District Review Report

Pathfinder Regional Vocational Technical School District

Review conducted February 10-13, 2014

Center for District and School Accountability

Massachusetts Department of Elementary and Secondary Education

Organization of this Report

This document was prepared by the
Massachusetts Department of Elementary and Secondary Education

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Published October 2014

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Pathfinder RVTSD District Review Overview

Purpose

Conducted under Chapter 15, Section 55A of the Massachusetts General Laws, district reviews support local school districts in establishing or strengthening a cycle of continuous improvement. Reviews consider carefully the effectiveness of system wide functions, with reference to the six district standards used by the Department of Elementary and Secondary Education (ESE): leadership and governance, curriculum and instruction, assessment, human resources and professional development, student support, and financial and asset management. Reviews identify systems and practices that may be impeding improvement as well as those most likely to be contributing to positive results.

Districts reviewed in the 2013-2014 school year include districts classified into Level 2 or Level 3 of ESE's framework for district accountability and assistance. Review reports may be used by ESE and the district to establish priority for assistance and make resource allocation decisions.

Methodology

Reviews collect evidence for each of the six district standards above. A district review team consisting of independent consultants with expertise in each of the district standards reviews documentation, data, and reports for two days before conducting a four-day district visit that includes visits to individual schools. The team conducts interviews and focus group sessions with such stakeholders as school committee members, teachers' association representatives, administrators, teachers, parents, and students. Team members also observe classroom instructional practice. Subsequent to the onsite review, the team meets for two days to develop findings and recommendations before submitting a draft report to ESE. *District review reports focus primarily on the system's most significant strengths and challenges, with an emphasis on identifying areas for improvement.*

Site Visit

The site visit to the Pathfinder Regional Vocational Technical School was conducted from February 10-13, 2014. The site visit included 26 hours of interviews and focus groups with approximately 47 stakeholders, including school committee members, district administrators, school staff, students, and teachers' association representatives. The review team conducted 2 focus groups with 4 academic and 3 vocational teachers.

A list of review team members, information about review activities, and the site visit schedule are in Appendix A, and Appendix B provides information about enrollment, student performance, and expenditures. The team observed classroom instructional practice in 35 classrooms in 1 school. The team collected data using an instructional inventory, a tool for recording observed characteristics of standards-based teaching. This data is contained in Appendix C.

District Profile

Pathfinder Regional Vocational Technical School District has a superintendent/school committee form of government and the chair of the school committee is elected. There are 11 members of the school committee and they meet once a month.

The current superintendent has been in the position since 1974. The district leadership team includes the superintendent, the assistant superintendent/principal, the vocational director, the director of pupil services, and the business manager. Central office positions have been mostly stable in number over the past several years. The district has one assistant superintendent/principal leading one school. There are other school administrators, including the assistant director who oversees student affairs. There were 79.6 teachers in the district in 2013-2014. District administrators reported that this number does not include guidance counselors, a library-media specialist, a school adjustment counselor, occupational/speech specialists, and two special education liaisons, noting that these positions would bring the total to 87.

In the 2013-2014 school year, 611 students were enrolled in the district's 1 school:

Table 1: Pathfinder RVTSD
Schools, Type, Grades Served, and Enrollment 2013-2014

School Name	School Type	Grades Served	Enrollment
Pathfinder Regional Vocational Technical High School	high school	9-12	611
Totals	**one school**	**9-12**	**611**
*As of October 1, 2013			

Between 2009-2010 and 2013-2014 overall student enrollment decreased by 7 percent. Enrollment figures by race/ethnicity and high needs populations (i.e., students with disabilities, students from low-income families, and English language learners (ELLs) and former ELLs) as compared with the state are provided in Tables B1a and B1b in Appendix B.

Total in-district per-pupil expenditures were similar to the median in-district per pupil expenditures for 4 vocational/agricultural districts of similar size in fiscal year 2013: $20,646 as compared with $20,949. (see District Analysis and Review Tool Detail: Staffing & Finance). Actual net school spending has been above what is required by the Chapter 70 state education aid program, as shown in Table B8 in Appendix B.

Student Performance

Pathfinder is a Level 3 district because Pathfinder Vocational Technical is among the lowest performing 20 percent of schools.

- Pathfinder Vocational Technical is in the 19th percentile of high schools with a Cumulative Progressive Performance Index (PPI) of 74 for all students and 78 for high needs students; the target is 75.

Pathfinder RVTSD reached its 2013 ELA CPI target with an ELA CPI of 95.0. However, ELA proficiency for grade 10 at Pathfinder was below the state rate for grade 10.

- ELA proficiency for grade 10 was 83 percent in 2013, 27 percentage points higher than the 2010 rate of 56 percent, and below the state's rate of 91 percent for grade 10.

With a math CPI of 86.0, Pathfinder RVTSD did not reach its 2013 math CPI target and math proficiency for grade 10 was below the state rate for grade 10.

- Math proficiency for grade 10 was 68 percent in 2010 and 69 percent in 2013, 11 percentage points below the state rate of 80 percent for grade 10.

With a science CPI of 88.6, Pathfinder RVTSD was above its 2013 science CPI target and science proficiency for grade 10 was equal to the state rate for grade 10.

- Science proficiency for grade 10 was 71 percent in 2013, 21 percentage points higher than the 2010 rate of 51 percent, and equal to the 2013 state rate of 71 percent for grade 10.

Pathfinder RVTSD met the 2014 annual four year cohort graduation rate target and did not meet the five year cohort graduation target.

- The four year cohort graduation rate was 86.3 percent in 2013, 7.4 percentage points higher than the 2010 rate of 78.9 percent, and above the state rate of 85 percent.

- The five year cohort graduation rate was 83.1 percent in 2012, 6.1 percentage points higher than the 2009 rate of 77.0 percent, and below the state rate of 87.5.

- The annual dropout rate for Pathfinder was consistently below the state rate and was 2.1 percent in 2013, below the statewide rate of 2.2 percent.

Pathfinder RVTSD District Review Findings

Strengths

Leadership and Governance

1. **The Pathfinder Regional Vocational School superintendent has a longstanding collaborative relationship with, and strong support from, member communities and town officials.**

   A. The school district is consistently supported by the member towns.

      1. School committee members stated that the annual budget is frequently recommended for approval by member towns' officials and they generally do not have to attend the annual town meeting.

      2. The superintendent, who has served the district for 40 years, stated that the annual budget has been passed every year for the past 40 years.

      3. Town officials said that because of the trust factor between the member towns and the superintendent, the annual budget has always received the approval of the required two-thirds of the towns.

   B. The superintendent cultivates good relations with the member communities.

      1. The superintendent is aware of and sensitive to each town's ability to support the school as he develops the annual budget.

      2. Funds from the school district excess and deficiency account were used in fiscal year 2009 to reduce the assessment to the member towns. The annual budget request was level-funded for three years during times when the towns were experiencing financial problems.

      3. The superintendent reaches out to town officials to find out if there are questions about the budget. He and the business manager return calls promptly.

   C. Town officials praise the school district and the superintendent.

      1. Town officials cite the school's connection to local industries as an important real world asset to the community.

      2. Town officials told the team that the superintendent breaks down the budget request very well and provides a great deal of background information to officials.

      3. Town officials remarked on the clean conditions of the school as a sign of respect and self-discipline on the part of students.

Impact: The superintendent has cultivated collaborative relations between the school district and the member towns over a long period of time. The efforts of the superintendent during his 40-year tenure have resulted in an open trust of the school district by the member communities. This relationship has resulted in a high degree of support for the financial needs of the district and its students.

Curriculum and Instruction

2. **The effort to align the district's career, vocational, and technical education curricula to 2012 MA Career and Vocational Technical Education (CVTE) Frameworks is ongoing and has resulted in curricular improvements.**

   A. A district leader noted that vocational teachers have begun to update and implement curriculum based on the 2012 Massachusetts CVTE Frameworks with the expectation of completion of the alignment of scope and sequence documents and lesson plans by the beginning of the 2014-2015 school year.

      1. Vocational and technical teachers stated that several teachers had participated in ESE framework workshops to prepare to update their CVTE curricula.

         a. Teachers described modifications such as streamlined standards, reordered topics, and new instructional software.

         b. A leader noted that the current revisions and alignment would lend organization to a collection of curriculum documents that were previously "all over the place" in terms of format. At the time of the onsite additional scope and sequence discussions and activities were planned for April 2014.

      2. In embedding academic knowledge and skills in the revised CVTE curricula, the district has initiated several innovative and collaborative opportunities to help academic and vocational teachers improve teaching and learning.

         a. ELA and mathematics skills have been included in new curricula under requirements for CVTE Strand 3, "Embedded Academic Knowledge and Skills."

         b. Vocational teachers noted participating in recent schoolwide professional development on the Collins Writing Program. They also noted that writing assignments were now consistently included in the curriculum for shop related classes.

         c. The English department helped the automotive shop develop writing rubrics for a car safety project and also has worked with business technology to produce the school newspaper and poetry magazine.

         d. The District and School Assistance Center (DSAC) staff has met with groups of vocational and academic teachers to address the integration of academic and vocational content. For example, a mathematics teacher and a DSAC representative each described the recent

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DSAC workshop for mathematics and vocational teachers to more effectively teach reading informational texts and mathematics texts.

3. Vocational teachers and leaders described discussions about curriculum during weekly department meetings and at end-of-day team meetings.

4. Teachers and leaders reported that the school supports strong curriculum delivery by providing state-of-the-art equipment and tools to prepare students for the workplace.

B. A review of current CVTE curricula showed that vocational teachers developed curriculum documents using varied formats with shared common components.

1. Most curriculum documents contained almost all components of a useful, viable curriculum although the formats varied. Documents included learning objectives by grade level, content and links to frameworks and strands by grade level, instructional materials and equipment such as textbooks, software, tools, and specific assessment and evaluation information, including various competency tests.

2. Project-based curriculum, such as electrical shop, guide students through sequential learning objectives using step-by-step skill-based activities, detailed diagrams, checklists, evaluation and assessment guidelines, as well as guiding principles for professional conduct, and procedures related to the shop and its workplace.

3. In accounting and business, cosmetology, horticulture, programming and web design, vocational teachers are revising curricula not only to meet new CVTE standards but also to address recommendations included in the school's 2012 NEASC Report.

Impact: The work to complete curriculum alignment to 2012 MA CVTE Frameworks in all vocational technical shops ensures that students have access to high quality state-of-the-art content as they develop knowledge, skills, and understandings in their chosen vocations.

3. **A recent initiative to improve student writing across the curriculum and to develop teachers' instructional skills in writing constitutes an important school-wide improvement strategy.**

A. The school has recognized the importance and value of improving students' ability to write well by instituting writing across the curriculum as a curricular and instructional priority.

1. Teachers and leaders attributed the decision to improve student writing as a way to have more consistency in writing and also as a strategy to improve results on MCAS open- response questions.

B. This year, to improve the teaching of writing, the district began schoolwide professional development in the John Collins Writing Program, starting with a full-day presentation to the whole faculty by John Collins before the start of school and continuing with ongoing sessions with departments. Six teachers have also participated in an off-site seminar for the program.

1. In interviews and focus groups, academic and vocational teachers showed enthusiasm about the new writing initiative.

   a. Vocational teachers described a variety of writing assignments they have developed based on the professional development in the Collins Writing Program.

      i. Students in the auto shop take pictures of their work and write about the materials they use, the sequence of their activities, and how they overcome technical problems.

      ii. Machine tool students write a journal about their weekly activities. Teachers evaluate the writing by how well sentences are structured, students' use of technical terms, and descriptions of how they used the tools.

      iii. In the culinary shop, students write about the experiences of two chefs: one who succeeded and one who failed.

      iv. Business tech students write reflective journals and also complete numerous writing assignments for class work.

   b. Academic teachers acknowledged the need to incorporate the Collins Writing Program into the curriculum and noted that the new writing strategies were already in use.

Impact: The school's focus on writing serves to unify the academic and vocational programs in their expectations for students' writing and how writing skills are taught. The improvement of student writing will help to develop lifelong skills that will serve students well in post-secondary careers. By mastering each of the five types of writing included in the Collins Writing program, students can learn to express their ideas in a variety of contexts and real-life situations.

Human Resources and Professional Development

4. The district is on track with its implementation of its educator evaluation system.

   A. The district is proceeding this year with the adoption and implementation of the new educator evaluation system.

   1. District administrators indicated that in October 2012 they adopted the ESE model and the required 11 hours of training for administrators and the four hours for teachers were conducted. They told review team members that the teachers' association was very positive throughout the process.

   2. A review of 30 randomly selected personnel files in the district's new TeachPoint software showed that the district was on track with the implementation of its new educator evaluation system.

      a. The file of each teacher being evaluated included a self-assessment, a completed educator plan form, a goal setting form, and evidence of one or more walkthroughs.

b. Administrators reported that 80 percent of the whole staff had completed the self-assessment, whether or not they were being evaluated in year one.

Impact: Full adoption and implementation of the teacher evaluation system signals to teachers the district's intention to establish a healthy and viable system for engaging with teachers about the quality of their instruction and recommendations for their continuing growth.

Student Support

5. **The district is working to improve student engagement and student participation, particularly those with high needs.**

   A. The district is providing additional support staff for high needs students.

      1. The addition of a third guidance counselor has reduced the counselor/student ratio, and has improved the staff's capacity to identify and work with high needs students.

      2. The hiring of a full time school psychologist has expanded the department's capacity to counsel and work with high needs students.

   B. The district continues to provide programs to support high needs students.

      1. The Skills USA/PDP Employability Program, required of students in grades 9-11, gives students employability skills before they enter the workforce or seek further educational opportunities. There is an MCAS academic support component to the program.

      2. The Title I program offers extra ELA and mathematics classes to students struggling academically.

      3. The Workforce Investment Act (WIA) Summer Component Program provides a subsidized work program for 30 to 100 students for five to six weeks during the summer.

      4. The Summer Transition Program provides 36 contact hours to the first 30 responding entering ninth graders with low scores on their Stanford 10. The program orients students to the school and focuses on personal accountability, team building, homework, learning strategies, and study skills. The program is free and includes transportation and a nutritious breakfast.

      5. Upper class students offer peer tutoring opportunities. Tutors provide directed tutoring to underclassmen in the areas of academics, vocational classes, and OSHA.

   C. Staff identified communication, staff collegiality, professional relations, and a caring approach toward students as the factors that work well to keep high needs students in school.

   D. The annual dropout rate has been below the state rate for the past five years.

   E. The 4-year cohort graduation rate was 7.4 percentage points higher in 2013 than in 2010 while the 5 year cohort graduation rate was 6.1 percentage points higher in 2012 than in 2009.

Impact: As a result of the district's provision of programs and staffing to support high needs students, the school has been able to maintain a low dropout rate and to improve its graduation rates.

Financial and Asset Management

6. **The district has comprehensive operating revenue and expense budget documents as well as an inclusive budget process that incorporates staff and town input.**

   A. The fiscal year 2014 operating revenue budget contains detailed information on member town assessments, including historical data comparisons.

      1. The fiscal year 2014 "Preliminary Budget with Capital" document includes state and local revenue sources for net school spending and transportation and assigns a revenue source for capital expenses.

      2. The document also includes student enrollment numbers by town and percentage apportionment per the regional agreement.

      3. The revenue budget document includes the assessment calculation by town for operating, transportation, and capital budgets based on the regional agreement appropriation.

   B. The fiscal year 2014 general fund operating budget is clear and comprehensive.

      1. The fiscal year 2014 approved budget has detailed expense line items based on the ESE Chart of Accounts.

      2. The district also has an expense budget containing historical budget expenses for fiscal years 2010-2013.

   C. The budget process solicits input from advisory committees, department heads, and administration.

      1. The budget process begins with vocational advisory committees reviewing the current year's budget and making recommendations on both operating and capital needs for the next year.

      2. Academic and vocational department heads are encouraged to get input from teachers as they develop their department budgets.

      3. Department heads meet individually with administrators to present their proposed budget.

   D. The fiscal year 2015 proposed budget includes funding for goals and objectives from the SIP.

      1. In response to the goal of providing more staff professional development, the district has proposed a total professional development budget of $42,830 in fiscal year 2015, an increase of 43 percent over the fiscal year 2014 professional development budget of $30,000.

2. Curriculum materials budgets were increased by $10,000 for fiscal year 2015 in response to goals and objectives in the SIP.

E. The superintendent and business manager meet periodically with officials of the member towns and attend annual town meetings to explain the district's budget.

1. Officials from member towns are invited to attend the March public hearing of the school committee to learn of the preliminarily approved operating budget and to discuss the proposed capital budget.

2. Town officials said that the March budget presentation is detailed, informative, and gives them an accurate picture of school operations.

3. Town officials can call the superintendent and business manager at any time with   questions or concerns.

Impact: As a result of preparing and presenting a clear and comprehensive budget, the superintendent has gained the trust and support of town officials from member towns, and the district has had annual approval of the district's budget.

7. **The district has adequate financial resources to ensure sound programs and quality facilities.**

A. The district exceeds required net school spending.

1. Pathfinder spent 14.7 percent above required net school spending in fiscal year 2013.

B. The district actively pursues and acquires local, state, and federal financial support.

1. The district has a full-time grants coordinator and a business office staff member who administers grants part-time.

2. The grants coordinator has been successful in acquiring competitive grants and soliciting private financial support.

a. The district was recently awarded a state Community Innovation Challenge (CIC) grant to implement a collaborative security program with local public safety departments.

b. The district received an Amp It Up Grant that enabled middle school students to experience the school's vocational shops. This program resulted in the district being featured on the "Today" show.

c. The district is currently working with Friendly's Ice Cream, LLC. on the donation of an assembly line for instructional use in the Machine Technology shop.

C. Other than a roof replacement project currently proposed for MSBA and town support, the building has no major structural issues. The school building is clean and well maintained.

Impact: With sufficient financial resources to address the educational needs of students and the programmatic needs of staff, the district helps to ensure educationally sound programs and facilities that promote quality teaching, learning, and improved student achievement.

Challenges and Areas for Growth

It is important to note that district review reports prioritize identifying challenges and areas for growth in order to promote a cycle of continuous improvement; the report deliberately describes the district's challenges and concerns in greater detail than the strengths identified during the review.

Leadership and Governance

8. **School priorities are not sufficiently articulated or prioritized to provide clear expectations and direction to administrators. There is unclear delegation of authority in some areas.**

    A. School administrators are not provided with clear priorities for school improvement.

        1. The School Improvement Plan (SIP), September 2013–June 2015, approved by the district school committee on November 11, 2013, does not provide a clear and measureable plan for school improvement.

            a. School administrators reported that a better use of data is needed to inform the improvement plan and to hold people accountable.

            b. The superintendent stated that although the current school improvement plan is better than the previous one, clearer priorities are needed to ensure the progress of the school and the focus and direction of administrators.

            c. The assistant superintendent/principal has begun to use the ESE guide to develop an Accelerated Improvement Plan (AIP) for a focused, actionable, and sustainable plan.

    B. Although there are nearly daily informal meetings held between the superintendent and the assistant superintendent/principal, there are no regularly scheduled formal administrative team meetings to delineate expectations or provide guidance and feedback. Administrators reported that administrative team meetings, while not scheduled, are held regularly and minutes are kept.

        1. The superintendent attends the assistant superintendent/principal's biweekly team meetings. These are characterized as primarily dealing with school operations and are not used to monitor progress on goal attainment.

        2. The superintendent stated that his goals were to move the school out of ESE's Level 3 status and to improve student recruitment; however, at the time of the visit these goals were not yet part of a formal plan nor had they been assigned to specific staff.

C. Administrator goals are not aligned to the school improvement plan, nor are the superintendent and assistant superintendent/principal holding administrators accountable for attaining their goals.

1. The superintendent developed his goals and discussed them with the school committee at the September 11, 2013, meeting. His goals are aligned to the four standards of Effective Administrative Leadership but not to the SIP.

2. At the time of the site visit (February), the superintendent and assistant superintendent/principal had not yet provided the administrators who report to them with feedback about their annual goals.

D. The school's assistant superintendent/principal does not have clear responsibility and authority to execute her role.

1. The district organizational chart provides the reporting lines and areas of responsibility.

   a. The assistant superintendent/principal, business manager, and pupil services director report to the superintendent.

   b. The vocational director, assistant director, technology director, grants coordinator, cafeteria manager and staff, facilities manager, nurse and all academic teachers report to the assistant superintendent/principal.

   c. The pupil services director reports to the superintendent, as the special education director and guidance director had done in the past. Reporting to the superintendent represents equal authority with the principal and appears to create unclear reporting lines. School committee members agreed that having the pupil services director report to the assistant superintendent/principal would establish a clearer chain of command.

   d. The assistant superintendent/principal position has operational responsibility for the high school building but does not have the authority to hire personnel; for example, the superintendent hired the recently appointed vocational director. Administrators reported that the assistant superintendent/principal makes recommendations subject to the superintendent's approval.

   e. The assistant superintendent/principal position does not directly participate in the budget development for program administrators, namely the vocational director and pupil services director.

Impact: Because there is not clear articulation of district and school priorities to improve student achievement school administrators may be less effective in executing their responsibilities to improve instruction. Further, when the school assistant superintendent/principal does not have clear responsibility and authority to execute her role, she may not have the power to institute the changes necessary for the improvement of student achievement.

Curriculum and Instruction

9. **There is insufficient curricular leadership; as a result, school systems and practices to develop, manage, and monitor the academic curriculum are weak. Core curricula are not well coordinated, fully developed, or aligned to the 2011 Massachusetts Curriculum Frameworks.**

   A. School leaders responsible for hiring the academic director do not have a clear idea of the roles and responsibilities for this position.

      1. School and district leaders have had difficulty defining the role and responsibilities of an academic director and determining whether to hire an internal or an external candidate to fill this role.

      2. Leaders expressed concerns about finances and adding another administrative position which would appear to contradict a 2012 NEASC report recommendation of "streamlining the administrative structure in order to specifically address accountability and follow through."

      3. Since January, 2014, a part-time consultant has been working two days per week to support curriculum work at the school. The part-time curriculum consultant is currently assessing the curriculum to see what changes are needed and to work with departments to make curriculum binders.

   B. Interviewees told the team that there were several reasons why the academic curriculum alignment efforts had stalled.

      1. Some leaders noted that the academic staff needed training in understanding, developing, and implementing the 2011 Massachusetts Curriculum Frameworks, including the writing of lesson plans and understanding the relationship of textbooks to the curriculum.

      2. One leader noted that the English department was struggling with the Common Core requirements because there was an expectation that students would read at or above grade level in a school with many students reading below grade level.

      3. This year, a new schedule of six 60-minute blocks for each class has replaced the previous eight 42-minute blocks. This has particularly challenged the English department, which had taught in double-blocks of 84 minutes each day. English teachers were struggling to adjust the planning and teaching of curriculum in one hour what had been designed for 84-minute blocks. The new schedule represented a loss for them of two instructional hours per week and had taken time away from curriculum development.

      4. Teachers said that although the school had provided professional development to help, curriculum development was "slow going in a school without a lot of curriculum writing experience." Teachers credited the assistant superintendent/principal with giving good guidance when she was available.

      5. A leader told the team that the school provided a few days of professional development last year on Wiggins and McTighe's *Understanding by Design* (UbD) framework in an attempt to

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"enhance the curriculum by using essential questions and objectives." However, the leader noted that when the UbD professional development was brought in, the staff was not ready for it.

C. Interviews and a review of curriculum documents showed that core academic curricula were in various stages of development, did not follow a common template, did not have key curriculum components, and were not aligned to the 2011 Massachusetts Curriculum Frameworks.

1. Teachers stated that there was no specific or common curriculum template in use in ELA. A review of documents indicated that English I, English II, English III curriculum documents were aligned to 2011 MA Curriculum Frameworks. An English IV curriculum document contained text of all 2011 MA ELA and Literacy Frameworks for grade 12. The documents did not link the standards to specific units of study, works or genres and contained limited instructional strategies and a generic list of assessments.

2. Two recently developed mathematics curricula, algebra I and geometry, were incomplete. Although they listed 2011 Mathematics Frameworks and linked them to "enduring understandings" and "essential questions," they did not have other key components such as instructional strategies and resources, viable timelines, and a balanced set of common formative, summative and benchmark assessments.

3. Mathematics curricula for statistics, pre-calculus, and algebra II were labeled "scope and sequence." They listed topics for textbook chapters and pre-dated the 2011 Frameworks.

4. Interviewees stated that the social studies curriculum was farther behind than the others. The interviewee indicated that "nothing has been done on US History I and US History II" although teachers were working to include non-fiction reading materials this year. A new World History curriculum was being developed to meet MassCore requirements.

5. The science department had begun to align curriculum to Common Core standards, i.e., the college and career readiness anchor standards for reading informational texts. Other science curriculum documents were aligned to 2001 standards, and the department was reviewing the draft of the recently released new science standards.

D. The district does not have systems and practices to regularly monitor the delivery and effective use of the academic curriculum.

1. The department heads' roles and responsibilities focus on organizing and facilitating meetings, preparing the department budget, ordering materials, and acting as a communication liaison with school and district leaders. They do not have supervisory responsibilities or monitor curriculum implementation.

2. The identification, collection, and use of data to drive curricular decisions are rudimentary at the school. MCAS results are the only data shared universally, which leaders note arrives "late" while the need for feedback is more "immediate." Common benchmark assessments to

analyze student progress in content knowledge, skill development and understandings are just beginning to be addressed. The assistant superintendent/principal noted the school has provided no training in data analysis and instead relies on one staff member for analysis of MCAS data.

3. There is no regular dedicated common planning time for all members of a department and there are no professional learning communities to enable teachers to collaborate regularly.

    a. Some academic teachers share common planning time with colleagues, while others collaborate after school or on weekends. The District and School Assistance Center (DSAC) team is attempting to identify ways for the school to establish Professional Learning Communities with common planning time to enable more regular and purposeful collaboration.

Impact: Without curricular leadership, up-to-date documents, and a review system in place, the school cannot guarantee that all students have access to a complete, current, and high quality curriculum to prepare them for careers and post-secondary education.

10. **School leaders and teachers do not have a shared or complete understanding of what constitutes good instructional practice in both academic and vocational classrooms.**

    A. In 2012-2013, the school instituted classroom walkthroughs to monitor and improve instruction. The walkthrough protocol focuses on instructional characteristics such as lesson/ activity objective, student engagement level, strategies used to ensure engagement, instructional practices used to help students interact with content, and frequency of checking for understanding.

    B. When asked about the expectations for good teaching in vocational technical classes, the vocational director cited checking for understanding, good student-teacher relations, parent communication, and a vocational staff that differentiates instruction.

        1. When asked about what constitutes good teaching in vocational classes and whether there was a shared instructional model in the vocational area, vocational teachers gave responses which reflected more personal views of good vocational teaching.

            a. One teacher responded, "We utilize the industry standards so we can send them out in the job market. [We] make sure the students are ready. We don't have a template."

            b. Another teacher said, "Our vision is that we are producing students who are getting the most out of their program."

            c. Another noted, "[We do] whatever it takes; no one has come down and said, 'teach this way.'"

C. When asked about the expectations for good teaching in academic classes, the assistant superintendent/principal stated she expected good teaching to be rigorous with high standards, and that teachers should use effective communication and formative assessments.

    1. When asked in an interview and in a focus group about the qualities or expectations for good teaching in academic classes, some academic teachers appeared uncertain or unclear while others referenced the walkthrough tool.

        a. One teacher identified the Collins Writing Program as a school-wide expectation, but said that there were no other common ones.

        b. Another, when asked about a requirement to have an agenda, noted that while agendas had been mentioned at a faculty meeting, they were not specifically required but were slowly being communicated on an individual basis from assistant superintendent/principal to teachers in conversations. Another teacher, in a focus group, cited the need for "kids to receive the classroom agenda."

        c. Another teacher said, "We know we need to have an objective, but we don't have a standard about how to start a lesson…we have our own ways of doing things."

        d. When teachers were asked about what the assistant superintendent/principal looked for in walkthroughs, they described several of the looked-for characteristics and specifically named, "higher order thinking skills, percentage of students engaged, classroom management, tools used, and clear learning objectives."

Impact: An array of good teaching characteristics is delineated on the school's walkthrough tool. However, without a shared view about the expectations for these and other good instructional practices, the benefits of conducting walkthroughs and thereby improving instruction are limited. The ability for the school to focus on and evaluate specific instructional practices that will lead to improve student achievement is therefore limited.

11. Classroom teachers provided a positive learning environment, but effective instructional strategies that demonstrate rigor, high expectations, and differentiation were not consistently present in all classrooms.

The team observed 35 classes at the school: 18 academic classes and 17 vocational technical education classes, including 3 related shop classes. In the academic subjects, the team observed eight ELA classes, six mathematics classes, two science classes, and one Spanish class. Among the classes observed were six special education classes. The observations were approximately 20 minutes in length. All review team members collected data using ESE's instructional inventory, a tool for recording observed characteristics of standards-based teaching. This data is presented in Appendix C and is organized by whole school data, academic data, and vocational technical data. For the purposes of findings, only numbers are reported because of the small sample size.

A. Review team members saw clear and consistent evidence of a positive learning environment in most academic classrooms. Yet in some classrooms, teachers made less effective use of time, had insufficient resources to meet the needs of diverse learners, or did not set high expectations for student responsibility for learning.

1. There was clear and consistent evidence that the tone of interactions between the teacher and students and among students was positive and respectful in 15 of 18 observed lessons.

2. Skillful classroom management in 12 of 18 lessons meant that behavioral standards were clear, students were well behaved, and lessons were carried out without disruptions.

3. In only nine of 18 observed lessons teachers and students made smooth transitions, so that there was no loss of instructional time.

4. In two of 18 observed lessons, teachers did not make use of multiple instructional and other resources to meet students' diverse learning needs. In particular, review team members noticed limited literacy resources, technology, and other instructional tools and materials that could be used to support teaching and learning for students on Individualized Educational Programs (IEP).

5. Students clearly and consistently assumed responsibility for their own learning whether individually, in pairs, or in groups in seven of 18 lessons. The majority of academic lessons were teacher directed with students listening and occasionally responding to questions with short or one-word answers.

B. In academic classes, evidence of effective teaching practices was inconsistent.

1. The review team noted that in 13 of 18 academic lessons, teachers clearly and consistently demonstrated knowledge of subject and content. They were secure in subject knowledge, gave clear and accurate explanations, and provided appropriate content for the grade or course level.

2. Only one of the 18 observed academic lessons clearly and consistently reflected rigor and high expectations. In most classes, there was little evidence of student use of critical and analytical thinking skills, application of knowledge to new contexts, encouraging students to ask questions, or to demonstrate understanding other than recall of facts and information.

3. Observers saw students engaging in higher order thinking such as inquiry, exploration, application, analysis, synthesis and evaluation of knowledge or concepts in four of 18 lessons. Two examples of these practices were an English lesson that required students to engage in and synthesize ideas from a chapter in a novel and a science lesson where the teacher asked students to link the use of heat sources conceptually to the use of heat in their vocational areas such as an auto radiator and a hairdryer in cosmetology.

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4. Observers did see agendas on white boards. However, in only two of 18 lessons did observers notice posted or spoken learning objectives with instructional strategies well matched to the learning objective(s) and content.

5. Evaluation and checking for student understanding was inconsistent. Questioning techniques that required thoughtful responses that demonstrate understanding rather than repeating information or responding with one or two words were observed in three of the 18 lessons. Frequent use of formative assessments to check for understanding and inform instruction was observed in three of the 18 lessons.

6. Students rarely elaborated about content and ideas when responding to questions. Observers found clear and consistent evidence of this in only one of the 18 observed academic lessons. Students articulated their thinking orally or in writing in three of 18 observed academic lessons. In an English lesson, the teacher asked thoughtful questions, but students did not elaborate about content or ideas when responding to questions. In most cases, students offered one- or two-word answers that were not followed up by the teacher.

7. Teacher use of modifications specifically suited to students with disabilities was infrequent, seen in four of the 18 lessons. In six of 18 observed lessons, students clearly and consistently made connections to prior knowledge, or real world experiences, or could apply knowledge and understanding to other subjects. Teachers paced lessons to match content and meet students' learning needs in nine of 18 observed lessons.

8. In seven of the 18 lessons, teachers clearly and consistently made use of available technology to support instruction and enhance learning. Observers noticed a high level of expertise and innovative and animated use of smart boards, which engaged students and helped them understand new concepts. Students used technology as a tool for learning or to demonstrate understanding in four of 18 lessons. In others, teachers controlled classroom technology, usually smart boards.

Impact: Because of the inconsistent use of research-based effective instructional practices in its classrooms, the district cannot ensure that the intended curriculum is taught and learned by all students. Student achievement may continue to lag behind, particularly when instruction is not differentiated to meet the needs of all learners.

12. **The level of instruction observed in vocational technical shops showed consistent strengths in project-based, experiential learning techniques. There was more variation in the quality of instruction in the shop-related academic classrooms.**

    A. In all 17 classrooms, there was clear and consistent evidence that the tone of interactions between the teacher and students and among students was positive and respectful. Skillful classroom management was observed in all 17 observed vocational technical lessons. Behavioral and safety standards were clear and adhered to. Students were careful and deliberate in using equipment. All students had access to learning activities, tools and machines. Lesson transitions for students

working individually, in pairs, and in groups were managed well with minimal loss of transition time in 14 of 17 observed shops and classrooms.In 12 of 17 observed lessons, students clearly and consistently assumed responsibility for their own learning in shops whether individually, in pairs, or in groups.

B. In all observed shop lessons, there was clear and consistent evidence of the availability of multiple instructional and other resources to meet students' diverse learning needs. In the two related shop lessons that were more academic in nature, observers noted fewer resources to meet students' diverse learning needs.

C. In many observations teachers exhibited use of strong instructional practices; however, these were not yet in place in all classrooms.

1. The review team noted that in all vocational technical lessons, teachers clearly and consistently demonstrated knowledge of their subject, content and competencies. They showed expertise in various skills and activities, gave clear and accurate explanations, and modeled the performances and tasks expected of students. In 12 of 17 shops, teachers clearly and consistently paced lessons to match content and meet students' learning needs.

2. In 11 of 17 observations, shop lessons were clearly and consistently planned and implemented to reflect rigor and high expectations. In an electronic shop, students learned basic circuitry to advance their understanding of digital electronics and robotics. Rigorous shop lessons encouraged students to question (which they often did) and to solve problems using critical and analytical thinking (which they could explain). To demonstrate mastery, students applied knowledge and skills by completing projects independently and in groups.

3. Teachers clearly and consistently required students to engage in higher order thinking in nine of 17 vocational technical lessons. Where observed, shop activities and skill building required students to inquire, explore, apply, analyze, synthesize and evaluate what they knew and could do to meet lesson objectives. For example, in a culinary related shop, students watched a video and took notes on restaurant sanitation requirements, while in the culinary shop, a group of students discussed and then sanitized the cooking equipment and washed dishes using multiple rinse basins.

4. Checking for student understanding by using formative assessments was demonstrated in 11 of 17 shops. Before students began projects or tasks, they often gathered to discuss with the teacher the required objectives and needed skills. Teachers required full explanations when asking questions. Students did not hesitate to ask questions of the teacher.

Students clearly and consistently elaborated about content and ideas when responding to questions in five of 17 observed shops. In an HVAC shop, students were clear and articulate in describing the rationale and requirements for good ventilation. In other lessons, although students responded to questions, there was little follow-up or probing for more information or explanations.

5. In addition to shop equipment and tools, teachers clearly and consistently made use of instructional technology to support instruction and enhance learning in 10 of 17 observed vocational technical lessons. Students clearly and consistently used technology as a tool for learning or to demonstrate understanding in 11 of 17 lessons.

6. In 12 of 17 observed lessons; students were clearly and consistently making connections to prior knowledge, real world experiences, or could apply knowledge and understanding to new tasks. In these lessons, prior knowledge was often the prerequisite to engage in learning objectives and lesson tasks, such as the skillful use of machine tools where each project reflected a different challenge, according to an observer.

Impact: The growing consistency of instructional strengths in the vocational technical shops helps to ensure that the intended curriculum is taught and learned by all students. Until these instructional practices are fully in place, some students may not be fully accessing the curriculum and developing the skills necessary for career readiness.

Assessment

13. **The district does not have in place systems or practices that ensure a thorough analysis of student performance on MCAS and dissemination of results to teachers.**

   A. Some dissemination of MCAS results takes place.

      1. MCAS results are presented to the teachers during a schoolwide faculty meeting.

      2. An administrator analyzes the MCAS test results for the district. Teachers rely on him for their knowledge of results.

         a. An administrator brings a documented analysis of ELA results to the English department, mathematics results to the math department, and science results to the science department.

         b. Teachers in the three departments discuss MCAS results specific to their department and plan how to address the weaknesses evident in the results.

      3. Planning is informal; no written plan is developed.

      4. All teachers receive information concerning individual students in their classes who have not achieved proficiency on MCAS assessments.

      5. MCAS results are also made available on the district website.

B. Dissemination, analysis, and planning concerning overall MCAS results is limited to the three content areas and so tied to the specific MCAS assessment.

1. Other departments do not receive presentations on overall MCAS results.

2. Individual teachers have only reports on those students in their classrooms who are not proficient on specific assessments.

Impact: Teachers across the school do not have opportunities through their departments to analyze overall MCAS results and make decisions concerning how their department or they as individuals can modify their instruction to address weaknesses in the achievement of students in the school. In effect, the school is holding English teachers responsible for addressing ELA results, math teachers for math results, and science teachers for science results. This limits the impact on student achievement that might follow the analysis of results by all departments and the assumption of responsibility for MCAS results by all teachers.

14. **The district does not have in place an accurate, balanced set of assessments that can be used for school, educator, and student improvement.**

A. The school has a single summative assessment, namely the MCAS.

B. There is substantial evidence of formative assessments in vocational classrooms, but little in academic classrooms. Formative assessments take place 4 to 8 times a year, and they periodically measure student growth and needs.

1. In each vocational area, teachers have a list of competencies that students must master, and teachers regularly assess students' progress against those competencies.

2. In some academic departments, there has been some initial discussion of benchmarks in the math department, but little in other departments.

a. There are common final exams in the math department; social studies had common mid-terms, finals, and more in its two required courses until this year; the English department does not have common exams.

i. These common exams are summative rather than formative since they do not take place with sufficient frequency to serve as formative assessments that provide a teacher with periodic information on student progress.

ii. Other than in the math department, there is little evidence that teachers review together results from exams they have administered in common to establish how successfully students have learned what they have taught. This lost opportunity compromises the value of administering exams in common.

Impact: Without ways to periodically measure student progress toward those outcomes teachers are unable to modify instruction that addresses student needs. While vocational teachers have the benchmarks and the assessments in place to determine the extent of each student's learning, academic teachers have not yet established the benchmarks and the formative assessments that would inform them concerning their students' progress. Without these, the school, teachers, and the students themselves cannot know where they stand as an academic course progresses.

Human Resources and Professional Development

15. **The district employs a variety of informal strategies to determine its professional development offerings rather than a formal systematic process.**

    A. Two sources have identified professional development as an area in need of improvement.

        1. In a review of the district's 2012 TELL Mass Survey data, 81 percent of respondents reported that they have either no role or a small role in determining the content of the district's in-services. Fifty eight percent either strongly disagreed or disagreed that leadership makes a sustained effort to address their professional development concerns; 80 percent strongly disagreed or disagreed that professional development offerings are data driven; 69 percent strongly disagreed or disagreed that professional development opportunities are aligned with the SIP; 78 percent strongly disagreed or disagreed that follow-up is provided for professional development; and, finally, 86 percent strongly disagreed or disagreed that professional development is evaluated and results are given to teachers.

        2. The April 2012 New England Association of Schools and Colleges (NEASC) Report contains a recommendation that the district develop and implement a professional development program that is "more focused" and "less fragmented."

    B. In developing the fiscal year 2014 professional development schedule, the assistant superintendent/principal, director of pupil personnel services, and the vocational director employed a mix of formal and informal strategies to determine professional development rather than a deliberate planning process responsive to teacher and student needs.

        1. Teachers in focus groups reported some use of data in planning professional development in the 2013-2014 school year.

            a. The new instructional technology coordinator surveys the staff to determine teacher interest and needs for professional development.

        2. Administrators told review team members that teacher involvement was informal.

            a. Teachers indicated their primary input into professional development comes informally from input at faculty meetings.

Impact: Without a more formal and systematic approach to developing its professional development plan, the district is unlikely to consistently offer professional development that addresses its teachers' real needs and targeted towards improving student achievement. This compromises the effectiveness of the district's professional development program in improving instructional practice and decreases the likelihood of improved student achievement.

16. **At the time of the site visit neither the Pathfinder Educator Association nor the school committee had ratified the language about educator evaluation in the collective bargaining agreement (CBA**).

    A.   The new educator evaluation language was successfully negotiated in the summer of 2013 along with a new teacher Collective Bargaining Agreement (CBA).

    B.   A review of the new teacher CBA indicated that the new educator evaluation language was still subject to ratification by the Pathfinder Educator Association and by the Pathfinder Regional Vocational Technical High school committee.

        1.   At the time of the review the superintendent told review team members that the negotiation of the document took place in one of the most favorable environments in recent years. He indicated that there was an impending ratification vote, adding his confidence that it would not be a problem.

Impact: Positive steps have been taken to keep the district on track with the adoption and implementation of the new educator evaluation system. However, moving ahead with sensitive personnel changes without a signed agreement exposes the district to potential legal challenges.

Financial and Asset Management

17. **The school committee is not engaged in setting budget goals and priorities and is not sufficiently informed about district finances such as revolving and grant accounts.**

    A.   The school committee is not involved in the budget preparation process.

        1.   The finance subcommittee of the school committee has recently been inactive.

        2.   The school committee sees the operating budget (also known as the "shell" budget) for the first time at the preliminary budget adoption meeting in February.

            a.   Budget updates to the five-year capital plan are also presented.

        3.   The school committee adopts the final operating and capital budget at the conclusion of the public hearing in March.

            a.   At the conclusion of the public hearing, the school committee votes to approve the operating and capital budget with corresponding assessments.

    B.   The district's budget does not include formal revolving and grants budgets, and these represent a significant contribution to its operating revenue.

1. The district had combined revolving and grant revenues of $1,283, 205 in fiscal year 2013.

2. Of the $1 million in revolving account receipts, approximately $275,000 is from "lunch receipts" and approximately $364,000 is "other local receipts."

3. The business manager reports grant revenue totals to the school committee each spring and reports grant revenue totals and general expenses in the Annual Report.

4. The district does not include important financial information on its website.

Impact: Upon final adoption, the superintendent's budget becomes the school committee's budget. By not participating in the initial stages of the development of the annual budget, the school committee is not fulfilling its fiduciary responsibility. It loses the opportunity to play a more critical role in program development and resource allocation and may not be adequately representing the schools' constituents of students, parents, and the broader community. In addition, by not providing complete information on all components of the district's funding and operations, the district is not being transparent with all of its stakeholders.

Pathfinder RVTSD District Review Recommendations

Leadership and Governance

1. **The district should clarify and streamline responsibilities and lines of authority.**

   A. The district organizational chart should reflect balanced administrative responsibilities and clear lines of supervision.

      1. The district should consider revising the organizational chart so that all district-based personnel and the high school assistant superintendent/principal report to the superintendent.

      2. The district should consider having high school program directors should report to the assistant superintendent/principal.

      3. Systems and routines, such as the educator evaluation system and administrative meetings, should reflect clarified responsibilities and lines of supervision.

   Benefits: An organization with clear responsibilities balanced among administrators is likely to be more effective in accomplishing its goals. Clear direction and autonomous authority for the school assistant superintendent/principal will enable that individual to more directly bring about school improvement and raise student achievement.

2. **The district's improvement plans should clearly articulate S.M.A.R.T. goals.**

   A. The district should continue using the ESE Accelerated Improvement Plan (AIP) model as a guide for developing a multi-year district improvement plan and annual school improvement plan.

      1. The district should ensure wide participation and input into plan development.

      2. The plans should include the priorities of the superintendent and the school council.

   B. The plans should include goals that are S.M.A.R.T. (Specific and Strategic; Measureable; Action-Oriented; Rigorous, Realistic, and Results-Focused; and Timed and Tracked).

   C. District and school administrators should periodically report to the school committee, superintendent, school council, faculty, and general public on the progress toward attainment of plan goals.

Recommended resources:

- ESE's *Conditions for School Effectiveness* (http://www.doe.mass.edu/apa/ucd/CSE.pdf) identify the research-based practices that all schools, especially the state's most struggling schools, require to effectively meet the learning needs of all students. This tool also defines what each condition looks like when implemented purposefully and with fidelity.

- The *Conditions for School Effectiveness Self-Assessment* (http://www.doe.mass.edu/apa/ucd/CSESelf-Assesment.pdf) is a tool for conducting a scan of current practice, identifying areas of strength, and highlighting areas requiring greater focus.

- The *Conditions for School Effectiveness Research Guide* (http://www.doe.mass.edu/apa/framework/level4/ConditionResearchGuide.pdf) provides a thorough description of research that supports the Essential *Conditions* which can be used to consider the impact of decisions made to improve schools.

- ESE's *Planning for Success* tools (http://www.doe.mass.edu/research/success/) support the improvement planning process by spotlighting practices, characteristics, and behaviors that support effective planning and implementation and meet existing state requirements for improvement planning.

- *Focused Planning for Accelerating Student Learning* (http://www.doe.mass.edu/apa/sss/dsac/FocusedPlanning.pdf) provides guidance for Level 3 districts to accelerate achievement for all students through the development of a focused, actionable and sustainable Accelerated Improvement Plan (AIP).

- *District Accelerated Improvement Planning - Guiding Principles for Effective Benchmarks* (http://www.doe.mass.edu/apa/sss/turnaround/level4/AIP-GuidingPrinciples.pdf) provides information about different types of benchmarks to guide and measure district improvement efforts.

- *What Makes a Goal Smarter?* (http://www.doe.mass.edu/edeval/resources/presentations/SMARTGoals/Handout5.pdf) is a description of SMART goals with accompanying examples. The handout was designed to support educators in developing goals as part of the educator evaluation system, but could also be a useful reference for districts as they develop or refine their DIP and SIPs.

Benefits: An improvement plan with clear priorities will focus the efforts of all stakeholders, and administrators and teachers in particular, toward the improvement of student achievement.

Curriculum and Instruction

3. The district should identify leadership roles related to curriculum and should establish or strengthen systems for developing, aligning, revising, and monitoring curriculum.

A. The district should clearly define the role and responsibilities for the position of academic director. These should include, but may not be limited to:

1. Providing leadership to enable academic faculty to develop and continually improve a challenging curriculum aligned to 2011 Massachusetts Curriculum Frameworks;

2. Considering the use of a curriculum model such as Wiggins and McTighe's *Understanding by Design,* as used in ESE model curriculum;

3. Working with faculty to develop a balanced and comprehensive set of formative, benchmark and summative assessments which provide data to guide and inform decision making;

4. Participating in the school's professional development planning, implementation, and evaluation; and

5. Supporting the improvement, monitoring, and supervision of curriculum and instruction for both academic and vocational technical subjects. This may include targeted coaching or creating focused discussions of good practices using videos of exemplary teaching.

B. The district, under the leadership of the academic director and other district leaders, should ensure that all curricula are fully developed and aligned to the most recent state frameworks.

1. All districts were expected to align ELA and math curricula to the 2011 Massachusetts Curriculum Frameworks by the beginning of the 2013-2014 school year.

C. The district should provide support for, and monitoring of, curriculum implementation in order to ensure that teachers have the time and guidance they need to deliver curriculum effectively.

1. The district should continue to work with the DSAC team to identify ways to increase available common planning time and to ensure the effectiveness of teachers' collaboration.

Recommended resources:

- ESE's *Common Core State Standards Initiative* web page (http://www.doe.mass.edu/candi/commoncore/) includes links to several resources designed to support the transition to the 2011 Massachusetts Curriculum Frameworks, which incorporate the Common Core.

- *Model Curriculum Units* (http://www.youtube.com/playlist?list=PLTuqmiQ9ssqvx_Yjra4nBfqQPwc4auUBu) is a video series that shows examples of the implementation of Massachusetts' Model Curriculum Units.

- The *Model Curriculum Unit and Lesson Plan Template* (http://www.doe.mass.edu/candi/model/MCUtemplate.pdf) includes Understanding by Design elements. It could be useful for districts' and schools' curriculum development and revision.

- *Creating Curriculum Units at the Local Level* (http://www.doe.mass.edu/candi/model/mcu_guide.pdf) is a guidance document that can serve as a resource for professional study groups, as a reference for anyone wanting to engage in curriculum development, or simply as a way to gain a better understanding of the process used to develop Massachusetts' Model Curriculum Units.

- *Creating Model Curriculum Units* (http://www.youtube.com/playlist?list=PLTuqmiQ9ssquWrLjKc9h5h2cSpDVZqe6t) is a series of videos that captures the collaboration and deep thinking by curriculum design teams over the course of a full year as they worked to develop Massachusetts' Model Curriculum Units. The series includes videos about developing essential questions, establishing goals, creating embedded performance assessments, designing lesson plans, selecting high-quality materials, and evaluating the curriculum unit.

- ESE's *Quality Review Rubrics* (http://www.doe.mass.edu/candi/model/rubrics/) can support the analysis and improvement of curriculum units.

- *Curriculum Mapping: Raising the Rigor of Teaching and Learning* (http://www.doe.mass.edu/CandI/model/maps/CurriculumMaps.pdf) is a presentation that provides definitions of curriculum mapping, examples of model maps, and descriptions of curriculum mapping processes.

- Sample curriculum maps (http://www.doe.mass.edu/candi/model/maps/default.html) were designed to assist schools and districts with making sense of students' learning experiences over time, ensuring a viable and guaranteed curriculum, establishing learning targets, and aligning curriculum to ensure a consistent implementation of the MA Frameworks.

- *Mathematics Framework Exploration Activities* (http://www.doe.mass.edu/candi/commoncore/mathexplore/default.html) are a growing set of activities designed by the Department of Elementary and Secondary Education mathematics staff and educators. The activities can be accessed and used to promote discussion and collaborative inquiry.

- *Science and Technology/Engineering Concept and Skill Progressions* (http://www.doe.mass.edu/STEM/ste/default.html) articulate of possible ways for students to progress through levels of understanding of concepts.

- The *PLC Expansion Project* website (http://plcexpansionproject.weebly.com/) is designed to support schools and districts in their efforts to establish and sustain cultures that promote Professional Learning Communities.

Benefits: Careful attention to systems, roles and responsibilities related to curriculum will result in the following:

- Curriculum and assessment systems that are developed, managed, and regularly updated using a thoughtful cycle of review and revision;

- Monitoring and supervision of curriculum implementation;

- Academic professional development that is coordinated to school priorities and teaching and learning needs;

- Access for all students to the same high standards and high expectations as other Massachusetts high school students;

- Clear definitions, and supports for good teaching in all programs, both academic and vocational; and

- A school culture of excellence in which students are empowered to reach higher levels of educational achievement as they prepare for careers and post secondary education.

4. The district should establish and communicate a shared definition of instruction that emphasizes rigor, differentiation, and high expectations for students.

A. District leaders should use the classroom walkthrough model it has established to communicate a common definition of high-quality instruction.

1. All educators should be informed about the identified elements of effective instruction to ensure that they are aware of district expectations and can develop a common language about instruction.

2. The district should establish systems for ongoing sharing of feedback to staff about trends observed in walkthroughs.

3. The professional development committee (see Human Resources and Professional Development recommendation below) should use information from walkthroughs to inform professional development planning.

4. The district should provide embedded professional development, such as coaching and professional learning communities, to support teachers as they collaboratively reflect on and improve instruction.

B. The district's definition and explicit expectations for instruction should emphasize rigor to appropriately challenge all students, differentiation to meet students' diverse needs, and high expectations for students' responses and communication in the classroom.

Recommended resources:

- ESE's *Learning Walkthrough Implementation Guide*
  (http://www.doe.mass.edu/apa/dart/walk/ImplementationGuide.pdf) is a resource to support instructional leaders in establishing a *Learning Walkthrough* process in a school or district. It is designed to provide guidance to those working in an established culture of collaboration as well as those who are just beginning to observe classrooms and discuss teaching and learning in a focused and actionable manner.

  Appendix 4, *Characteristics of Standards-Based Teaching and Learning: Continuum of Practice (*http://www.doe.mass.edu/apa/dart/walk/04.0.pdf) is a framework that provides a common language or reference point for looking at teaching and learning.

- *Characteristics of a Standards-Based K-12 Science and Technology/Engineering Classroom* (http://www.doe.mass.edu/STEM/Standards-BasedClassroom.pdf) and *Characteristics of a Standards-Based Mathematics Classroom* (http://www.doe.mass.edu/STEM/news07/mathclass_char.pdf) are references for instructional planning and observation, intended to support activities that advance standards-based educational practice, including formal study, dialogue and discussion, classroom observations, and other professional development activities.

Benefits: By developing a common understanding of effective instruction, the district will establish expectations to guide continuous instructional improvement and will help to maximize the effectiveness of educators' collaborative work to improve instruction. A shared focus on specific instructional approaches will help the district to improve student achievement.

Assessment

5. **To foster a culture of inquiry and data use to improve instruction and learning, the district should establish a district data team, develop and administer formative or benchmark assessments for its academic courses, and ensure wide analysis and use of assessment results.**

   A. All academic courses should include high quality formative assessments.

      1. The district should establish benchmarks based on state and district standards that specify what students are expected to know and be able to do.

      2. The district should institute a plan to develop and administer periodic common assessments for academic courses that measure each student's progress toward the benchmarks and that provide useful information to inform curriculum and instruction.

      3. This process could help the district to identify or develop district-determined measures (DDMs) as part of its educator evaluation system.

   B. The district should establish a data team that assumes responsibility for the collection, dissemination, and analysis of summative and formative assessments.

1. Members of the data team would build districtwide understanding of the central role of assessment in the improvement of student achievement.

2. The team could oversee the use of data by developing data analysis plans and protocols, identifying trends in student data, and providing support for the use of data throughout the district.

3. The data team could oversee the development of action plans to address student instructional needs determined through analysis of assessment results and monitor progress in the improvement of student achievement districtwide.

C. Assessment results should be disseminated to and analyzed by those who work with the students who were assessed.

1. For example, since MCAS measures the results of the efforts of an entire district or school in improving the achievement of its students in English language arts, mathematics, and science, MCAS results should be disseminated to the entire staff (both academic and vocational) for analysis, and plans should be developed to guide a targeted response to the data.

2. Formative assessment results should be similarly disseminated analyzed.

D. Instructional plans resulting from the analysis of assessment results should be formulated in writing to facilitate tracking and monitoring of student progress.

1. Teachers should receive guidance and support as they modify their instruction to implement the plans.

2. The effectiveness of the re-teaching should be measured.

Recommended resources:

- *Massachusetts Transfer Goals* (http://www.doe.mass.edu/candi/model/MATransferGoals.pdf) are long-range goals that students should work toward over the course of their PK-12 academic experience. They were written to provide an explicit connection between the standards-based Model Curriculum Units and Massachusetts' definition of College and Career Readiness. They are not recommended for use as a checklist or evaluation or assessment tool, but they could be a helpful resource for districts as they articulate a vision and engage in long-term planning.

- ESE's *District Data Team Toolkit* (http://www.doe.mass.edu/apa/ucd/ddtt/toolkit.pdf) is a set of resources to help a district establish, grow, and maintain a culture of inquiry and data use through a District Data Team.

- ESE's *MCAS Student Work and Scoring Guides* web page (http://www.doe.mass.edu/mcas/student/) includes all released short-response questions, open-response questions and writing prompts that were included on the MCAS tests from the last five years; the scoring guides that accompany them; and samples of student work at each score point for each question. Taken together, the questions and

writing prompts, the scoring guides, and the corresponding student work provide a picture of the expectations for student performance on the MCAS tests.

- ESE's *District-Determined Measures (DDMs)* web page (http://www.doe.mass.edu/edeval/ddm/) includes a wealth of resources and information about the development and use of DDMs.

- *District-Determined Measures* (http://www.youtube.com/playlist?list=PLTuqmiQ9ssquEaIxpfpzD6qG9zxvPWl0c) is a series of videos featuring different aspects of the development and use of District-Determined Measures (DDMs).

Benefits: Implementing this recommendation will ensure a balanced assessment system and focused planning based on information about students' learning. It will help to build a districtwide culture of data use in which assessment results help educators to understand students' strengths and needs and design instruction to address these. In such a culture, all staff will assume responsibility for improving student achievement, and data will drive the district's continuous improvement.

Human Resources and Professional Development

6. **The district should create a professional development committee to lead the development of an annual professional development plan that is aligned with the SIP.**

   A. The professional development (PD) committee should have wide representation and should provide administrators with the input they need to develop a PD plan that is reflective of the district's goals and teachers' needs.

      1. The professional development committee should base its recommended PD plan on district goals and on the analysis of MCAS and other achievement data.

      2. The professional development committee should also aim to align professional development offerings with teachers' goals, provide accurate budgetary projections for anticipated activities, and seek alternate funding sources to support professional development efforts.

   B. The professional development plan should be aligned with the priorities outlined in the SIP.

Recommended resources:

- *The Massachusetts Standards for Professional Development* (http://www.doe.mass.edu/pd/standards.pdf) describe, identify, and characterize what high quality learning experiences should look like for educators.

- *PBS LearningMedia* (http://www.pbslearningmedia.org/) is a free digital media content library that provides relevant educational resources for PreK-12 teachers. The flexible platform includes high-quality content tied to national curriculum standards, as well as professional development courses.

- *Quick Reference Guide: Educator Evaluation & Professional Development* (http://www.doe.mass.edu/edeval/resources/QRG-ProfessionalDevelopment.pdf) describes how

educator evaluation and professional development can be used as mutually reinforcing systems to improve educator practice and student outcomes.

- *The Relationship between High Quality Professional Development and Educator Evaluation* (http://www.youtube.com/watch?v=R-aDxtEDncg&list=PLTuqmiQ9ssqt9EmOcWkDEHPKBqRvurebm&index=1) is a video presentation that includes examples from real districts.

- ESE's Mathematics Learning Community materials (http://www.doe.mass.edu/STEM/mlc/default.html) are designed to support job-embedded professional development for K-8 mathematics teachers. Their focus is to develop teachers' content knowledge through examining students' work in professional learning communities.

- *Classroom Connections* (http://www.doe.mass.edu/STEM/mlc/ClassConnections/) is a professional development (PD) curriculum that explores important mathematical content across the grade levels and provides teachers with the opportunity to examine written student work in order to identify evidence of the Standards for Mathematical Practice.

- The *Teacher Education Materials Project Database* (http://www.te-mat.org/default.aspx) is a website that was developed to support professional development providers as they design and implement programs for pre-service and in-service K - 12 mathematics and science teachers.

Benefits: By using a professional development committee to systematically plan PD, the district would encourage broader ownership for professional development. It would provide professional learning opportunities that target educators' and students' specific needs and reflect district goals and student achievement.

7. **To keep the district on track with the implementation of the new educator evaluation system, the review team recommends that steps be taken to ensure the ratification of the educator evaluation contract language.**

    A. Until the educator evaluation collective bargaining language is ratified, the district is in a situation of potential legal liability.

Benefits: When the district successfully ratifies its new educator evaluation contract language, it will be on sound legal ground for the implementation of the new system.

Financial and Asset Management

8. **To fulfill its fiduciary responsibility and trusteeship of the district, the school committee should play an integral role in all stages of the development of the district's operating and capital budgets. In addition, the district should provide more comprehensive and transparent information to its stakeholders.**

A. The school committee should review and approve a detailed budget calendar early in the budget development process that outlines the schedule for internal administration actions as well as public meetings and hearings that involve subcommittees and the full committee.

B. Included in the budget calendar should be meetings at which the school committee discusses and sets broad academic and vocational goals and objectives as well as financial parameters for budget development.

C. The school committee should consider re-establishing the finance subcommittee.

1. The finance subcommittee should hold regular public meetings with administrators beginning early in the budget process. The goal would be to inform all constituents of goals, objectives, opportunities, and concerns of administrators and the school committee.

   a. The finance subcommittee should consider holding more frequent meetings during the important months preceding budget approval.

   b. The finance subcommittee should serve to facilitate communication between administrators and the full school committee. The finance subcommittee should present reports and updates at the full school committee's monthly meeting.

   c. The finance subcommittee, working with administrators, should analyze recent and historical enrollment data to determine strategies for increasing and sustaining future student enrollment.

D. The district should prepare and review revenue and expense budgets for revolving and grants accounts with the school committee.

1. Because revolving accounts and grants represent approximately $1 million in additional revenue, the district should have a plan, in the form of budgets, on how these revenues will be used each year.

2. Although the school committee is not required to approve revolving and grants budgets, by reviewing the budgets with the school committee in a public meeting, the district will demonstrate its willingness to receive input and recommendations from its governing body.

E. The district should include more financial and operational information on its website.

1. The district should include current and historical information on its website such as the FY15 proposed budget, current year and historical budgets, five-year capital plans, MSBA Statement of Interest for roof replacement, financial audits, and annual reports.

Benefits: By implementing these recommendations, communication among all will be enhanced and the full and appropriate engagement of the school committee as it fulfills its fiduciary responsibilities will be encouraged and supported. Comprehensive budget documents and complete transparency in the financial operations of the district will establish accountability and integrity with the district's diverse constituents.

Appendix A: Review Team, Activities, Site Visit Schedule

Review Team Members

The review was conducted from February 10-13, 2014, by the following team of independent ESE consultants.

1. Dr. Wilfrid Savoie, leadership and governance

2. Dr. Linda Greyser, curriculum and instruction

3. Patricia Williams, assessment, review team coordinator

4. Dr. Williams Contreras, human resources and professional development

5. Maria Iglesias, student support

6. Marge Foster, financial and asset management

District Review Activities

The following activities were conducted during the review:

The team conducted interviews with the following financial personnel: business manager.

The team conducted interviews with the following members of the school committee: chair, vice-chair, town selectman.

The review team conducted interviews with the following representatives of the teachers' association: president, vice-president, secretary, treasurer, former president, members.

The team conducted interviews/focus groups with the following central office administrators: superintendent, assistant superintendent/assistant superintendent/principal, director of pupil services, vocational director, business manager.

The team visited the following school: Pathfinder Regional Vocational Technical High School (grades 9-12).

During school visits, the team conducted interviews with one assistant superintendent/principal and two focus groups with four academic teachers and three vocational teachers. The team observed 35 classes at the high school. The review team analyzed multiple data sets and reviewed numerous documents before and during the site visit, including:

o   Student and school performance data, including achievement and growth, enrollment, graduation, dropout, retention, suspension, and attendance rates.

o   Data on the district's staffing and finances.

o   Published educational reports on the district by ESE, the New England Association of Schools and Colleges (NEASC), and the former Office of Educational Quality and Accountability (EQA).

o   District documents such as district and school improvement plans, school committee policies, curriculum documents, summaries of student assessments, job descriptions, collective bargaining agreements, evaluation tools for staff, handbooks, school schedules, and the district's end-of-year financial reports.

o   All completed program and administrator evaluations, and a random selection of completed teacher evaluations.

Site Visit Schedule

Monday 02/10/2014	Tuesday 02/11/2014	Wednesday 02/12/2014	Thursday 02/13/2014
Orientation with district leaders and assistant superintendent/principal; interviews with district staff and assistant superintendent/principals; document reviews; interview with teachers' association..	Interviews with district staff and assistant superintendent/principal; review of personnel files; student focus group, teacher focus groups; parent focus group; and classroom observations at the high school.	Interviews with town or city personnel; interviews with school leaders; interviews with school committee members; classroom observations at high school; district review team meeting, emerging themes meeting with district leaders and assistant superintendent/principal.	Interviews with school leaders; follow-up interviews; district review team meeting; visits to Pathfinder Regional Vocational Technical High School for classroom observations; emerging themes meeting with district leaders and assistant superintendent/principals.

Appendix B: Enrollment, Performance, Expenditures

Table B1a: Pathfinder RVTSD

2013-2014 Student Enrollment by Race/Ethnicity

Student Group	District	Percent of Total	State	Percent of Total
African-American	1	0.2%	82990	8.7%
Asian	1	0.2%	58455	6.1%
Hispanic	23	3.8%	162647	17.0%
Native American	5	0.8%	2209	0.2%
White	563	92.1%	620628	64.9%
Native Hawaiian	--	--	1007	0.1%
Multi-Race, Non-Hispanic	18	2.9%	27803	2.9%
All Students	611	100.0%	955739	100.0%

Note: As of October 1, 2013

Table B1b: Pathfinder RVTSD

2013-2014 Student Enrollment by High Needs Populations

Student Groups	District			State		
	N	Percent of High Needs	Percent of District	N	Percent of High Needs	Percent of State
Students w/ disabilities	182	52.1%	29.8%	164336	34.8%	17.0%
Low Income	255	73.1%	41.7%	365885	77.5%	38.3%
ELLs and Former ELLs	--	--	--	75947	16.1%	7.9%
All high needs students	349	100.0%	57.1%	472001	100.0%	48.8%

Notes: As of October 1, 2013. District and state numbers and percentages for students with disabilities and high needs students are calculated including students in out-of-district placements. Total district enrollment including students in out-of-district placement is 611; total state enrollment including students in out-of-district placement is 966,360.

Table B2a: Pathfinder RVTSD

English Language Arts Performance, 2010-2013

Grade and Measure		Number Included (2013)	Spring MCAS Year					Gains and Declines	
			2010	2011	2012	2013	State 2013	4-Year Trend	2 Year Trend
10	CPI	149	87.8	92.7	93.8	95	96.9	7.2	1.2
	P+	149	56.0%	72.0%	81.0%	83.0%	91.0%	27.0%	2.0%
	SGP	131	37.5	47	40	49	57	11.5	9

Notes: The number of students included in CPI and percent *Proficient* or *Advanced* (P+) calculations may differ from the number of students included in median SGP calculations. A median SGP is not calculated for students in grade 3 because they are participating in MCAS tests for the first time.

Table B2b: Pathfinder RVTSD

Mathematics Performance, 2010-2013

Grade and Measure		Number Included (2013)	Spring MCAS Year					Gains and Declines	
			2010	2011	2012	2013	State 2013	4-Year Trend	2 Year Trend
10	CPI	148	87.2	88.3	86.6	86	90.2	-1.2	-0.6
	P+	148	68.0%	68.0%	71.0%	69.0%	80.0%	1.0%	-2.0%
	SGP	130	65	54	52	50.5	51	-14.5	-1.5

Notes: The number of students included in CPI and percent *Proficient* or *Advanced* (P+) calculations may differ from the number of students included in median SGP calculations. A median SGP is not calculated for students in grade 3 because they are participating in MCAS tests for the first time.

Table B2c: Pathfinder RVTSD

Science and Technology/Engineering Performance, 2010-2013

Grade and Measure		Number Included (2013)	Spring MCAS Year					Gains and Declines	
			2010	2011	2012	2013	State 2013	4-Year Trend	2 Year Trend
10	CPI	138	81	84.7	83.9	88.6	88	7.6	4.7
	P+	138	50.0%	62.0%	60.0%	71.0%	71.0%	21.0%	11.0%

Notes: P+ = percent *Proficient* or *Advanced*. Students participate in STE MCAS tests in grades 5, 8, and 10 only. Median SGPs are not calculated for STE.

Table B3a: Pathfinder RVTSD
English Language Arts (Grade 10)
Performance for Selected Subgroups Compared to State, 2010-2013

Group and Measure			Number Included (2013)	Spring MCAS Year				Gains and Declines	
				2010	2011	2012	2013	4 Year Trend	2-Year Trend
High Needs	District	CPI	86	85.4	89	90.2	91.9	6.5	1.7
		P+	86	47%	56%	71%	72%	25%	1%
		SGP	72	38	49.5	41	49	11	8
	State	CPI	29706	83.3	86.9	91	93.1	9.8	2.1
		P+	29706	57%	67%	75%	81%	24%	6%
		SGP	23937	45	46	46	54	9	8
Low Income	District	CPI	71	90.4	92.6	92.6	92.3	1.9	-0.3
		P+	71	57%	67%	77%	76%	19%	-1%
		SGP	60	38	47	40.5	44	6	3.5
	State	CPI	23066	84.1	87.4	91.3	93.5	9.4	2.2
		P+	23066	60%	69%	77%	82%	22%	5%
		SGP	18612	46	46	45	54	8	9
Students w/ disabilities	District	CPI	46	76.9	84.2	83.5	88	11.1	4.5
		P+	46	15%	37%	53%	59%	44%	6%
		SGP	35	33	49.5	43	57	24	14
	State	CPI	11091	75.7	80.2	85.8	88.4	12.7	2.6
		P+	11091	38%	50%	60%	66%	28%	6%
		SGP	8732	39	43	45	51	12	6
English language learners & Former ELLs	District	CPI	--	--	--	--	--	--	--
		P+	--	--	--	--	--	--	--
		SGP	--	--	--	--	--	--	--
	State	CPI	4045	65.9	69.7	77	81.8	15.9	4.8
		P+	4045	28%	37%	47%	58%	30%	11%
		SGP	2292	55	56	59	65	10	6
All students	District	CPI	149	87.8	92.7	93.8	95	7.2	1.2
		P+	149	56%	72%	81%	83%	27%	2%
		SGP	131	37.5	47	40	49	11.5	9
	State	CPI	68697	91.9	93.9	95.8	96.9	5	1.1
		P+	68697	78%	84%	88%	91%	13%	3%
		SGP	59914	50	50	50	57	7	7

Notes: The number of students included in CPI and percent *Proficient* or *Advanced* (P+) calculations may differ from the number of students included in median SGP calculation. State figures are provided for comparison purposes only and do not represent the standard that a particular group is expected to meet.

Table B3b: Pathfinder RVTSD
Mathematics (Grade 10)
Performance for Selected Subgroups Compared to State, 2010-2013

Group and Measure			Number Included (2013)	Spring MCAS Year				Gains and Declines	
				2010	2011	2012	2013	4 Year Trend	2-Year Trend
High Needs	District	CPI	85	81.9	85.3	80.3	81.5	-0.4	1.2
		P+	85	51%	59%	62%	59%	8%	-3%
		SGP	71	61	61	49	50	-11	1
	State	CPI	29807	77.8	79.1	80.4	80.3	2.5	-0.1
		P+	29807	54%	57%	59%	61%	7%	2%
		SGP	24202	47	48	48	45	-2	-3
Low Income	District	CPI	70	87.9	90.5	86.1	83.6	-4.3	-2.5
		P+	70	60%	71%	69%	64%	4%	-5%
		SGP	59	62.5	61	53	50	-12.5	-3
	State	CPI	23120	78.9	79.7	81.3	81.2	2.3	-0.1
		P+	23120	56%	59%	62%	63%	7%	1%
		SGP	18819	47	48	47	45	-2	-2
Students w/ disabilities	District	CPI	46	70.7	78.2	66	70.1	-0.6	4.1
		P+	46	24%	38%	36%	35%	11%	-1%
		SGP	35	56	59	46.5	45	-11	-1.5
	State	CPI	11188	69.4	70.1	71.4	70	0.6	-1.4
		P+	11188	36%	39%	41%	40%	4%	-1%
		SGP	8871	47	46	47	42	-5	-5
English language learners & Former ELLs	District	CPI	--	--	--	--	--	--	--
		P+	--	--	--	--	--	--	--
		SGP	--	--	--	--	--	--	--
	State	CPI	4097	64.5	66.2	67.5	64.4	-0.1	-3.1
		P+	4097	36%	40%	42%	39%	3%	-3%
		SGP	2350	55	59	59	45	-10	-14
All students	District	CPI	148	87.2	88.3	86.6	86	-1.2	-0.6
		P+	148	68%	68%	71%	69%	1%	-2%
		SGP	130	65	54	52	50.5	-14.5	-1.5
	State	CPI	68821	88.8	89.4	90	90.2	1.4	0.2
		P+	68821	75%	77%	78%	80%	5%	2%
		SGP	60270	50	50	50	51	1	1

Notes: The number of students included in CPI and percent *Proficient* or *Advanced* (P+) calculations may differ from the number of students included in median SGP calculation. State figures are provided for comparison purposes only and do not represent the standard that a particular group is expected to meet.

Table B3c: Pathfinder RVTSD
Science and Technology/Engineering (Grade 10)
Performance for Selected Subgroups Compared to State, 2010-2013

Group and Measure			Number Included (2013)	Spring MCAS Year				Gains and Declines	
				2010	2011	2012	2013	4 Year Trend	2-Year Trend
High Needs	District	CPI	78	76.5	76.7	77.7	85.3	8.8	7.6
		P+	78	40%	45%	48%	60%	20%	12%
	State	CPI	28592	71.7	73.9	76	77.7	6	1.7
		P+	28592	39%	43%	46%	49%	10%	3%
Low Income	District	CPI	64	80.2	84.1	80.6	86.3	6.1	5.7
		P+	64	43%	59%	55%	66%	23%	11%
	State	CPI	22133	71.8	73.9	76.2	78	6.2	1.8
		P+	22133	41%	44%	47%	50%	9%	3%
Students w/ disabilities	District	CPI	44	69.1	66.7	70.5	80.1	11	9.6
		P+	44	26%	24%	32%	45%	19%	13%
	State	CPI	10990	65.2	67.1	68.8	70.3	5.1	1.5
		P+	10990	27%	30%	32%	33%	6%	1%
English language learners & Former ELLs	District	CPI	--	--	--	--	--	--	--
		P+	--	--	--	--	--	--	--
	State	CPI	3514	55.8	59.3	61.8	63	7.2	1.2
		P+	3514	20%	23%	26%	27%	7%	1%
All students	District	CPI	138	81	84.7	83.9	88.6	7.6	4.7
		P+	138	50%	62%	60%	71%	21%	11%
	State	CPI	66693	84.6	85.7	87	88	3.4	1
		P+	66693	65%	67%	69%	71%	6%	2%

Notes: Median SGPs are not calculated for STE. State figures are provided for comparison purposes only and do not represent the standard that a particular group is expected to meet.

Table B4: Pathfinder RVTSD
Annual Grade 9-12 Dropout Rates, 2010-2013

	School Year Ending				Change 2010-2013		Change 2012-2013		State (2013)
	2010	2011	2012	2013	Percentage Points	Percent	Percentage Points	Percent	
All students	2.6	1.9	1.4	2.1	-0.5	-19.2%	0.7	50.0%	2.2

Notes: The annual dropout rate is calculated by dividing the number of students who drop out over a one-year period by the October 1 grade 9–12 enrollment, multiplied by 100. Dropouts are those students who dropped out of school between July 1 and June 30 of a given year and who did not return to school, graduate, or receive a GED by the following October 1. Dropout rates have been rounded; percent change is based on unrounded numbers.

Table B5a: Pathfinder RVTSD
Four-Year Cohort Graduation Rates, 2010-2013

Group	Number Included (2013)	School Year Ending				Change 2010-2013		Change 2012-2013		State (2013)
		2010	2011	2012	2013	Percentage Points	Percent Change	Percentage Points	Percent Change	
High needs	101	70.8%	81.4%	78.9%	81.2%	10.4	14.7%	2.3	2.9%	74.7%
Low income	77	71.1%	79.4%	74.6%	77.9%	6.8	9.6%	3.3	4.4%	73.6%
Students w/ disabilities	49	60.3%	74.5%	67.4%	75.5%	15.2	25.2%	8.1	12.0%	67.8%
English language learners & Former ELLs	--	--	--	--	--	--	--	--	--	63.5%
All students	168	78.9%	86.2%	81.0%	86.3%	7.4	9.4%	5.3	6.5%	85.0%

Notes: The four-year cohort graduation rate is calculated by dividing the number of students in a particular cohort who graduate in four years or less by the number of students in the cohort entering their freshman year four years earlier, minus transfers out and plus transfers in. Non-graduates include students still enrolled in high school, students who earned a GED or received a certificate of attainment rather than a diploma, and students who dropped out. Graduation rates have been rounded; percent change is based on unrounded numbers.

Table B5b: Pathfinder RVTSD
Five-Year Cohort Graduation Rates, 2009-2012

Group	Number Included (2012)	School Year Ending				Change 2009-2012		Change 2011-2012		State (2012)
		2009	2010	2011	2012	Percentage Points	Percent Change	Percentage Points	Percent Change	
High needs	90	71.0%	77.0%	89.5%	80.0%	9.0	12.7%	-9.5	-10.6%	78.9%
Low income	67	66.7%	77.1%	88.9%	76.1%	9.4	14.1%	-12.8	-14.4%	77.5%
Students w/ disabilities	46	62.3%	69.8%	84.3%	69.6%	7.3	11.7%	-14.7	-17.4%	73.8%
English language learners & Former ELLs	--	--	--	--	--	--	--	--	--	68.5%
All students	142	77.0%	84.6%	91.3%	83.1%	6.1	7.9%	-8.2	-9.0%	87.5%

Notes: The five-year cohort graduation rate is calculated by dividing the number of students in a particular cohort who graduate in five years or less by the number of students in the cohort entering their freshman year five years earlier, minus transfers out and plus transfers in. Non-graduates include students still enrolled in high school, students who earned a GED or received a certificate of attainment rather than a diploma, and students who dropped out. Graduation rates have been rounded; percent change is based on unrounded numbers. Graduation rates have been rounded; percent change is based on unrounded numbers.

Table B6: Pathfinder RVTSD

Attendance Rates, 2010-2013

Group	School Year Ending				Change 2010-2013		Change 2012-2013		State (2013)
	2010	2011	2012	2013	Percentage Points	Percent Change	Percentage Points	Percent Change	
All students	95.3%	95.7%	94.9%	95.3%	0.0	0.0%	0.4	0.4%	94.8%

Notes: The attendance rate is calculated by dividing the total number of days students attended school by the total number of days students were enrolled in a particular school year. A student's attendance rate is counted toward any district the student attended. In addition, district attendance rates included students who were out placed in public collaborative or private alternative schools/programs at public expense. Attendance rates have been rounded; percent change is based on unrounded numbers.

Table B7: Pathfinder RVTSD

Suspension Rates, 2010-2013

Group	School Year Ending				Change 2010-2013		Change 2012-2013		State (2013)
	2010	2011	2012	2013	Percentage Points	Percent Change	Percentage Points	Percent Change	
In-School Suspension Rate	9.8%	9.6%	7.9%	8.8%	-1.0	-10.2%	-0.9	-11.4%	2.2%
Out-of-School Suspension Rate	8.6%	9.0%	11.9%	9.2%	0.6	7.0%	-2.7	-22.7%	4.3%

Note: This table reflects information reported by school districts at the end of the school year indicated. Suspension rates have been rounded; percent change is based on unrounded numbers.

Table B8: Pathfinder RVTSD
Expenditures, Chapter 70 State Aid, and Net School Spending
Fiscal Years 2011–2013

	FY11		FY12		FY13	
	Estimated	Actual	Estimated	Actual	Estimated	Actual
Expenditures						
From school committee budget	$12,277,461	$11,816,309	$12,499,974	$12,185,218	$12,834,802	$12,156,517
From revolving funds and grants	---	$1,400,136	---	$1,236,925	---	$1,283,203
Total expenditures	---	$13,216,445	---	$13,422,143	---	$13,439,720
Chapter 70 aid to education program						
Chapter 70 state aid*	---	$4,773,477	---	$4,923,562	---	$5,305,602
Required local contribution	---	$3,193,516	---	$3,406,888	---	$3,742,148
Required net school spending**	---	$7,966,993	---	$8,330,450	---	$9,047,750
Actual net school spending	---	$9,760,286	---	$9,987,633	---	$10,377,058
Over/under required ($)	---	$1,793,293	---	$1,657,183	---	$1,329,308
Over/under required (%)	---	22.5	---	19.9	---	14.7

*Chapter 70 state aid funds are deposited in the local general fund and spent as local appropriations.

**Required net school spending is the total of Chapter 70 aid and required local contribution. Net school spending includes only expenditures from local appropriations, not revolving funds and grants. It includes expenditures for most administration, instruction, operations, and out-of-district tuitions. It does not include transportation, school lunches, debt, or capital.

Sources: FY11, FY12 District End-of-Year Reports; Chapter 70 Program information on ESE website.

Data retrieved September 8, 2014

Table B9: Pathfinder RVTSD
Expenditures Per In-District Pupil
Fiscal Years 2010-2012

Expenditure Category	2010	2011	2012	2013
Administration	$852	$859	$870	$943
Instructional leadership (district and school)	$1,432	$1,506	$1,361	$1,334
Teachers	$7,587	$7,968	$7,761	$7,961
Other teaching services	$514	$716	$694	$663
Professional development	$60	$58	$60	$76
Instructional materials, equipment and technology	$1,877	$1,438	$1,374	$1,116
Guidance, counseling and testing services	$556	$595	$595	$638
Pupil services	$1,997	$2,204	$2,098	$2,240
Operations and maintenance	$1,786	$1,951	$1,632	$1,711
Insurance, retirement and other fixed costs	$3,212	$3,450	$3,707	$3,963
Total expenditures per in-district pupil	$19,873	$20,744	$20,153	$20,646

Sources: Per-pupil expenditure reports on ESE website

Note: Any discrepancy between expenditures and total is because of rounding.

Appendix C: Instructional Inventory

WHOLE SCHOOL AND ACADEMIC AND VOCATIONAL BY "N" AND BY PERCENTAGE

LEARNING ENVIRONMENT	Evidence Type	None	Partial	Clear & Consistent	None	Partial	Clear & Consistent
		(0)	**(1)**	**(2)**	**(0)**	**(1)**	**(2)**
1. Tone of interactions between teacher and students and among students is positive and respectful.	**WHOLE SCH.**	2	1	32	6%	3%	91%
	ACADEMIC	2	1	15	11%	6%	83%
	VOCATIONAL	0	0	17	0%	0%	100%
2. Behavioral standards are clearly communicated and disruptions, if present, are managed effectively and equitably.	**WHOLE SCH.**	2	4	29	6%	11%	83%
	ACADEMIC	2	4	12	11%	22%	67%
	VOCATIONAL	0	0	17	0%	0%	100%
3. The physical arrangement of the classroom ensures a positive learning environment and provides all students with access to learning activities.	**WHOLE SCH.**	0	3	32	0%	9%	91%
	ACADEMIC	0	3	15	0%	17%	83%
	VOCATIONAL	0	0	17	0%	0%	100%
4. Classroom rituals and routines promote transitions with minimal loss of instructional time	**WHOLE SCH.**	6	6	23	17%	17%	66%
	ACADEMIC	5	4	9	28%	22%	50%
	VOCATIONAL	1	2	14	6%	12%	82%
5. Multiple resources are available to meet all students' diverse learning needs.	**WHOLE SCH.**	6	15	14	17%	43%	40%
	ACADEMIC	5	11	2	28%	61%	11%
	VOCATIONAL	1	4	12	6%	24%	71%

TEACHING	Evidence Type	None	Partial	Clear & Consistent	None	Partial	Clear & Consistent
		(0)	(1)	(2)	(0)	(1)	(2)
6. The teacher demonstrates knowledge of subject and content.	**WHOLE SCH.**	0	3	30	0%	9%	91%
	ACADEMIC	0	5	13	0%	28%	72%
	VOCATIONAL	0	0	17	0%	0%	100%
7. The teacher plans and implements a lesson that reflects rigor and high expectations.	**WHOLE SCH.**	11	12	12	31%	34%	34%
	ACADEMIC	10	7	1	56%	39%	6%
	VOCATIONAL	1	5	11	6%	29%	65%
8. The teacher communicates clear learning objective(s) aligned to 2011 Massachusetts Curriculum Frameworks. SEI/language objective(s) are included when applicable.	**WHOLE SCH.**	22	3	10	63%	9%	29%
	ACADEMIC	14	2	2	78%	11%	11%
	VOCATIONAL	8	1	8	47%	6%	47%
9. The teacher uses appropriate instructional strategies well matched to learning objective(s) and content.	**WHOLE SCH.**	12	14	9	34%	40%	26%
	ACADEMIC	10	6	2	56%	33%	11%
	VOCATIONAL	2	8	7	12%	47%	41%
10. The teacher uses appropriate modifications for ELL and SPED students such as explicit language objective(s); direct instruction in vocabulary; presentation of content at multiple levels of complexity; and, differentiation of content, process, and/or products.	**WHOLE SCH.**	26	3	6	74%	9%	17%
	ACADEMIC	12	2	4	67%	11%	22%
	VOCATIONAL	14	1	2	82%	6%	12%
11. The teacher provides multiple opportunities for students' to engage in higher order thinking such as use of inquiry, exploration, application, analysis, synthesis, and/or evaluation of knowledge or concepts (Bloom's Taxonomy).	**WHOLE SCH.**	14	8	13	40%	23%	37%
	ACADEMIC	9	5	4	50%	28%	22%
	VOCATIONAL	5	3	9	29%	18%	53%

TEACHING (continued)	Evidence Type	None	Partial	Clear & Consistent	None	Partial	Clear & Consistent
		(0)	(1)	(2)	(0)	(1)	(2)
12. The teacher uses questioning techniques that require thoughtful responses that demonstrate understanding.	**WHOLE SCH.**	9	14	7	30%	47%	23%
	ACADEMIC	7	8	3	39%	44%	17%
	VOCATIONAL	2	11	4	12%	65%	24%
13. The teacher implements teaching strategies that promote a learning environment where students can take risks such as make predictions, make judgments and investigate.	**WHOLE SCH.**	9	15	11	26%	43%	31%
	ACADEMIC	6	10	2	33%	56%	11%
	VOCATIONAL	3	5	9	18%	29%	53%
14. The teacher paces the lesson to match content and meet students' learning needs.	**WHOLE SCH.**	9	5	21	26%	14%	60%
	ACADEMIC	6	3	9	33%	17%	50%
	VOCATIONAL	3	2	12	18%	12%	71%
15. The teacher conducts frequent formative assessments to check for understanding and inform instruction.	**WHOLE SCH.**	11	8	16	31%	23%	46%
	ACADEMIC	8	5	5	44%	28%	28%
	VOCATIONAL	3	3	11	18%	18%	65%
16. The teacher makes use of available technology to support instruction and enhance learning.	**WHOLE SCH.**	11	7	17	31%	20%	49%
	ACADEMIC	6	5	7	33%	28%	39%
	VOCATIONAL	5	2	10	29%	12%	59%

LEARNING	Evidence Type	None	Partial	Clear & Consistent	None	Partial	Clear & Consistent
		(0)	(1)	(2)	(0)	(1)	(2)
17. Students are engaged in challenging academic tasks.	**WHOLE SCH.**	8	14	13	23%	40%	37%
	ACADEMIC	6	8	4	33%	44%	22%
	VOCATIONAL	2	6	9	12%	35%	53%
18. Students articulate their thinking orally or in writing.	**WHOLE SCH.**	7	17	11	20%	49%	31%
	ACADEMIC	5	10	3	28%	56%	17%
	VOCATIONAL	2	7	8	12%	1%	47%
19. Students inquire, explore, apply, analyze, synthesize and/or evaluate knowledge or concepts (Bloom's Taxonomy).	**WHOLE SCH.**	16	9	10	46%	26%	29%
	ACADEMIC	11	5	2	61%	28%	11%
	VOCATIONAL	5	4	8	29%	24%	47%
20. Students elaborate about content and ideas when responding to questions.	**WHOLE SCH.**	16	13	6	46%	37%	17%
	ACADEMIC	11	6	1	61%	33%	6%
	VOCATIONAL	5	7	5	29%	41%	29%
21. Students make connections to prior knowledge, or real world experiences, or can apply knowledge and understanding to other subjects.	**WHOLE SCH.**	9	8	18	26%	23%	51%
	ACADEMIC	8	4	6	44%	22%	33%
	VOCATIONAL	1	4	12	6%	24%	71%
22. Students use technology as a tool for learning and/or understanding.	**WHOLE SCH.**	14	6	15	40%	17%	43%
	ACADEMIC	9	5	4	50%	28%	22%
	VOCATIONAL	5	1	11	29%	6%	65%
23. Students assume responsibility for their own learning whether individually, in pairs, or in groups.	**WHOLE SCH.**	8	8	19	23%	23%	54%
	ACADEMIC	6	5	7	33%	28%	39%
	VOCATIONAL	2	3	12	12%	28%	71%
24. Student work demonstrates high quality and can serve as exemplars.	**WHOLE SCH.**	23	3	9	66%	9%	26%
	ACADEMIC	16	2	0	89%	11%	0%
	VOCATIONAL	7	1	9	41%	6%	53%