Targeted District Review Report

Frontier Regional School District

Review conducted March 7-9, 2016

Center for District and School Accountability

Massachusetts Department of Elementary and Secondary Education

**Organization of this Report**

[Executive Summary 1](#_Toc453678592)

[Frontier Regional Targeted District Review Overview 3](#_Toc453678593)

[Curriculum and Instruction 11](#_Toc453678594)

[Assessment 29](#_Toc453678595)

[Student Support 33](#_Toc453678596)

[Appendix A: Review Team, Activities, Schedule, Site Visit 42](#_Toc453678597)

[Appendix B: Enrollment, Performance, Expenditures 44](#_Toc453678598)

[Appendix C: Instructional Inventory 54](#_Toc453678599)

**Massachusetts Department of Elementary and Secondary Education**

75 Pleasant Street, Malden, MA 02148-4906

Phone 781-338-3000 TTY: N.E.T. Replay 800-439-2370

[www.doe.mass.edu](http://www.doe.mass.edu)



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

Mitchell D. Chester, Ed.D.

Commissioner

**Published July 2016**

The Massachusetts Department of Elementary and Secondary Education, an affirmative action employer, is committed to ensuring that all of its programs and facilities are accessible to all members of the public. We do not discriminate on the basis of age, color, disability, national origin, race, religion, sex, gender identity, or sexual orientation. Inquiries regarding the Department’s compliance with Title IX and other civil rights laws may be directed to the Human Resources Director, 75 Pleasant St., Malden, MA 02148-4906. Phone: 781-338-6105.

© 2016 Massachusetts Department of Elementary and Secondary Education

*Permission is hereby granted to copy any or all parts of this document for non-commercial educational purposes. Please credit the “Massachusetts Department of Elementary and Secondary Education.”*

This document printed on recycled paper

Massachusetts Department of Elementary and Secondary Education

75 Pleasant Street, Malden, MA 02148-4906

Phone 781-338-3000 TTY: N.E.T. Relay 800-439-2370

[www.doe.mass.edu](http://www.doe.mass.edu)



Executive Summary

**Strengths**

In 2015, the director of secondary education and the director of elementary education for the associated Union #38 schools created a Curriculum Management Plan to address curricular issues raised in an external audit commissioned by the superintendent and in the 2010 Report of the Visiting Committee of the New England Association of Schools and Colleges (NEASC). Teachers have begun to use the Atlas Rubicon as a tool to continue developing curriculum.

Teachers have time to collaborate in several ways. The school has a somewhat unique professional development calendar that provides teachers with 30 early-release Fridays to work collaboratively on curriculum and instructional tasks. Some additional common planning and meeting time is in place; grades 7 and 8 teachers meet twice weekly in team meetings and all teachers meet monthly in department meetings.

The school has identified a number of District-Determined Measures (DDMs) of student learning. The school enjoys a welcoming and respectful school climate. There is trust among stakeholders, including a positive relationship among school committee members, teachers’ association members, and school leaders.

**Challenges and Areas for Growth**

Although the school is using the Atlas Rubicon system for documenting curriculum, the maps are incomplete and inconsistent in quality. The purpose and use of curriculum maps has not been established by school leaders and expectations have not been set on how they are to be used to guide instruction. Some teachers indicated that the curriculum maps were for recording post-instruction, and not as starting points for their daily instruction. Coupled with limited use of formative assessments, teachers do not have the information they need to improve curriculum and instruction.

Students’ learning experiences vary throughout the school. Instructional leadership is diffuse, resulting in varying views about what constitutes high-quality instruction that leads to improved learning. Leaders and teachers do not have a common understanding of what constitutes effective instruction. Also, in observed classrooms, students were not consistently involved in taking responsibility for their learning or engaged in tasks that promoted critical thinking. Although interviews and a document review indicated that in the 2015-2016 school year professional development has focused on differentiation, differentiation was not routinely observed by the team.

Data analysis rests in the hands of school leaders, without involvement of classroom teachers. There are no structures in place to involve teachers in schoolwide and classroom data analysis and there has been no recent training for teachers on the use of data to improve instruction and learning. The school does not regularly use data to inform its curricular decisions or to evaluate programs. It has not analyzed the performance of its largest subgroup, students with disabilities, to better understand the causes for their proficiency gap.

The school does not have an effective process for regularly monitoring student performance and providing tiered support in general education classrooms. There is limited mainstream instruction with accommodations and insufficient training in differentiation. Identification of students for special services is high. The school’s block schedule does not provide flexible time for intervention. Students with disabilities are frequently scheduled for an entire block every day when they might benefit from shorter blocks for services, flexible assignments to those blocks, or alternating days that would allow students more access to general education. This means that for some students skills courses take up a substantial part of the day, resulting in lower rates of full inclusion In addition, a number of students participat~~e~~ in “Academy” classes with a streamlined general curriculum, a form of sub-separate education with enrollment limited almost exclusively to students with disabilities.

**Recommendations**

To improve teaching and learning the school should: establish common expectations for curriculum alignment, documentation, and implementation; and set clear and consistent expectations for research-based instructional practices that include clear learning objectives, active student engagement to build critical-thinking skills, and the use of formative assessments for effective differentiation.

To improve instruction and learning and to evaluate the effectiveness of programs, the school should cultivate a data-driven culture where instruction is guided by student performance, student progress is monitored through daily formative assessments, and program effectiveness is based on the impact on student learning.Communication of student achievement should become routine to all stakeholders so that all can make effective decisions about the use of resources.

The school should implement a Response to Intervention (RtI) approach to better meet the needs of all students, including those with disabilities. The use of data to monitor students’ progress should be integrated into all phases of instruction to more quickly identify students in need of intervention, and to help teachers differentiate instruction to better meet students’ learning needs within the classroom. The school should eliminate its Academy classes or at least ensure that they are part of a continuum of services and that they reflect a true inclusion approach to learning for students with disabilities.

Frontier Regional Targeted District Review Overview

Purpose

Conducted under Chapter 15, Section 55A of the Massachusetts General Laws, targeted district reviews support local school districts in establishing or strengthening a cycle of continuous improvement. Reviews consider carefully the effectiveness of systemwide functions, with reference to three district standards used by the Department of Elementary and Secondary Education (ESE). Targeted reviews address one of the following sets of three standards: **Governance and Administrative Systems** (Leadership and Governance, Human Resources and Professional Development, and Financial and Asset Management standards) or **Student-Centered Systems** (Curriculum and Instruction, Assessment, and Student Support standards). A targeted review identifies systems and practices that may be impeding improvement as well as those most likely to be contributing to positive results. In addition, the targeted district reviews is designed to promote district reflection on its own performance and potential next steps.

Districts whose performance level places them in Level 2 of ESE’s framework for district accountability and assistance will typically participate in a targeted district review (Level 3 and Level 4 districts typically receive a comprehensive review). Other relevant factors are taken into consideration when determining if a district will participate in a targeted or comprehensive review.

Methodology

Reviews collect evidence for each of the three district standards identified as the focus of the targeted review. Team members also observe classroom instructional practice. A district review team consisting of independent consultants with expertise in the district standards reviews documentation, data, and reports for two days before conducting a three-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. Subsequent to the onsite review, the team meets for two days to develop findings and recommendations before submitting a draft report to ESE.

Site Visit

The site visit to the Frontier Regional School was conducted from March 7-9, 2016. The site visit included 17 hours of interviews and focus groups with approximately 40 stakeholders, including school committee members, district administrators, school staff, students, parents, and teachers’ association representatives. The assistant principal was not available for interviews during the site visit. The review team conducted 2 focus groups with 12 teachers at the middle-school level, and 4 teachers at the high-school level.

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 the 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**

Frontier Regional School serves students in grades 7 through 12 from the towns of Conway, Deerfield, Sunderland, and Whately (Union #38 School District). There are 11 school committee members, 4 of whom also serve on their town school committees. The chair of the school committee is elected and the committee meets monthly.

The current superintendent has been in the position since 2013; before becoming superintendent she served as principal at the high-school level for 12 years. The leadership team includes the principal, the assistant principal, the director of secondary education, the director of guidance, and the special education team leader. As needed, the director of special education participates though her major responsibilities are at the elementary level among the schools in Union #38. Leadership positions have been stable in number over the past several years. The school has one principal. The director of secondary education participates in the teacher evaluation process. In 2014-2015, there were 53 classroom teachers at FRS.

In the 2015-2016 school year, 613 students in grades 7-12 were enrolled in the school.

Between 2012 and 2016 overall student enrollment decreased by 13.3 percent. Enrollment figures by race/ethnicity and high needs populations (i.e., students with disabilities, economically disadvantaged students, 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 higher than the median in-district per pupil expenditures for 6 secondary schools of similar size (less than 1,000 students) in fiscal year 2014: $16,661 as compared with $15,813 (see [District Analysis and Review Tool Detail: Staffing and Finance](http://www.mass.gov/edu/government/departments-and-boards/ese/programs/accountability/tools-and-resources/district-analysis-review-and-assistance/dart-for-districts-and-dart-for-schools.html)). Actual net school spending has been well above what is required by the Chapter 70 state education aid program, as shown in Table B6 in Appendix B.

Student Performance

**District and Subgroup Results**

**Frontier Regional is a Level 2 district for not meeting its gap narrowing targets for all students and high needs students.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 2: Frontier Regional Public School District**  **District and School PPI, Percentile, and Level 2012–2015** | | | | | | | | |
| **School** | **Group** | **Annual PPI** | | | | **Cumulative PPI** | **School**  **Percentile** | **Accounta-bility**  **Level** |
| **2012** | **2013** | **2014** | **2015** |
| MSHS:  Frontier Regional | All | 82 | 61 | 43 | 57 | 56 | 36 | 2 |
| High Needs | 54 | 43 | 32 | 64 | 49 |

**The district did not reach its 2015 Composite Performance Index (CPI) targets in ELA, math, and science for all students, high needs students, and students with disabilities.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 3: Frontier Regional Public School District**  **2015 CPI and Targets by Subgroup** | | | | | | | | | |
|  | **ELA** | | | **Math** | | | **Science** | | |
| **Group** | **2015 CPI** | **2015 Target** | **Rating** | **2015 CPI** | **2015 Target** | **Rating** | **2015 CPI** | **2015 Target** | **Rating** |
| All students | 92.4 | 95.1 | Improved Below Target | 81.9 | 84.5 | Improved Below Target | 80.2 | 86.1 | Declined |
| High Needs | 83.2 | 89.4 | Improved Below Target | 65.6 | 75.6 | Improved Below Target | 69.6 | 81.7 | Declined |
| Economically Disadvantaged[[1]](#footnote-1) | 87.3 | -- | -- | 71.3 | -- | -- | 68.5 | -- | -- |
| ELLs | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Students with disabilities | 76.3 | 84.0 | Improved Below Target | 54.3 | 70.1 | Improved Below Target | 63.3 | 81.5 | No Change |

**Students’ growth in ELA and math was moderate compared to their academic peers statewide for all students, high needs students, and students with disabilities.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 4: Frontier Regional Public School District**  **2015 Median ELA and Math SGP by Subgroup** | | | | | | |
| **Group** | **Median ELA SGP** | | | **Median Math SGP** | | |
| **District** | **State** | **Growth Level** | **District** | **State** | **Growth Level** |
| All students | 45.5 | 50.0 | Moderate | 48.0 | 50.0 | Moderate |
| High Needs | 47.0 | 47.0 | Moderate | 47.0 | 46.0 | Moderate |
| Econ. Disadv. | -- | -- | -- | -- | -- | -- |
| ELLs | -- | 53.0 | -- | -- | 51.0 | -- |
| SWD | 41.5 | 43.0 | Moderate | 47.0 | 43.0 | Moderate |

**Frontier’s out-of- school and in-school suspension rates were lower than the state rate for all students and high needs students. The out of-school suspension rate for high needs students was one quarter of the state rate and the in-school suspension rate for high needs students was about one half the state rate.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 5: Frontier Regional Public School District**  **Out-of-School and In-School Suspensions by Subgroup 2013–2015** | | | | | |
| **Group** | **Type of Suspension** | **2013** | **2014** | **2015** | **State 2015** |
| High Needs | OSS | 5.1% | 7.4% | 1.0% | 4.8% |
| ISS | 0.5% | 3.3% | 1.4% | 2.7% |
| Economically disadvantaged\* | OSS | 5.4% | 8.2% | -- | 5.4% |
| ISS | 0.7% | 2.0% | -- | 2.9% |
| Students with disabilities | OSS | 6.7% | 10.5% | 3.1% | 6.1% |
| ISS | 0.8% | 4.8% | 5.3% | 3.4% |
| ELLs | OSS | -- | -- | -- | 3.8% |
| ISS | -- | -- | -- | 1.8% |
| All Students | OSS | 2.6% | 3.2% | 1.0% | 2.9% |
| ISS | 0.2% | 1.3% | 1.4% | 1.8% |

\*Low income students’ suspensions used for 2013 and 2014

**Between 2012 and 2015 Frontier’s four-year cohort graduation rate improved by 7.8 percentage points for all students, by 12.9 percentage points for high needs students, by 23.7 percentage points for low income students, and by 5.4 percentage point for students with disabilities. Frontier reached the four-year cohort graduation target for all students, high needs students, and low income students.[[2]](#footnote-2)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 6: Frontier Regional Public School District**  **Four-Year Cohort Graduation Rates 2012-2015** | | | | | | | | | | |
| **Group** | **Number Included (2015)** | **Cohort Year Ending** | | | | **Change 2012-2015** | | **Change 2014-2015** | | **State (2015)** |
| **2012** | **2013** | **2014** | **2015** | **Percentage Points** | **Percent Change** | **Percentage Points** | **Percent Change** |
| High needs | 36 | 73.2% | 75.7% | 79.4% | 86.1% | 12.9 | 17.6% | 6.7 | 8.4% | 78.5% |
| Low income | 29 | 62.5% | 76.2% | 77.4% | 86.2% | 23.7 | 37.9% | 8.8 | 11.4% | 78.2% |
| SWD | 19 | 68.3% | 73.9% | 69.2% | 73.7% | 5.4 | 7.9% | 4.5 | 6.5% | 69.9% |
| ELLs | -- | -- | -- | -- | -- | -- | -- | -- | -- | 64.0% |
| All students | 97 | 85.0% | 89.3% | 91.9% | 92.8% | 7.8 | 9.2% | 0.9 | 1.0% | 87.3% |

**Between 2011 and 2014 Frontier’s five-year cohort graduation rate improved by 1.7 percentage points for all students and by 4.9 to 9.8 percentage points for high needs students, low income students, and students with disabilities. Frontier reach the five-year cohort graduation target for all students.[[3]](#footnote-3)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 7: Frontier Regional Public School District**  **Five-Year Cohort Graduation Rates 2011-2014** | | | | | | | | | | |
| Group | Number Included (2014) | Cohort Year Ending | | | | Change 2011-2014 | | Change 2013-2014 | | State (2014) |
| 2011 | 2012 | 2013 | 2014 | Percentage Points | Percent Change | Percentage Points | Percent Change |
| High needs | 34 | 75.7% | 76.8% | 81.1% | 82.4% | 6.7 | 8.9% | 1.3 | 1.6% | 80.3% |
| Low income | 31 | 70.8% | 68.8% | 81.0% | 80.6% | 9.8 | 13.8% | -0.4 | -0.5% | 79.6% |
| SWD | 13 | 72.0% | 73.2% | 82.6% | 76.9% | 4.9 | 6.8% | -5.7 | -6.9% | 73.5% |
| ELLs | -- | -- | -- | -- | -- | -- | -- | -- | -- | 69.8% |
| All students | 99 | 91.2% | 86.6% | 91.3% | 92.9% | 1.7 | 1.9% | 1.6 | 1.8% | 88.5% |

**In 2015 Frontier’s dropout rate was lower than the state rate for all students and high needs students and higher for economically disadvantaged students and students with disabilities.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 8: Frontier Regional Public School District**  **Dropout Rates by Subgroup 2012–2015[[4]](#footnote-4)** | | | | | |
|  | **2012** | **2013** | **2014** | **2015** | **State 2015** |
| High Needs | 4.8% | 3.9% | 3.3% | 3.1% | 3.4% |
| Econ. Disad. | 6.4% | 4.7% | 4.6% | 4.4% | 3.3% |
| SWD | 4.1% | 4.5% | 1.6% | 4.9% | 3.5% |
| ELLs | -- | -- | -- | -- | 5.7% |
| All students | 1.9% | 2.0% | 1.5% | 1.1% | 1.9% |

**Grade and School Results**

**Between 2012 and 2015 ELA proficiency rates declined in the district as a whole and in each tested grade.**

* ELA proficiency in the district as a whole declined 8 percentage points, from 86 percent in 2012 to 78 percent in 2015.
  + Between 2012 and 2015 LA proficiency rates declined by 11 percentage points in the 7th grade, by 7 percentage points in the 8th grade, and by 1 percentage point in the 10th grade.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 9: Frontier Regional Public School District**  **ELA Percent Proficient or Advanced by Grade 2012–2015** | | | | | | | | |
| **Grade** | **Number** | **2012** | **2013** | **2014** | **2015** | **State** | **4-Year Trend** | **2-Year Trend** |
| 7 | 116 | 78% | 74% | 63% | 67% | 70% | -11% | 4% |
| 8 | 111 | 85% | 79% | 79% | 78% | 80% | -7% | -1% |
| 10 | 89 | 94% | 94% | 92% | 93% | 91% | -1% | 1% |
| All | 316 | 86% | 82% | 78% | 78% | -- | -8% | 0% |

**In 2015 ELA proficiency rates at Frontier Regional were below the state rate in the 7th and 8th grade by 3 and 2 percentage points, respectively and above the state rate in the 10th grade by 2 percentage points.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 10: Frontier Regional Public School District**  **ELA Percent Proficient or Advanced by School and Grade 2014-2015** | | | | | | | | |
| **School** | **3** | **4** | **5** | **6** | **7** | **8** | **10** | **Total** |
| MS/HS: Frontier Regional | -- | -- | -- | -- | 67% | 78% | 93% | 78% |
| District Total | -- | -- | -- | -- | 67% | 78% | 93% | 78% |
| State | 60% | 53% | 71% | 71% | 70% | 80% | 91% | -- |

**Between 2012 and 2015 ELA proficiency rates declined by 8 percentage points for all students and by 6 percentage points for high needs students.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 11: Frontier Regional Public School District**  **ELA Percent Proficient or Advanced by School and Subgroup 2012-2015** | | | | | |
|  | **2012** | **2013** | **2014** | **2015** | **3- or 4-Year Trend** |
| MS/HS: Frontier Regional | 86% | 82% | 78% | 78% | -8 |
| High Needs | 62% | 54% | 49% | 56% | -6 |
| Economically disadvantaged | -- | -- | -- | 67% | -- |
| ELL and former ELL | -- | -- | -- | -- | -- |
| Students with disabilities | 39% | 33% | 30% | 38% | -1 |

**Between 2012 and 2015 math proficiency rates improved by 3 percentage points in the district as a whole and by 12 percentage points in the 8th grade.**

* Between 2012 and 2015 math proficiency rates did not improve in the 7th and 10th grades.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 12: Frontier Regional Public School District**  **Math Percent Proficient or Advanced by Grade 2012-2015** | | | | | | | | |
| **Grade** | **Number** | **2012** | **2013** | **2014** | **2015** | **State** | **4-Year Trend** | **2-Year Trend** |
| 7 | 116 | 52% | 47% | 46% | 51% | 51% | -1% | 5% |
| 8 | 112 | 39% | 44% | 33% | 51% | 60% | 12% | 18% |
| 10 | 89 | 88% | 93% | 85% | 88% | 79% | 0% | 3% |
| All | 317 | 58% | 60% | 54% | 61% | 0% | 3% | 7% |

**In 2015 math proficiency rates were above the state rate by 9 percentage points in the 10th grade, equal to the state rate in the 7th grade, and below the state rate by 9 percentage points in the 8th grade.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 13: Frontier Regional Public School District**  **Math Percent Proficient or Advanced by School and Grade 2014-2015** | | | | | | | | |
| **School** | **3** | **4** | **5** | **6** | **7** | **8** | **10** | **Total** |
| MS/HS: Frontier Regional | -- | -- | -- | -- | 51% | 51% | 88% | 61% |
| District Total | -- | -- | -- | -- | 51% | 51% | 88% | 61% |
| State | 70% | 47% | 67% | 62% | 51% | 60% | 79% | -- |

**Between 2012 and 2015 math proficiency rates improved by 3 percentage points in the district as a whole and for high needs students and by 6 percentage points for students with disabilities.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 14: Frontier Regional Public School District**  **Math Percent Proficient or Advanced by School and Subgroup 2012-2015** | | | | | |
|  | **2012** | **2013** | **2014** | **2015** | **3- or 4-Year Trend** |
| MS/HS: Frontier Regional | 58% | 60% | 54% | 61% | 3 |
| High Needs | 31% | 38% | 33% | 34% | 3 |
| Economically disadvantaged | -- | -- | -- | 43% | -- |
| ELL and former ELL | -- | -- | -- | -- | -- |
| Students with disabilities | 11% | 22% | 11% | 17% | 6 |

**Between 2012 and 2015 science proficiency rates declined by 5 percentage points in the district as a whole and by 11 percentage points in the 8th grade, and improved by 3 percentage points in the 10th grade.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 15: Frontier Regional Public School District**  **Science Percent Proficient or Advanced by Grade 2012-2015** | | | | | | | | |
| **Grade** | **Number** | **2012** | **2013** | **2014** | **2015** | **State** | **4-Year Trend** | **2-Year Trend** |
| 8 | 112 | 38% | 25% | 31% | 27% | 42% | -11% | -4% |
| 10 | 85 | 86% | 88% | 84% | 89% | 72% | 3% | 5% |
| All | 197 | 59% | 54% | 56% | 54% | 54% | -5% | -2% |

**In 2015 science proficiency rates were 17 percentage points above the state rate in the 10th grade and 15 percentage points below the state rate in the 8th grade.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 16: Frontier Regional Public School District**  **Science Percent Proficient or Advanced by School and Grade 2014-2015** | | | | | | | | |
| **School** | **3** | **4** | **5** | **6** | **7** | **8** | **10** | **Total** |
| MS/HS: Frontier Regional | -- | -- | -- | -- | -- | 27% | 89% | 54% |
| District Total | -- | -- | -- | -- | -- | 27% | 89% | 54% |
| State | -- | -- | 51% | -- | -- | 42% | 72% | 54% |

**Between 2012 and 2015 science proficiency rates improved by 8 percentage points for students with disabilities and by 1 percentage point for high needs students and declined by 5 percentage points for the district as a whole.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 17: Frontier Regional Public School District**  **Science Proficient or Advanced by School and Subgroup 2012–2015** | | | | | |
|  | **2012** | **2013** | **2014** | **2015** | **3- or 4-Year Trend** |
| MS/HS: Frontier Regional | 59% | 53% | 56% | 54% | -5 |
| High Needs | 32% | 35% | 35% | 33% | 1 |
| Economically disadvantaged | -- | -- | -- | 36% | -- |
| ELL and former ELL | -- | -- | -- | -- | -- |
| Students with disabilities | 12% | 27% | 18% | 20% | 8 |

Curriculum and Instruction

Contextual Background

*Curriculum*

Until 2015-2016, there was limited time available for the school for professional development or curriculum development. In the 2015-2016 school year, the school introduced “professional development Fridays,” 30 early-release Fridays which provide 90 minutes for professional development, curriculum development, and common planning.

The school has recently introduced a curriculum mapping tool. However, curriculum maps are not consistently documented or used throughout the school; the school has not provided training to staff on developing the components of high-quality curriculum maps. The school’s leaders have not established a process to ensure that the written curriculum and the taught curriculum are aligned, or a process to monitor the effectiveness of the curriculum in improving student achievement. Similarly, the school has not conducted a regular and timely review and revision of curricula based on valid research. Although teachers have been working on curriculum documentation during the 2015-2016 school year, the school has not provided training to staff on the purpose, development, and use of the essential elements of curricula and guides for a number of years.

The review team found that at the time of the onsite the school had implemented few curricular recommendations in the 2010 Report of the Visiting Committee of the New England Association of Schools and Colleges (NEASC). The school is in the elementary stages of responding to similar recommendations made in a comprehensive report commissioned by the superintendent in 2015.

In 2015, the director of secondary education, in collaboration with the director of elementary education for associated Union #38 schools, developed a Curriculum Management Plan to address vertical and horizontal alignment and other curricular topics including a curriculum review cycle for grades 7-12.

*Instruction*

While the school provides students with safe and respectful learning environment, it faces challenges with regard to instruction. There is not a shared understanding in the district about what constitutes good instruction. Also, with the exception of student engagement and differentiated instruction, instructional expectations identified by teachers and school leaders were inconsistent and did not include research-based practices such as providing and referring to learning objectives in lessons. In addition, the school has not set schoolwide expectations for effective, research-based instruction. Overall data from classroom observations suggest that the school does not have a common understanding of high-quality, research based instructional practices. Teachers do not have a fully explicated curriculum that includes a detailed learning plan for units when planning for instruction.

During the 2015-2016 school year, differentiated instruction has been a major focus in professional development. Nevertheless, data from the review team’s classroom observations indicated that teachers are not consistently differentiating their instruction and formative assessment practices to drive differentiation vary widely between levels. Without consistently linking formative assessments to differentiation, the school will continue to struggle to effectively meet the needs of diverse learners.

Teachers have time to collaborate in several ways. Teachers in grades 7 and 8 meet twice weekly in team meetings; all teachers in grades 7-12 meet in monthly department meetings. With 30 early-release professional development days added during the 2015-2016 school year, teachers have more opportunities to collaborate and to plan for instruction. With this additional time for collaboration, the school is in a position to systematically and thoroughly establish effective instructional practices.

*Summary of Observed Instruction*

The team observed 35 classes throughout the school: 22 in grades 9-12, and 13 in grades 7-8. The team observed 9 ELA classes, 11 mathematics classes, 9 science classes, and 6 classes in other subject areas. Among the classes observed were two 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.

In observed lessons, the school has provided students with a safe and respectful learning environment. Classroom climate was characterized by respectful behaviors, routines, tone, and discourse in 97 percent of classes observed.

Most students were engaged in their own learning; however, students in grades 7-8 were more consistently involved in taking responsibility for their learning and being purposefully engaged in tasks that promote higher-order thinking than students in grades 9-12.

Instructional practices characterized by rigorous, well-structured lessons aligned to standards-based learning objectives and supported by multiple strategies were not consistently implemented schoolwide. For example, at the middle-school level, the team found strong or moderate evidence that teachers chose tasks that encouraged students to develop and engage in critical thinking in 85 percent of observed classes, while at the high-school level teachers did so in only 36 percent of classes observed. While teachers demonstrated knowledge of subject matter, they did not consistently provide and reinforce clear learning objectives or provide appropriate instructional strategies well-matched to the learning objectives.

Most lessons were not structured to account for differences in students’ learning needs, interests, or levels of readiness. Observers noted strong or moderate evidence of teachers appropriately differentiating instruction so that content was accessible for all learners in just 23 percent of lessons overall.

Strength Finding

**1. The Frontier Regional School has provided teachers with consistent, frequent opportunities for collaboration and professional development in curriculum and instruction during 30 early-release Fridays.**

* 1. Frontier and the elementary schools in the “feeder” districts of Union #38 (Conway, Deerfield, Sunderland, and Whately) participate in the Friday early-release schedule. Students are dismissed at 12:45 PM and non-release day dismissal is at 2:15 PM, providing teachers with 1.5 hours of professional development (PD).
     1. There are two additional PD days throughout the year and teachers are each provided $600.00 to attend outside programs.
  2. The superintendent introduced the pilot program in the 2015-2016 school year after obtaining community support.

**C.** The superintendent said that with the new early-release schedule at the time of the site visit the district had saved $11,000, that staff were having more meaningful PD, that staff were beginning to identify teacher leaders, and that there were more opportunities for interdisciplinary work.

**D.** The superintendent and the teachers told the team that they had recently told the school committee how the Friday release day PD sessions were improving their instruction.

**E.** FRS school leaders and teachers said that the early-release Fridays enable the teachers to work on curriculum and instructional initiatives.

1.For example, one focus in 2015-2016 has been developing rubrics for narrative and argumentative writing.

**F.** The superintendent told the team that she continues to track teacher attendance and that this year it was better on Fridays than on other days.

**Impact**: The implementation of a weekly early-release professional development program has provided time for teachers to work on vertical and horizontal curricular alignment and enabled the school to address schoolwide curricular and instructional issues.

**Challenges and Areas for Growth**

*Curriculum*

**2. The school does not have systems or procedures to ensure that school curricula are fully and consistently developed, reviewed, aligned, and effectively delivered.**

* 1. School leaders recognized the need to develop curriculum maps and introduced the Atlas Rubicon online curriculum mapping system to assist teachers in mapping and aligning curriculum with the Massachusetts 2011 Curriculum Frameworks.

1. The school’s template for curriculum maps within the Atlas system includes the following components: unit name, unit overview, essential questions/enduring understandings, Massachusetts 2011 Curriculum Framework standards, learning objectives/goals/skills, prerequisite skills, vocabulary, evidence of student learning, sample activities, resources, and instructional strategies.

**B.** School leaders told the team that 100 percent of the school’s curriculum is aligned to the Massachusetts 2011 Curriculum Frameworks. Some teachers agreed, others said that 95 percent of the curriculum is aligned, and still others said that it was difficult to say.

**C.** A review of curriculum documents provided by the school indicated that some curricula are not aligned with the Massachusetts 2011 Curriculum Frameworks, including college writing, AP English, literature and composition, and English 9A.

**D.** Essential elements of high-quality curriculum maps are missing or incomplete.

1. In many curriculum maps, the entire standard from the Massachusetts 2011 Curriculum Frameworks is listed but there is no clear alignment between the specific elements of the standard and the stated essential questions & understandings, learning objectives, goals & skills, or items of evidence of student learning.

2. The reviewers found little evidence of documented assessments.

a. Assessments are not fully developed, vary in quality by unit, and are incomplete or not present in some maps.

b. The curriculum maps do not include formative assessments that could inform and differentiate instruction.

3. Some curriculum maps either do not include student learning objectives or do not reflect an understanding of the purpose of learning objectives; examples include grade 7 ELA, grade 8 ELA, geometry, science and technology, and physics.

4. Many curriculum maps are missing one or more required components.

5. Many of the entries under “Essential Questions” are not fully developed and do not reflect an understanding of the definition and purpose of essential questions. Often the entries are learning objectives or restatements of the content of the unit.

6. The curriculum maps do not include strategies to inform and differentiate instruction or support a tiered approach to instruction.

**E.** The school has not provided training to staff on developing essential questions, learning objectives, assessments, or other components of high-quality curriculum maps.

1. Staff members told the review team that there has not been any training on developing the components of curriculum maps for several years, despite teacher turnover as a result of a high number of retirements.

2. The superintendent told the review team that there was some professional development on curriculum about six years ago.

**F**. Teachers told the review team that although the school has chosen Atlas Rubicon as the location for the development, use, and maintenance of curriculum maps some elements of the curriculum are stored in other locations.

1. Some components of curriculum maps are located in *Atlas Rubicon*, Google Docs, MyLearning Plan, or on the school’s shared drive.

**G.** Other reviews have identified similar curricular issues.

1. The recently completed report, *A Curriculum Audit of the K-12 Special Education Program and Services, Frontier Regional and Union # 38 School District,* commissioned by the superintendent in 2015, concluded that the school’s curriculum maps …”are inadequate to give quality support to instructional implementation of the curriculum.”

2. The 2010 Report of the Visiting Committee of the New England Association of Schools and Colleges (NEASC) stated that the school’s written curriculum “…does not adequately provide guidance in terms of school-wide learning expectations and relationship to school-wide assessment, including rubrics. As a result of inconsistent curriculum maps, absence of connection to schoolwide learning expectations, and irregular use of school-wide rubrics, a student’s experience at Frontier Regional School varies widely in terms of instruction, assessment and achievement.”

**Impact**: Without aligned, comprehensive, and cohesive curriculum maps, supported by strong leadership that ensures consistent use, alignment, and effective delivery of the school curricula, the school cannot guarantee that students consistently receive high-quality instruction that promotes higher levels of achievement and enables them to be college and career ready. New teachers, or teachers with changing teaching assignments, do not have sufficient guidance to implement the school’s documented curriculum. The absence of appropriate professional development means that teachers cannot create curriculum components that effectively address student learning and ensure that all students have access to high-quality, aligned curriculum.

**3. The school does not have systems or processes to ensure that the written curriculum is the taught curriculum, or to ensure the timely review and revision of the curriculum to guarantee that updated and comprehensive curriculum will be implemented in all classrooms.**

1. Interviews and a document review indicated few formal procedures to ensure that the written and taught curricula are aligned.
2. When asked how the school ensures that the written and taught curricula are the same, the superintendent told the review team that the principal, assistant principal, and the director of secondary education “do the observations” noting that ”[their] goal is to be in the classroom every day…[and to]…keep track of all the data they are collecting.”
3. The review team was told that school leaders conduct walkthroughs to see whether the curriculum and professional development programs are having an impact on the classroom. Data are compiled and the findings are shared with faculty, “if appropriate.” During the 2015-2016 school year walkthroughs have focused on the implementation of differentiation strategies.
   1. School leaders said that they “... do not lean too heavily on the [observation] findings because they might have hit a day when there is little differentiation.” They told the review team that they do not go back to the teacher “…if we didn’t see what we wanted to see...” because they do not want the walk-through to be seen as punitive.

3. Although department chairs observe teachers, they do not participate in walkthroughs to calibrate expectations, do not provide feedback to those observed, and do not serve as evaluators.

4. Teachers told the review team that there are no expectations for them to use or keep lesson plans.

a. Teachers in grades 7 and 8 said that lesson plans have never been reviewed. Another teacher said that in 15 years that teacher has never had a plan book.

1. Teachers do not consistently use curriculum maps to guide instruction.

When the team asked teachers how most people use the maps to inform daily instruction, one teacher said, “I don’t.” Several others agreed. Another teacher added, “I don’t feel the need to have a map.” Other teachers said they were told the curriculum maps should not be driving instruction but should reflect what a teacher was already doing.

a. For example, one teacher said, “The map doesn’t drive me. I wrote the curriculum years before and I have used the map to document some of the things.”

When the team asked district leaders whether teachers use the curriculum maps to guide instruction, an administrator told the team that it varies, depending on the individual teachers and the grade level.

**C.** The school does not conduct a regular and timely review and revision of curricula based on valid research, the analysis of MCAS results, and other assessments to provide for continuous improvement of instruction and student achievement.

1. The superintendent told the review team that the curriculum review process “happens in an informal manner.” She said that the district does not have a formal curriculum review process in place.

2. When the team asked teachers who is involved in reviewing and revising curriculum and to describe the process, teachers told reviewers that they were all involved. They said, “We’ve met with other teachers. We all met one summer and worked on our maps together.”

3. An administrator told the review team that there are many “singleton” teachers who are the only instructors for a particular course. Teachers are offered three paid professional days after the end of the school year if they wish to “work on curriculum.” In courses where there is more than one teacher, they are able to choose to “divvy up the curriculum” or to collaborate.

**Impact**: When teachers do not use the written curriculum as the taught curriculum, the school cannot ensure alignment to the Massachusetts 2011 Curriculum Frameworks or vertical and horizontal alignment of curriculum within the school. In the absence of established, documented processes for ensuring that teachers implement the documented curriculum, the school cannot ensure faithful implementation of high quality curricula. Without a regular and timely review and revision of curricula by teachers, based on valid research, and on MCAS results and other assessments, the school cannot ensure that curricula are continuously improving and meeting the needs of all learners.

*Instruction*

**4. District administrators and teachers do not share a common understanding of what constitutes best instructional practice.**

1. There are many instructional leaders in the school, but in some cases there is limited calibration of expectations among them.

1.School leaders told the team that instructional leadership is shared among the principal, assistant principal, and the director of secondary education who conduct observations for the purpose of evaluations and provide feedback to teachers.

2. When the team asked teachers to identify their instructional leader, they cited their department chairs, team leaders, and colleagues as playing a role in providing instructional support and leadership.

a. Although teachers identified department chairs as instructional leaders, school leaders told the team that they have not met with department chairs during the 2015-2016 school year to discuss expected instructional strategies.

b. District leaders stated that department chairs did not participate in walkthroughs conducted by school leaders during the 2014-2015 school year to calibrate instructional expectations or those conducted by school leaders during the 2015-2016 school year to look for differentiated instructional strategies.

**B.** Some instructional expectations identified by school leaders were inconsistent with the tool used for classroom observations.

1. School leaders reported that teachers are expected to have an objective or reason for a lesson, but they are not required to write learning objectives for students. School leaders told the team that while they have had conversations with teachers about the purpose of posting objectives, they have not decided whether objectives should be written.

a. The first section on the school’s observation form (MyLearning Plan*)* deals with objectives and requires the observer to determine the degree to which the lesson is connected to posted learning objectives.

b. In only 37 percent of observed classrooms overall, teachers provided and reinforced clear learning objectives for students (14 percent, strong evidence; 23 percent, moderate evidence).

**Impact:** Without strong and clear instructional leadership to define and consistently reinforce the school’s instructional expectations, the school cannot ensure that all students have access to effective instruction that meets their needs and enables them to learn to the best of their ability. Without a common understanding of instructional expectations, supervision practices will vary with each evaluator or supervisor. When a school has not established a clear model of high-quality instruction, teachers do not have access to targeted professional development program for professional growth.

**5. In observed classrooms, instructional practices characterized by rigorous, well-structured lessons aligned to standards-based learning objectives and supported by appropriate strategies were not consistently implemented schoolwide.**

The team observed 35 classes throughout the school: 22 in grades 9-12, and 13 in grades 7-8. The team observed 9 ELA classes, 11 mathematics classes, 9 science classes, and 6 classes in other subject areas. Among the classes observed were two 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.

**A**. While teachers demonstrated knowledge of subject matter, observed lessons did not consistently provide and reinforce clear learning objectives to enable students to understand the learning experience.

1. In only 37 percent of lessons observed overall (13 of 35 classes) teachers provided and referred to clear learning objectives (14 percent, strong evidence; 23 percent, moderate evidence).

a. In many lessons, objectives were replaced by agendas, were not clear, or were not present. For example, in one observed class students watched a video without the benefit of guiding questions or lesson objectives to make meaning of what they were watching. In another class, the lesson began without the teacher mentioning the learning objective. Students opened their books and were directed to read aloud. In a grade 8 mathematic class, activities were posted on the board and while students worked on them they were unable to tell the observer the purpose of the activities.

b. In contrast, the team observed some lessons where the teacher provided and reinforced a clear learning objective.

i. For example, in a grade 7 social studies class, the teacher shared the agenda for the day and reviewed the objectives of the lesson: To learn about the origins and basic teachings of the three major monotheistic religions. When observers asked students why they were doing the assignment, they were able to clearly explain the purpose of the assignment.

ii. In a grade 7 science class, the teacher began the class by reviewing the objective of the project students were assigned; all students were given an explicit guide to help them know what was expected of them to complete the project.

c. Students told the team that their most challenging classes were those where tasks or assignments were not well explained.

**B**. The incidence of well-structured lessons that reflected high expectations or rigor varied between grades 7-8 and grades 9-12.

In 61 percent of lessons observed in grades 7-8 (5 of 13 classes), teachers implemented lessons that reflected high expectations (23 percent, strong evidence; 38 percent, moderate evidence).

a. For example, in a grade 8 ELA lesson where the objective was to learn Shakespeare’s life story, students took Cornell notes while watching a video about Shakespeare’s life and did quick research about Shakespeare on their Chromebooks. They then shared their notes with partners. A class discussion followed.

2. In only 37 percent of lessons observed in grades 9-12 (5 of 22 classes), teachers implemented lessons that reflected high expectations (14 percent, strong evidence; 23 percent, moderate evidence).

a. For example, in a grade 11 mathematics classroom, after completing a test with 25 minutes of instructional time remaining, students watched a video on a topic unrelated to math with no learning expectations for the video set by the teacher.

i. In some lessons, observers noted that lessons did not run bell to bell. Instructional time was lost when lessons ended 7-8 minutes before the bell.

b. Observers noted some lessons where students completed learning packets or exercises in textbooks for the entire twenty-minute observation. It was unclear how the work connected to a learning objective as none was stated or posted by the teacher.

**C**. In observed classes, teachers did not consistently use appropriate instructional strategies well matched to the learning goal.

1. In only 49 percent of lessons observed overall (17 of 35 classes), teachers used appropriate instructional activities so that students could access and engage with content (23 percent, strong evidence; 26 percent, moderate evidence).

a. In these lessons the team saw examples of effective strategies such as the use of varied grouping; guided practice; Cornell note-taking; students doing online research or mathematics programs using Chromebooks; collaborative project work; and students doing close reading.

b. In most classes, however, instruction was teacher centered with limited active student involvement other than responding to teacher questions.

i. Some students told the team that they did not like the ninety-minute lecture format, and that it was a common practice. They said that they preferred the type of class where they could talk with their teacher rather than listen to a lecture.

**Impact:** Developing and sharing learning objectives is a strategy that guides students’ work and focuses them on the learning goals. Without learning objectives, students may struggle to make meaning of what they are learning and why. When lessons do not consistently reflect high expectations aligned to learning objectives and instructional strategies are not well matched to learning objectives, students are not provided the tools they need to achieve at higher levels and to succeed in college and careers.

**6. In observed classes, many students were engaged in their learning. Students in grades 7-8 were more consistently involved in taking responsibility for their learning and being purposely engaged in tasks that promote critical thinking than their high-school level counterparts.**

**A.** The incidence of students being engaged with content and activities varied between the middle- and high-school levels.

1. In 94 percent of lessons observed in grades 7-8 (12 of 13 classes), students were motivated and engaged (23 percent, strong evidence; 69 percent, moderate evidence).

a. The team noted examples of active student participation at the middle level, including students: having conversations about content in pairs; sharing notes; practicing oral recitations; conducting research in class; doing close reading; and recording information on two-column notes while watching a video.

2. In 68 percent of lessons observed in grades 9-12 (15 of 22 classes), students were engaged and motivated (32 percent, strong evidence; 36 percent, moderate evidence).

a. In most lessons, students participated in activities, took notes and/or volunteered responses in questions and answers posed by teachers. The team noted the use of student response systems in a number of lessons (clickers and smart phone apps) that fostered student engagement.

b. However, some lessons were teacher-centered or not well-structured to ensure student engagement. For example, in one class after completing a test, students were told that they could do whatever they wanted. A group of students spent the time looking at cars on their Chromebooks.

i. Students told the review team that sometimes the block scheduling did not make maximum use of teaching time. They described it as “down time;” one student described it as time to complete homework or to use their phones.

**B.** Teachers’ facilitation of tasks that encourage students to think critically about content varied by level.

1. In 84 percent of lessons observed in grades 7-8 (11 of 13 classes), students were engaged in tasks that required critical thinking (38 percent, strong evidence; 46 percent, moderate evidence).

In these lessons, students were involved in a range of activities that encouraged the development of critical thinking skills. For example, students were required to explain their math solutions and to describe different methods used to reach the same answers. Teachers consistently used “why” questions and expected students to explain their answers fully.

2. In contrast, in only 36 percent of lessons observed in grades 9-12 (8 of 22 classes), the team found students engaging in critical thinking (18 percent, strong evidence; 18 percent, moderate evidence).

a. In these lessons, teachers were focused on how and why questions; they set up tasks for students to use prediction skills or to apply new knowledge; students analyzed mathematics problems; and used critical thinking skills for literary and imagery analysis.

b. Observers characterized most lessons as being teacher-centered with low-level questions that did not require students to explain their answers. With teacher-centered instruction, students missed opportunities to engage in tasks that would enable them to develop critical thinking skills. For example, in a mathematics class a teacher solved problems on the interactive whiteboard while students watched. In an ELA lesson, the teacher pointed out examples from the text, eliminating opportunities for students to find and explain the examples.

**C.** In observed classrooms, students in grades 7-8 were more likely than students in grades 9-12 to assume responsibility for their own learning whether individually, in pairs or in groups.

1. In 76 percent of lessons observed in grades 7-8 (10 of 13 classes), students took responsibility for their own learning (38 percent, strong evidence; 38 percent, moderate evidence).

a. In these lessons, students had opportunities to be responsible for doing their own thinking in small groups, discussing and solving mathematics problems; students worked individually on mathematics assignments with the teacher acting as a facilitator; and students collaborated in small groups working on projects and had opportunities to share and process information in think-pair share structures.

2. In 59 percent of lessons observed in grades 9-12 (13 of 22 classes), students assumed responsibility for their own learning individually, in pairs or in groups (23 percent, strong evidence; 36 percent, moderate evidence). Examples of student-led learning included ELA students working independently on research and doing analysis; the team also noted lessons where student-led exploration took place in small groups and individually.

a. Observers characterized many lessons as teacher-centered and missing student voice. In these lessons observers did not see cooperative learning strategies that enable students to reason out problems and to work collaboratively.

**Impact:** When teachers direct most of the learning throughout the lesson, students miss out on challenging experiences in a variety of instructional groupings. When instructional practices and activities do not consistently encourage students to assume responsibility for their own learning, students are less able to develop critical skills that they need to achieve at high levels and to succeed in college and career.

**7. Most observed lessons were not appropriately differentiated and did not use appropriate resources aligned to the needs of all learners. Formative assessment practices to inform instruction varied** **widely between levels.**

1. Schoolwide most observed lessons were not structured to account for differences in students’ learning needs, interests, or levels of readiness**.**
2. Teachers appropriately differentiated instruction so that the lesson content was accessible for all learners in only 23 percent of lessons overall (6 percent, strong evidence; 17 percent, moderate evidence).
3. Observers noted that teachers appropriately differentiated instruction in only 18 percent of lessons observed in grades 9-12 (0 percent, strong evidence; 18 percent, moderate evidence).
   1. The examples of differentiation noted by observers were limited in range: these included focusing on giving students options in classroom activities, projects and labs; and selecting readings or books and options to work with partners in labs.
4. In grades 7-8, teachers implemented lessons with appropriate differentiation in only 30 percent of lessons observed (15 percent, strong evidence; 15 percent, moderate evidence).

The team noted some examples of differentiation of product, process, or content. In these lessons, students were given options for projects and choices in class assignments. Students in a mathematics class worked at their own rate on a variety of tasks and once they finished their work used their Chromebooks to extend math learning.

**B.** School leaders, including the superintendent, told the team that the school’s own classroom observation data pointed to the need for increased professional development (PD) on differentiated instruction.

1. A review of the PD calendar and interviews with teachers, school leaders, and the superintendent indicated that over the school year the district has provided PD focused on differentiated instruction. These offerings included presentations from outside experts and an ongoing book study on differentiated instruction.

**D.** The use of appropriate resources aligned to students’ diverse learning requires further development schoolwide.

1. In 48 percent of lessons observed overall, teachers used appropriate resources aligned to students’ diverse learning needs (17 percent, strong evidence; 31 percent, moderate evidence). Some classrooms were equipped with Chromebooks and students used them for research, challenges, and enrichment. Some classrooms had television sets and banks of computers. While the team noted the use of graphing calculators in mathematics lessons, well-equipped science labs, and some literacy-rich classrooms with books and posters and an array of resources, these were not the norm. Instructional assistants (support personnel) worked one-on- one with some students to meet their diverse learning needs.

a. While interactive whiteboards were available in all classrooms, the team did not see them fully used to support students’ diverse learning needs. Teachers used interactive whiteboards to project agendas, problems, PowerPoint presentations, and videos. The team did not see teachers using this technology in an interactive way (e.g., displaying student responses to a question in real time).

2. In some of these classrooms there was little or no evidence of appropriate resources. These classrooms were devoid of anchor charts, posters, standards, and student exemplars that are typically associated with well-provisioned literacy or math classrooms.

**E.** In observed classrooms the incidence of the use of formative assessments to check for understanding and provide feedback to students varied between the middle- and high-school levels.

In grades 7-8, teachers conducted formative assessments to check for understanding in 76 percent of lessons observed (38 percent, strong evidence; 38 percent, moderate evidence).

Teachers conducted formative assessments through effective questioning techniques including cold-calling on students, monitoring students’ progress by continually circulating in the room, asking questions when students worked individually or in groups, and by asking students to give examples. The team did not see a range of formative assessment routines, including thumbs up/thumbs down, exit tickets, or the use of students’ whiteboards.

In grades 9-12, teachers conducted formative assessments to check for understanding in only 32 percent of lessons observed (5 percent, strong evidence; 27 percent, moderate evidence).

a. In most observed lessons teachers posed questions to the entire class and received choral responses, did not call on students randomly, and posed no questions during the observation period.

b. Examples of effective practices included the use of student response systems such as clickers and phone apps to get immediate feedback. In one mathematics lesson students used clickers to respond to equations posted by the teacher. In another mathematics class, a phone app enabled the teacher to determine whether students’ comprehension was increasing as they worked on proofs. The team also noted limited examples of effective questioning techniques and of teachers continually checking on students’ work.

**Impact:** When lessons are not consistently structured to address the differences in students’ learning needs, learning outcomes are compromised. Without appropriate resources, teachers are challenged to differentiate learning experiences for students who need different approaches and materials. When appropriate resources are available but underused, teachers and students miss opportunities to expand their learning. Without formative assessments, teaching cannot be differentiated and teachers cannot personalize instruction to increase students’ understanding and achievement.

**Recommendations**

*Curriculum*

**The school should take prompt and immediate steps to refine and implement its Curriculum Management Plan** **to complete curricula in all subjects. It should ensure that curriculum materials are high quality, cohesive, aligned to the appropriate standards,and aligned vertically between contiguous grades and horizontally across classes at the same grade.**

**A.** The school should build upon its work to support teachers’ leadership and growth by ensuring that teachers play an active role in refining and implementing the Curriculum Management Plan.

**B.** The school should ensure that all curriculum maps include: a unit overview, essential questions/enduring understandings, the specific Massachusetts Framework standard to which the unit is aligned, clear student learning objectives, evidence of student learning (formative and summative assessments), sample activities, resources, instructional strategies that are differentiated to meet student needs, and timelines.

**C.** The school should provide sufficient curriculum leadership and support to ensure consistent development, alignment, and effective delivery of the curriculum.

1. This support should include frequent conversations about curriculum, instruction, and assessment and ensuring that teachers are implementing the curriculum with fidelity.

**D.** The school should provide all staff with high-quality professional development on developing curriculum, as well as the expectations for implementing the written curriculum.

**Benefits:** Implementing this recommendation will ensure consistent use, alignment, and effective delivery of the school’s curricula. Teachers and other staff will make more effective use of curriculum maps to plan, assess, and improve the quality of their instruction. Teachers and other staff will have a deeper understanding of the components of high-quality curriculum to better meet the needs of all learners and to promote higher levels of student achievement. A clearly articulated and comprehensive curriculum review process guarantees currency of curriculum and a system for reviewing and updating instructional materials. It helps to ensure that school professionals grow in their understanding and use of the latest research in curriculum, instruction and assessment to promote higher levels of student achievement.

**Recommended resources:**

* + - ESE’s *Common Core State Standards Initiative* web page(<http://www.doe.mass.edu/candi/standards/>) includes links to several resources designed to support the transition to the 2011 Massachusetts Curriculum Frameworks, which incorporate the Common Core.
    - *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 year as they worked to develop Massachusetts’ Model Curriculum Units. It includes videos about developing essential questions, establishing goals, creating embedded performance assessments, designing lesson plans, selecting high-quality materials, and evaluating the curriculum unit.
    - *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.
    - 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/standards/>) 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.
    - ESE’s *Writing Standards in Action* (<http://www.doe.mass.edu/candi/wsa/>) provide examples of high-quality student writing with annotations that highlight how each piece demonstrates competence in learning standards at each grade level.
    - *Local District Common Core Implementation – Progress and Capacity Rubric* ([http://www.ccsso.org/Documents/Districtpercent20Commonpercent20Corepercent20Capacitypercent20Rubricpercent20percent20130910.pdf](http://www.ccsso.org/Documents/District%20Common%20Core%20Capacity%20Rubric%20%20130910.pdf)) from the Council of Chief State School Officers (CCSSO) is a tool for districts to use to assess their progress on Common Core implementation and to identify areas of strength and improvement.
    - *Quick Reference Guide: Educator Evaluation and the MA Curriculum Frameworks* (<http://www.doe.mass.edu/edeval/resources/implementation/EdEvalandCF.pdf>) provides an overview of how the Educator Evaluation System supports implementation of the Massachusetts Curriculum Frameworks, including ways to embed the Frameworks within the 5-Step Cycle for Educator Evaluation and to incorporate them into evidence collection. An accompanying document, *Examples of Aligned Activities* (<http://www.doe.mass.edu/edeval/resources/implementation/AlignedActivities.pdf>), provides examples of activities aligned with implementation of the educator evaluation system and the Massachusetts Curriculum Frameworks.
    - EdReports.org (<http://www.edreports.org/>) provides free, independent reviews of K-12 education materials. The reviews focus on alignment to the Common Core and other indicators of high quality as recommended by educators.

*Instruction*

**2. The school should establish a common understanding of high-quality instruction and support teachers in its implementation.**

**A.** School leaders and teachers should collaboratively develop and articulate expectations for high- quality teaching and learning practices.

1.The recommended product of this collaboration is a model emphasizing high expectations for student learning, well-structured lessons aligned to learning objectives, critical thinking, students assuming responsibility for their learning, and frequent assessment of practice and student learning.

**B.** Once a model of instructional practice isidentified and defined, school administrators should develop a plan to share instructional expectations with staff.

**C.** The school should continue and expand the use of learning walkthroughs to generalize and share feedback about trends observed and to discuss improvement strategies regularly with teachers.

**D**. Teachers should be provided with appropriate guidance and feedback as they implement the model.

1. Job-embedded professional development should focus on elements of the instructional model, and especially on skills associated with differentiation, including formative assessment.

**E**. The school should support teachers’ leadership and growth by creating opportunities for exemplary teachers to have responsibility for instructional leadership and mentoring.

**Benefits:** Implementing this recommendation will mean a common understanding among administrators and teachers of high quality, research-based teaching and learning. Student voice will be evident across the school with students assuming responsibility for their learning in tasks that require critical thinking. Teachers will consistently create learning environments that are appropriately differentiated to more effectively meet the needs of all learners. Finally, by identifying exemplary teachers and giving them opportunities for leadership and mentoring, the school will build its ability to train new educators and provide high-quality professional development.

**Recommended resources:**

• ESE’s *Characteristics of Standards-Based Teaching and Learning: Continuum of Practice* (<http://www.mass.gov/edu/docs/ese/accountability/dart/walkthrough/continuum-practice.pdf>) is a framework that provides a common language or reference point for looking at teaching and learning. The continuum provides an overview of seventeen characteristics of standards-based practice.

* ESE’s *Learning Walkthrough Implementation Guide* ESE’s *Learning Walkthrough Implementation Guide* (<http://www.mass.gov/edu/government/departments-and-boards/ese/programs/accountability/tools-and-resources/district-analysis-review-and-assistance/learning-walkthrough-implementation-guide.html>) 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. (The link above includes a presentation to introduce Learning Walkthroughs.)

Assessment

Contextual Background

Student performance data is available to the staff upon students’ matriculation from the school’s 4 “feeder” elementary schools into grade 7 and on through grade 12. The school administers a number of assessments in English, mathematics, and science but makes limited use of student assessment results to inform instruction and improve student achievement. Because teachers have not been trained in data analysis,opportunities to gain valuable and useful instructional insight are missed. Pre-tests are not used formatively and many common assessments are not analyzed to enhance instruction. Longitudinal data is not aggregated or disaggregated for the review of student performance trends.

**Challenges and Areas for Growth**

**1. The school makes limited use of student assessment results, local benchmarks, and other pertinent data to inform instructional practice, to improve student achievement, and to assist in policy development.**

**A.** The school has not established processes or practices for the continuous collection, analysis, and timely dissemination of multiple sources of student performance data.

1. A document review indicated that the school administers 15 common assessments in the disciplines of English, mathematics, and science. Some assessments are administered every year and others at particular grade levels. For example, the Measures of Academic Progress (MAP) assessment is administered in grades 7 and 8 in both English and mathematics, whereas the *Narrative* and *Argument* writing assignments take place in all grade levels 7-12. Typically, the assessments are administered twice a year, providing instructional staff opportunities for pre- and post data analysis. Nine assessments are listed as District-Determined Measures (DDMs), and all are labeled as formative and summative assessments.

2. Timely review of student performance data is limited and therefore there is limited use of formative assessment data. School staff reported that they usually talk about the common assessment data at the end of the semester or at the end of the year and consider altering instruction the following semester or the next year.

* 1. When asked about the use of pre-test data, one teacher said “They [the pre-tests] sit in a drawer until after the post tests are complete.” However, a teacher in another department said that she uses the data to help her design her teaching. She said this was not a department practice but her own.
  2. Teachers reported that they typically review common assessment results at the end of the semester or the end of the year.
  3. When asked how the district uses pre and post MAP data, school administrators told the team that the use of data is mainly limited to placement decisions.
  4. Review team members were told that departments do not use results formatively and that more training is necessary.
  5. Review team members did not find evidence of longitudinal aggregation/disaggregation of data.
  6. Teachers referred to reviewing MCAS data annually.

3. The school does not have a data team or professional learning community (PLC) with expertise in analyzing data and producing user-friendly student achievement reports.

a. When school leaders were asked about the existence of structures and teacher involvement in reviewing student performance data, they said that teachers are not trained in data analysis.

**B.** The district does not use student performance data to drive or inform decision-making. Data is not used to prioritize goals or to allocate human and financial resources.

1. A member of the school committee and the superintendent said that the budget and policy development process do not include the review of student performance data.

a. In response to a question about the use of data to inform the policy development, a school committee member said: “I can’t recall there was ever data put in front of me when we have to make a policy decision.”

2. School officials including the superintendent said that the school committee was not provided with student performance data other than an annual presentation of MCAS scores.

3. An external curriculum audit found the district’s budget development and financial decision making documents are not “adequately connected to clientele needs, curricular goals, strategic priorities, and assessment data.” Additionally, the audit stated that “funding allocations do not appear to be driven by performance data.”

**Impact**: In a school culture where student performance results are not continuously collected, analyzed, and presented in a useful and timely manner, teachers are unable to gauge the effectiveness of their instruction. Without timely user-friendly student performance reports a team or a department is challenged to focus its instructional and remedial resources strategically, efficiently, and effectively. Additionally, the absence of student performance data hampers an instructional leader’s ability to pinpoint areas for improvement in instruction. Finally, without continual student performance assessments, diverse learning styles and needs are not addressed.

**Recommendation**

**1. The school should develop uniform and integrated policies, structures, and practices for the continuous collection, analysis, and dissemination of student performance and other data.**

**A.** School and program leaders should develop specific strategies, timelines, and clear expectations for the use of data schoolwide.

1. The school should consider establishing a representative data team or professional learning community which would be responsible for the collection, dissemination, and analysis of student performance data.

2. School leaders should ensure that educators at all levels use data strategically to inform instruction, ongoing curriculum revision, program evaluation, and the educator evaluation system.

3. The school should consider coordinating discussions about assessment data between the elementary schools and the grade 7 instructional team to inform changes to instruction and curriculum.

**B.** School leaders should systematically incorporate student assessment results and other pertinent data into all aspects of policy, prioritization, and decision making, including budget development, the school improvement plan, and the evaluation of educational programs and services.

**C.** Ongoing, targeted training in the collection, analysis, and use of student performance data should be provided for staff in each grade and subject area.

**Benefits**: A school that continuously collects and analyzes student performance data allows a team or department to thoughtfully and strategically focus its finite instructional and remedial resources in an efficient and effective manner. Data analyses can inform both professional development and the supervision and evaluation of staff. A data-rich culture promotes continuous learning for staff and students.

**Recommended resources:**

* ESE’s *Assessment Literacy Self-Assessment and Gap Analysis Tool* (<http://www.doe.mass.edu/edeval/ddm/webinar/PartI-GapAnalysis.pdf>)is intended to support districts in understanding where their educators fit overall on a continuum of assessment literacy. After determining where the district as a whole generally falls on the continuum, districts can determine potential next steps.
* *ESE’s District Data Team Toolkit* (<http://www.mass.gov/edu/government/departments-and-boards/ese/programs/accountability/tools-and-resources/district-analysis-review-and-assistance/leadership-and-governance.html>)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.
* *The Edwin Analytics web page* (<http://www.doe.mass.edu/edwin/analytics/>)includes links to a Getting Started Guide, as well as a video tutorial series.
* *District-Determined Measures* (<http://www.youtube.com/playlist?list=PLTuqmiQ9ssquEalxpfpzD6qG9zxvPWl0c>)is a series of videos featuring different aspects of the development and use of District-Determined Measures (DDMs).

Student Support

Contextual Background

The school provides a welcoming and respectful school climate. At every level, stakeholders have trust in the system and in each other. They cooperate in many ways to provide an education to the students of this regional school. Students are well behaved and cooperative whether engaged in routine writing tasks, participating in discussions, or called upon to act responsibly in unusual situations. It seems that everyone is primed to work together as needed. Change can be effected in this environment if managed well.

Students with disabilities form the school’s largest subgroup. Interviewees reported high numbers of students identified as students with disabilities and a low inclusion rate. This might be because of an ineffective process of tiered support. The school provides limited differentiated instruction, limited use of data to identify children who are performing below grade level as well as limited resources for intervention and assessments to measure progress. In addition, the block schedule does not provide flexible time for intervention. Students are frequently scheduled for a whole block every day when they might benefit from shorter blocks for services, flexible assignment to those blocks, or alternating days that would allow students more access to general education classes. In fact, because of the block schedule, for some students skills courses occupy a significant portion of the school day, decreasing the rate of full inclusion.

When students are identified and evaluated for special education services, they sometimes remain in the special education classroom in the absence of appropriate mainstream instruction with accommodations. And the special education department has developed few options for inclusion. Some co-teaching and pull-out supports exist; there are instructional aides in some classrooms. A number of separate, sometimes blended, programs also exist in this small school. Students may be enrolled in “Academy” courses, a form of sub-separate education. There is little time in the schedule for teachers and special educators to confer.

Strength Finding

**1. Staff, students, and other stakeholders reported a welcoming and safe environment for learning. Administrators and students spoke of cooperation, polite behavior, and attentiveness to instruction*.***

**A.** Staff expressed general satisfaction with the work environment and school administration.

1. Staff told the team that they were embracing the new Friday early-release professional development schedule and enjoying the exchange of information with colleagues.

* + 1. Association members anticipated a quick resolution to the new collective bargaining negotiations. The school committee echoed this congenial outlook.

**B.** Administrators and students acknowledged a cordial and caring relationship between them and within the student body.

1. Administrators reported “good” attendance and low rates of in-school suspension.

a. Both administrators and students acknowledged few violations of school rules for attendance and conduct. Both attributed this fact to the reasonable handling of problems by school administration.

2. The review team observed courteous student behavior and attentiveness in observed classrooms and in the halls.

a. In observed classrooms, the review team noted a high incidence of students engaged in lessons; this was especially strong in grades 7 and 8, and in nearly all classes the climate was characterized by respectful behavior, tone, and discourse on the part of teachers and students.

b. The review team also noted polite behavior in the halls and a cooperative and responsible response in an unusual incident requiring vacating the school on the first day of the review.

3. Administrators credited student adjustment and comfort with the school and staff to new transition practices between grades 6 and 7, grades 7 and 8, and grades 9 and 10.

**C.** Students and parents told the team that even though the school is small, it offers many opportunities to students including an expansive list of extracurricular activities and a selection of AP courses. Parents also said that they are pleased with the quality of the teaching staff.

**D.** School committee members spoke about the level of trust between the community and themselves as they put the budget out for a vote. They also acknowledged the trust that they had in the superintendent.

**Impact**: The efforts of all stakeholders have enhanced the atmosphere for learning and attracted students through school choice. They have created a fertile ground for enhancing instruction, raising standards, and coping with change.

**Challenges and Areas for Growth**

**2. The school’s structure of student support services, which interviewees characterized as Response to Intervention (RTI), does not offer Tier 1 classroom instruction that meets the needs of all students, does not use consistent methods and data to identify students in need of support, and has limited resources for students performing below grade level.**

**A.** The school’s classroom instruction (Tier 1) is not generally provided in a way that addresses differences in students’ needs.

1. In observed classrooms, teachers appropriately differentiated instruction so that all students could access the curriculum in just 23 percent of lessons overall (6 percent, strong evidence; 17 percent, moderate evidence).

2. The 2015 Curriculum Audit stated that training in differentiated instruction had been offered in the past, but there was no follow up and the strategies did not become institutionalized. Without the “thorough implementation of differentiated instruction techniques,” the RTI model “cannot succeed as it is intended” and there is an “over-identification” of students with disabilities.

3. The 2015 Coordinated Program Review (CPR) stated that the district does not ensure that all staff are trained on “analyzing and accommodating diverse learning styles of all students in order to achieve an objective of inclusion in the general education classroom of students with diverse learning styles….”

4. Teachers told the team that the school’s professional development plan for 2015-2016 devotes significant attention to the need to develop the ability of teachers to differentiate instruction. However, such strategies were not explicitly mentioned when administrators and staff were asked about the elements of high-quality teaching in the school.

5. In the written curriculum, teachers have not included teaching strategies, including options for students with different needs.

6. In observed classrooms the incidence of the use of formative assessment to check for understanding and provide feedback to students varied between the middle- and high-school levels. Without such ongoing assessment, it is difficult to identify and accommodate students’ needs as they emerge.

7. The administration has provided one option for differentiation. In classes with standards and honors students, students receive assignments and tests that are more challenging than those required of their classmates.

**B.** The school has two student intervention teams (SITs), one for grades 7 and 8 and the other for grades 9 through 12. The SIT is used differently by teachers at each level; neither focuses primarily on helping teachers to help students to succeed in the general education classroom.

1. Middle-school level teachers primarily use their grade-level team meetings to address students’ learning difficulties. They rarely refer students to the SIT.

At the high-school level, the SIT meets bi-weekly and is the main method of connecting resources with students having difficulty.

Referrals to the SIT at both levels go through the guidance office whose job it is to gather information for the SIT.

a. The principal, two counselors, a psychologist, a nurse, the special education team leader, and the director of secondary education gather to review the referrals bi-weekly. The referring teacher occasionally attends; however, the SIT rarely makes recommendations to the referring teacher for strategies or other accommodations that might help students within the classroom. Rather, the SIT considers other resources that may be employed to help the student.

* + 1. At the middle-school level, the SIT and middle-school teams have limited data on which to base recommendations for support.

Administrators and teachers said that referrals are based on MCAS results, fall and spring administrations of MAP, attendance and discipline data, and teacher recommendations. Improvement in the challenge areas and successful completion of the course indicate progress or success.

Other than the above, the school does not have other specialized assessments to determine interim progress toward goals and to measure the effectiveness of interventions periodically.

* + 1. The school has limited materials and dedicated personnel resources for Tier 2 interventions.

In grades 7 and 8, the schedule includes a half-hour advisory period after the four core courses. Students are assigned to spend this advisory period with a specific teacher, but with permission, they may visit other teachers to get help or make up work. In the case of academic referrals to the SIT, the intervention resources at the middle-school level are limited to assigned teacher help during the advisory periods and teacher help sessions before or after school. The school does not provide a late bus.

In grade 9-12, students are assigned to a “TD,” a teacher-directed study taught by a single teacher three times daily during assigned blocks. In a TD, the teacher also works with students who received a failing MCAS score as well as students on 504 plans who need help with organization.

* + - * 1. Students in grades 7 and 8 with social or behavioral issues enter the Frontier Transitional Education Program (FTEP), a program run by the special education department.

The Title I program supports students in their math class and has some software such as Study Island that students can use for practice.

**Impact**: When schools do not systematically provide a way to help teachers develop accommodations and plan differentiated instruction and support for all students falling behind (Tier 1), those students can cancan become the responsibility of the SIT. In this school, the SIT does not have a data-driven approach to prevention, early detection, and support for students at the Tier 2 level. In addition, material resources and dedicated staffing for interventions are limited. Reviewing homework or class work with a teacher is helpful but specific gaps that remain unidentified will not be addressed. As a result, it is difficult for the school to close the proficiency gap between students with disabilities and general education students.

**3. Special education programs are not all clearly defined and most do not offer students with disabilities equitable access to the full curriculum.**

**A.** The school reported high numbers of students identified for special education services and low rates of inclusion in the general education classroom.

1. According to ESE data, in 2015-2016 students with disabilities make up 21 percent of school enrollment, compared with the state proportion of 17 percent. The school’s proportion of students with disabilities has fluctuated slightly over the last several years, from 19 percent in 2013-21014 to 21 percent in 2014-2015 to 21 percent in 2015-2016.

2. According to the latest available ESE data (2014-2015), the school’s rate of full inclusion is 35 percent compared with the state rate of 62 percent. The school’s rate of partial inclusion is twice that of the state rate: 38 percent compared with 17 percent. The rate of substantially separate instruction is 20 percent compared with the state rate of 14 percent.

* 1. When asked about the low inclusion rates, administrators and teachers said that block scheduling of the study skills component does not provide flexible time for intervention which would allow students more access to general education classes.
  2. The 2015 Coordinated Program Review (CPR) stated that the school does not consistently document the reason for removing a student from the general education classroom or give the basis “for its conclusion that education of the student in a less restrictive environment, with the use of supplementary aids and services, could not be achieved satisfactorily.”

1. Students with different disabilities are educated in the same program, which could lead to a dilution of services.
   1. The Life Skills program in grades 7 and 8 contains students with cognitive, health, multiple disabilities, autism, and ADHD. Some Life Skills students are mainstreamed for courses such as social studies, science, and exploratory subjects other than foreign language. Life Skills in grades 9-12 is a substantially separate program for students with the most severe disabilities and has a vocational orientation.

**C.** The 2015 CPR noted that the school does not address the needs resulting from the specific manifestation of autism. Information is not included in the Individualized Education Program (IEP), meetings notes, or behavior plan. A document review indicated that a similar finding appeared in the Curriculum Audit of 2015.

**D.** Interviewees told the team that the special education department has not established guidelines for moving students from one level of service to another in all programs.

**E.** Specialized testing is limited.

1. Interviewees said that MCAS and MAP results are used annually at student reviews to pinpoint where students are struggling. These are also used to assess students on 504 plans entering the school in grade 7. These assessments are the same as those used for general education students at the school.

**F**. The school does not routinely provide inclusive classrooms and programs that use an integrated services model, thereby separating students with disabilities from the mainstream school activity, and likely jeopardizing their access to high-quality curriculum.

1. Whether because of an absence of supports or specific exit criteria, some students with disabilities receive instruction in partial inclusion rather than in the general education classroom with additional supports.

a. At the middle-school level, students with language-based disabilities receive instruction in ELA in a special education classroom. At the high-school level, students receive English instruction in Academy classes, a special English 9/10, or in a general education classroom with support from a reading teacher.

b. Although many students with social-emotional disabilities leave the Frontier Transitional Education Program (FTEP) at the middle-school level to enter a vocational school or the Hampshire Collaborative for Educational Services, some students are placed in Academy classes.

i. While Academy courses are listed as a special education program in the program of studies, some interviewees said that they were courses, not a program, describing them as “Academy inclusion.” They started as a transition for FTEP students and later served some Life Skills students.

ii. Administrators said that these courses are seen as a way to offer a streamlined version of the curriculum with special education teachers and general education teachers offering accommodations not otherwise available in the general education classroom.

c. However, in Academy classes students with disabilities make up approximately 75 percent of enrollment. The classes are small and substantially separate. Although many students may be in only one or two Academy courses, others may receive half or more of their instruction in this environment.

**G.** Communication between general and special educators is uneven in grades 9 through 12. Special educators in the middle school may confer with their students’ mainstream teachers during team meetings as well as with instructional assistants who accompany students. High-school teachers and special educators do not have dedicated time to confer.

1. The absence of planning time between general and special education teachers is noted in the 2015 CPR.

**Impact**: When general education classrooms do not provide accommodations, the special education department is less likely to release students from separate settings or move them along a continuum, thereby reducing access for those students to the mainstream classroom and the full curriculum.

**Recommendations**

**1. The school should implement a Response to Intervention (RTI) process that develops the ability of all staff to effectively teach students with different needs in the mainstream classroom when appropriate, to use data to monitor and support their progress, and to follow consistent, pre-determined practices to assess their need for additional supports.**

**A.** The district should continue to develop teachers’ ability to address students’ academic needs in the mainstream classroom.

1. T he school should continue to educate faculty about strategies for differentiating instruction in the general education classroom.

2. The school should train faculty to use data that is currently available, as well as specialized assessments as appropriate, to accurately identify the needs of students and to address them in a timely way.

* 1. The district might consider the use of an outside provider for training, or visit other schools with exemplary RtI programs, and ensure through embedded professional development (for example, through ongoing coaching and classroom visits) that the training is continuous and that it has an impact on instruction.
  2. The school should consider ways in which it can provide more flexibility within the block schedule for academic support.

**D.** The district should clearly identify the assessments or criteria that will be used to assess students’ progress, to deliver services, and to refer students to Student Intervention Teams (SITs).

1. This information should be clearly communicated to all staff and should be consistently referenced.

**E.** The district should review the make-up, purpose, and goals of the SITs with the goal of making them a broader resource for classroom teachers in working to improve student achievement.

**Benefits:** By implementing this recommendation, the school will ensure that more students receive appropriate support from their general education classroom teachers in a timely manner. Teachers will be able to rely on data and school resources as they monitor students’ progress and accommodate diverse learning needs. The school will establish systemic policies that will improve instruction and achievement for all.

**Recommended** **resources:**

* The *Massachusetts Tiered System of Support (MTSS)* ([www.mass.gov/ese/mtss](http://www.mass.gov/ese/mtss)) is a blueprint for school improvement that focuses on systems, structures and supports across the district, school, and classroom to meet the academic and non-academic needs of all students. The MTSS website includes links to a self-assessment and a variety of helpful resources. The quick reference guides are particularly helpful: (<http://www.mass.gov/edu/government/departments-and-boards/ese/programs/accountability/tools-and-resources/massachusetts-tiered-system-of-support/mtss-quick-reference-guides.html>).

**2. The school should review its general and special education practices and make changes necessary to ensure that students with disabilities are educated in the least restrictive environment and included in the life of the school.**

**A.** The school should develop appropriate instruction and supports that will maximize the time that students with disabilities spend in the general education classroom. This would include building teachers’ ability to address a variety of student needs and to provide accommodations, creating co-teaching opportunities where no more than half of the class is identified for special services, and identifying ways to provide push-in or pull-out support.

1. The school should provide ongoing, high-quality professional development to teachers focused on instructional strategies that are desirable for students with disabilities, including techniques to differentiate instruction while providing an appropriate level of challenge to all students.

2. The school should eliminate the Academy class model or at least ensure that Academy classes provide students with access to a challenging curriculum and have clear exit criteria.

3. The school should consider ways to provide students with skills classes with the goal of limiting the time spent outside the general education classroom.

4. The school should consider how it might provide general and special educators, particularly in grades 9-12, sufficient time to collaborate on strategies that accommodate the range of differences found in general education classrooms.

**B**. The special education department should establish clear entry and exit criteria based on evaluations by appropriate personnel and an analysis of student performance data.

* + 1. The department should look at available resources, including identifying appropriate specialized assessments, to determine appropriate ways for students to transition to the next level of service.
    2. The department should document, clearly communicate, and consistently refer to these policies.

**Benefits:** Implementing this recommendation will ensure that students with disabilities are in classrooms where they can access the full curriculum, become more fully included in the regular life of the school, and advance their learning. Also, fewer students will require the support of a substantially separate classroom. Finally, in learning to differentiate instruction and help each student reach his or her full potential, teachers will acquire a wider array of skills from which the whole student population will benefit.

**Recommended resource:**

* *Is Special Education the Right Service?* (<http://www.doe.mass.edu/sped/docs.html>). Along with statutory requirements and state regulations, this document offers guidance on how to ensure a responsive general education environment and guidelines to assist practitioners and parents in identifying students with disabilities.

Appendix A: Review Team, Activities, Schedule, Site Visit

Review Team Members

The review was conducted from March 7-9, 2016, by the following team of independent ESE consultants.

1. Richard Silverman, Curriculum and Instruction
2. Suzanne Kelly, Curriculum and Instruction
3. Peter McGinn, Assessment
4. Kathleen Lopez-Natale, Student Support
5. Christine Brandt, *review team coordinator*

District Review Activities

The following activities were conducted during the review:

The team conducted interviews with the following members of the school committee: the chairman and one member.

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

The team conducted interviews/focus groups with the following central office administrators: the superintendent and the director of special education. The assistant principal was not available for interviews during the site visit.

The team visited the following school: Pioneer Regional School (grades 7-12).

During school visits, the team conducted interviews with 1 principal and focus groups with 12 teachers at the middle-school level and 4 teachers at the high-school level.

The team observed 35 classes in the school: 22 at the high-school level and 13 at the middle-school level.

The review team analyzed multiple data sets and reviewed numerous documents before and during the site visit, including:

* + Student and school performance data, including achievement and growth, enrollment, graduation, dropout, retention, suspension, and attendance rates.
  + Data on the district’s staffing and finances.
  + 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).
  + 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.
  + All completed program and administrator evaluations, and a random selection of completed teacher evaluations.

Site Visit Schedule

|  |  |  |
| --- | --- | --- |
| **Monday**  3/7/2016 | **Tuesday**  3/8/16 | **Wednesday**  3/9/16 |
| Orientation with district staff, school principal, and school leaders; document reviews; interviews with district and school leaders and visits to Frontier Regional School for classroom observations. | Interviews with district and school leaders; interview with teachers’ association, teacher focus groups; parent focus group; interviews with school committee members; and visits to Frontier Regional School for classroom observations. | Interviews with school staff; interview with district leaders; visits to Frontier Regional School for classroom observations. |

Appendix B: Enrollment, Performance, Expenditures

**Table B1a: Frontier Regional School District**

**2015–2016 Student Enrollment by Race/Ethnicity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Student Group** | **District** | **Percent**  **of Total** | **State** | **Percent of**  **Total** |
| African-American | 6 | 1.0% | 83,481 | 8.8% |
| Asian | 19 | 3.1% | 61,584 | 6.5% |
| Hispanic | 22 | 3.6% | 176,873 | 18.6% |
| Native American | -- | -- | 2,179 | 0.2% |
| White | 549 | 89.6% | 597,502 | 62.7% |
| Native Hawaiian | 2 | 0.3% | 888 | 0.1% |
| Multi-Race, Non-Hispanic | 15 | 2.4% | 30,922 | 3.2% |
| **All Students** | 613 | 100.0% | 953,429 | 100.0% |
| Note: As of October 1, 2015 | | | | |

**Table B1b: Frontier Regional School District**

**2015–2016 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 | 129 | 69.0% | 20.7% | 165,559 | 39.4% | 17.2% |
| Econ. Disad. | 84 | 44.9% | 13.7% | 260,998 | 62.2% | 27.4% |
| ELLs and Former ELLs | 4 | 2.1% | 0.7% | 85,763 | 20.4% | 9.0% |
| All high needs students | 187 | 100.0% | 30.0% | 419,764 | 100.0% | 43.5% |
| Notes: As of October 1, 2015. 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 624; total state enrollment including students in out-of-district placement is 964,026. | | | | | | |

**Table B2a: Frontier Regional School District**

**English Language Arts Performance, 2012–2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade and Measure** | | **Number Included (2015)** | **Spring MCAS Year** | | | | | **Gains and Declines** | |
| **4-Year Trend** | **2-Year Trend** |
| **2012** | **2013** | **2014** | **2015** | **State (2015)** |
| 7 | CPI | 116 | 91.9 | 90.9 | 87.2 | 87.5 | 87 | -4.4 | 0.3 |
| P+ | 116 | 78% | 74% | 63% | 67% | 70% | -11% | 4% |
| SGP | 108 | 39 | 31 | 27 | 37 | 50 | -2 | 10 |
| 8 | CPI | 111 | 93.3 | 90.6 | 92 | 92.6 | 91.4 | -0.7 | 0.6 |
| P+ | 111 | 85% | 79% | 79% | 78% | 80% | -7% | -1% |
| SGP | 103 | 40 | 43 | 46 | 58 | 50 | 18 | 12 |
| 10 | CPI | 89 | 98.2 | 97.6 | 96.9 | 98.6 | 96.7 | 0.4 | 1.7 |
| P+ | 89 | 94% | 94% | 92% | 93% | 91% | -1% | 1% |
| SGP | 77 | 49 | 61 | 49 | 55 | 51 | 6 | 6 |
| All | CPI | 316 | 94.3 | 92.9 | 91.9 | 92.4 | -- | -1.9 | 0.5 |
| P+ | 316 | 86% | 82% | 78% | 78% | -- | -8% | 0% |
| SGP | 288 | 41 | 44 | 37 | 46.5 | 50 | 5.5 | 9.5 |
| 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 B2b: Frontier Regional School District**

**Mathematics Performance, 2012–2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade and Measure** | | **Number Included (2015)** | **Spring MCAS Year** | | | | | **Gains and Declines** | |
| **4-Year Trend** | **2-Year Trend** |
| **2012** | **2013** | **2014** | **2015** | **State (2015)** |
| 7 | CPI | 116 | 77.4 | 74.5 | 72.3 | 76.9 | 73 | -0.5 | 4.6 |
| P+ | 116 | 52% | 47% | 46% | 51% | 51% | -1% | 5% |
| SGP | 109 | 37 | 47.5 | 48 | 49 | 51 | 12 | 1 |
| 8 | CPI | 112 | 71.2 | 69.6 | 64.5 | 75.9 | 78.7 | 4.7 | 11.4 |
| P+ | 112 | 39% | 44% | 33% | 51% | 60% | 12% | 18% |
| SGP | 103 | 38.5 | 23 | 25 | 39 | 51 | 0.5 | 14 |
| 10 | CPI | 89 | 94.3 | 96.4 | 92.8 | 95.8 | 89.9 | 1.5 | 3 |
| P+ | 89 | 88% | 93% | 85% | 88% | 79% | 0% | 3% |
| SGP | 77 | 42 | 69 | 48 | 62 | 50 | 20 | 14 |
| All | CPI | 317 | 80.1 | 79.8 | 76.3 | 81.9 | -- | 1.8 | 5.6 |
| P+ | 317 | 58% | 60% | 54% | 61% | -- | 3% | 7% |
| SGP | 289 | 39 | 46 | 41 | 48 | 50 | 9 | 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 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: Frontier Regional School District**

**Science and Technology/Engineering Performance, 2012–2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade and Measure** | | **Number Included (2015)** | **Spring MCAS Year** | | | | | **Gains and Declines** | |
| **4-Year Trend** | **2-Year Trend** |
| **2012** | **2013** | **2014** | **2015** | **State (2015)** |
| 8 | CPI | 112 | 72 | 66.7 | 72.7 | 67.4 | 72.4 | -4.6 | -5.3 |
| P+ | 112 | 38% | 25% | 31% | 27% | 42% | -11% | -4% |
| 10 | CPI | 85 | 94.7 | 97.1 | 94.1 | 97.1 | 88.2 | 2.4 | 3 |
| P+ | 85 | 86% | 88% | 84% | 89% | 72% | 3% | 5% |
| All | CPI | 197 | 82.1 | 80.6 | 82.9 | 80.2 | 79.4 | -1.9 | -2.7 |
| P+ | 197 | 59% | 54% | 56% | 54% | 54% | -5% | -2% |
| Notes: P+ = percent *Proficient* or *Advanced*. Students participate in Science and Technology/ Engineering (STE) MCAS tests in grades 5, 8, and 10 only. Median SGPs are not calculated for STE. | | | | | | | | | |

**Table B3a: Frontier Regional School District**

**English Language Arts (All Grades)**

**Performance for Selected Subgroups Compared to State, 2012–2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group and Measure** | | | **Number Included (2015)** | **Spring MCAS Year** | | | | **Gains and Declines** | |
| **4-Year Trend** | **2-Year Trend** |
| **2012** | **2013** | **2014** | **2015** |
| High Needs | District | CPI | 113 | 84.3 | 81.6 | 80.8 | 83.2 | -1.1 | 2.4 |
| P+ | 113 | 62.0% | 55.0% | 49.0% | 56.0% | -6.0% | 7.0% |
| SGP | 93 | 40 | 35 | 30 | 47 | 7 | 17 |
| State | CPI | 93,277 | 76.5 | 76.8 | 77.1 | 79.5 | 3 | 2.4 |
| P+ | 93,277 | 48.0% | 48.0% | 50.0% | 55.0% | 7.0% | 5.0% |
| SGP | 68,746 | 46 | 47 | 47 | 47 | 1 | 0 |
| Econ.  Disad. | District | CPI | 61 | -- | -- | -- | 87.3 | -- | -- |
| P+ | 61 | -- | -- | -- | 67.0% | -- | -- |
| SGP | 53 | -- | -- | -- | 58 | -- | -- |
| State | CPI | 63,124 | -- | -- | -- | 80.9 | -- | -- |
| P+ | 63,124 | -- | -- | -- | 59.0% | -- | -- |
| SGP | 47,064 | -- | -- | -- | 47 | -- | -- |
| Students w/ disabilities | District | CPI | 77 | 73.7 | 70.9 | 72.5 | 76.3 | 2.6 | 3.8 |
| P+ | 77 | 39.0% | 33.0% | 30.0% | 38.0% | -1.0% | 8.0% |
| SGP | 61 | 40.5 | 26 | 28 | 42 | 1.5 | 14 |
| State | CPI | 39,117 | 67.3 | 66.8 | 66.6 | 71.6 | 4.3 | 5 |
| P+ | 39,117 | 31.0% | 30.0% | 31.0% | 39.0% | 8.0% | 8.0% |
| SGP | 28,234 | 43 | 43 | 43 | 44 | 1 | 1 |
| English language learners or Former ELLs | District | CPI | 6 | -- | -- | -- | -- | -- | -- |
| P+ | 6 | -- | -- | -- | -- | -- | -- |
| SGP | 4 | -- | -- | -- | -- | -- | -- |
| State | CPI | 18,541 | 66.2 | 67.4 | 67.8 | 70.1 | 3.9 | 2.3 |
| P+ | 18,541 | 34.0% | 35.0% | 36.0% | 41.0% | 7.0% | 5.0% |
| SGP | 11,589 | 51 | 53 | 54 | 54 | 3 | 0 |
| **All students** | District | CPI | 316 | 94.3 | 92.9 | 91.9 | 92.4 | -1.9 | 0.5 |
| P+ | 316 | 86.0% | 82.0% | 78.0% | 78.0% | -8.0% | 0.0% |
| SGP | 288 | 41 | 44 | 37 | 46.5 | 5.5 | 9.5 |
| State | CPI | 216,396 | 86.7 | 86.8 | 86.7 | 89.3 | 2.6 | 2.6 |
| P+ | 216,396 | 69.0% | 69.0% | 69.0% | 75.0% | 6.0% | 6.0% |
| SGP | 172,652 | 50 | 51 | 50 | 50 | 0 | 0 |
| 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: Frontier Regional School District**

**Mathematics (All Grades)**

**Performance for Selected Subgroups Compared to State, 2012–2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group and Measure** | | | **Number Included (2015)** | **Spring MCAS Year** | | | | **Gains and Declines** | |
| **4-Year Trend** | **2-Year Trend** |
| **2012** | **2013** | **2014** | **2015** |
| High Needs | District | CPI | 112 | 62.8 | 65.8 | 61.1 | 65.6 | 2.8 | 4.5 |
| P+ | 112 | 31.0% | 38.0% | 32.0% | 34.0% | 3.0% | 2.0% |
| SGP | 92 | 36 | 42 | 34.5 | 47 | 11 | 12.5 |
| State | CPI | 93,295 | 67 | 68.6 | 68.4 | 70.2 | 3.2 | 1.8 |
| P+ | 93,295 | 37.0% | 40.0% | 40.0% | 43.0% | 6.0% | 3.0% |
| SGP | 69,106 | 46 | 46 | 47 | 47 | 1 | 0 |
| Economically Disadvantaged | District | CPI | 61 | -- | -- | -- | 71.3 | -- | -- |
| P+ | 61 | -- | -- | -- | 43.0% | -- | -- |
| SGP | 53 | -- | -- | -- | 47 | -- | -- |
| State | CPI | 63,076 | -- | -- | -- | 71.9 | 71.9 | 71.9 |
| P+ | 63,076 | -- | -- | -- | 47.0% | 47.0% | 47.0% |
| SGP | 47,295 | -- | -- | -- | 46 | 46 | 46 |
| Students w/ disabilities | District | CPI | 76 | 49.1 | 55 | 47.5 | 54.3 | 5.2 | 6.8 |
| P+ | 76 | 11.0% | 22.0% | 11.0% | 17.0% | 6.0% | 6.0% |
| SGP | 60 | 43 | 35 | 34 | 47 | 4 | 13 |
| State | CPI | 39,181 | 56.9 | 57.4 | 57.1 | 60 | 3.1 | 2.9 |
| P+ | 39,181 | 21.0% | 22.0% | 22.0% | 27.0% | 6.0% | 5.0% |
| SGP | 28,451 | 43 | 42 | 43 | 44 | 1 | 1 |
| English language learners or Former ELLs | District | CPI | 6 | -- | -- | -- | -- | -- | -- |
| P+ | 6 | -- | -- | -- | -- | -- | -- |
| SGP | 4 | -- | -- | -- | -- | -- | -- |
| State | CPI | 18,625 | 61.6 | 63.9 | 63.8 | 64.4 | 2.8 | 0.6 |
| P+ | 18,625 | 32.0% | 35.0% | 36.0% | 37.0% | 5.0% | 1.0% |
| SGP | 11,735 | 52 | 53 | 52 | 50 | -2 | -2 |
| **All students** | District | CPI | 317 | 80.1 | 79.8 | 76.3 | 81.9 | 1.8 | 5.6 |
| P+ | 317 | 58.0% | 60.0% | 54.0% | 61.0% | 3.0% | 7.0% |
| SGP | 289 | 39 | 46 | 41 | 48 | 9 | 7 |
| State | CPI | 216,363 | 79.9 | 80.8 | 80.3 | 83.1 | 3.2 | 2.8 |
| P+ | 216,363 | 59.0% | 61.0% | 60.0% | 66.0% | 7.0% | 6.0% |
| SGP | 173,217 | 50 | 51 | 50 | 50 | 0 | 0 |
| 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: Frontier Regional School District**

**Science and Technology/Engineering (All Grades)**

**Performance for Selected Subgroups Compared to State, 2012–2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group and Measure** | | | **Number Included (2015)** | **Spring MCAS Year** | | | | **Gains and Declines** | |
| **4-Year Trend** | **2-Year Trend** |
| **2012** | **2013** | **2014** | **2015** |
| High Needs | District | CPI | 70 | 65.8 | 70.6 | 72.5 | 69.6 | 3.8 | -2.9 |
| P+ | 70 | 32.0% | 35.0% | 35.0% | 33.0% | 1.0% | -2.0% |
| State | CPI | 91,013 | 65 | 66.4 | 67.3 | 66.3 | 1.3 | -1 |
| P+ | 91,013 | 31.0% | 31.0% | 33.0% | 32.0% | 1.0% | -1.0% |
| Econ. Disad. | District | CPI | 42 | -- | -- | -- | 68.5 | -- | -- |
| P+ | 42 | -- | -- | -- | 36.0% | -- | --- |
| State | CPI | 62,345 | -- | -- | -- | 67.1 | -- | -- |
| P+ | 62,345 | -- | -- | -- | 33.0% | -- | -- |
| Students w/ disabilities | District | CPI | 45 | 52.4 | 65.2 | 63.5 | 63.3 | 10.9 | -0.2 |
| P+ | 45 | 12.0% | 27.0% | 18.0% | 20.0% | 8.0% | 2.0% |
| State | CPI | 38,520 | 58.7 | 59.8 | 60.1 | 60.2 | 1.5 | 0.1 |
| P+ | 38,520 | 20.0% | 20.0% | 22.0% | 22.0% | 2.0% | 0.0% |
| English language learners or Former ELLs | District | CPI | 2 | -- | -- | -- | -- | -- | -- |
| P+ | 2 | -- | -- | -- | -- | -- | -- |
| State | CPI | 17,516 | 51.4 | 54 | 54 | 53.9 | 2.5 | -0.1 |
| P+ | 17,516 | 17.0% | 19.0% | 18.0% | 18.0% | 1.0% | 0.0% |
| All students | District | CPI | 197 | 82.1 | 80.6 | 82.9 | 80.2 | -1.9 | -2.7 |
| P+ | 197 | 59.0% | 54.0% | 56.0% | 54.0% | -5.0% | -2.0% |
| State | CPI | 210,454 | 78.6 | 79 | 79.6 | 79.4 | 0.8 | -0.2 |
| P+ | 210,454 | 54.0% | 53.0% | 55.0% | 54.0% | 0.0% | -1.0% |
| Notes: Median SGPs are not calculated for Science and Technology/ Engineering (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: Frontier Regional School District**

**Annual Grade 9-12 Drop-Out Rates, 2012–2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group** | **School Year Ending** | | | | **Change 2012–2015** | | **Change 2014–2015** | | **State (2015)** |
| **2012** | **2013** | **2014** | **2015** | **Percentage Points** | **Percent Change** | **Percentage Points** | **Percent Change** |
| High Needs | 4.8% | 3.9% | 3.3% | 3.1% | -1.7 | -35.4% | -0.2 | -6.1% | 3.4% |
| Econ. Disad. | -- | -- | -- | 4.4% | -- | -- | -- | -- | 3.3% |
| Students w/ disabilities | 4.1% | 4.5% | 1.6% | 4.9% | 0.8 | 19.5% | 3.3 | 206% | 3.5% |
| ELL | -- | -- | -- | -- | -- | -- | -- | -- | 5.7% |
| All students | 1.9% | 2.0% | 1.5% | 1.1% | -0.8 | -42.1% | -0.4 | -26.6% | 1.9% |
| Notes: The annual drop-out 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. Drop outs 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 high school equivalency by the following October 1. Drop-out rates have been rounded; percent change is based on unrounded numbers. | | | | | | | | | |

**Table B5: Frontier Regional School District**

**Attendance Rates, 2012–2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group** | **School Year Ending** | | | | **Change 2012–2015** | | **Change 2014–2015** | | **State (2015)** |
| **2012** | **2013** | **2014** | **2015** | **Percentage Points** | **Percent Change** | **Percentage Points** | **Percent Change** |
| All students | 96.4% | 96.3% | 96.0% | 96.4% | 0.0 | 0% | 0.4 | 0.4% | 94.7% |
| 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 B6: Frontier Regional School District**

**Expenditures, Chapter 70 State Aid, and Net School Spending Fiscal Years 2012–2014**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **FY12** | | **FY13** | | **FY14** | |
|  | **Estimated** | **Actual** | **Estimated** | **Actual** | **Estimated** | **Actual** |
| Expenditures | | | | | | |
| From local appropriations for schools: |  | | | | | |
| By school committee | $10,055,908 | $9,997,703 | $10,331,414 | $10,233,999 | $10,701,509 | $10,613,370 |
| From revolving funds and grants | -- | $2,021,502 | -- | $1,726,908 | -- | $1,620,991 |
| Total expenditures | -- | $12,019,205 | -- | $11,960,907 | -- | $12,234,361 |
| Chapter 70 aid to education program | | | | | | |
| Chapter 70 state aid\* | -- | $2,704,790 | -- | $2,729,670 | -- | $2,744,045 |
| Required local contribution | -- | $4,614,585 | -- | $4,643,352 | -- | $4,748,410 |
| Required net school spending\*\* | -- | $7,319,375 | -- | $7,373,022 | -- | $7,492,455 |
| Actual net school spending | -- | $9,214,346 | -- | $9,543,822 | -- | $9,936,352 |
| Over/under required ($) | -- | $1,894,971 | -- | $2,170,800 | -- | $2,443,897 |
| Over/under required (%) | -- | 25.9% | -- | 29.4% | -- | 32.6 |
| \*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: FY12, FY13, and FY14 District End-of-Year Reports, Chapter 70 Program information on ESE website  Data retrieved 11/20/15 | | | | | | |

**Table B7: Frontier Regional School District**

**Expenditures Per In-District Pupil**

**Fiscal Years 2012–2014**

|  |  |  |  |
| --- | --- | --- | --- |
| **Expenditure Category** | **2012** | **2013** | **2014** |
| Administration | $462 | $544 | $573 |
| Instructional leadership (district and school) | $961 | $1,008 | $1,052 |
| Teachers | $5,937 | $6,058 | $5,624 |
| Other teaching services | $1,061 | $1,353 | $1,578 |
| Professional development | $274 | $280 | $249 |
| Instructional materials, equipment and technology | $579 | $517 | $685 |
| Guidance, counseling and testing services | $623 | $720 | $824 |
| Pupil services | $1,544 | $1,637 | $1,698 |
| Operations and maintenance | $1,283 | $1,385 | $1,433 |
| Insurance, retirement and other fixed costs | $2,854 | $2,973 | $2,944 |
| Total expenditures per in-district pupil | $15,577 | $16,476 | $16,661 |
| Sources: [Per-pupil expenditure reports on ESE website](http://www.doe.mass.edu/finance/statistics/ppx.html)  Note: Any discrepancy between expenditures and total is because of rounding. | | | |

Appendix C: Instructional Inventory

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
| **Focus Area #1: Learning Objectives & Instruction** |  | Insufficient | Minimal | Moderate | Strong | Avg Number of points |
|  | (0) | (1) | (2) | (3) | (0 to 3) |
| 1. The teacher demonstrates knowledge of subject matter and content. | **ES** |  |  |  |  |  |
| **MS** | 0% | 8% | 8% | 85% | 2.8 |
| **HS** | 0% | 18% | 45% | 36% | 2.2 |
| **Total #** | 0 | 5 | 11 | 19 | 2.4 |
| **Total %** | 0% | 14% | 31% | 54% |  |
| 2. The teacher provides and refers to clear learning objective(s) in the lesson. | **ES** |  |  |  |  |  |
| **MS** | 38% | 8% | 31% | 23% | 1.4 |
| **HS** | 45% | 27% | 18% | 9% | 0.9 |
| **Total #** | 15 | 7 | 8 | 5 | 1.1 |
| **Total %** | 43% | 20% | 23% | 14% |  |
| 3. The teacher implements a lesson that reflects high expectations aligned to the learning objective (s). | **ES** |  |  |  |  |  |
| **MS** | 15% | 23% | 38% | 23% | 1.7 |
| **HS** | 32% | 32% | 23% | 14% | 1.2 |
| **Total #** | 9 | 10 | 10 | 6 | 1.4 |
| **Total %** | 26% | 29% | 29% | 17% |  |
| 4. The teacher uses appropriate instructional strategies well matched to the learning objective(s). | **ES** |  |  |  |  |  |
| **MS** | 15% | 31% | 23% | 31% | 1.7 |
| **HS** | 23% | 32% | 27% | 18% | 1.4 |
| **Total #** | 7 | 11 | 9 | 8 | 1.5 |
| **Total %** | 20% | 31% | 26% | 23% |  |
| **Total Score For Focus Area #1** | **ES** |  |  |  |  |  |
| **MS** |  |  |  |  | 7.5 |
| **HS** |  |  |  |  | 5.7 |
| **Total** |  |  |  |  | 6.4 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
| **Focus Area #2: Student Engagement & Critical Thinking** |  | Insufficient | Minimal | Moderate | Strong | Avg Number of points |
|  | (0) | (1) | (2) | (3) | (0 to 3) |
| 5. Students are motivated and engaged in the lesson. | **ES** |  |  |  |  |  |
| **MS** | 0% | 8% | 69% | 23% | 2.2 |
| **HS** | 0% | 32% | 36% | 32% | 2.0 |
| **Total #** | 0 | 8 | 17 | 10 | 2.1 |
| **Total %** | 0% | 23% | 49% | 29% |  |
| 6. The teacher facilitates tasks that encourage students to develop and engage in critical thinking. | **ES** |  |  |  |  |  |
| **MS** | 0% | 15% | 46% | 38% | 2.2 |
| **HS** | 41% | 23% | 18% | 18% | 1.1 |
| **Total #** | 9 | 7 | 10 | 9 | 1.5 |
| **Total %** | 26% | 20% | 29% | 26% |  |
| 7. Students assume responsibility for their own learning whether individually, in pairs, or in groups. | **ES** |  |  |  |  |  |
| **MS** | 23% | 0% | 38% | 38% | 1.9 |
| **HS** | 23% | 18% | 36% | 23% | 1.6 |
| **Total #** | 8 | 4 | 13 | 10 | 1.7 |
| **Total %** | 23% | 11% | 37% | 29% |  |
| **Total Score For Focus Area #2** | **ES** |  |  |  |  |  |
| **MS** |  |  |  |  | 6.3 |
| **HS** |  |  |  |  | 4.7 |
| **Total** |  |  |  |  | 5.3 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
| **Focus Area #3: Differentiated Instruction & Classroom Culture** |  | Insufficient | Minimal | Moderate | Strong | Avg Number of points |
|  | (0) | (1) | (2) | (3) | (0 to 3) |
| 8. The teacher appropriately differentiates instruction so the lesson content is accessible for all learners. | **ES** |  |  |  |  |  |
| **MS** | 38% | 31% | 15% | 15% | 1.1 |
| **HS** | 55% | 27% | 18% | 0% | 0.6 |
| **Total #** | 17 | 10 | 6 | 2 |  |
| **Total %** | 49% | 29% | 17% | 6% |  |
| 9. The teacher uses appropriate resources aligned to students' diverse learning needs. (e.g., technology, manipulatives, support personnel). | **ES** |  |  |  |  |  |
| **MS** | 31% | 15% | 31% | 23% | 1.5 |
| **HS** | 36% | 18% | 32% | 14% | 1.2 |
| **Total #** | 12 | 6 | 11 | 6 | 1.3 |
| **Total %** | 34% | 17% | 31% | 17% |  |
| 10. The classroom climate is characterized by respectful behavior, routines, tone, and discourse. | **ES** |  |  |  |  |  |
| **MS** | 0% | 0% | 23% | 77% | 2.8 |
| **HS** | 0% | 5% | 41% | 55% | 2.5 |
| **Total #** | 0 | 1 | 12 | 22 | 2.6 |
| **Total %** | 0% | 3% | 34% | 63% |  |
| 11. The teacher conducts appropriate formative assessments to check for understanding and provide feedback to students. | **ES** |  |  |  |  |  |
| **MS** | 8% | 15% | 38% | 38% | 2.1 |
| **HS** | 32% | 36% | 27% | 5% | 1.0 |
| **Total #** | 8 | 10 | 11 | 6 | 1.4 |
| **Total %** | 23% | 29% | 31% | 17% |  |
| **Total Score For Focus Area #3** | **ES** |  |  |  |  |  |
| **MS** |  |  |  |  | 7.4 |
| **HS** |  |  |  |  | 5.4 |
| **Total** |  |  |  |  | 6.1 |

1. The economically disadvantaged subgroup does not have a CPI target and rating because 2015 is the first year that a CPI was calculated for the economically disadvantaged group and will serve as a baseline for future years’ CPI targets. [↑](#footnote-ref-1)
2. The four-year cohort graduation rate target is 80 percent for each group and refers to the 2014 graduation rate. Low income students did not receive a 2015 accountability rating because of the change to the economically disadvantaged measure. [↑](#footnote-ref-2)
3. The five-year cohort graduation rate target is 85 percent for each group and refers to the 2013 graduation rate. Low income students did not receive a 2015 accountability rating because of the change to the economically disadvantaged measure. [↑](#footnote-ref-3)
4. Low income dropout rate used for the 2012, 2013, and 2014 economically disadvantaged dropout rates. [↑](#footnote-ref-4)