

**NEW HAMPSHIRE
DEPARTMENT OF EDUCATION
SPECIAL EDUCATION
FOCUSED MONITORING 2012 - 2013**

**Manchester School District
Pre K- 5 Mathematics Summary Report**



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Focused Monitoring Participants

Leadership Team

Name	School/District Office	Title
Karen Burkush	District Office	Assistant Superintendent of Schools
Michael Tursi	District Office	Assistant Superintendent of Schools
Ken Duesing	District Office	Assistant Director Student Services
Jennifer Freitas	District Office	Special Education Coordinator Elementary Schools
Pam Agate	District Office	Pre-School Coordinator
Judith Adams	Bakersville	Principal
Pat Snow	Beech Street	Principal
Lori Upham	Gossler Park	Principal
Richard Norton	Green Acres	Principal
Rachelle Otero	Hallsville	Principal
James Adams	Highland Goffe's Falls	Principal
Peter Lubelczyk	Jewett	Principal
Ken DiBenedetto	McDonough	Principal
Shelly Larochelle	Northwest	Principal
Amy Allen	Parker Varney	Principal
Jennifer Briggs	Smyth Road	Principal
Chris Martin	Webster	Principal
Lizabeth MacDonald	Weston	Principal
Linda Durand	Wilson	Principal
Sarah Ambrogi	Board of School Committee Member	Chair of Curriculum Committee
Polly Golden	District Office/Federal Projects	Professional Development Coordinator

Achievement Team

Name	School/District Office	Title
Lucy Canotas	Bakersville	Grade 4 Classroom Teacher
Siobhan Bergeron	Beech Street	Grade 5 Classroom Teacher
Melissa Gray	Beech Street	Grade 5 Classroom Teacher
Pat Snow	Beech Street	Principal
Deb Miller	Gossler Park	Grade 4 Classroom Teacher
Colleen Bowen	Green Acres	Grade 2 Classroom Teacher
Richard Norton	Green Acres	Principal
Judy Troy	Gossler Park	Grade K Teacher
Sharon DeVincent	Hallsville	Teacher
Monique Flynn	Highland-Goffe's Falls	Special Education Teacher
Cindy Bannon	Jewett	Special Education Teacher
Valerie Tarbell	Jewett	Assistant Principal
Wendy Katsekas	McDonough	Assistant Principal
Patty Hurley	Northwest	Learning Disabilities Specialist
Terry Birmingham	Parker Varney	Learning Disabilities Specialist
Jo Ann Mulligan	Parker Varney	Preschool Teacher
Amy Colby	Smyth Road	Reading Teacher
Helene Stanley	Smyth Road	Grade 3 Classroom Teacher
Jennifer Briggs	Smyth Road	Principal
Laurie Evans	Webster	Guidance Counselor
Rick Chretien	Weston	Assistant Principal
Nicole Flurey	Weston	Grade 1 Teacher
Karen Grosfelt	Weston	Special Education Teacher
Stephanie Wheeler	Wilson	Assistant Principal
Karen Burkush	District Office	Assistant Superintendent
Ken Duesing	District Office	Assistant Director Student Services
Jennifer Freitas	District Office	Special Education Coordinator Elementary Schools

Pam Agate	District Office	Pre-School Coordinator
Ruth Broderick	District-wide	Math Implementation Specialist
Donna Crook	District Office	Data Analyst

The Manchester School District

The Manchester School District is the largest district in the state with approximately 15,536 students who are educated in twenty-two schools, including a developmental preschool (ages 3 to 5) in five of the fourteen elementary schools, fourteen elementary schools (grades Kindergarten to 5), four middle schools (grades 6 to 8), three high schools (grades 9 to 12), and a regional School of Technology (grades 10 to 12). Eight of the district's elementary schools are identified as Title I School-Wide schools.

The District is governed by a fifteen member committee that is elected every two years. The Mayor serves as chairperson of the Board. All of the elementary schools provide opportunities for parents to participate at school or from home through parent associations and volunteer groups. Partnerships with the business community are highly valued. Most schools enjoy one or more business/education partnerships.

As a community with an increasingly diverse population, the District offers a wide range of programs and initiatives. The English Learner program serves more than 2,000 students who, as immigrants or refugees, are non-English proficient. The EL program provides English language instruction and offers students assistance with cultural assimilation.

The district's mission is to provide safe, healthy, nurturing and respectful environments in which all students have the opportunity to acquire knowledge and skills that will enable them to become life-long learners as well as positive and productive citizens. The success of our schools can only be achieved through collaboration and interdependence with the community. The District is committed to utilizing all resources towards this exciting challenge.

Focused Monitoring

Focused Monitoring (FM) is a multi-year district improvement process aimed at reducing the achievement gap between students with disabilities and their non-disabled peers while raising student achievement for all students. The purpose of FM is to ensure that children and youth with disabilities ages 3-21 are afforded a free appropriate public education (FAPE) and are provided opportunities to learn in the Least Restrictive Environment (LRE). FM ensures that students with disabilities have access to, can participate in, and can demonstrate progress within the general education curriculum, thereby improving student learning.

The special education Program Approval team at SERESC is under contract with the New Hampshire Department of Education (NHDOE) to (1) assess the impact and effectiveness of state and local efforts, (2) monitor Local Education Agencies' (LEA) implementation of Individuals with Disabilities Education Act (IDEA) per federal mandate, (3) review current education research with participating districts and (4) provide technical assistance to participating districts.

Districts are selected to participate in FM based on a review of the achievement gap measurement using NECAP assessment data. The NHDOE anticipates that approximately twelve districts, including year one and year two districts, will participate in FM each year.

IDEA guarantees that FAPE is available to each qualified person with a disability who is in the school district's jurisdiction, regardless of the nature or severity of the person's disability. IDEA provides federal funds to assist states in carrying out this responsibility and to comply with the associated regulations. Federal statute 34 CFR Section 300.600 of the IDEA requires that states ensure that local systems comply with these federal regulations and meet the state's academic standards as they provide education programming for students with disabilities. The

NHDOE, Bureau of Special Education supervises and monitors local school districts through a variety of activities including, data monitoring, site visits, and FM. The most time intensive and in-depth is FM.

Each participating district assembles a Leadership Team that will in turn establish the district's Achievement Team, to be broadly representative of its educational system. The team will include district administrators, general and special educators. The Achievement Team meets regularly to collect and analyze baseline data and new student performance data, both qualitative and quantitative, in order to answer an essential study question. The team produces a set of findings from its analysis of data and prepares an Action Plan for improvement for implementation the following year. The facilitation and technical assistance of the FM Process provided to the NH FM districts is through the NH Department of Education.

The Manchester School District and Focused Monitoring

In May of 2007 the New Hampshire Department of Education (NHDOE) Bureau of Special Education identified the Manchester School District as one of seven Focused Monitoring districts in the state, based on the achievement gap in NECAP results between students with disabilities and their nondisabled peers. It was determined by the Bureau of Special Education that the Focused Monitoring (FM) Process would make multi-year commitment of technical assistance to the Manchester School District.

The NHDOE requested that the FM Technical Assistants assume responsibility for the FM processes and support the district in conducting Root Cause Analysis processes, developing new school district improvement plans and creating an FM Report, including an action plan.

In 2012 the Manchester School District was selected by the State to undergo another round of Focused Monitoring. The achievement gap was not being closed in Manchester. By focusing on the achievement gap it is hoped that the District will truly improve the performance for all students in Manchester. FM will continue where it left off a couple of years ago. During Year 1, 2012-13 school year, the Focused Monitoring process involved working with the elementary schools. During Year 2, 2013-14 school year, the focus will turn to the Manchester middle schools.

Upon initial engagement with the district in July 2012, the following data was reviewed: DINI, SINI, Restructuring and SIG Plans, as well as district data report card, Professional Development Master Plan, and District Assessment Calendar. Since September 2012 the Focused Monitoring technical assistance team has reviewed data in two categories with the Manchester Focused Monitoring teams: student achievement data (longitudinal data reports) and survey (Implementation Survey and Math Gap Analysis Survey). Note: In Manchester the focus is Pre K-5 Elementary math practices.

Summary Report

The summary report is intended to serve as a record of the work of the Achievement Team during the 2012-2013 school year. See Appendix 1: *Chronology of Major FM Activities in the Manchester School District 2012-13*. The Leadership Team identified mathematics as a focus area of study and analysis to determine why an achievement gap exists in grades Pre K-5. The team began the process by identifying an essential question to guide the process. Establishing an essential question for study purposes was important because the question generated multiple plausible answers, perspectives, and research directions and provides opportunities for analysis, synthesis, and evaluation. The question established by the Leadership Team is:

What educational strategies/practices need to be modified, enhanced, or replaced to ensure alignment of instruction, curriculum, and assessments to all student subgroups so that all students are fully engaged in the general education mathematics curriculum and demonstrating growth in their mathematics knowledge?

The report provides answers to the essential question. It contains specific recommendations based on findings that will help focus the District's work on addressing the identified factors that impact student achievement. The document is intended to be a synthesis of what the Achievement Team has accomplished. The report includes an improvement plan with clear goals, research-based interventions and action steps to achieve the goal of narrowing the achievement gap between students with and without disabilities. Resources utilized and professional development suggestions can be found in Appendix 9: *Resources/ Professional Development*

Overview of Current State of Affairs - A Recap of the Data

First, the NECAP data resulted in Manchester being identified by the State for Focused Monitoring. There is clearly an achievement gap and it has not been closing. Second, data from the Implementation Survey administered to district administrators shows that the Every Day Math program is not fully implemented and that teachers continue to need professional development opportunities in math content and math instruction. Third, the Teacher Survey data reveals that teachers seem to have a positive self-appraisal. Yet the gap persists. Since the last FM process only some of the recommendations that were acknowledged to be essential were implemented. Despite this, teachers are confident that many of the best practices are being implemented. Which leads to the question, what is it that the Manchester School District must do really well and how will they know if they are doing it well?" This last statement aligns with the essential question.

It was agreed that while many best practices are in place and some of the recommendations from the last FM visit have been implemented the achievement gap remains wide and is not closing. Thus, the AT was determined to focus the MSD plan on a core set of recommendations that could be implemented and monitored. These recommendations flow from four areas: curriculum, instruction, assessment and instructional leadership. Recommendations in each of these areas with clear monitoring (evaluation) are presented as the strategy to achieve future success.

Data Inquiry and Analysis

Focused Monitoring is based on the following five-step data inquiry process:

- 1) *Get ready for inquiry (July/September)*
- 2) *Organize and analyze data (October/November)*
- 3) *Investigate factors impacting student achievement (December/January)*
- 4) *Determine effective practices and write a plan (February/May)*
- 5) *Implement, monitor and evaluate (2013-2014)*

Step 1: Get ready for inquiry

As a first step, the team assessed its readiness to undertake a systems change process and examined the District's decision-making process. This was an opportunity for the FM teams to see what was already going on in the district and how it would relate to the FM process.

As the Leadership and Achievement Teams began to "get ready for inquiry" it was suggested that perceptual data be collected from administrative and school-based staff to determine progress made on the identified goals; implemented improvement strategies and recommendations made in the 2008-09 Focused Monitoring Action Plan. To assist with gathering that data a survey was developed and administered. The results were shared at subsequent meetings. See Appendix 2: *Progress Made Since 2008—09 FM Process* for some sample questions and responses. The following questions were used to gather base-line inquiry data.

- What worked well and what didn't from the previous 2008-09 FM process? Did FM make a difference in the past? (Utilizing the data results from a FM Progress Survey)
- From your perspective, what is the cause of the achievement gap for students with disabilities in the Manchester School District?
- How do principals work together now?
- Special Education:
 - ✓ What is the administrative structure for special education? Who oversees the delivery?
 - ✓ How is special education delivered?
 - ✓ How are students identified? (What is the rate?)
 - ✓ What are their rates of non-compliance?
 - ✓ How functional are school leaders (and others) with use of data (e.g. data-driven protocol)?
 - ✓ Are principals expected to set annual goals?

FM Action Plan Implementation Survey Results

Among the initiatives that featured prominently in the 2008-09 Action Plan was *Everyday Math* (EDM). EDM is the elementary school math program that the school district implemented a number of years ago. The previous action plan outlined a number of actions regarding the implementation of EDM: including, training all staff, pursuing curriculum mapping, and organizing into Professional Learning Communities (PLC).

The 2012 survey results show that there was some disagreement among elementary administrators as to whether there has been adequate follow through with respect to the plan of five years ago. Of significance, a majority of the responses indicated there was a lack of full implementation and training in the EDM program.

Historical NECAP Math Data

As part of preparing for inquiry, both the Leadership and Achievement Teams examined historical NECAP math data for the district. The Manchester teams used the longitudinal data reports from the NHDOE to identify patterns in student performance over time. See Appendix 3: *NECAP Percent Proficient or Above by Disaggregation and Grade Level*. The Manchester Achievement Team members identified the following patterns from the data:

- Manchester has the largest achievement gap in the State between identified and non-identified students
- While the gap closes between district and state for all students it remains the same for students with disabilities with IEPs
- The percentage of students proficient remains stable over time
- The gap between students with IEPs and their nondisabled peers remains consistent over time (no closing of the gap)
- Over time students with disabilities results go down, widening the gap
- In most years, the highest performance is in grade 3, but decreases each grade after third grade (exception 2008)

Math Gap Analysis Survey

After reviewing the initial Implementation Survey data and historical NECAP data, the Achievement Team (AT) suggested surveying teachers on their math practices to get a better sense of what practices teachers were more (and less) confident using. The math survey questions focused on the following topics: District math curriculum planning; programs, texts, and resources for math; special education issues; teacher practices; teacher math content knowledge; professional development in math; assessments used in math; math supports for students; vertical and horizontal alignment of the math curriculum; depth of knowledge questions; understanding of Response to Intervention (RtI); distribution of emphasis in mathematics; and math structures currently in place. Some sample

questions and responses can be found in Appendix 4: *Math Gap Analysis Survey*. In general, teachers answered questions about their own abilities positively while questions around district support were more negative. Of significance, 30% of the teachers reported that they felt sufficiently supported in receiving training for deeper understanding of specific math content. Fifty percent of the responding staff felt that *Everyday Math* was fully implemented in the elementary schools and over half felt that the staff was not sufficiently trained in the implementation of the *Everyday Math* program. Less than 50% of the teachers reported that every student in their class has the supports the students need to be a successful math students.

Achievement Team Roles and Responsibilities

After reviewing initial data, the Focused Monitoring Achievement Team divided into subcommittees who were charged with further review of additional data to help answer the essential question in Pre K-5 mathematics. The role and responsibilities of each subcommittee was defined and each began the process of identifying and prioritizing the data that was gathered, reviewed and analyzed in order to answer the essential question and to draft an action plan that aligns with existing district plans/goals. Each of the subcommittees was asked to:

- Define "best practice" (See Appendix 5: *Best Practices Defined*)
- Conduct research where gaps in expertise exist
- Identify, collect, and analyze data on "current practice"
- Present in writing recommendations for how the district could bridge the gap between "current" practice and "best" practice. These recommendations will inform the development of the district action plan
- Identify benchmarks for measuring improvement in current practice

Step 2: Organize and Analyze Data

Achievement Team

During Step 2, the Achievement Team (AT) focused on determining the nature and causes of the achievement gap between students with disabilities and their non-disabled peers. The team decided to break up into three subcommittees to conduct its analysis of curriculum; instruction; and assessment practices.

IEP Compliance Review*

In addition, during Step 2 of the Focused Monitoring process required a review of district compliance with federal and state regulations and adds emphasis on results-driven accountability by evaluating and responding to the learning results for students with IEPs.

The district special and general education staff participated in a structured review of randomly selected IEPs in order to determine the district's level of compliance with the IEP process. The review of selected IEPs was conducted by a collaborative team in each building with technical assistance and external visitors provided by NHDOE. The IEP review template has been designed to help the team examine the IEP for measures of educational benefit and compliance because the IEP is at the core of the special educational process.

Data gathered in the IEP process provided the Leadership and Achievement teams with valuable information that has informed the district's special education process and programming about the progress of students with disabilities and about the alignment of special education programming with the district's general curriculum, instruction and assessment systems. Some significant practices were identified during the IEP compliance reviews that contribute to the achievement gap. Those practices include:

- Not all students with disabilities have full access to and can participate in the general education math curriculum
- Not all IEPs reviewed include annual measurable goals
- Math pull-out programming was found in some of the schools including some with a separate curriculum
- Math resources/supplies and materials were not consistently available to all the elementary schools.

- Tiered levels of supports and interventions specific to mathematics and with a clearly defined district RtI Model were missing
- The use of data to inform instruction, write IEP's, and monitor progress was inconsistent among the schools
- Collaboration/communication between general and special educators, using a well-defined Professional Learning Community (PLC) model and related protocol, was inconsistent among the schools
- Professional development opportunities to enhance teacher math content and skill knowledge are not provided for special education and elementary school teachers

*Specific findings of the IEP Compliance Review are outlined in a separate report issued by the NHDOE Bureau of Special Education

Step 3: Investigate Factors Impacting Student Achievement

Achievement Team Data Collection

Next the AT examined the root causes of underperformance and identified the significant Pre K-5 mathematics curriculum, instruction, and assessment challenges and needs of the district. The AT needed to seek answers to the essential question from a holistic system perspective, and examined curriculum, instruction and assessment issues that impact all students in both general and special education settings. During this phase the team prepared a set of findings from its data analysis. See Appendix 6: *Subcommittee Detailed Findings*. The findings provided the foundation for its system improvement plan.

A number of major practices emerged that have a direct impact on student opportunities to achieve in Pre K-5 mathematics including:

Curriculum

1. The scope of the current Pre K-5 math curriculum, which is limited to a single program, is inadequate to direct instruction and meet the needs of a diverse student population
2. The math curriculum is not aligned to the Common Core State Standards either vertically or horizontally.
3. The current Pre K-5 math curriculum guides and resources lack the content and quality necessary to support effective classroom math instruction
4. There is inconsistent use of math resources across the district. Not all schools have the same resources and those that do don't necessarily use them in the same way
5. There is no formal process in place for monitoring, evaluating and reviewing the Pre K-5 math curriculum on a regular basis
6. Resources for print and technology are inadequate to support both the teaching and learning of Pre K-5 mathematics
7. The district office is not adequately organized or staffed to perform curriculum management tasks necessary to improve student achievement

Instruction

1. The existing math program is not being implemented consistently in all of the elementary schools; *Everyday Math*, is the program, and is often defined to be the "curriculum"
2. Oversight of the math instruction (in the classroom setting) varies from school to school and grade to grade
3. There are significant numbers of students with disabilities who receive mathematics instruction outside of the general education setting, and the curriculum provided is not always aligned to the general education curriculum
4. Not all elementary educators responsible for teaching mathematics are adequately trained to do so.
5. Response to Intervention (RtI) in the Manchester School District is not clearly defined, and inconsistent across elementary schools

Assessment

1. The Pre K-5 mathematics assessments are not aligned to the Common Core State Standards (vertically or horizontally)
2. There is inconsistent implementation of Pre K-5 math assessments across the district
3. Different assessments are used and students with disabilities are not always assessed with the same assessments
4. There is a lack of an initial math screening for incoming kindergartners
5. Teachers do not meet on a regular basis to review assessment results
6. The communication of assessment results is not done in a consistent or timely manner
7. Professional development is inconsistent across the district for EDM, Rtl and PLCs

Principals' Focus Group Findings (Full report in Appendix 7)

The Education Consultants conducted elementary school principals' focus group discussions to gather feedback, perceptions, and suggestions related to the essential question from their perspective as educational leaders in their schools. The feedback provided from the focus group conversations provided an important data sources for the Achievement Team.

Three primary themes arose as a result of the two discussions: (1) need to communicate, understand and implement a school focus and vision, (2) need for greater clarity around leader expectations, and (3) a need to develop a cohesive leadership team.

Focus or vision

One of the most critical needs of the district as this point is to establish a clear vision for improving student achievement. School and district administrators working collaboratively will ensure that the process and vision establishes high expectations for students while acknowledging the differences in schools. This vision will not only drive the work of the district but will become the primary focus of all stakeholders.

Expectations of Leaders

In order to achieve the highest potential, both individually and collectively, it is necessary to clearly establish expectations and provide feedback to school leadership. The role of "critical friend" would assist in guiding both teaching and learning. It would also serve as a vehicle for ensuring that administrators were cognizant of the needs and accomplishments of schools and the district.

Leadership Team

An effective implementation process is critical to the success of any and all initiatives. The focus must clearly be on curriculum, instruction and assessment. These processes need to reflect competencies both with conceptual understanding as well as knowledge of effective evidenced based practices. While not directly instructional, the role of school leadership is to be knowledgeable in content and methodology. The role of the District Administration is to provide professional development and support.

District Office Administrators' Focus Group Report (Full report in Appendix 8)

In addition, the Education Consultants conducted a district office administrators' focus group discussion to gather feedback, perceptions, and suggestions related to the essential question from their perspective as educational leaders in the school district. The feedback provided from the focus group conversation provided an important data source for the Achievement Team.

Three primary themes arose as a result of the district administration focus group: (1) clarity of the district vision for success with an aligned strategy for achieving the vision and measurable goals is lacking, (2) a focus on day to day management duties siphons a majority of leadership's time resulting in very little energy dedicated to goal setting,

monitoring, and meaningful conversations aligned with the district vision, and (3) internal and external communications are not consistent and do not emphasize the overall vision, goals, or strategy for success.

Clarity of District Vision and Goals

The district currently lacks overall student achievement goals or a clear vision for the future. District office administrators reported that goals are not set collaboratively and that Manchester schools do not have student achievement goals. The Board of School Committee (BOSC) is currently working on a strategic plan, but the plan is not yet public. District office administrators reported a significant portion of the board's time is spent on operational issues and the board has not defined a clear framework for accountability, so it is not always clear what is most important.

Management Focus

District leaders expressed frustration that a majority of their time is dedicated to tasks related to management and not connected to improving student performance (e.g. compliance related activities, organizing data, personnel). Without a clear focusing vision and set of measurable goals leadership in the district is left to focus on management. As Peter Drucker noted, "Management is doing things right, leadership is doing the right things. The problem is that we have a lot of managers doing the wrong things very well."

Internal and External Communication

As the business author Marcus Buckingham noted, "Effective leaders must be pre-occupied with clarity." The central administrators involved in the focus group noted that communication between the SAU office and the schools and the SAU office and other stakeholders is not effective. Without a clear vision, goals, strategy, and non-negotiable expectations for achievement and instruction it is difficult to develop a cohesive message. District administrators noted that managerial obligations are a significant barrier to spending time in schools, which results in little monitoring of the educational process, a principal evaluation process that is disconnected from day to day school leadership (and the behaviors known to impact student achievement), and few opportunities to communicate the overall vision of the district (and board).

Step 4: Determine Effective Practices and Write a Plan

The Leadership Team (LT) and Achievement Team (AT) converted district challenges/needs into priority recommendations for its action plan that addresses the root causes of the achievement gap. The team established and examined a set of alternative system changes to determine their basis in research and their effectiveness.

The teams prepared a final report on the year's study which includes the 2013-14 Action Plan and an application for an implementation grant to assist the team in carrying out its action plan.

Priority Recommendations

Below are priority recommendations of strategies/practices that need to be modified, enhanced, or replaced so that all students are fully engaged in the general education mathematics curriculum and demonstrating growth in their mathematics knowledge. See Appendix 9 for more detailed recommendations.

Curriculum

1. Develop a collaborative process and timeline for K-5 math curriculum alignment to the mathematics Common Core State Standards (CCSS) both within and across grades
2. Establish a process for writing a Pre K-5 math curriculum for the district that is:
 - a. Aligned to CCSS
 - b. Realistic/clear scope and sequence/timeline
 - c. Aligned vertically and horizontally

- d. Embodies the principles of Universal Design for Learning, including establishing high curriculum expectations for every student and meaningful choices to meet and sustain those high expectations
- 3. Reference CCSS curriculum alignment models developed by the states of Georgia, New York, or Ohio to develop curriculum guides, aligned to the CCSS; including pacing guides; scope and sequence; and student learning targets in Pre K-5 math
- 4. Develop a sustainable process for monitoring, evaluating and reviewing the math curriculum on a regular basis at the district level
- 5. Develop a process of accountability to ensure that all students with disabilities have full access to the Pre K-5 general education math curriculum and are taught by teachers knowledgeable about the district math curriculum and related expectations
- 6. Develop a timeline for ongoing and sustainable professional development in the area of math that focuses on best practices in the delivery of the math curriculum

Instruction

- 1. Ensure that all students have access to and participate in the general education curriculum and instruction based on CCSS and that intervention is supplemental
- 2. Develop common definition, purpose, and protocol for RtI, and PLCs
- 3. Develop an action plan to increase community and family awareness of school readiness expectations and resources
- 4. Provide more support for Pre K-2 catch-up growth for the students who enter the schools already behind (including paraprofessional support for the whole class, not tied to specific students only)
- 5. Provide consistent oversight and monitoring of math instruction

Assessment

- 1. Administer DIAL assessment at the Pre K-K (April before school year starts – all students in kindergarten are assessed using DIAL) (replaces the PALS)
- 2. Administer NWEA MAP/primary grades K-5 (starting in the Fall of 2013 and screened three times per year)
- 3. Make a five year commitment to the assessment with professional development and assurance that 98% of students will be assessed in each of the three testing windows. Tier 2 cut point will be the equivalent of the 25 percentile (this is considered an absolute bottom and should be evaluated after the first testing period in the Fall of 2013)
- 4. Recommend that PLCs are the primary vehicle for analyzing data

Instructional Leadership

- 1. Establish a procedure and timeline for developing a district vision.
- 2. Adopt a clear set of instructional leadership standards (eg Balanced Leadership from McREL. NISL etc.) Many principals were previously trained in the NISL standards and reported satisfaction with the quality of the training.
 - a. Align evaluation with leadership standards.
 - b. Provide professional development on instructional leadership for all administrators. Develop a sustainable plan for training new administrators.
 - c. Provide regular ongoing feedback to principals aligned with standards.
- 3. Conduct school visits to focus on the implementation of the district vision and goals. These visits would provide information for monitoring feedback to principals and subsequently evaluations.
- 4. Develop a principal leadership team, focusing on curriculum, instruction and assessment through the perspective of instructional leadership. A professional learning community would provide the forum for learning, discussion and consistency throughout the district. Meeting norms would be established to facilitate the process.

District Leadership

1. Ensure that the strategic plan under development includes: (a) clear vision for the future of Manchester schools, (b) measurable goals, and (c) a clear strategy for achieving the vision. The BOSC should consider the research findings for effective school boards during the development of the strategic plan¹.
2. Ensure that policies are in place to achieve the vision; allocate resources based on the vision; and monitor progress towards the vision periodically.
3. Ensure that accountability and policy are leveraged to improve student achievement.
4. Revise the evaluations for leaders to reflect the research-based behaviors that are identified with leaders that have an impact on student achievement. District-level and school-level leaders' accountability should be based on expectations outlined in the district strategic plan.
5. Set non-negotiable student achievement and instructional goals based on the district strategic plan and a process for collaboratively setting goals with schools.
6. Report publicly on the attainment of non-negotiable goals.

Step 5: Implement, Monitor and Evaluate (September 2013 – May 2014)

Year 2 of the Focused Monitoring process will be the implementation year for the district's Action Plan. During Year 2 the NHDOE will work with Manchester to monitor the Action Plan. At the end of year 2, the team will be asked to evaluate the implementation of the action plan.

FOCUSED MONITORING
MANCHESTER SCHOOL DISTRICT: ACTION PLAN PreK – 5
June, 2013

MEASURABLE GOAL: To develop district-wide consistency in the delivery of standards-based curriculum, instruction, assessment and intervention to support individual students' growth towards proficiency.

OBJECTIVE # 1 Align the PreK-5 math curriculum with the Common Core State Standards (CCSS), which includes the following:

- a. Realistic and clear scope and sequence
- b. Vertical and horizontal alignment
- c. Principles of Universal Design for Learning

PROPOSED ACTIVITIES FOR 2013-2014	ESTIMATED RESOURCES Budget, Human Resources, Materials	TIMELINE Begin/End	PERSON(S) RESPONSIBLE / OVERSIGHT Leader and Participants	MONITORING OF IMPLEMENTATION Evidence		EVALUATING RESULTS Evidence of Effectiveness	
				What & by whom	When	What & by whom	When
				Documentation of attendance at daily meetings.	July – August 2013	Creation of document indicating the curriculum alignment	August 2013
				Draft documents produced by work group at daily meetings.		Curriculum Planning guides, including scope and sequence and pacing guides.	
Hire Public Consulting Group to facilitate a ten (10) day workshop with teachers to align the PreK – 5 math curriculum with the CCSS.	School administrators, Elementary teachers CCSS curriculum alignment models developed by the consulting group and the states of Georgia, New York, or Ohio to use as a reference. \$83,900 previously approved by BOSC for facilitator. \$119,334.60 previously approved by BOSC teacher stipends.	July – August 2013	Assistant Superintendent for Curriculum and Instruction Assistant Superintendent for Student Services Director of Federal Projects Assistant Director for Student Services Special Education Coordinators Math Implementation Specialist				

**FOCUSED MONITORING
MANCHESTER SCHOOL DISTRICT: ACTION PLAN PreK – 5
June, 2013**

MEASURABLE GOAL: To develop district-wide consistency in the delivery of standards-based curriculum, instruction, assessment and intervention to support individual students' growth towards proficiency.

OBJECTIVE # 2 Adopt a standardized mathematics assessment protocol for PreK – 5 students. The DIAL (Developmental Indicators for the Assessment of Learning) for PreK – K students and NWEA MAP (Northwest Evaluation Association Measures of Academic Progress) for K – 5 students are recommended because they are valid and reliable assessment tools for progress monitoring and measuring student achievement and growth.

PROPOSED ACTIVITIES FOR 2013-2014	ESTIMATED RESOURCES Budget, Human Resources, Materials	TIMELINE Begin/End	PERSON(S) RESPONSIBLE / OVERSIGHT Leader and Participants	MONITORING OF IMPLEMENTATION Evidence		EVALUATING RESULTS Evidence of Effectiveness	
				What & by whom	When	What & by whom	When
Develop a proposal for adopting a standardized assessment protocol for PreK – 5 students and bring it to the Board of School Committee Curriculum and Instruction Committee, Finance Committee, and full Board through the BOSC approval process.	Funds totaling \$513,600 to purchase a three (3) year subscription for the NWEA MAP assessments. Funds totaling \$17,000 to purchase DIAL assessments for the first year. Initial and ongoing professional development for administering, scoring, and using data.	Purchase assessment tools by October 2013 Begin professional development by October 2013 Begin implementation of assessments by December 2013	Assistant Superintendent for Curriculum and Instruction Assistant Superintendent for Student Services Director of Federal Projects Assistant Director for Student Services Special Education Coordinators Math Implementation Specialist	Monthly reports to the BOSC Curriculum and Instruction Committee from Focused Monitoring Leadership and Achievement Team members.	Monthly beginning in September 2013	Analyzing data to determine individual student growth three times per year (fall, winter, spring) by building administrators and teachers.	Beginning January 2014
						The Assistant Superintendent for C&I and school principals will be responsible for providing direction for curricular, assessment, and/or intervention changes based on both district level data and school-level data when appropriate.	By June 2019, 98% of elementary students will be assessed in each of the three assessment windows.

**FOCUSED MONITORING
MANCHESTER SCHOOL DISTRICT: ACTION PLAN PreK – 5
June, 2013**

June, 2013 MEASURABLE GOAL: To develop district-wide consistency in the delivery of standards-based curriculum, instruction, assessment and intervention to support individual students' growth towards proficiency.

OBJECTIVE # 3 Develop a process of accountability to ensure that all students with disabilities have full access to and participation in the PreK-5 general education math curriculum to include demonstrated progress and that all students with disabilities are instructed by teachers knowledgeable about and qualified to teach the district math curriculum and related expectations.

PROPOSED ACTIVITIES FOR 2013-2014	ESTIMATED RESOURCES Budget, Human Resources, Materials	TIMELINE Begin/End	PERSON(S) RESPONSIBLE / OVERSIGHT Leader and Participants	MONITORING OF IMPLEMENTATION Evidence		EVALUATING RESULTS Evidence of Effectiveness	
				What & by whom	When	What & by whom	When
				Monthly reports to the BOSC Curriculum and Instruction Committee from Focused Monitoring Leadership and Achievement Team members.	Monthly beginning in September 2013	The District will develop consistent tools to evaluate teacher effectiveness. Teachers will be observed using curriculum planning guides as part of administrative walk-throughs during the teacher evaluation process.	June 2014
Develop a walk-through procedure, following best practices, for building administrators to use during the teacher evaluation process. The process will include identified data points that will be collected in all schools and be reviewed by the team of elementary principals on a monthly basis.	Funds up to \$10,000 secured through the 2013 – 2014 Focused Monitoring Grant. Elementary School Principals	September 2013 – June 2014	Assistant Superintendent for Curriculum and Instruction Assistant Superintendent for Student Services Director of Federal Projects Assistant Director for Student Services Special Education Coordinators Elementary School Principals				

FOCUSED MONITORING
MANCHESTER SCHOOL DISTRICT: ACTION PLAN PreK – 5
June, 2013

June, 2013 MEASURABLE GOAL: To develop district-wide consistency in the delivery of standards-based curriculum, instruction, assessment and intervention to support individual students' growth towards proficiency.

OBJECTIVE # 4 Develop a principals' leadership team, focusing on curriculum, instruction and assessment through the perspective of instructional leadership. A professional learning community would provide the forum for learning, discussion and consistency throughout the district. Agendas and meeting norms will be established to facilitate the process and meeting minutes will be recorded.

PROPOSED ACTIVITIES FOR 2013-2014	ESTIMATED RESOURCES Budget, Human Resources, Materials	TIMELINE Begin/End	PERSON(S) RESPONSIBLE / OVERSIGHT Leader and Participants	MONITORING OF IMPLEMENTATION Evidence		EVALUATING RESULTS Evidence of Effectiveness	
				What & by whom	When	What & by whom	When
				Monthly reports to the BOSC Curriculum and Instruction Committee from Focused Monitoring Leadership and Achievement Team members.	Monthly beginning in September 2013	Revision of Leadership standards. Provision of professional development activities. Establishment of an evaluation process for principals that includes timeliness of ongoing feedback.	June 2014
Adopt a clear set of instructional leadership standards (e.g. Balanced Leadership from McREL, NISL, etc.). Many principals were previously trained in the NISL standards and reported satisfaction with the quality of the training. a. Align evaluation with leadership standards. b. Provide professional development on instructional leadership for all administrators. Develop	Funds up to \$10,000 secured through the 2013 – 2014 Focused Monitoring Grant. Elementary School Principals	September 2013 – June 2014	Assistant Superintendent for Curriculum and Instruction Assistant Superintendent for Student Services Director of Federal Projects Assistant Director for Student Services Special Education Coordinators Principal Leaders – Rick Norton and Pat Snow	Monthly reports to the BOSC Curriculum and Instruction Committee from Focused Monitoring Leadership and Achievement Team members.	Monthly beginning in September 2013	Revision of Leadership standards. Provision of professional development activities. Establishment of evaluation process that includes timeliness of ongoing feedback.	June 2014

<p>a sustainable plan for training new administrators.</p> <p>c. Provide regular ongoing feedback to principals aligned with standards.</p>			<p>Elementary Principals</p>				
<p>Revise the evaluations for leaders to reflect the research-based behaviors that are identified with leaders that have an impact on student achievement. District-level and school-level leaders' accountability should be based on expectations outlined in the district strategic plan.</p>	<p>Funds up to \$10,000 secured through the 2013 – 2014 Focused Monitoring Grant</p> <p>Elementary School Principals</p>	<p>September 2013 – June 2014</p>	<p>Assistant Superintendent for Curriculum and Instruction</p> <p>Assistant Superintendent for Student Services</p> <p>Director of Federal Projects</p> <p>Assistant Director for Student Services</p> <p>Special Education Coordinators</p> <p>Principal Leaders – Rick Norton and Pat Snow</p> <p>Elementary Principals</p>	<p>Monthly reports to the BOSC Curriculum and Instruction Committee from Focused Monitoring Leadership and Achievement Team members.</p>	<p>Monthly beginning in September 2013</p>	<p>Revision of Leadership standards.</p> <p>Provision of professional development activities.</p> <p>Establishment of evaluation process that includes timeliness of ongoing feedback.</p>	<p>June 2014</p>
<p>Set non-negotiable student achievement and instructional goals for principals based on the district strategic plan and establish a process for collaboratively setting goals with schools.</p>	<p>Funds up to \$10,000 secured through the 2013 – 2014 Focused Monitoring Grant</p> <p>Elementary School Principals</p>	<p>September 2013 – June 2014</p>	<p>Assistant Superintendent for Curriculum and Instruction</p> <p>Assistant Superintendent for Student Services</p> <p>Director of Federal Projects</p> <p>Assistant Director for Student Services</p> <p>Special Education Coordinators</p> <p>Principal Leaders – Rick Norton and Pat Snow</p> <p>Elementary Principals</p>				

Appendices

Appendix 1: Chronology of FM Activities - Manchester School District 2012-13

Date	Activity
May 24, 2012	FM Initial Meeting at SERESC
August 2, 2012	FM Meeting with District Office Admin.
August 23, 2012	FM Meeting with District Office Admin. and Principals
September 19, 2012	LT Meeting
October 17, 2012	LT and AT Meetings
November 21, 2012	LT and AT Meetings
November 26, 2012	IEP Review Initial Meeting
December 19, 2012	LT and AT Meetings
January 3, 2013	IEP Review Staff Training
January 16, 2013	LT and AT Meetings
January 31, 2013	LT and AT Meetings
February 7 and 8, 2013	IEP Review
February 20, 2013	AT Meeting
March 20, 2013	AT Meeting
April 1, 2013	IEP Review
April 17, 2013	AT Meeting
April 30, 2013	Principals' Focus Group Discussions
May 6, 2013	FM Planning Meeting with District Administration
May 15, 2013	LT and AT Meetings District Office Focus Group Discussions

Appendix 2: Progress Made Since 2008 – 09 FM Process

Sample Questions/Responses

Q6. Staff are sufficiently trained in the implementation of Everyday Math.

Strongly Agree	0.0%	0
Agree	40.0%	4
Disagree	60.0%	6
Strongly Disagree	0.0%	0

Q19. Everyday Math

Fully Implemented	50.0%	5
Partially Implemented	50.0%	5
Not Implemented	0.0%	0
Not Sure	0.0%	0

Q8. Staff are sufficiently trained in the implementation of curriculum mapping.

Strongly Agree	0.0%	0
Agree	20.0%	2
Disagree	50.0%	5
Strongly Disagree	30.0%	3

Q20. Curriculum Mapping

Fully Implemented	10.0%	1
Partially Implemented	30.0%	3
Not Implemented	50.0%	5
Not Sure	10.0%	1
N/A	0.0%	0

Q21. Professional Learning Communities (PLC)

Fully Implemented	80.0%	8
Partially Implemented	20.0%	2
Not Implemented	0.0%	0
Not Sure	0.0%	0

Appendix 3: NECAP Percent Proficient or Above by Disaggregation and Grade Level (All Students and students with an IEP)

02/03/2013

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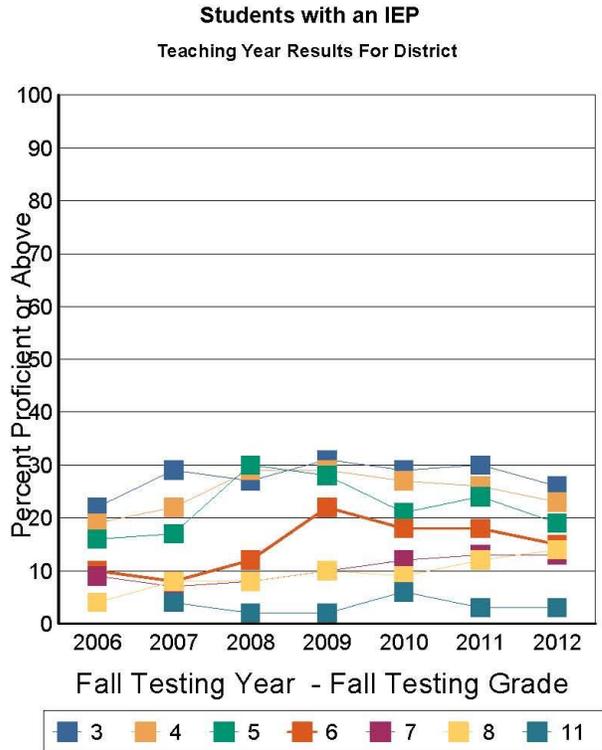
NECAP Percent Proficient or above by Disaggregation and Grade level

Math Teaching Year Report for District

Manchester

Fall NECAP results for students who attended this District during the academic year prior to the year reported. Grade is fall testing grade. Year is fall testing year. Line 1: Percent Proficient or above, Line 2: Avg Scaled Score, Line 3: Number Tested

		2006	2007	2008	2009	2010	2011	2012
3	District	22% 332 133	29% 330 147	27% 332 151	31% 334 151	29% 333 147	30% 334 126	26% 333 142
	State	38% 336 1,794	43% 337 1,867	40% 336 1,737	44% 338 1,775	45% 338 1,652	45% 338 1,649	43% 337 1,711
4	District	19% 428 187	22% 429 169	29% 431 167	29% 432 172	27% 433 168	26% 432 156	23% 430 136
	State	33% 434 2,132	34% 435 2,142	39% 436 2,034	40% 436 2,046	41% 437 1,930	42% 437 1,919	43% 437 1,851
5	District	16% 528 197	17% 529 194	30% 532 183	28% 533 175	21% 531 176	24% 532 179	19% 532 172
	State	30% 534 2,325	34% 535 2,399	37% 536 2,237	39% 536 2,196	36% 536 2,156	39% 536 2,082	35% 536 2,067
6	District	10% 625 212	8% 625 219	12% 626 210	22% 629 212	18% 630 170	18% 628 181	15% 627 192
	State	28% 632 2,515	27% 633 2,474	29% 633 2,426	32% 634 2,404	30% 634 2,260	32% 634 2,263	30% 633 2,127
7	District	9% 726 208	7% 725 187	8% 726 224	10% 727 207	12% 728 207	13% 729 184	13% 727 167
	State	20% 730 2,517	23% 732 2,577	24% 732 2,475	25% 733 2,488	24% 733 2,395	26% 733 2,305	25% 733 2,250
8	District	4% 823 188	8% 826 213	8% 827 187	10% 827 222	9% 828 206	12% 830 214	14% 826 176
	State	17% 830 2,526	17% 830 2,526	22% 833 2,539	23% 832 2,510	24% 833 2,421	24% 834 2,424	23% 832 2,284
11	District	0 0	4% 1121 209	2% 1125 163	2% 1122 167	6% 1123 174	3% 1124 175	3% 1122 156
	State	0 0	4% 1124 2,303	4% 1126 2,367	5% 1125 2,248	5% 1125 2,142	7% 1127 2,160	6% 1126 2,108



These results are for the students who were instructed in the previous teaching year grade. For example: Fall Testing grade 5 is reporting the performance of teaching year grade 4.

Note: This report includes NECAP data only. Students who did not take the test for any reason are NOT included. The denominator for percent proficient is number of students tested by NECAP (which is not a true representation of the student population). A student's assignment to a school or district in this report is not contingent on continuous enrollment (as it is in AYP reporting). If less than 10 students are tested then results are not reported. Ethnic group designations have changed over time. Please see website for more information. Data source for report: Disaggregated results teaching year.

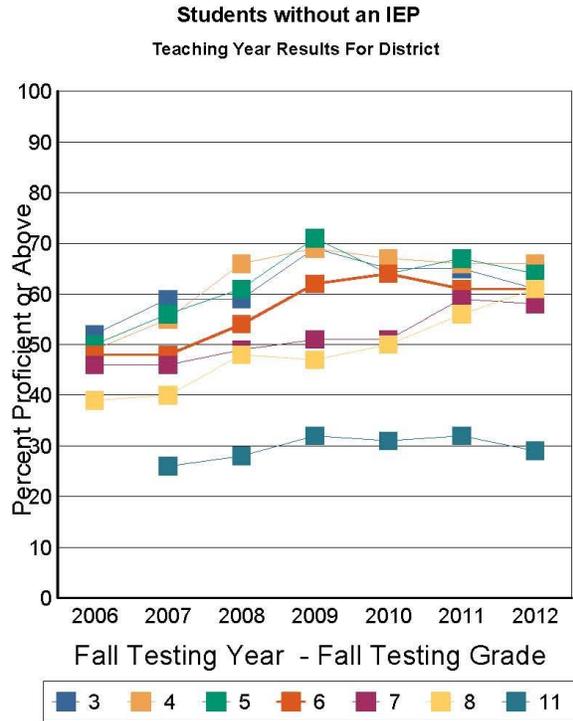
NECAP Percent Proficient or above by Disaggregation and Grade level

Math Teaching Year Report for District

Manchester

Fall NECAP results for students who attended this District during the academic year prior to the year reported. Grade is fall testing grade. Year is fall testing year. Line 1: Percent Proficient or above, Line 2: Avg Scaled Score, Line 3: Number Tested

		2006	2007	2008	2009	2010	2011	2012
3	District	52% 340 1,020	59% 341 925	59% 342 913	69% 345 850	65% 344 933	65% 344 886	61% 343 897
	State	74% 346 13,004	77% 347 12,584	76% 347 12,555	81% 348 12,302	80% 348 12,343	80% 349 12,069	79% 348 12,001
4	District	49% 439 920	55% 441 942	66% 443 880	69% 445 878	67% 445 810	66% 444 905	66% 444 850
	State	72% 445 12,778	73% 446 12,729	79% 448 12,410	79% 448 12,334	80% 449 12,129	82% 450 12,101	82% 450 11,875
5	District	50% 539 909	56% 540 887	61% 542 911	71% 545 846	64% 543 830	67% 544 781	64% 544 890
	State	74% 546 12,803	75% 546 12,636	79% 547 12,619	81% 548 12,346	79% 548 12,254	82% 549 11,972	80% 548 12,006
6	District	48% 638 887	48% 639 887	54% 640 886	62% 643 886	64% 643 871	61% 643 841	61% 643 788
	State	75% 646 13,147	76% 647 12,701	77% 647 12,597	80% 648 12,508	79% 648 12,331	80% 649 12,144	81% 649 11,961
7	District	46% 738 943	46% 739 851	49% 739 851	51% 740 869	51% 740 914	59% 742 842	58% 741 819
	State	70% 744 13,604	70% 745 13,098	73% 746 12,837	74% 746 12,701	75% 746 12,616	76% 747 12,349	77% 747 12,259
8	District	39% 836 902	40% 837 931	48% 839 856	47% 839 870	50% 839 860	56% 841 897	61% 842 817
	State	65% 843 13,777	66% 843 13,554	73% 845 13,116	74% 845 12,879	73% 845 12,787	77% 846 12,538	76% 846 12,272
11	District	0 0	26% 1133 1,317	28% 1135 1,035	32% 1136 951	31% 1135 1,099	32% 1135 983	29% 1134 908
	State	0 0	31% 1135 13,243	37% 1137 13,307	39% 1137 12,939	40% 1138 12,882	41% 1138 12,566	43% 1138 12,277



These results are for the students who were instructed in the previous teaching year grade. For example: Fall Testing grade 5 is reporting the performance of teaching year grade 4.

Note: This report includes NECAP data only. Students who did not take the test for any reason are NOT included. The denominator for percent proficient is number of students tested by NECAP (which is not a true representation of the student population). A student's assignment to a school or district in this report is not contingent on continuous enrollment (as it is in AYP reporting). If less than 10 students are tested then results are not reported. Ethnic group designations have changed over time. Please see website for more information. Data source for report: Disaggregated results teaching year.

Appendix 4: Math Gap Analysis Survey, Sample Questions

Q6. Teacher Practice

Answer Options	Yes	No	Not Sure
a) I am prepared to teach each mathematics concept in multiple ways.	262	12	6
b) I use high-quality research to support instructional decisions and practices relating to the teaching of mathematics.	205	46	20
c) I re-teach concepts, strategies, and skills based on formative assessment information.	269	8	2
d) I have planned opportunities to discuss student work to reflect on instructional practice and student progress.	209	66	4
e) As a new teacher (new to the grade, school or profession) I was supported with a mentor.	87	96	1
f) I am prepared to teach diverse learners (e.g. English language learners, students with disabilities).	253	23	6
g) I integrate explicit instruction in reading and writing into mathematics.	195	72	5
h) I balance individual and group work with specific guidance for students to work well as part of a team.	252	10	5
i) I am evaluated on a regular basis each year with a resulting plan for support and goals for improvement.	179	76	16

Q8. Professional Development

Answer Options	Yes	No	Not Sure
a) The district's professional development plan is cohesive, that is, it has long term goals that extend beyond one year, specifies goals and coordinates across schools and grade levels.	138	65	87
b) The district utilizes multiple funding sources for professional development in order to address mathematics holistically so that connections are made across topics (e.g. addressing content, diverse learners, pedagogy, and assessment) rather than providing professional development by topic or funding stream.	58	90	145
c) The district has worked in partnership with the bargaining unit (union) to address contractual barriers to planning and implementing focused, directed professional development in mathematics that balances meeting individual teacher needs with school needs.	60	51	177
d) Professional development addresses and makes the connections between mathematics content and pedagogy.	141	79	63
e) Professional development utilizes educational research related to the teaching and learning of mathematics.	157	68	61
f) There is on-going and systematic support for teachers to transfer professional development into practice in their classrooms.	114	117	55
g) Mathematics coaches are identified through an application process that emphasizes math content expertise and are trained in the coaching process.	47	81	148

Q9. Formative, Interim, and Summative Assessment

Answer Options	Yes	No	Not Sure
a. My classroom environment places students at the center of all decision making.	195	71	4
b. I collect frequent (daily/weekly) data on my students so that I can take immediate steps when s/he is falling behind in mathematics.	259	13	3
c. Every student in my class has the materials (e.g. textbooks, manipulatives, calculators) s/he needs in order to participate in the mathematics curriculum.	218	54	2
d. I make sure every student's family is informed about student's progress in formal and informal ways (e.g. conferences, notes, progress reports, telephone calls).	274	6	0
e. Every student in my class has the support s/he needs to be a successful mathematics student (e.g. ramp up programs, tutoring, extended mathematics classes, credit recovery).	132	119	15

Appendix 5: Defining “Best Practice”

One of the responsibilities of the subcommittee was to define "best practice" for the focus area of that committee. The definition of "best practice" should be based on participant knowledge and research and represent prevailing knowledge in the field.

Research/Definition of Effective Mathematics Curriculum, Instruction, and Assessment Practices

Curriculum

District Level

- The District’s math curriculum is aligned with national, state and district content and performance standards.
- Mathematics curriculum, instruction and assessments are aligned vertically (between grades) and horizontally (across classrooms at the same grade level and across sections of the same course).
- Print and technology resources are sufficient for instruction.
- A process is in place for monitoring, evaluating and reviewing the math curriculum on a regular basis.
- School board policies reflect sound curriculum management (planning and budgeting processes are linked).
- The central office is organized and staffed to perform curriculum management tasks necessary to improve student achievement.

Classroom Level

- Teachers have immediate access to district curriculum documents, including specific grade level learning targets, and scope and sequence of math topics.
- Teachers use math content and performance standards aligned with assessment information to design relevant, challenging learning experiences.
- Teachers use assessment data to identify, and if necessary, modify instructional priorities.
- All students have access to math programs, services and opportunities aligned to the content standards. In other words, the math curriculum provides flexibility to meet the needs of all students, including special education, gifted and talented, culturally and linguistically diverse, and economically disadvantaged students.
- Math professional development initiatives are in place and appropriately targeted to district, staff and student needs.

Community Level

- Written curriculum documents provide information for the public concerning the mathematics curriculum.

Instruction

General Instruction

- Is based on scientific research-based core curriculum
- Informs family and early care providers of expectations for kindergarten readiness and grade level standards and how to facilitate mathematical readiness
- Incorporates 8 Mathematical Practices of CCSS (see attachment [8 Mathematical Practices](#))
- Is explicit and systematic-teacher demonstrating a specific strategy for solving problems of steps and procedures or questions to ask in solving problems
- Is differentiated
- Takes into account student behavior, engagement and motivation
- Is culturally and linguistically sensitive
- Has a consistently defined and agreed upon RtI framework that includes adequate screening and progress monitoring measures and plan for effective delivery of interventions in all tiers.
- Instruction is data driven
- Is supported by PLCs with common definition, purpose, and protocol

- Rtl, as an instructional model, has become a vehicle for system reform and provides a framework in which data can be relied on as the basis for making instructional decisions.

Instructors

- Understand learning progressions of mathematical content
- Know how to facilitate mathematical concept development
- Use questioning effectively
- Understand depth of knowledge for grade level
- Have adequate materials, technology and software to allow student exploration
- Have high quality job embedded PD to provide support and guide instruction
- PD is sustained and ongoing; it is relevant to the teacher's needs
- Are prepared to teach diverse learners (e.g. English Language Learners, students with IEP's)
- Have planned opportunities to discuss student work, reflect upon and utilize data to inform instruction
- Use data to drive instruction
- Have a consistent system for progress monitoring and assessing student learning
- Receive feedback to affirm effective practices and improve instruction

Assessment

- The school uses multiple math classroom, school, district, and state assessments, both formal and informal, to assess and monitor each child's math progress (including English Language Learners and Special Education students) in achieving math content, performance, and graduation standards.
- Math achievement data is disaggregated to identify standards and equity gaps, develop strategies to eliminate these gaps, and identify instruction goals.
- The school's teaching and learning are continually adjusted on the basis of data collected through a variety of valid and reliable methods that indicate student progress and needs.

Appendix 6: Subcommittee Detailed Findings

Curriculum Findings

Current Pre K-5 mathematics curriculum practices in Manchester School District (description of current models/practice based on data collected through the Focused Monitoring Process)

Strengths

1. Dedicated professionals
2. The district has the resources readily available for developing curriculum maps to align with the Common Core State Standards in mathematics
3. Some of the district schools are doing good work around Professional Learning Communities (PLCs)
4. There is an awareness in the school district that we can use assessment data to identify and modify instruction priorities
5. The summer work discussion by Assistant Superintendent Mike Tursi is like a “light at the end of the tunnel”

Challenges

1. There is a misconception that the instructional materials are the curriculum.
2. There is inconsistent use of math resources across the district. Not all schools have the same resources and those that do, don't necessarily use them in the same way.
3. There is a lack of professional development for teaching math to different learners. The professional development activities that have occurred was not easily accessible by SPED and ELL staff
4. There is not easy access to math curriculum guides within district and materials are not always distributed the way it was intended (i.e. materials that need to be in color not copied in color)
5. The scope of the current Pre K-5 math curriculum is inadequate to direct instruction and the math curriculum is not aligned to the Common Core State Standards either vertically or horizontally
6. The current K-5 math curriculum guides lack the content and quality necessary to support effective classroom math instruction.
7. The school system does not have an adequate Pre K-5 mathematics student assessment and program evaluation plan to provide the feedback necessary to support sound decisions regarding the design and delivery of the math curriculum.
8. Teachers are unfamiliar with the techniques to modify math instruction for various learning styles and needs
9. Mathematics professional development and materials have not been equally provided to all (special education vs. general education)
10. Some students with disabilities do not have full access to the general education math curriculum.
11. There is evidence that some students with disabilities have a separate math curriculum, not aligned to the district's current math curriculum
12. Pre K-5 math foundation skills are not taught to mastery
13. Pre K-5 math does not have same structure/model for instruction similar to the reading program
14. There is a lack of consistency among the schools in terms of the amount and quality of data available to support effective math instruction and the ability to process it
15. There is a lack of support and understanding from the community due to the lack of effective communication from the district.
16. There is no formal process in place for monitoring, evaluating and reviewing the Pre K-5 math curriculum on a regular basis.
17. There is an inconsistent flow of communication from district to teacher.
18. Resources for print and technology are inadequate to support both the teaching and learning of Pre K-5 mathematics
19. There is a lack of collective ownership for the curriculum across district (reactive vs. collaborative) and a lack of empowerment.

20. The district office is not adequately organized or staffed to perform curriculum management tasks necessary to improve student achievement.

Instruction Findings

Current math instructional practices in Manchester School District (description of current models/practice based on data collected through the Focused Monitoring Process).

The existing math program is not being implemented consistently in all of the elementary schools; *Everyday Math*, is the program, and is often defined to be the “curriculum.”

1. Oversight of the math instruction (in the classroom setting) varies from school to school and grade to grade
2. There are significant numbers of students with disabilities who receive mathematics instruction outside of the general education setting, and the curriculum provided is not always aligned to the general education curriculum.
3. Not all elementary educators responsible for teaching mathematics are adequately trained to do so
4. NH DOE is reviewing credentialing for elementary math certification (Elementary Mathematics Specialist for grades PK-6)
5. There are Reading Specialists for each Manchester Elementary School, but this is not the case for mathematics
6. Rtl in the Manchester School District is not clearly defined, and inconsistent across elementary schools
7. The elementary schools are in the initial stages of rolling out the Common Core State Standards; principals have met to discuss moving forward with Common Core implementation. A systemic approach will be essential, along with ongoing sustained support and professional development for all administrators and faculty.
8. Currently the Manchester School District has a screening tool for assessing incoming kindergarten/first grade students in literacy however there is nothing available in the area of math
9. The number of children who can access “Ready for Success” has decreased

Assessment Findings

Assessment

1. The Pre K-5 mathematics assessments are not aligned to the Common Core State Standards (vertically or horizontally).
2. There is inconsistent implementation of Pre K-5 math assessments across the district.
3. Different assessments are used and students with disabilities are not always assessed with the same assessments.
4. There is a lack of an initial math screening for incoming kindergartners
5. Teachers do not meet on a regular basis to review assessment results.
6. The communication of assessment results is not done in a consistent or timely manner.
7. Professional development is inconsistent across the district for EDM, Rtl and PLCs.

Appendix 7: Principals' Focus Group Report

Introduction

Throughout the early stages of the Focused Monitoring (FM) process in the Manchester School District (MSD) members of the Achievement Team (AT) have noted that for change to be implemented effectively in their schools active *instructional leadership* from the principals is fundamental. On April 30, 2013 SERESC consultants conducted two simultaneous focus groups with the MSD elementary school principals. The facilitators, Joseph Miller and Edward Hendry, used a set of guiding questions based on the research in *School Leadership That Works* (Waters, Marzano, and McNulty 2003). The questions encouraged conversation among the principals about structures that were supporting success and structures that needed to be changed or implemented to encourage more effective school leadership.

School Leadership that Works presents a leadership framework that describes the knowledge, skills, strategies, and tools leaders need to have to positively impact student achievement. The authors based the framework on a meta-analysis of the literature that revealed a substantial relationship between leadership and student achievement (a correlation of 0.25). Waters, et. al. (2003) describes two types of change: first-order and second-order. First-order change is change that aligns with prevailing norms and values and meets with general agreement. Second-order change is change that is significant, might contrast with prevailing values and norms and requires people to learn significant new approaches. For the purposes of this focus group discussion the facilitators developed questions around the seven principals' behaviors correlated with student achievement gains for schools experiencing second-order change.

Demonstrated behaviors for second-order change:

1. Knowledge of Curriculum, Instruction, and assessment (not involvement in): is knowledgeable about current curriculum, instruction, and assessment practices.
2. Optimizer: inspires and leads challenging and new innovations.
3. Intellectual stimulation: Ensures that faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture.
4. Change agent: Is willing to challenge the status quo actively.
5. Monitoring/Evaluation: Monitors the effectiveness of school practices and their impact on student learning.
6. Flexibility: Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent.
7. Ideals/Beliefs: Communicates and operates from strong ideals and beliefs about schooling.

Questions

The following questions were used to guide conversations with the principals. All questions were asked (in some form), but not all questions were asked in both focus groups.

1. Describe one or two things that went well in your school this year.
2. (Knowledge of CIA) What are the expectations for leaders in the Manchester School District regarding knowledge of curriculum, instruction, and assessment? (Possible follow-ups: what professional development is provided to increase knowledge? How are expectations communicated?)
3. (Optimizer) Describe a recent challenging innovation at your school? How does the Manchester School District encourage school leaders to innovate and what might be done to increase innovative practices?

4. (Intellectual Stimulation) When it comes to mathematics instructional practices, what are some examples of how you share the best practices from research with your staff? What ideas do you have for making discussion of effective practice a regular part of school culture?
5. (Change agent) What elements of the status quo in Manchester most need to be challenged and what might be some strategies to challenge these?
6. (Monitoring and Evaluation): How do you currently monitor the effectiveness of math instruction? What strategies should be implemented district wide or considered district wide?
7. (Flexibility) How prepared do you feel to adapt your leadership style as situations change in the school? Do you feel you have the appropriate support from the district to be both directive and non-directive as the particular situations warrant?
8. (Ideals/Beliefs): As principals do you feel comfortable sharing your ideals and beliefs with staff? , Are you encouraged to share ideals and beliefs? Further, do you point to ideals and beliefs when making tough decisions?
9. Are principals evaluated on instructional leadership skills? If so, how? What skills are evaluated and how is this communicated in your evaluations?
10. What professional development do principals receive in common as related to math instruction? (Elementary and K-12)?

Three primary themes arose as a result of the two discussions: (1) need to communicate, understand and implement a school focus and vision, (2) need for greater clarity around leader expectations, and (3) a need to develop a cohesive leadership team.

Focus or vision

One of the most critical needs of the district as this point is to establish a clear vision for improving student achievement. School and district administrators working collaboratively will ensure that the process and vision establishes high expectations for students while acknowledging the differences in schools. This vision will not only drive the work of the district but will become the primary focus of all stakeholders.

Expectations of Leaders

In order to achieve our highest potential, both individually and collectively, it is necessary to clearly establish expectations and provide feedback to school leadership. The role of “critical friend” would assist in guiding both teaching and learning. It would also serve as a vehicle for ensuring that administrators were cognizant of the needs and accomplishments of schools and the district.

Leadership Team

An effective implementation process is critical to the success of any and all initiatives. The focus must clearly be on curriculum, instruction and assessment. These processes need to reflect competencies both with conceptual understanding as well as knowledge of effective evidenced based practices. While not directly instructional, the role of school leadership is to be knowledgeable in content and methodology. The role of the District Administration is to provide professional development and support.

Recommendations

1. Establish a procedure and timeline for developing a district vision.
2. Adopt a clear set of instructional leadership standards (e.g. Balanced Leadership from McREL. NISL etc.) Many principals were previously trained in the NISL standards and reported satisfaction with the quality of the training.

- a. Align evaluation with leadership standards.
 - b. Provide professional development on instructional leadership for all administrators. Develop a sustainable plan for training new administrators.
 - c. Provide regular ongoing feedback to principals aligned with standards.
3. School visits to focus on the implementation of the district vision and goals. These visits would provide information for monitoring feedback to principals and subsequently evaluations.
 4. Develop a principal leadership team, focusing on curriculum, instruction and assessment through the perspective of instructional leadership. A professional learning community would provide the forum for learning, discussion and consistency throughout the district. Meeting norms would be established to facilitate the process.

Appendix 8: District Office Administrators' Focus Group Report

Introduction

In *District Leadership That Works* Robert Marzano and Timothy Waters (2009) set out to determine whether district administration was "really unrelated to student learning (at best) or detrimental to student learning (at worst)?" as former Secretary of Education William Bennett had argued². Marzano and Waters found that, contrary to Bennett's argument, district leadership has a measurable impact on student achievement. Marzano and Waters identified five leadership behaviors that align with student achievement gains: (1) ensuring collaborative goal setting, (2) establishing non-negotiable goals for achievement and instruction, (3) creating board alignment with and support of district goals, (4) monitoring achievement and instruction goals, and (5) allocating resources to support the goals for achievement and instruction.

For the purposes of this focus group discussion the facilitators developed questions around the five leadership behaviors correlated with student achievement gains:

1. **Collaborative goal-setting:** Researchers found that effective superintendents include all relevant stakeholders, including central office staff, building-level administrators, and board members, in establishing goals for their districts.
2. **Non-negotiable goals for achievement and instruction:** Effective superintendents ensure that the collaborative goal-setting process results in non-negotiable goals (i.e., goals that all staff members must act upon) in at least two areas: student achievement and classroom instruction. Effective superintendents set specific achievement targets for schools and students and then ensure the consistent use of research-based instructional strategies in all classrooms to reach those targets.
3. **Board alignment and support of district goals:** The key work of school boards – student achievement and community engagement to promote student achievement- is recognized as the primary agenda for boards of education³. In districts with higher levels of student achievement, the local board of education is aligned with and supportive of the non-negotiable goals for achievement and instruction. They ensure these goals remain the primary focus of the district's efforts and that no other initiatives detract attention or resources from accomplishing these goals.
4. **Monitoring goals for achievement and instruction:** Effective superintendents continually monitor district progress toward achievement and instructional goals to ensure that these goals remain the driving force behind a district's actions.
5. **Use of resources to support achievement and instruction goals:** Effective superintendents ensure that the necessary resources, including time, money, personnel, and materials, are allocated to accomplish the district's goals. This can mean cutting back on or dropping initiatives that are not aligned with district goals for achievement and instruction.

Marzano and Waters also noted a "surprising & perplexing finding", which they called "Defined autonomy". As they noted they are some contradictory findings within the analysis they completed. One study reported that building autonomy has a positive correlation of .28 with average student achievement in the district, indicating that an increase in building autonomy is associated with an increase in student achievement. As Marzano and Waters later note that same study reported that site-based management

² Bennett first argued that central administration was soaking up resources and resisting reform in 1987 in his state of education address. He reiterated this claim in 1999 in the book *The educated child: A parent's guide from preschool through eighth grade* written with Chester Finn and John Cribb.

³ The Iowa Lighthouse Project (2002-2007) studied the behaviors of five school boards as a follow-up from the original Lighthouse Project (1998-2000) and found boards in successful sites focused on creating a sense of urgency, developing a district-wide focus for improvement, creating conditions within the system for success, monitoring progress, deliberative policy development, and developing a leadership continuum.

had a negative correlation with student achievement of $-.16$, indicating that an increase in site-based management is associated with a decrease in student achievement. Marzano and Waters note that the researchers concluded from this finding that effective superintendents may provide principals with “defined autonomy.” Effective superintendents set clear, non-negotiable goals for learning and instruction, yet provide school leadership teams with the responsibility and authority for determining how to meet those goals.

The questions that follow are based on the above findings.

Questions

The following questions were used to guide conversations with the central administration.

1. Tell me one or two things that went well in Manchester this year.
2. (Ensuring collaborative goal setting) How does the Manchester School District ensure that goals are set collaboratively? Is there a clear expectation from the Board of School Committee, schools, and greater community that goals will be set together?
3. (Establishing non-negotiable goals for achievement and instruction) Are the non-negotiable achievement goals for schools established and communicated? And incorporated into the annual principals’ goal setting process? If no, what are the barriers to having non-negotiable goals (similar to the Kennewick District in Annual Growth)?
4. (Establishing non-negotiable goals for achievement and instruction) Are there clear non-negotiable instructional goals? How are these communicated? What are the barriers to ensuring these instructional practices are in place?
5. (Creating board alignment with and support of district goals) Is the Board of School Committee aligned with and supportive of the non-negotiable achievement and instruction goals? What barriers are faced in attempting to align with the Board’s goals and vision?
6. (Monitoring achievement and instruction goals) How is progress monitored towards achievement goals? Towards instruction goals?
7. (Allocating resources to support the goals for instruction and achievement): Are budgets currently developed from a core set of academic and instructional goals? Is it clear that the budget supports the development of requisite knowledge, skills, and competencies that teachers need to implement the district’s expectations?
8. (Defined Autonomy) Defined autonomy means that the superintendent (or leadership) expects principals and all other administrators in the district to lead within the boundaries defined by the Board of School Committee and district goals. What would need to change in Manchester to implement this approach to district leadership?
9. How are district administrators evaluated? What needs to change to make these evaluations meaningful?

Themes

Three primary themes arose as a result of the central administration focus group: (1) clarity of the district vision for success with an aligned strategy for achieving the vision and measurable goals is lacking, (2) a focus on day to day management duties siphons a majority of leadership’s time resulting in very little energy dedicated to goal setting, monitoring, and meaningful conversations aligned with the district vision, and (3) internal and external communications are not consistent and do not emphasize the overall vision, goals, or strategy for success.

Clarity of District Vision and Goals

The district currently lacks overall student achievement goals or a clear vision for the future. District office administrators reported that goals are not set collaboratively and that Manchester schools do not have student achievement goals. The Board of School Committee (BOSC) is currently working on a strategic plan, but the plan is not yet public. District office administrators reported a significant portion of the board's time is spent on operational issues and the board has not defined a clear framework for accountability, so it is not always clear what is most important.

Management Focus

District leaders expressed frustration that a majority of their time is dedicated to tasks related to management and not connected to improving student performance (e.g. compliance related activities, organizing data, personnel). Without a clear focusing vision and set of measurable goals leadership in the district is left to focus on management. As Peter Drucker noted, "Management is doing things right, leadership is doing the right things. The problem is that we have a lot of managers doing the wrong things very well."

Internal and External Communication

As the business author Marcus Buckingham noted, "Effective leaders must be pre-occupied with clarity." The central administrators involved in the focus group noted that communication between the SAU office and the schools and the SAU office and other stakeholders is not effective. Without a clear vision, goals, strategy, and non-negotiable expectations for achievement and instruction it is difficult to develop a cohesive message. District administrators noted that managerial obligations are a significant barrier to spending time in schools, which results in little monitoring of the educational process, a principal evaluation process that is disconnected from day to day school leadership (and the behaviors known to impact student achievement), and few opportunities to communicate the overall vision of the district (and board).

Recommendations

1. Ensure that the strategic plan under development includes: (a) clear vision for the future of Manchester schools, (b) measurable goals, and (c) a clear strategy for achieving the vision. The BOSC should consider the research findings for effective school boards during the development of the strategic plan⁴.
2. Ensure that policies are in place to achieve the vision; allocate resources based on the vision; and monitor progress towards the vision periodically.
3. Ensure that accountability and policy are leveraged to improve student achievement.
4. Revise the evaluations for leaders to reflect the research-based behaviors that are identified with leaders that have an impact on student achievement. District-level and school-level leaders' accountability should be based on expectations outlined in the district strategic plan.
5. Set non-negotiable student achievement and instructional goals based on the district strategic plan and a process for collaboratively setting goals with schools.
6. Report publicly on the attainment of non-negotiable goals.

³ Two such reports regarding effective school boards can be found here:

<http://www.centerforpubliceducation.org/Main-Menu/Public-education/Eight-characteristics-of-effective-school-boards/Eight-characteristics-of-effective-school-boards.html> and in *The Key Work of School Boards, Guidebook*, National School Boards Association.

Appendix 9: Achievement Team Detailed Recommendations

Curriculum

1. Develop a collaborative process and timeline for Pre K-5 math curriculum alignment to the mathematics Common Core State Standards (CCSS) both within and across grades.
2. Establish a process for writing a Pre K-5 math curriculum for the district that is:
 - a. Aligned to CCSS
 - b. Realistic/clear scope and sequence/timeline
 - c. Aligned vertically and horizontally
 - d. Embodies the principles of Universal Design for Learning, including establishing high curriculum expectations for every student and meaningful choices to meet and sustain those high expectations.
3. Use CCSS curriculum alignment models developed by the states of Georgia, New York, or Ohio to develop curriculum guides, aligned to the CCSS; including pacing guides; scope and sequence; and student learning targets in Pre K-5 math
4. Provide assessments aligned to the math curriculum that give accurate, timely, and frequent means to measure progress and inform instruction for all students.
5. Develop a sustainable process for monitoring, evaluating and reviewing the math curriculum on a regular basis at the district level
6. Develop a process of accountability to ensure that all students with disabilities have full access to the Pre K-5 general education math curriculum and are taught by teachers knowledgeable about the district math curriculum and related expectations.
7. Create a model for all stakeholders (incl. school board) for establishing a culture/climate of effective communication in order to promote student achievement in the area of mathematics
8. Develop a timeline for ongoing and sustainable professional development in the area of math that focuses on best practices in the delivery of the math curriculum.
9. Ensure that all SPED staff has the same access to professional development opportunities in mathematics.
10. Establish math leaders at each school to provide the same structure/model which the district has for literacy – meeting on a monthly basis
11. Establish a process for gathering, analyzing and interpreting data for instructional purposes
12. Create a schedule to conduct Professional Learning Communities (PLCs) in each school on a regular basis that focuses on student growth and data
13. Revisit mission statement to support culture and climate
14. Develop a calendar for professional development aligned to the K-5 math CCSS
15. Develop a district calendar and timeline for the district and each school to review, monitor, evaluate Pre K-5 mathematics data, and revise, as needed, the district K-5 math curriculum.

Instruction

1. Develop current math curriculum that is aligned with CCSS
2. Curriculum is systemic and explicit with frequent and cumulative review
3. Secure a math leader at each building
4. Additional staff to support Tier 2 and Tier 3 math instruction
5. Assure that all students have access to and participate in the general education curriculum and instruction based on CCSS and that intervention is supplemental
6. Develop common definition, purpose, and protocol for Rtl, and PLCs

7. Develop an action plan to increase community and family awareness of school readiness expectations and resources
8. Institute full day kindergarten and allow kindergarteners to ride the bus
9. Provide more support for K-2 catch-up growth for the students who enter our schools already behind (including paraprofessional support for the whole class, not tied to specific students only)
10. Provide consistent oversight and monitoring of math instruction
11. Provide coordinated, systemic, job embedded and sustained support and professional development to all administrators, faculty and staff in the area of mathematics instruction in the elementary schools.

Appendix 10: Resources/ Professional Development

Curriculum

1. Manchester School District's *Everyday Math* program units of study
2. Georgia Department of Education. Mathematics Common Core State Standards resource: <https://www.georgiastandards.org/Common-Core/Pages/Math-K-5.aspx>
3. New York State Common Core Mathematics Curriculum Maps. A Story of Units: A Mathematics Curriculum Overview for Grades P-5. <http://www.commoncore.org/>
4. Ohio Model Common Core State Standards Curriculum Math: <http://www.ode.state.oh.us/GD/Templates/Pages/ODE/OEDDetail.aspx?Page=3&TopicRelationID=1696&Content=142141>
5. *Illustrative Mathematics* from the [Institute for Mathematics & Education](http://www.illustrativemathematics.org/). Mathematics Curriculum Common Core State Standards resource: <http://www.illustrativemathematics.org/standards/k8>
6. *Everyday Mathematics* ©2007 alignment with the Common Core State Standards for Mathematics. <https://www.mheonline.com/emcrosswalk/grades.php?grade=K>
7. *50 Ways to Reduce the Achievement Gap*. Corwin Publishing. 2009. Carolyn J. Downey, Betty E. Steffy, William K. Poston, Jr., Fenwick W. English.
8. *Assessment Continuum of School-wide Improvement Outcomes*, New England Comprehensive Assistance Center at Education Development Center, Inc. 2002 and *School Review Process Guide*, The Center for Comprehensive School Reform and Improvement, 2009.

Instruction

1. Understanding the CCSS 8 Mathematical Practices
2. Training for administrators around how to provide instructional leadership
3. Common expectations for all buildings for math instruction
4. There is a math leader at each building
5. Audit of instructional programs and materials available at each school at all levels of instruction, including at the birth - 5 year level
6. Assure that common instructional resources and instructional opportunities (including teacher-student ratios) are available to all students in the district
7. District wide PD plan that incorporates all instructors (EL, Spec Ed) and aligns with district-wide initiatives