

Murkland School Tiered Instruction System A District and School Partnership

Massachusetts Department of Elementary and
Secondary Education Curriculum and Instruction
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Lowell Public Schools

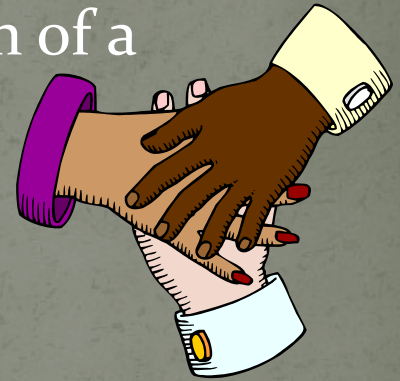
Number of students = 13,600

Enrollment by Race/Ethnicity (2010-11)	% of District	% of State
African American	6.6	8.2
<i>Asian</i>	<i>29.1</i>	<i>5.5</i>
<i>Hispanic</i>	<i>26.6</i>	<i>15.4</i>
<i>White</i>	<i>35.4</i>	<i>68.0</i>
Multi-Race, Non-Hispanic	2.1	2.4
First Language not English	43.9	16.3
Limited English Proficient	33.1	7.1
Low-income	72.5	34.2
Special Education	15.4	17.0
Free Lunch	61.2	29.1
Reduced Lunch	11.3	5.1
Teacher Data (2010-2011)	District	State
% of Teachers Licensed in Teaching Assignment	98.5	97.5
% of Core Academic Classes Taught by Teachers		
Who are Highly Qualified	98.3	97.7
Student/Teacher Ratio	14.5 to 1	13.9 to 1

Lowell Public Schools Vision & Core Values

Vision

Excellence in teaching and learning are essential elements necessary to render academic results that allows for children to attain their future academic goals, to compete in the global market, and to achieve their dream of a satisfying life.



Core Values


All children can learn and achieve at high levels given the right time and support.

All teachers can teach to high standards given the right conditions and support.

Accelerated Mathematics Initiative Timeline

2001-2009

- Leadership
- Standards-Based Curriculum
- Professional Development
 - Content
 - Pedagogy
 - Coaching
- Standards-Based Assessments
- Professional Learning Communities
 - District Assessment Committee



Murkland Summer Mathematics Program 2009 and 2010

State-District-School Partnership

- Professional development for teachers and paraprofessionals
- Targeted standards-based instruction based on benchmark data
 - 6 stage framework to develop PLC
 - Schedule that supports collaborative team time and vertical team time
 - Unpacking standards
 - Characteristics of a standards-based ELL math classroom
 - Lesson study template
 - Intervention – inclusion
 - LASW
 - Accountable talk
- Ongoing assessment
- Coaching role, all teachers are coached

District's On-going Support

- Monthly District Math Resource Meetings
- Race to the Top Project 2A – Aligning curriculum to New Common Core
- Leadership
- Professional Development
 - Math Learning Community 2010 – Present
 - Lowell Program Andrew Chen Math Courses – ongoing
 - First STEPS

Charlotte Murkland Elementary School



Title	% of School
Number of Students	500
Teacher Student Ratio	14.1 to 1
First Language not English	53.6
Low-income	86.2
Special Education	11.0
African American	3.2
Asian	53.6
Hispanic	27.8
Native American	1.6
White	11.2
Multi-Race, Non-Hispanic	2.6

The Redesign Process Begins

- Under new school leadership a Redesign Team was created
- Honest look at data to find the “Root Causes”
 - MCAS achievement trends
 - Student Growth Data
 - Organizational Assessment Data
 - Comparisons to Like Schools

The 2011-2014 Redesign Plan

- *Five Priorities*
 - Effective Instruction*
 - Aligned Curriculum*
 - Professional Development*
 - Social-Emotional Well Being of Children and Families*
 - School Culture*

Implementing a Plan that Includes Tiered Instruction with Success

Lowell Public Schools & Murkland School Redesign Plan

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Structural Changes

- School Schedule

- Maximize efficiency of school to target the school's vision and priorities
- Contains time for our priorities and tiered instruction
- Content-based CPT
- High expectations around curriculum pacing and standards

Average Percent Score	# of MC/SA questions 2006-2010	Standard	Murkland to State
75%	3	4N1	-13%
73%	4	4N2	-14%
44%	6	4N3	-20%
57%	5	4N4	-14%
35%	5	4N5	-23%
42%	4	4N6	-27%

Murkland "CHEER!"

Commitment to
Growth



Expectations



Results

C



H

Hope

E



E

Energy and
Enthusiasm

R



Cultural Changes

Murkland "CHEER!"

Commitment to
Growth



C



H

Hope



E

Expectations



E

Energy and
Enthusiasm



R

Results



“All our kids ”



“Inclusion model”

“Walk the walk”



Shared Ownership

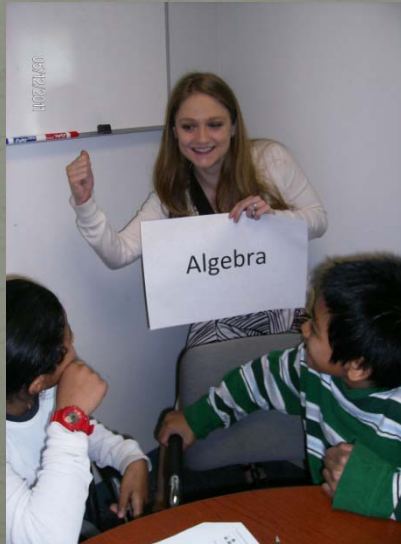


**PreK - 4 Curriculum
Expectations**

“Vertical ownership”

Cultural Changes

- Classroom learning environment (Morning Meeting)
- A relentless approach toward high expectations and motivating students and staff (Effective Effort)



Cultural Changes (continued)

- Classroom learning environment (Morning Meeting)
- A relentless approach toward high expectations and motivating students and staff (Effective Effort)
- Shared accountability for data

Shared Accountability for Data

Classroom	Grade 3 MCAS			Grade 4 Fall Benchmark				Grade 4 Winter Benchmark				
#3	Raw	Scaled	Level	Scaled Score	Level	CPI Points	Growth	Scaled Score	Level	CPI Points	MCAS Growth	Benchmark Growth
Student 1	31	240	P	980	HN	75	-1					
Student 2	27	238	N	900	LN	50	0	893	LN	50	0	0
Student 3	19	220	N	871	LN	50	0	865	HW	25	-1	-1
Student 4	38	268	A	1057	P	100	-1	1064	P	100	-1	0
Student 5	24	230	N	915	LN	50	0	893	LN	50	0	0
Student 6	19	220	N	828	HW	25	-1	879	HW	25	-1	0
Student 7	14	216	W	915	LN	50	1	948	LN	50	1	0
Student 8	33	252	P	980	HN	75	-1	1026	HN	75	-1	0
Student 9	15	216	W	828	HW	25	0	893	LN	50	1	1
Student 10	19	220	N	931	LW	50	0	948	LN	50	0	0
Student 11	14	216	W	786	LW	0	0	811	LW	0	1	0
Student 12	15	216	W	885	LN	50	1	893	LN	50	1	0
Student 13	11	212	W	900	LN	50	1	824	HW	25	0	-1
Student 14	14	216	W	871	LN	50	1	963	HN	75	1	1
Student 15	33	252	P	1057	P	100	0	1044	P	100	0	0
Student 16	29	242	P	1036	P	100	0	920	LN	50	0	-2
Student 17	27	238	N	998	HN	75	0	1009	HN	75	0	0
Student 18	27	38	N	900	LN	50	0	963	HN	75	0	1
Student 19	12	214	W	692	LW	0	0	755	LW	0	0	0
Student 20	30	244	P	963	HN	75	-1	993	HN	75	-1	0
Student 21	23	228	N	998	HN	75	0	978	HN	75	0	0
Averages >>	22.57	220.76		918.62	CPI>	55.95	-0.05		CPI>	53.75	0	-0.05

Cultural Changes (continued)

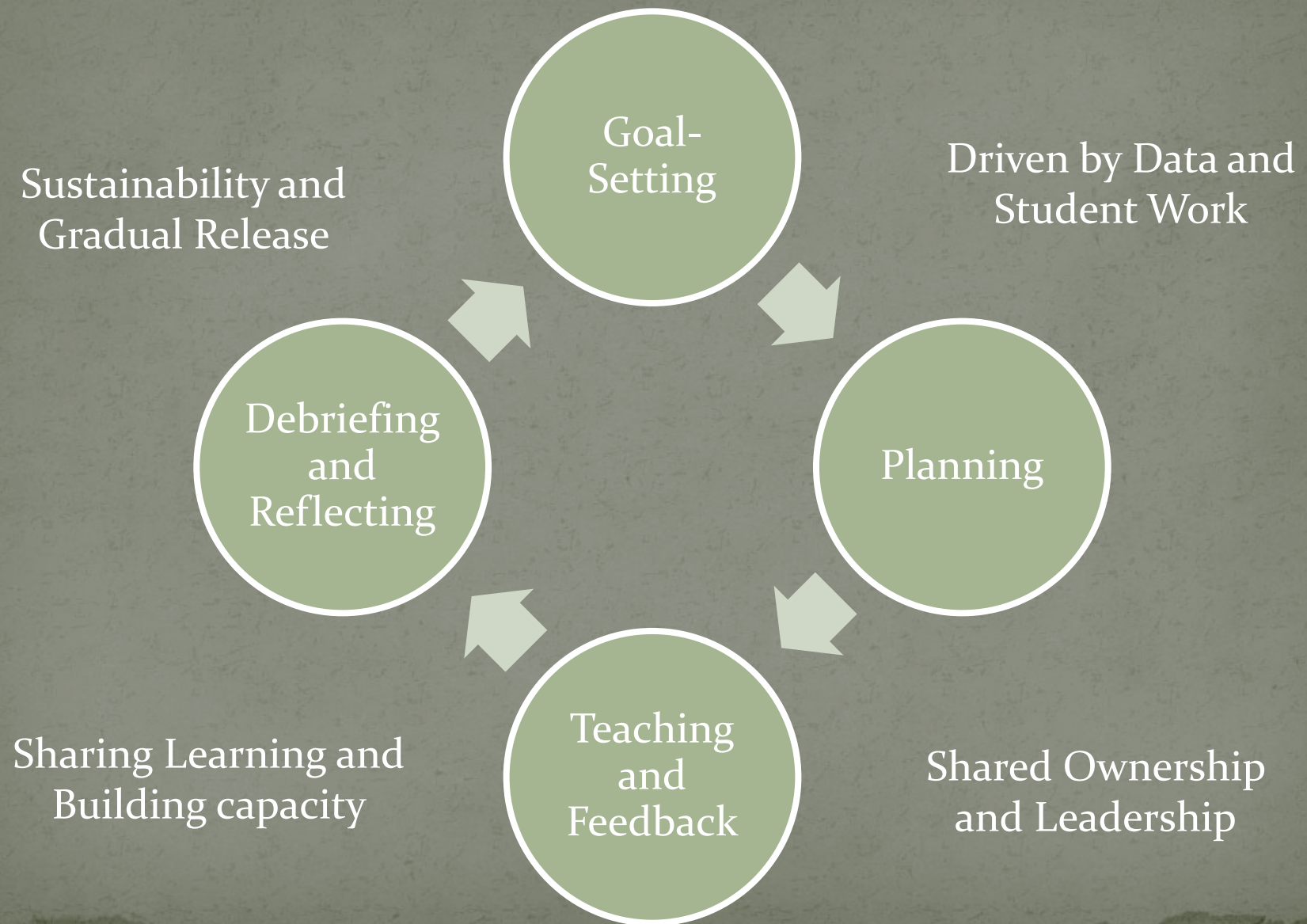
- Classroom learning environment (Morning Meeting)
- A relentless approach toward high expectations and motivating students and staff (Effective Effort)
- Shared accountability for data
- Shared leadership
 - Developed an Integrated Coaching Team (ICT)
- PD/Coaching at the Murkland
 - Murkland Coaching Values
 - Foundational coaching value -
“All teachers deserve coaching”



Murkland Redesign Plan Priority 3: Professional Development

- Murkland Coaching Values
 - All teachers deserve coaching that is driven by student need(s) and teacher reflection
 - A school climate of teacher reflection and adult learning is a key to student success
 - Consistent formalized feedback from teachers provides data to assess and monitor the coaching model
 - A learning community that fosters peer coaching and supports the growth of teacher-leaders
- Clarify role of coach

The Murkland Nine-Day Coaching Cycle



Murkland Redesign Plan Priority 2: Aligned Mathematics Curriculum

	Launch (10)	Explore (30-40)	Summary (10-20)
Teacher(s)	<ul style="list-style-type: none"> •Set objectives •Model vocabulary •Set expectations •Partners •Material use •Behavior •Pose problem(s) •Engage students in talking to assess entry into lesson/schema 	<ul style="list-style-type: none"> •Check in with students regarding anticipated difficulties •Ask questions to support students to using more efficient strategies •Facilitate student discussions between partners/groupmates •Consider what work/ thinking to capitalize on in summary •Assess what types of supports students need to improve accuracy and/or efficiency 	<ul style="list-style-type: none"> •Have students share strategies in a concrete to abstract continuum •Ask students to partner talk, add on, and restate thinking to maximize engagement •Assess student accuracy and efficiency
Students	<ul style="list-style-type: none"> •Listen to teacher and peers •Talk to partner as prompted 	<ul style="list-style-type: none"> •Persevere to solve problems •Use appropriate math vocabulary •Share thinking with peers •Ask peers questions •Follow expectations 	<ul style="list-style-type: none"> •Share thinking with partners and whole class as prompted •Use math vocabulary

Toward Tier I Alignment

- A closer look at standards, students, and curricular resources
 - “Soft” unpacks of curricular units
 - Use data to identify standards that need further instruction
 - Weekly Math Challenge
 - “Rehitting” standards with daily math problems
 - Sprint to 240
 - Math Clinic
 - Unpacking standards and developing continuums
 - Differentiation
 - Scaffolding
 - Determining next steps for student learning
 - Common Core Initiative: Match resources to standards, not standards to resources.

Murkland Tier II Structure

Session I (Tue, Wed)		Session II (Mon, Thu)	Session III (Fri)
Whole-grade intervention/enrichment based on common grade-level trends		In-homeroom intervention/enrichment based on specific classroom trends	In homeroom intervention/enrichment based on students responses to the Weekly Math Challenge
Continuum of Supports			
Group 1 (Tier 3)	≈ 6 students to 1 educator	Explicit Intervention/Remediation	
Group 2 (Tier 2)	≈ 9 students to 1 educator	Explicit Intervention	
Group 3 (Tier 1)	≈ 20 students to 1 educator	Reteach/Enrichment	
Group 4	≈ 25 students to 1 educator	Enrichment	

Using Data to Determine Tier II Groupings on Tuesday and Wednesday

- Analyze class data for strengths and teaching opportunities
- Compare class data to school data
- Four Outcomes when Comparing Data
 - Most kids in the grade share a given strength.
 - Most kids in the grade are in need of instruction in a particular area.
 - Most kids in one class are in need of instruction in a particular area, but the rest of the grade is not.
 - Some kids in each class are in need of instruction in a particular area; there is a wide range of data.

Key Features of the Tier II Structure

- More Targeted, more intense interventions = smaller student to teacher ratio
- Flexible groupings allow students to move to a less intense intervention when progress has been made.
- Time allotted for Tier II instruction occurs outside of the Tier I math block. It is an additional 30 minutes daily.
- Students who do not demonstrate a need for Tier II interventions take part in enrichment activities during that time.

Murkland School Tier III Structure

- Embedded in Tier II structure
 - Most intense, most targeted, smallest group
- Summer school
 - Screening for the Murkland program include looking at data and progress made from the whole school year

Data from Year I of Turnaround

Percent of Murkland Students Proficient on the Grade 4 Math MCAS 2011 Compared to 2006-2010



Data from Year I of Turnaround

**Murkland Median Student Growth Percentile
Grade 4 Math MCAS 2011**

