the work and responsibilities of these new positions were not clearly defined. Connecting all of these structures to the overall goals of the project was another important aspect of the work this year. As a result, less time and fewer resources were available for actually doing the work of the project. For example, results from the 2013 administration of the teacher questionnaire indicate that 55% of teachers at both schools believed that the Partnership for Change initiative had either no impact or minimal impact on their instruction over the 2012-2013 school year. In addition, 59% of teachers believed that the Partnership for Change initiative had no impact or minimal impact on student engagement, understanding, and/or acquisition of 21st century skills this past year. This is in sharp contrast to earlier questionnaire results indicating that in the previous administration of the questionnaire, the majority of teachers believed that the Partnership for Change would have an impact. There are several possible explanations for this

apparent discrepancy. First, as the work has gotten underway, many teachers may have come to realize how difficult it is to implement many of these changes. Second, given that most of the changes at BHS were concentrated in the 9th grade, it could be that many teachers did not see how their instructional practices and student engagement were impacted. Finally, it could also be the case that with so much of the energy focused on establishing these structures, the real work of getting these reforms into the classroom has not happened at scale yet. While there was plenty of progress, including the establishment of the graduate expectations, we would expect that next year's work will have an even deeper impact on students as many of these important technical components of building these structures have been resolved.

- While there are activities and structures that involve both sites and lead to collaboration across the sites, including the Steering Committee, implementation teams, the SDI, and fellows, the nature of collaboration and how the two sites should share resources have not been explicitly established. This lack of clear understanding of cross-site collaboration has made for some challenges. The fellows are left to determine how they will apply their time between the two sites without clear guidelines. In addition, while opportunities exist to collaborate these do not always necessarily result in cross-site work. In the 2013 SDI, BHS and WMHS teachers largely worked as separate groups. Establishing clear expectations about cross-site collaboration is needed to ensure greater effectiveness of current efforts and in identifying new ways in which the schools can learn from one another.

- While the vision for change seems to be clear and shared between the school and the community, the "how" has not yet been determined. This could present potential challenges if groups have differing opinions on how to move the work forward. There is also a tension between the grassroots approach for creating the direction of the change efforts and the desire for authentic community input. Without clear goals, community members might not understand the work and why their participation is needed. For example, it is difficult to recruit community member participation in the implementation teams when it is unclear what the work will be. Many in the community come from diverse ethnic and language backgrounds, which often increases the need for clearly articulated planning and goals. Partnership and LCP staff are aware of this tension. Finding ways to resolve this issue will be important as the work continues to maintain strong community involvement.