



Lowell Public Schools
DISTRICT PLAN FOR SCHOOL INTERVENTION (DPSI)
REVIEW

August 2009

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



This document was prepared on behalf of the
Center for School and District Accountability of the
Massachusetts Department of Elementary and Secondary Education
Mitchell D. Chester, Ed.D
Commissioner

Board of Elementary and Secondary Education Members

Ms. Maura Banta, Chair, Melrose
Ms. Harneen Chernow, Jamaica Plain
Mr. Gerald Chertavian, Cambridge
Mr. Michael D'Ortenzio, Jr., Chair, Student Advisory Council, Wellesley
Dr. Thomas E. Fortmann, Lexington
Ms. Beverly Holmes, Springfield
Dr. Jeff Howard, Reading
Ms. Ruth Kaplan, Brookline
Dr. Dana Mohler-Faria, Bridgewater
Mr. Paul Reville, Secretary of Education, Worcester
Dr. Sandra L. Stotsky, Brookline
Mitchell D. Chester, Ed.D., Commissioner
and Secretary to the Board

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 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 781-338-6105.

© 2009 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



Overview of the District Plan for School Intervention (DPSI) Review

The purpose of the eight DPSI reviews is to assess district efforts to support school intervention, including strategic decisions made to support ongoing school improvement. These reviews also seek to assess the impact of support given by the Massachusetts Department of Elementary and Secondary Education (ESE) for improvement efforts. DPSI reviews also carry out requirements for state audits of districts.¹

The review is designed around the District Plan for School Intervention (DPSI) approved by the Board of Elementary and Secondary Education in June 2008 for each of the urban school districts being reviewed. The DPSI, which serves as the guiding document to support and hold accountable Commonwealth Priority Schools, is unique to each district and its schools. The DPSI serves as the foundation for the review, ensuring that each district's unique priorities, current improvement strategies, and key decisions are central to the review. In addition, the review considers other key documents, processes, and initiatives that have been central to the development and implementation of district intervention strategies and Department support efforts in recent years. These include, for example, the District Leadership Report on the Essential Conditions, the State Review Panel report, and the Memorandum of Understanding (MOU) between the district and the state.

The review places a team of contracted Department consultants in the district and its schools to collect and analyze evidence about district efforts to support school intervention, the evolution and current status of school intervention and improvement strategies, and the impact of Department efforts to support the district. This evidence includes documentation provided by the district and by the Department, interviews with Department staff, and focus groups and interviews at the central office level, as well as visits to Commonwealth Priority Schools. In some districts, reviews also include visits to schools in restructuring.² While on site at schools, the review team reviews school documents, conducts focus groups, and visits classrooms.

The review places a value on engaging the district in understanding its own performance.

The DPSI review of the Lowell Public Schools was conducted between April 28 and May 11, 2009. The DPSI review included visits to the following district schools: Bartlett Community Partnership School (PK-grade 8), C.W. Morey Elementary School (PK-grade 4), Charlotte M. Murkland Elementary School (PK-grade 4), Pawtucketville Memorial Elementary School (PK-grade 4) and Shaughnessy Elementary School (PK-grade 4). Further information about the review and the schedule can be found in Appendix B; information about the members of the review team can be found in Appendix A.

¹ See Mass. Gen. Laws c. 15, § 55A, as amended by St. 2008, c. 311, § 3, effective August 14, 2008.

² With respect to Commonwealth Priority Schools and schools in restructuring, see 603 CMR 2.00, available at <http://www.doe.mass.edu/lawsregs/603cmr2.html?section=all>.

Lowell Public Schools

District Profile

The Lowell Public Schools (LPS) are under new leadership for the 2008-2009 school year with a change in superintendent. The district also hired a new district-level coordinator of English language arts at the beginning of the school year. Individuals in other key district administrative positions have remained stable.

In the 2008-2009 school year, LPS enrolled 13,505 students. This represents a decrease in total enrollment of approximately 7.5 percent from three years ago (2005-2006), when the student population was 14,603. Student demographic and subgroup information for the 2008-2009 school year is provided in the following table.

**Table 1: LPS Student Enrollment by Race/Ethnicity and Selected Populations
2008-2009**

Enrollment by Race/Ethnicity	Percent of Total	Selected Populations	Percent of Total
African American	6.7%	First Language not English	45.1%
Hispanic	24.4%	Limited English Proficient	31.5%
Asian	28.5%	From low-income families	67.6%
White	38.9%	Special Education	15.9%
Native American	0.1%		
Native Hawaiian/Pacific Islander	0.0%		
Multi-Race, Non-Hispanic	1.2%		

The district's students are enrolled in 22 schools: 13 elementary schools (PreK/K-4); seven middle schools (5-8); one high school (9-12); and two PreK-grade 8 schools.

Four of the five schools reviewed by the Department's review team are elementary schools serving students in grade levels K-4. The Bartlett Community Partnership School is one of two district schools with a K-8 configuration; this is the school's third year with this configuration. Over the past three years, the Bartlett School has undergone numerous staffing changes. For example, 7 of 14 teachers left Bartlett after the first year in its present configuration; grade 3 has had new teachers each year. The principal of the Morey School is new to the school in 2008-2009. The principal at the Murkland is also new to the school in 2008-2009, reassigned from a school that was closed. School leadership and administrative staff at the other three schools have remained stable for the past several years.

The district has a large population of English language learner (ELL) students. District-level staff reported that they serve students and families who speak more than 50 languages; 30 percent of Lowell students are limited English proficient (LEP) and nearly 50 percent do not speak English as their primary language. Approximately half of the student population (45.8 percent) at the Morey School falls into the category of First Language Not English (FLNE). One of the five schools visited by the review team, the Murkland School, is a Khmer language specialty school,

structured to accommodate LEP students and families whose first language is not English (FLNE). Approximately one-half of its student population is limited English proficient.

Student Performance

In both 2007 and 2008, the Lowell Public Schools made Adequate Yearly Progress (AYP) in the aggregate in English language arts (ELA). The district made AYP in mathematics in the aggregate in 2007, but not in 2008. The district has not made AYP for ELA or mathematics subgroups in the past six years and currently has an NCLB status of Corrective Action for subgroups in both ELA and mathematics.

Table 2: LPS Adequate Yearly Progress History

		2003	2004	2005	2006	2007	2008	NCLB Accountability Status
ELA	Aggregate	Yes	No	No	No	Yes	Yes	Corrective Action - Subgroups
	All Subgroups	No	No	No	No	No	No	
Math	Aggregate	Yes	No	No	No	Yes	No	Corrective Action - Subgroups
	All Subgroups	No	No	No	No	No	No	

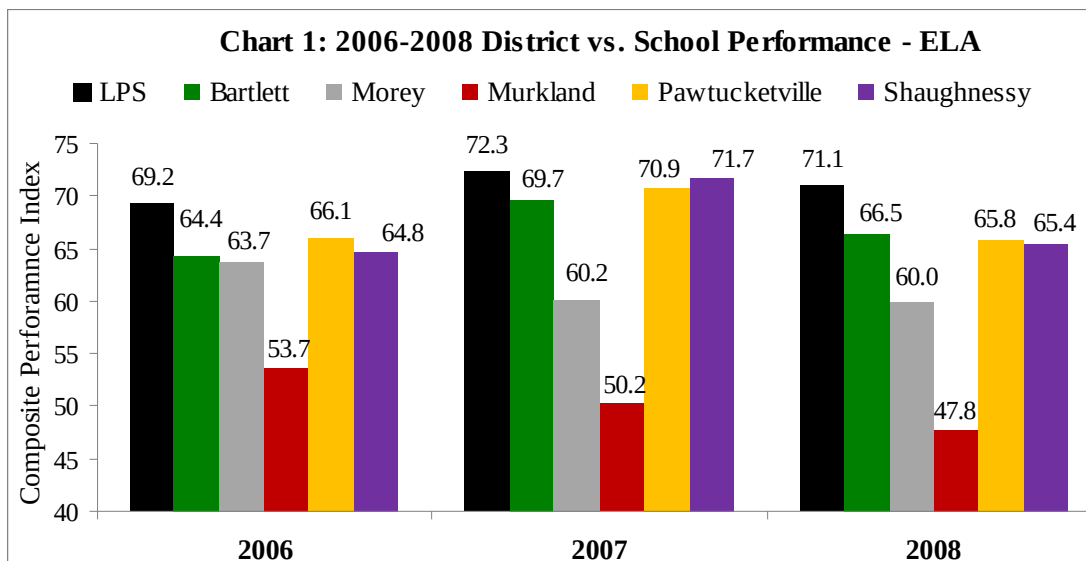
In 2008, none of the Commonwealth Priority Schools visited by the review team made AYP in ELA in the aggregate or for subgroups. On the other hand, all five of the Commonwealth Priority Schools made AYP in mathematics in the aggregate in 2008; three schools also made AYP for subgroups. The CPI (Composite Performance Index) increases from 2007 to 2008 were most notable at Morey and Murkland, which had increases of 7.1 percent and 10.1 percent, respectively.

Table 3: 2008 District and School AYP Status

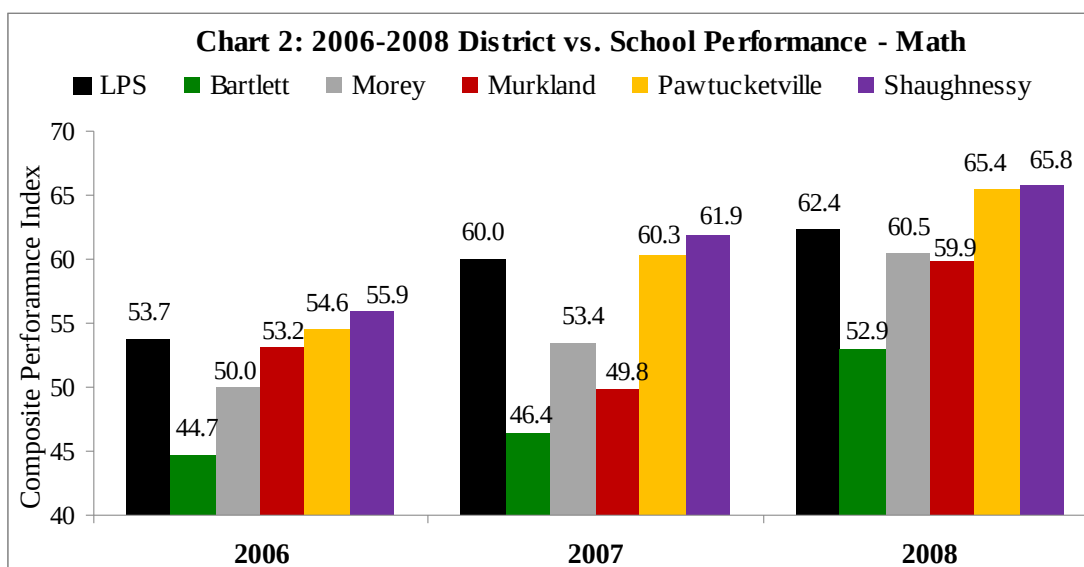
		ELA					Mathematics				
District/School	Enroll	Status 08	CPI 08	CPI Chg 07-08	AYP Agg	AYP Sub	Status 08	CPI 08	CPI Chg 07-08	AYP Agg	AYP Sub
Lowell	13,505	CA-S	71.7	-0.6	Yes	No	CA-S	62.4	2.4	No	No
Bartlett	428	RST1-A	66.5	-3.2	No	No	RST2-A	52.9	6.5	Yes	No
Morey	404	RST2-A	60.0	-0.2	No	No	RST1-A	60.5	7.1	Yes	Yes
Murkland	489	RST2-A	47.8	-2.4	No	No	RST1-A	59.9	10.1	Yes	Yes
Pawtucketville	462	RST1-A	65.8	-5.1	No	No	None	65.4	5.1	Yes	Yes
Shaughnessy	431	RST1-A	65.4	-6.3	No	No	II2-S	65.8	3.9	Yes	No

Note: A or Agg = Aggregate; CA = Corrective Action; CPI = Composite Performance Index; II2 = Identified for Improvement year 2; RST1 = Restructuring year 1; RST2 = Restructuring year 2; S or Sub = Subgroup

The district's CPI in ELA has remained relatively flat since 2006. The CPI increased by 3.1 percent from 2006 to 2007, but decreased slightly (by 1.2 percent) in 2008. Bartlett Community, Pawtucketville Memorial, and Shaughnessy followed a similar trend—each CPI increased in ELA from 2006 to 2007 and then decreased in 2008. The CPI in ELA at both Morey and Murkland decreased from 2006 to 2008—from 63.7 to 60.0 points and from 53.7 to 47.8 points, respectively, across MCAS administrations.



In mathematics, the district CPI increased from 2006 to 2008 with a total gain of 8.7 points across the three MCAS administrations. Four schools – Bartlett, Morey, Pawtucketville and Shaughnessy – have shown improvement at a rate that parallels the district. In 2006, 2007, and 2008, both Pawtucketville and Shaughnessy outperformed the district. Murkland's CPI declined 3.4 percent between 2006 and 2007, but increased more than 10 points in 2008.



Lowell Public Schools

Key Question 1: What capacity to support school intervention efforts has the district demonstrated to date? To what extent have these efforts impacted student achievement?

The Lowell District Plan for School Intervention (DPSI) was developed and written under the previous administration. The former superintendent, deputy superintendent, and coordinator for school improvement, as well as other school- and district-level stakeholders, were involved in its development.

The Lowell DPSI approved in April of 2008 presents a review of the “10 essential conditions” for school effectiveness³, including an analysis of current levels of implementation, next steps, timelines, and outcomes. The DPSI, on the basis of review of numerous data sources, also identifies cross-cutting issues in the district. Specific priorities, programs, and challenges are cited with regard to all five of the district’s Commonwealth Priority Schools.

The Lowell DPSI identifies three priority districtwide strategies: 1) customizing of the Department of Elementary and Secondary Education (ESE) learning walk protocol and its five power indicators in order to assess and refine professional development relative to teaching practice; 2) piloting district support teams to foster two-way communication about strategies for improving student achievement; and 3) clarifying coaching roles and responsibilities so as to improve teaching practice.

Findings under Key Question 1:

There is evidence that the three priority DPSI initiatives have been implemented in the Lowell Public Schools and continue to be a focus in the district. Under the new administration, modifications to previous implementation are in process.

1) In the 2007-2008 school year, the district conducted learning walks using the learning walk characteristics continuum developed by the Department. Learning walks were conducted during the spring of 2008 at the five Commonwealth Priority Schools visited by the review team. Learning walks focused on the five power indicators (i.e., instruction includes a range of techniques; questions require students to engage in application, analysis, synthesis, and evaluation; students articulate their thinking and reasoning; opportunities for students to apply new knowledge are embedded in the lesson; and on-the-spot formative assessments check for understanding to inform instruction). Participants in the learning walks included representatives from the Department, a range of district administrators, and school leaders. The district has also included union representatives in the learning walks, in part to ensure they were not evaluative. The participation of union representatives is also evidence of Lowell’s commitment to collaboration with stakeholders. Input from union representatives has been a valuable form of feedback at both the district and school levels.

³ Set out in 603 CMR 2.03(6)(e).

Data collected through the learning walks was shared with schools and used to identify opportunities for improvement in each school. Information from learning walks was also used to identify trends across schools and classrooms. In focus groups, both district administrators and school leaders indicated that the learning walk process enabled them to begin using a common language to talk about classroom practices. Most teachers indicated they were appreciative of feedback from learning walks.

Two of the schools visited by the review team—Morey and Pawtucketville Memorial—took part in learning walks in the fall of 2008. Other schools indicated that learning walks had been scheduled but were canceled by administrators due to other circumstances (e.g., snow days). In focus groups, some principals reported having recently received approval to resume formal learning walks, using the power indicators. District administrators and union representatives reported in focus groups that learning walks have continued in other schools (i.e., those not visited by the review team) across the district in the current school year.

2) The second strategy within the DPSI is to provide district support teams to aid in efforts to improve student achievement. The DPSI identified a few goals for district support teams, including: increasing responsiveness to challenging student behavior, accessing and using data, providing resources and strategies to help develop language proficiency in ELLs, and providing appropriate differentiation for special education students. One strategy the district has used to work toward these goals is to incorporate a range of individuals in the learning walk process. Special education, ELL, and early childhood staff—in addition to mathematics and ELA specialists—were trained on the learning walk protocol, increasing the diversity, experience, and perspective of teams.

In addition, there is a range of formal meeting structures to promote collaboration and communication between the district and schools and, within the schools, to establish support teams. For instance:

- Bimonthly K-12 meetings are held for all school leaders and district leaders.
- Mathematics coaches and assistant principals meet together with district support specialists.
- Literacy coaches and principals meet with the district ELA coordinator.
- School-based mathematics coaches participate in regular meetings with district mathematics support specialists, as well as the mathematics coordinator.
- School-based literacy specialists meet with the district coordinator.
- A district liaison meets individually with mathematics coaches or literacy specialists at school sites.
- At the school level, grade-level teams meet regularly for common planning time. Mathematics coaches and literacy specialists are a part of common planning time at the school level. Vertical (cross-grade level) teams also meet periodically for curriculum planning.

Informal collaboration—often through requests or informal visits—also occurs to provide support to schools. In focus groups, administrators and teachers across the schools visited by the

review team reported that the district provides resources as needed and that support personnel are responsive to their needs and the questions they raise.

3) The third DPSI strategy is to increase the impact of coaching on teaching and learning. The coaching model in Lowell includes two key school-based groups – mathematics coaches and literacy specialists. All five schools visited by the review team have both mathematics coaches and literacy specialists (at the Morey, the latter position is assumed by reading teachers). As described above, there are extensive opportunities for coaches and specialists to meet and collaborate. While individuals in these positions maintain some roles and responsibilities that are similar across the schools visited, there are also differences in the way the coaching model is implemented in different schools. (This is further discussed on page 10 in the finding on the roles and responsibilities of mathematics coaches and literacy specialists).

On the basis of data collected and the vision of the new administration, the implementation of some DPSI strategies has been modified in the current school year. In an interview, the superintendent reported that these strategic changes were driven largely in response to results from the Massachusetts Teaching Leading and Learning Survey (TeLLS), in which 59 percent of Lowell teachers participated. The survey revealed a sense of teacher disempowerment, a lack of clarity around the roles and responsibilities of instructional coaches, and varied perceptions about the impact the coaches are having on teaching and learning. Modifications to improvement strategies are focused on increasing teacher empowerment and redefining the role of instructional leadership in the district—both the role of coaches and the role of the central office in supporting teaching and learning. The superintendent has been working to invest teachers and administrators in sharing roles more broadly, noting that “...with empowerment comes responsibility... it is my job to make connections for people.” The superintendent also indicated that the development of the memorandum of understanding (MOU) with the Department should be the responsibility of stakeholders districtwide, not just representatives from the central office.

The district is revising the formal learning walk process to increase teacher involvement and empowerment.

The district provided the review team with a draft document detailing the history of the implementation of the DPSI. The document provides an overview of changes to be made to improvement efforts and the rationale for making these changes. Revisions to the learning walk process are central to these future modifications. The learning walk process is under development and was still being modified at the time of the DPSI review. The philosophy underlying the new model is to increase teacher engagement as well as the number of individuals involved in improvement initiatives. This new protocol (in draft form at the time of the review) is called *Cycle of Grade-level Learning Walks*. Its current design includes grade-level teachers as core members of the walkthrough teams, and it will use the data gathered to drive lesson studies. These lesson studies will, in turn, drive modeling and evaluation to refine instruction across a grade or school. This strategy, which aligns with the new superintendent’s vision of increasing teacher empowerment and overall participation in district improvement efforts, is part of an effort to create professional learning communities (PLCs). In an interview, the superintendent

stated, “Teachers are at the hub of everything we do. Conversations will start to connect data analysis to lesson focus.” A diagram that defines the new learning walk process, entitled *A Professional Learning Community Model for Teacher Support: the Hub-Driven Model*, shows grade-level teams at the center of a wheel, supported by data-driven school mathematics and literacy teams, district support teams, and special education support teams. The revised learning walk process is designed to be focused on PLCs and to provide opportunities for professional growth designed to improve instruction.

According to documents and focus groups conducted with district administrators, an initial step toward establishing PLCs in the current year was to have grade-level teams establish mathematics and ELA goals and corresponding action plans. (This occurred across all schools – not just Commonwealth Priority Schools.) The learning walk process was partially suspended to provide time for teacher teams to establish these goals and related action plans. During focus groups, both school leaders and teachers cited school-based goals and strategies for implementation, indicating that these strategies are discussed during common planning time. At some schools, faculty meeting agendas also included references to “action steps” and to evaluation of priorities and outcomes to determine “...what is working, what is emerging or what should be added to or deleted from plan.” Following review of goals established by grade-level teams, district administrators stated that the quality of goals and related action plans varies from school to school—while some are measurable and standards-based, others are not.

The establishment of focused, goal-driven grade-level meetings is the initial step toward establishing PLCs to be rolled out in the 2009-2010 school year. To continue to improve and build upon these practices, the district is seeking increased time for professional development—via release days and after-school time—to be used for instructional planning. This aligns with the vision of the new administration of continuing to implement learning walk processes, which have been positively received across the district, and of increasing teacher empowerment and engagement in driving improvement and determining how to best meet individual student needs. “If we spend all of this time [on learning walks], it needs to be as part of a PLC,” stated the superintendent.

There are processes at the school level to provide teachers some feedback on instructional practices to improve the quality of instruction. The foundations to increase feedback on classroom practice are in place.

While formal learning walks have been curtailed this year during the revision of the learning walk process, it is important to note that across schools visited by the review team, teachers and school leaders described informal processes to monitor classroom instruction and provide feedback. At the school level, principals have implemented informal walkthroughs that provide feedback to individual teachers. Principals reported making regular classroom visits and said that these observations create an informal snapshot of what is taking place in classrooms. Four of the five principals interviewed indicated that they provide informal oral feedback. The principal of Morey, for example, offers feedback in response to a focus identified by the teachers (e.g., wait time). The principal of Bartlett, using a brief form that draws on the five power indicators from

the learning walk tool, provides written feedback. In each school, teachers mentioned receiving informal feedback as a follow-up to informal walkthroughs by the principal. Teachers also reported that feedback was appreciated and that increased feedback would be helpful.

The review team conducted 72 classroom visits across the five schools. In general, the review team noted some examples of good instructional practice in many classrooms. In 90 percent of classrooms, the climate was characterized by respectful behaviors and routines. In most classrooms, nearly all students were seated appropriately, working on assigned tasks and raising hands to respond to teachers' questions. Students adhered to posted behavioral expectations and understood classroom rules and routines. In 75 percent of the classrooms visited, the review team noted solid class time that was maximized for teaching and learning. Students in grades 2 and 3, for example, were observed completing transitions between activities in different parts of the classroom and locating new materials—all within 20 seconds or less.

In 75 percent of classrooms visited, lesson pacing ensured active involvement of students. Varied instructional strategies—including a variety of individual, paired, and cooperative grouping configurations, as well as a mix of seatwork and manipulative materials—were used to engage students. Other strategies, such as making faces or gestures to illustrate story vocabulary, or having students turn to a peer and explain their answer, were also used to keep students interested in the learning process. The review team noted visuals posted in many classrooms to support English language development and academic vocabulary (especially in mathematics).

In 56% of classrooms visited, the review team noted at least some use of informal assessment strategies to check for student understanding. In these classrooms, teachers used various strategies—questions and other techniques such as thumbs up/thumbs down, finger spelling ABCD to indicate a multiple choice response, or individual writing slates—to gauge student comprehension of new content. However, in 44 percent of classrooms visited, the review team did not see any strategies used to gauge student understanding and, in turn, modify instructional practices. The review team also noted limited use of questions or assignments that asked students to engage in higher-order thinking. In more than 40 percent of classrooms visited, there was no evidence of tasks that asked students to explain their reasoning or to apply or synthesize learned content.

In summary, a number of good instructional practices were observed in Lowell classrooms. Strong classroom routines and high percentages of students who are actively engaged in the learning process are strengths. While rigorous questioning and assignments (e.g., higher-order tasks) were noted less frequently, there is evidence that these practices are occurring. In addition, most teachers indicated that feedback from both formal learning walks and informal processes was appreciated. The participation of union representatives has continued to strengthen systems for feedback on classroom practices. The foundations have been established for increasing feedback in the district in order to continue to improve teaching and, therefore, student learning.

The roles and responsibilities of mathematics coaches and literacy specialists vary. The role of the mathematics coach is perceived to be more specific than the role of the literacy specialist.

Across schools visited by the review team, there were both mathematics coaches and literacy specialists. In focus groups, district administrators described mathematics coaches and literacy specialists as having three key functions: to take part in common planning time at the school and district level; to disseminate data to classroom teachers; and to work with new teachers. These general roles were described similarly by mathematics coaches and literacy specialists at the school level. In focus groups, teachers also reported some common functions served by coaches and specialists: for example, involvement in CPT; accessing and examining data and disseminating it to teachers; modeling lessons; and responding to teachers' requests for assistance in a classroom. In focus groups, most teachers noted that coaches and specialists are often unavailable because they are pulled from the building to attend meetings. This was corroborated by coaches and specialists, who added that when assessment reports are released, extensive time is spent out of the classroom preparing and analyzing data.

Differences in the roles and availability of mathematics coaches and literacy specialists were evident. In all five schools visited by the review team, teachers were able to define the role of mathematics coaches more clearly and said that they were present in classrooms more regularly. They perceived mathematics coaches as having greater classroom involvement and a more consistent support role. In focus groups, teachers also reported greater collaboration with the mathematics coaches—in particular, coaches model lessons, use data to group students, and work directly with small groups of students. Teachers reported less reluctance to invite the mathematics coaches into their classrooms, which may be due to increased role clarity or greater collaboration. Both district administrators and teachers indicated that this may also be due in part to the contract, since mathematics coaches are part of the same bargaining unit as teachers, whereas literacy specialists are members of the administrative unit. Although literacy specialists cannot evaluate them, some teachers indicated in focus groups that the presence of literacy specialists in their classrooms seems evaluative and that they are therefore more reluctant to ask literacy specialists to observe or model lessons.

The role of the literacy specialist varied from school to school. At some schools, the role of the literacy specialist was clearer. For example, teachers at one school reported that the literacy specialist provided materials, as well as creating opportunities for teachers to conduct peer observations and to meet to discuss instructional practices. At another school, teachers reported use of a co-teaching model that allows direct collaboration, extensive support, and ongoing communication. At other schools, the role of the literacy specialist was less clear. Either teachers reported, "We're not sure what the literacy specialist does," or they had some knowledge of the role of the literacy specialist, citing lesson planning, monthly professional development sessions, modeling in classrooms, conducting observations, and providing feedback (only if asked by teachers).

Across schools, leadership and teachers reported that the literacy specialist is out of the building more frequently than the mathematics coach and that the literacy specialist performs more administrative functions. This is, in part, due to funding streams. Most literacy specialists are tied to grant monies (e.g., Reading First); their time, therefore, needs to be allocated in specific ways.

How and when the mathematics coaches and literacy specialists were instituted also varied. Literacy specialists were put in place several years ago, mostly coinciding with the implementation of Reading First. District administrators reported that many literacy specialists were hired to assume associated administrative roles, with less of a focus on a coaching model. Mathematics coaches were put in place more recently and received specific and consistent training, including an emphasis on their role as coaches, which may have had an impact on implementation.

Another distinction between mathematics coaches and literacy specialists is the level of support at the district level. Central office support is structured differently for mathematics and for ELA. The mathematics coordinators have three support staff who provide an additional layer of direct support to school-based coaches and who serve as an additional training resource. This layer does not currently exist in ELA.

The district has seen increases in MCAS scores in mathematics over the past three years, whereas ELA scores have remained flat. It is possible that the greater definition provided to the position of mathematics coach, the greater amount of time spent in the school and in the classroom (providing direct instruction to students), and the additional support structures for mathematics coaches have resulted in a greater impact on teaching and learning.

During the current school year, the district has been collecting data on the role of math coaches and literacy specialists. In an interview, the superintendent reported that the district has made a significant investment in the coaching model; understanding how the coaching model is implemented and its impact on teacher practice is a priority.

Data analysis and interpretation relies primarily on the coach at the school level. It is not clear how teachers access data.

The district has a range of assessments available in both ELA and mathematics. In ELA, elementary schools administer baseline reading assessments. Unit assessments and end-of-year assessments are also used to measure student learning in ELA/reading. In grades K-4, the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) is used to assess student fluency and phonemic awareness. The Scholastic Reading Inventory (SRI) is used in grades 4-8. Use of SRI in grade 4 informs placement as students transition from the elementary level. The Group Reading Assessment and Diagnostic Evaluation (GRADE) is used to assess student comprehension.

In mathematics, district-developed benchmark assessments are used. These focus on MCAS power standards and also incorporate items from Investigations (the core program in mathematics). This combination ensures alignment with the state standards and also with the

core program, which can be used by teachers to plan instruction. The Galileo assessment system is used to administer mathematics benchmark assessments.

The district office of research, testing, and assessment (RTA) is responsible for providing reports to schools. FilemakerPro is the assessment management system currently in use by the district. When asked about processes for analyzing and disseminating assessment information, the RTA coordinator reported that he analyzes MCAS data, translating it to examine subgroup data and trends. One principal indicated working with RTA to provide customized, classroom-at-a-glance reports that break data down to the student level. Previously, reports provided only school-level data.

It is not clear how assessment results are prepared or how it is determined what information should be contained in reports. Nor is it clear if reports are consistently provided in a format that is easy for school leaders, coaches and specialists, or teachers to understand. As previously described, one of the primary responsibilities of coaches and literacy specialists is to access, analyze, and disseminate data reports once they are made available by RTA. Coaches and specialists reported spending a lot of time analyzing data once received. Teachers also indicated that coaches and specialists disappear when the data becomes available.

Principals, as well as coaches and specialists, have received training (designed as a train-the-trainer model) in accessing and interpreting data. Coaches meet with teachers during common planning time to discuss the data and analyze results. In some schools, teachers indicated that the coaches assist them in identifying students for instructional groups, based on skill. When asked how data is accessed, most teachers reported, “We receive it from coaches.” A few teachers interviewed in focus groups reported that they are readily able to access their classroom data to group students. Other teachers indicated that they have difficulty accessing data for individual students and that they rely on information provided by coaches.

Currently, it is unclear what access teachers have to specific data provided by the district. The mathematics coaches and literacy specialists are the primary link between district systems and the classroom level. As a result, the effectiveness of data analysis and interpretation depends on the coaches and literacy specialists.

The district has continued to experience growth in mathematics performance on the MCAS, whereas ELA scores have remained stable. All Commonwealth Priority Schools visited by the review team made AYP in mathematics; none made AYP in ELA. The role of the mathematics coach was described by school-based staff as more effective. District administrators described more specific training for coaches than for literacy specialists in recent years—a difference in the development of the two positions. Furthermore, the specific standards-based benchmark assessments available in mathematics through Galileo may be providing teachers with more useful information to drive instruction at the classroom level. This information may also be easier to interpret. Across schools visited by the review team, teachers reported greater confidence in using mathematics data to target instruction. In ELA, a battery of assessments is required to understand student learning and performance; alignment to the state standards is also less clear.

As previously described, the new learning walk process is designed around PLCs to increase student-focused discussions, including use of data. The superintendent indicated that professional development on using data—including data analysis, inquiry, identification of instructional approaches, and lesson design—will take place over five days during a “data-mining summit” in the summer of 2009. This will include coaches, administrators, and teachers, working in literacy and numeracy teams.

There is no formal system to evaluate, on an ongoing basis, the impact of programs and initiatives on teaching and learning.

The district has a range of programs and initiatives that are designed to support teaching and learning—many of which (e.g., curriculum resources, instructional support personnel, embedded training opportunities) have been thoughtfully selected and developed on the basis of knowing Lowell’s unique population. Student learning data has consistently been reviewed in the district to measure student learning, and the district has a range of assessments. Other forms of data have also been reviewed in the district recently. For example, the TeLLS survey described above provides perception data, as do the focus groups conducted across all schools by the superintendent. Learning walks have been used previously to understand the implementation of some initiatives (e.g., professional development), as well as to monitor for the use of specific instructional strategies. However, there is no rigorous, ongoing system to monitor effectiveness and determine impact of improvement initiatives.

The district has adopted core texts at the elementary level in both ELA (Scott Foresman Reading Street) and mathematics (Investigations). In focus groups, district administrators reported that core texts were adopted because of the high level of student mobility in the district. Having core texts provides instructional continuity for students who move from school to school. With many schools participating in the Reading First program, teachers were required to adhere specifically to the core text to ensure fidelity of implementation, as prescribed by the grant. As a result, instructional flexibility in ELA was limited, with few opportunities for teachers to modify instruction to address gaps or meet student needs. Most schools visited by the review team are in the process of developing a balanced literacy approach with leveled readers to meet student needs. The superintendent and other district administrators attribute flat scores on the ELA MCAS—at least in part—to rigid application of the core text and supplementary materials, which did not address the needs of district students who were struggling the most. It took several years of minimal student performance gains to understand which aspects of the core program, curriculum, and instructional delivery were working and should be continued and which were less effective and should be modified to increase impact or discontinued.

The district has made a significant investment in its coaching model. Coaches and specialists are used to “turn-key” (via the train-the-trainer model) much information in the district through participation in network and administrative meetings. Analysis of student assessment information and its dissemination to teachers are also functions of the coaches and specialists. As a result, coaches’ and specialists’ facility with the data may have an impact on how well data is used to inform instruction. As described previously, there are different perceptions about the

role, impact, and effectiveness of mathematics coaches and literacy specialists. However, the district does not have a clear system to measure the impact of the coaching model or to hold these individuals accountable for improving teaching and, therefore, student learning.

As the district reviews its coaching model, new learning walk process, and organizational structure (see below), there is an opportunity to establish systems to ensure the impact of initiatives.

The district is in the process of reorganizing the central office structure to provide increased and more streamlined support to schools.

As previously described, the district has many structures that provide support to schools and ensure two-way communications. Under the new administration, the district has taken steps to streamline support further. A primary goal of this reorganization is to increase collaboration and communication by distributing leadership responsibilities and reducing departmental silos. The superintendent indicated that the changes in central office organization are designed to “develop a culture of sharing information and responsibility that is focused on student learning needs.” District administrators believe this shift in oversight will provide improved services to English language learners (ELL) and special education students—two populations that, according to the superintendent and other district administrators, need increased attention in the coming year.

At the time of the review, a new organizational chart was in draft format. A significant change to the organizational chart entails merging English language arts (ELA) and English language development (ELD) at the district level under the umbrella of a Department of English Language Development (ELD) and Literacy. The ELA coordinator hired in summer 2008 will oversee this new department. The purpose of this change is to ensure that delivery of English language instruction is streamlined. The district has a high percentage of English language learners (ELLs), but some services and programming currently provided are not coordinated (see below). Special education staff members are also to be integrated into academic departments (e.g., literacy and mathematics) under the new organization. The integration of services for these populations of students may lead to greater districtwide focus on service provision, as well as more focused training and support.

The approach to serving English language learners varies by school.

The Lowell Public Schools serves a large number of ELL students; 31.5 percent of the district’s students are designated as ELL. The schools observed by the review team also serve high percentages of ELL students. The Murkland and the Morey schools have the highest percentages of ELL students—44 and 36 percent of students, respectively. The other three schools enroll ELL students at rates slightly below the district average: Shaughnessy, 30 percent; Bartlett, 26 percent; and Pawtucketville, 19 percent. Across the schools visited, both the approach to serving ELL students and the materials in use vary.

The Murkland Elementary School, designated as a language-specialty school, has a full-time ELL teacher who serves students in grade 3. ELL students in grades 1, 2, and 4 are provided intervention primarily through pull-out services by an additional ELL teacher. Two part-time

tutors are also available. Morey Elementary School uses a co-teaching model to serve ELL students. In focus groups, teachers reported that this works well and that the addition of another person helps facilitate fluid student groupings. At Pawtucketville and Shaughnessy schools, the lead ELL teacher is a full-time classroom teacher. As a result, teachers indicated that supports are sometimes limited. Tutors are also used to provide services to ELL students. At Bartlett, there is no certified ELL staff; students are served primarily via tutors. Teachers indicated needing increased support in the classroom for ELL students.

In focus groups, teachers reported using a range of intervention materials for ELL students (e.g., My Sidewalks, Study Island, Lexia, Waterford). Across schools, teachers reported mixed levels of success with these materials. While they indicated that the core materials meet most students' needs, the effectiveness of the supplementary reading programs was less clear. Teachers reported that My Sidewalks uses different vocabulary from the core program. Also, some teachers reported that it is not leveled correctly to meet the needs of ELL students. The lowest level books, for example, are more difficult than the Fountas and Pinnell standards. To address these weaknesses, they are re-leveling books according to Fountas and Pinnell guidelines.

In focus groups, district-level ELL staff indicated that they have begun to use Carousel of Ideas in place of My Sidewalks for intervention. Some schools have implemented Carousel, whereas other schools have been more resistant to the change. The district also experienced a significant cut in ELL staff in the current year. Ten positions were cut down to three at the district level—another factor that has made consistent implementation of ELL programming difficult. One of the primary reasons for reorganizing the central office structure is to ensure increased continuity and support for the district's ELL population.

The district provides a range of professional development opportunities to support teacher development.

Professional development is a key area of district support provided to teachers. Staff commented on valuable professional development opportunities provided by the district. Meeting agendas, minutes, and handouts provided samples of ways in which district teams support coaches, administrators, and teachers in ELA, mathematics, and assessment. The professional development calendar supplied by the district offered further evidence of ongoing training and support that the district provides. These sources listed offerings such as intervention training for administrators, phonics/phonemic awareness workshops for teachers, and Collins Writing for literacy specialists. In focus groups, teachers reported that professional development opportunities have had a positive impact on practice.

Most staff members have received training in the Sheltered Instruction Observation Protocol (SIOP). The training is not limited to specialists or classroom teachers, but also includes allied arts teachers, and its effect can be observed throughout the schools (e.g., academic vocabulary used in classrooms, word walls with visuals). A physical education teacher remarked that before receiving this training, it had never occurred to him that a child who was unresponsive to a command to “stand on the yellow triangle” might not be familiar with the English concepts for *yellow* or *triangle*. Use of strategies to address the needs of ELLs—including instruction in

academic vocabulary; modeling, pantomime, and gestures; photographs and illustrations; visuals to support comprehension of mathematics vocabulary; and cooperative grouping strategies (such as Turn and Talk)—was noted in classrooms.

The Lowell Teachers Academy (LTA) is a comprehensive three-year mentoring program for teachers in the first three years of their careers in Lowell. In addition to providing graduate coursework, the LTA supports collaboration among teachers across the district. In focus groups, many teachers referred to the LTA as providing an opportunity to develop instructional practice—noting, in particular, training in mathematics differentiated instruction. The Lowell Program, which is linked to the LTA, provides low- to no-cost graduate degree opportunities. This is in collaboration with local college and universities and is also a joint union-administration initiative. The Lowell DPSI noted that in 2007, more than one-third of Lowell’s teachers were directly involved with the LTA or the Lowell Program.

At the Morey and Murkland schools, *Teacher for Teachers*—an ongoing professional development opportunity provided by external consultants—has provided teachers with a common language and with explicit modeling of comprehension strategies in literacy for the early grades through a focus on small group instruction, conferencing via homogeneous groups, and use of guided practice. This initiative, begun this year and to be continued in the next school year, was cited by teachers and administrators as a particularly valuable district support. Morey and Murkland were targeted to receive this training because of the lower student performance rates and the large ELL populations they serve.

Additional professional development and common planning at the district level occurs through Brigade Days, on which substitute teachers are hired to free up large groups of ELA or mathematics teachers for training or planning time. The district is taking steps to expand opportunities for horizontal and vertical communication and collaboration. The district is also seeking six half-day release days for professional development and instruction, as well as 40 additional hours of after-school planning time for every teacher. This will continue to increase the work of support teams, the collaboration with coaches, and two-way communications.

Key Question 2: To what extent has the work of the Department impacted and supported the district in implementing improvement initiatives?

Findings under Key Question 2

Department-sponsored programs, professional development opportunities, and collaborations were cited as valuable by district and school stakeholders.

District-level staff reported a history of strong relationships and collaboration with the Department. While noting an increase in assistance-oriented activities in recent years, individuals in Lowell noted that the relationship between the Department and the district has been primarily collaborative. District-level personnel reported that they have the Department contacts on speed-dial, that questions are always answered in a timely manner (often the same day), and that the Department staff has been very accommodating.

District- and school-level staff also cited funds and assistance with grant opportunities as valuable assistance provided by the Department. Morey, Murkland, Shaughnessy, and Pawtucketville have all received John Silber grants. A number of the district's schools also receive Reading First funding, approved by the Department. The district's 323A monies, provided to support Commissioner's Districts, have been used to expand learning time at all five Commonwealth Priority Schools. The district has also used 323A funds to evaluate literacy instruction at the middle school level, to evaluate the district's special education program, and to conduct a review of technology, including the district's data management system. Assistance securing funding (e.g., a Mathematics and Science Partnerships grant), technical assistance with the Title I grant, and related compliance changes were also cited by district staff as useful.

District and school-based staff have also participated in Department initiatives that are designed to increase instructional leadership capacity. The majority of the central office staff, as well as most of the district's elementary and K-8 principals, have participated in the Department-sponsored National Institute for School Leadership (NISL). The district has implemented a train-the-trainer model to continue to disseminate NISL learnings, with a focus on use of a common language and standards-based instructional practices. Central office staff noted that schools are developing stronger School Improvement Plans (SIPs) as a result of NISL training. One district administrator stated, "Training enhanced the ability of school leaders to better use data and work with leadership teams, which has led to a noticeable improvement in SIP action plans."

The district has adopted the power indicators from the Department's learning walk characteristics continuum, which has provided Lowell a common lens for looking at instruction across classrooms. Department staff have also participated in the learning walks and provided training to the district. District and school leaders have found this training to be helpful, citing, in particular, refining practices and clarifying expectations for instruction as most beneficial.

ELL training, in the categories required by the Department, was highlighted at both the district and school levels as a particularly effective professional development opportunity. In focus groups, both teachers and administrators also cited the following Department-offered professional development opportunities as beneficial: its alternative licensure program; dropout

prevention and recovery training; phonemic awareness training; and Scholastic RED. Mathematics network meetings, mathematics content trainings provided by Department staff, and conference calls to disseminate information around services for ELL and special education students were also noted by Lowell stakeholders.

Recommendations

Recommendations provided in this report reflect the areas that the team determined should be priorities for the district and are not intended to address every area. These recommendations are for the district and ESE to consider in prioritizing future improvement efforts.

Ensure that the new learning walk process provides sufficient feedback to teachers to improve the quality of individuals' practices.

- The learning walk process that is currently under development (Cycle of Grade-level Learning Walks) is designed to empower teachers and increase their involvement in improvement—specifically, to ensure that the teacher is at the hub of instructional modifications.
- As this process is rolled out, ensure that systems to provide feedback to teachers improve the practices of individual teachers, as well as those practices that are the focus of the team. This is likely to yield increased districtwide improvements in the quality of instruction. Implementation monitoring will determine impact on classroom practices as teachers are more involved in and empowered by the process.

Continue to develop the roles of the mathematics coaches and literacy specialists and the system for holding them accountable, to focus their work on providing supports that are most valuable to teachers and using practices that have the biggest impact on teaching and learning.

- Mathematics coaches and literacy specialists have varying roles, spend different amounts of time in the classroom, have received different types of training, and have different amounts of support from the district. MCAS scores in mathematics have increased since 2006, while ELA scores have not.
- During 2008-2009, the district has collected data on the roles of mathematics coaches and literacy specialists.
- Data collection and analysis should be continued and ongoing, and might include revisiting roles and responsibilities; the amount of time spent in the classroom modeling lessons and/or providing direct instruction; coaches' proficiency with content (literacy and mathematics); and systems and processes for analyzing data and disseminating the data to teachers.
- To ensure the coaching model is having maximum impact on teacher growth and student learning, especially in the area of literacy, clarify and monitor the systems for holding coaches accountable for their work.

Ensure that assessment information provided to teachers is easily accessible and user-friendly.

- At the time of the review, it was not clear how assessment results were prepared or how the district determined what information should be contained in reports. Most teachers

reported depending on coaches for access to data; they also reported greater confidence in using mathematics data than ELA data.

- The district has planned a five-day “data-mining summit” during the summer of 2009—professional development for coaches, teachers, and administrators on using data, including data analysis, inquiry, identification of instructional approaches, and lesson design.
- Increasing teacher access to and understanding of the wealth of assessment information available will increase data-driven instruction. Ensuring all teachers understand how various data reports are used is important.
- Considering which reports are most meaningful to teachers will also increase the regular use of data and, in turn, increase differentiated and targeted instruction at the classroom level.
- The district has designed professional learning communities, to be rolled out in 2009-2010, in which grade-level teams are supported by data-driven school mathematics and literacy teams.

Continue to refine and systematize the district’s approach to serving ELL students.

- The district is in the process of reorganizing its central office structure to provide more integrated services to ELL students.
- The district should continue to review the varying school practices and consider incorporating those practices (e.g., staffing structures, intervention materials, district-level supports) that have yielded the most positive results for students on an ongoing basis to support continuous improvement.

Appendix A: DPSI Review Team Members

The review of the Lowell Public Schools was conducted between April 27 and May 11, 2009 by a team of educators from SchoolWorks on behalf of the Massachusetts Department of Elementary and Secondary Education.

Patty O'Leary, Consultant, SchoolWorks

Myka-Lynne Sokoloff, Consultant, SchoolWorks

Megan Tupa, Chief Operating Officer, SchoolWorks

Dr. Janet Williams, Consultant, SchoolWorks

Appendix B: DPSI Review Activities and Schedule

DPSI Review Activities

The following activities were conducted as part of the DPSI review of the Lowell Public Schools.

- The DPSI review team conducted interviews and focus groups with the following representatives from the Massachusetts Department of Elementary and Secondary Education: manager of and staff from the Urban and Commissioner's Districts unit; manager of and staff from the Educator Leadership unit; staff from the Math, Science, Technology & Engineering unit; and staff from the Literacy unit.
- The DPSI review team conducted interviews and focus groups with the following representatives from the Lowell Public Schools' central office administration: superintendent of schools; special education director; curriculum, instruction and assessment team; professional development coordinator; Title I director; Lowell Teachers Academy coordinator; district ELL support specialists; district math coordinator and support specialists; ELA coordinator; district early childhood support specialists; deputy superintendent; coordinator of school improvement. In addition, the team interviewed administrators from the high school and one middle school, as well as union representatives and the union president.
- The DPSI review team visited the following schools in the Lowell Public Schools: Bartlett Community Partnership School (grades PreK-8), C.W. Morey Elementary School (grades PreK-4), Charlotte M. Murkland Elementary School (grades PreK-4), Pawtucketville Memorial Elementary School (grades PreK-4) and Shaughnessy Elementary School (grades PreK-4). During school visits, the DPSI review team conducted interviews with school principals, teachers, behavior specialists, social workers, and nurses.
 - The DPSI review team conducted 72 classroom visits for different grade levels and subjects across the five schools visited.
- The DPSI review team reviewed the following documents provided by the Department
 - The DPSI
 - The Memorandum of Understanding between the district and the Department
 - The District Leadership Report on the Essential Conditions
 - The State Panel Review Report
- The DPSI review team reviewed the following documents at the district and school levels (provided by the district or schools):

- o Description of the processes in place to monitor DPSI implementation and other intervention strategies and improvement efforts, including data reports and the DPSI Implementation History
- o Description of the formative/benchmark assessment system, including data reports
- o Description of the process for monitoring instruction/conducting learning walks, including data reports and a draft of the proposed Cycle of Grade-level Learning Walks
- o Professional development calendar, including descriptions of professional development that has taken place to support DPSI implementation, as well as meeting agendas and minutes
- o School-specific documents including schoolwide goals in mathematics and English language arts, faculty meeting agendas, principals' newsletters, action plans, classroom observation feedback form, afterschool program details, school mission/vision statements, and behavior expectations
- o Proposed organizational chart
- o Massachusetts Teaching Leading and Learning Survey (TeLLS) data

DPSI Review Schedule

The following is the schedule for the onsite portion of the DPSI review of the Lowell Public Schools, conducted April 28 to May 11, 2009.

Monday	Tuesday	Wednesday	Thursday	Friday
April 27	April 28 DPSI review team meeting Initial district meeting and interviews	April 29 Site visit to Bartlett Community Partnership School	April 30 Site visit to Shaughnessy Elementary School	May 1 Site visit to Pawtucketville Memorial Elementary School
May 4 Site visit to Murkland Elementary School	May 5 No site visit activities	May 6 No site visit activities	May 7 DPSI review team meeting Interviews and focus groups with central office administration	May 8 Site visit to Morey Elementary School
April 28 DPSI review team meeting Final meeting and interviews with district				