

Nottingham West Elementary School Math Data Report 2011

Nottingham West Elementary School has developed a data team this year as a result of being classified as a School in Need of Improvement in the area of math. The driving force behind this team is for the team to contribute to dramatic and permanent improvement so our teachers can make a greater positive difference in students' lives. The second purpose of our team is to strengthen our resolve to do whatever it takes to educate every student to the peak of his or her capacities. To engage in systematic and continuous improvement, Nottingham West, with the help of the data team, strives for the following outcomes:

- Work productively in professional learning communities
- Apply principles of cultural proficiency to data use and school improvement
- Understand and draw sound inferences from a variety of different kinds of data
- Accurately identify root causes of problems the data surface
- Implement research-based instructional improvements linked to the goals
- Monitor interim and long term progress toward goals

Regards of the sanctions of No Child Left Behind, you can't mandate what matters. For that reason, what matters is educator's deep responsibility for the learning of every child. Nottingham West believes that even though we have external accountability imposed through NCLB, it is our sense of internal and collective responsibility to continually improve instruction and student learning.

WHERE ARE WE NOW?

The following report is from our Data Committee on the Status of our School in Need of Improvement Plan. (The SINI Plan is on-line for reference)

First and Second Grade Math Report

There are six first grade and six second grade classrooms at Nottingham West Elementary. The average number of students in each classroom is between 20 and 22 which means that are approximately 120 students per grade level. Our school is currently on a Math SINI plan for the 2010-2011 school year. Using the 2009 NECAP data as a baseline our goal is for the percentage of students in the Educationally Disabled, Economically Disadvantaged, Non- or Limited- English Proficient groups in the substantially below proficient level to decrease by 10%.

NWEA First Grade Data

The mean RIT score for first graders for the NWEA Fall 2010 test is 165.4

Test Section	Number of students below a RIT score of 165.4	Percentage of students below a RIT score of 165.4	Percentage of students above a RIT score of 165.4
Statistics and Probability	49	35%	65%

Test Section	Number of students below a RIT score of 165.4	Percentage of students below a RIT score of 165.4	Percentage of students above a RIT score of 165.4
Computation	58	49%	51%
Number Sense	59	50%	50%

*The highest area of proficiency for students in first grade was in the area of statistics and probability with 65% of first grades scoring a RIT score above 165.4.

*The two lowest areas of proficiency for first graders at the start of this year were computation and number sense with 50% of students scoring a RIT score below 165.4 in the area of number sense and 49% in the area of computation.

Performance Pathways: Breakdown of Number Sense
First Grade Fall 2010

Number Sense	Number of Students	Percentage
Substantially Below Proficient	31	26%
Partially Proficient	34	29%
Proficient	53	45%

- 45% of students scored proficient in the area of number sense. Out of 118 students, 34 scored partially proficient and 31 scored substantially below proficient.
- While working with Professor Mahesh Sharma the first grade team is planning to start the next school year by teaching the sequence for addition and subtraction solely. This means that basic math facts will be the focus of instruction until November. The Everyday Series will be used after that time. As suggested by Professor Sharma once basic math facts are mastered other skills such as telling time and counting money will become easier for students to learn.

Second Grade Data

According to the comparative report for the NWEA Fall 2009 to the NWEA Fall 2010:

Numbers and Operations	Number of Students	Percentage
Substantially Below Proficient	44	36%
Partially Proficient	22	18%
Proficient	56	46%

Functions and Algebra	Number of Students	Percentage
Substantially Below Proficient	29	24%
Partially Proficient	31	25%
Proficient	62	51%

- The highest area of proficiency for students was in the area of data, statistics, and probability with 57% of students being proficient.
- The data shows that second graders tested the weakest on the NWEA in the areas of number and operations as well as functions and algebra.
- 46% of students scored proficient in the area of number and operations. Out of 122 students, 22 scored partially proficient and 44 scored substantially below proficient.
- 51% of students scored proficient in the area of functions and algebra. Out of 122 students, 31 scored partially proficient and 29 students scored substantially below proficient.

This data has been used to better instruct the areas of need in both grade levels by using the Everyday Math series as well as the theories of Professor Mahesh Sharma. As noted in the NWEA scores both grade levels need more focused time for instruction in the area of number sense. For the past three years each grade level has aligned the Everyday Math series to the state standards and have created formative and summative assessments to match the grade level expectations. Teachers are also familiar with content standards because they worked towards writing teacher friendly language for each.

Teachers in both grades have created math games or used website links that coincide with the strategies recommended by Professor Mahesh Sharma. Every Friday, teachers set time aside to practice addition and subtraction facts using the games created. During this time teachers are able to pull small groups for focused activities. Both grades are also teaching number sense by following the sequence of addition and subtraction provided by Professor Mahesh Sharma and teaching math during a 60 minute uninterrupted block of time. During math lessons, all first and second grade teachers also practice counting by 2s, 5s, and 10s starting at random numbers and using cards to create number patterns. We also give addition and subtraction timed tests to encourage fluency in numbers. Both grades have title 1 paraprofessionals that work daily with a selected group of students to focus on number sense skills. They incorporate the Cuisenaire rods in daily lessons.

This data has informed our teaching by making each teacher more aware of number sense by using the best practices for reaching students at various levels. Both grades are working towards teaching number sense skills consistency and with fidelity.

First Grade Report: Comparative Report - Proficiency

Assessment: NWEA Fall 2010 - Primary Grades Math - Gr 1 - 10/1/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NWEA Fall 2010 - Primary Grades Math - Gr 1 10/01/2010, District/Student: In District the year of the test; Sections: Total RIT Score

Item 1: NWEA Fall 2010 - Primary Grades Math - Gr 1 - 10/1/2010

44.92% Proficient

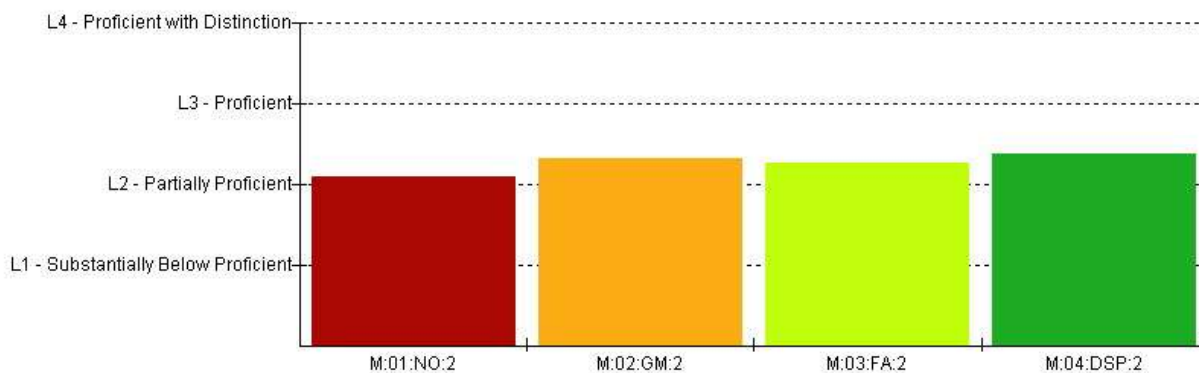
Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	35	29.66%	Click to view the students
L2 - Partially Proficient	1	30	25.42%	Click to view the students
L3 - Proficient	1	53	44.92%	Click to view the students
Total		118		

Second Grade Report: Comparative Report - Standards

Assessment: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2 - 10/1/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2 10/01/2010, District/Student: In District the year of the test

Assessments



NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2 - 10/1/2010

Item 1: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2 - 10/1/2010 49.59% Proficient

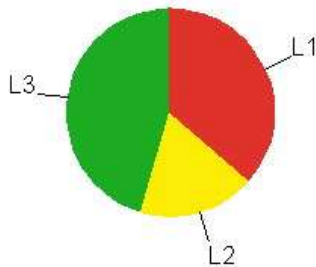
Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:2	NUMBER AND OPERATIONS	2.091 - L2 - Partially Proficient	121	1	1000	View
M:02:GM:2	GEOMETRY AND MEASUREMENT	2.322 - L2 - Partially Proficient	121	1	1000	View
M:03:FA:2	FUNCTIONS AND ALGEBRA	2.264 - L2 - Partially Proficient	121	1	1000	View
M:04:DSP:2	DATA, STATISTICS, AND PROBABILITY	2.372 - L2 - Partially Proficient	121	1	1000	View

Second Grade Report: Comparative Detail

Compare - Assessments - Drill down: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2-10/1/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2 10/01/2010, District/Student: In District the year of the test

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Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2-10/1/2010

M:01:NO:2 - NUMBER AND OPERATIONS

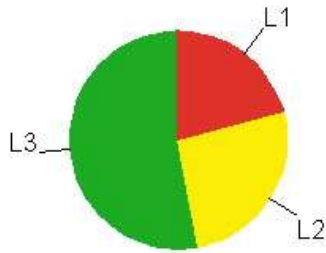
Proficiency Level	# of Tests	# of Students	Percent	View Students
(L3) L3 - Proficient	1	55	45.45%	Click to view the students
(L2) L2 - Partially Proficient	1	22	18.18%	Click to view the students
(L1) L1 - Substantially Below Proficient	1	44	36.36%	Click to view the students
Total		121		

Report: Comparative Detail

Compare - Assessments - Drill down: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2-10/1/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2 10/01/2010, District/Student: In District the year of the test

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Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2-10/1/2010

M:02:GM:2 - GEOMETRY AND MEASUREMENT

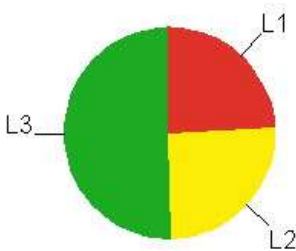
Proficiency Level	# of Tests	# of Students	Percent	View Students
(L3) L3 - Proficient	1	64	52.89%	Click to view the students
(L2) L2 - Partially Proficient	1	32	26.45%	Click to view the students
(L1) L1 - Substantially Below Proficient	1	25	20.66%	Click to view the students
Total		121		

Report: Comparative Detail

Compare - Assessments - Drill down: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2-10/1/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2 10/01/2010, District/Student: In District the year of the test

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Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2-10/1/2010

M:03:FA:2 - FUNCTIONS AND ALGEBRA

Proficiency Level	# of Tests	# of Students	Percent	View Students
(L3) L3 - Proficient	1	61	50.41%	Click to view the students
(L2) L2 - Partially Proficient	1	31	25.62%	Click to view the students
(L1) L1 - Substantially Below Proficient	1	29	23.97%	Click to view the students

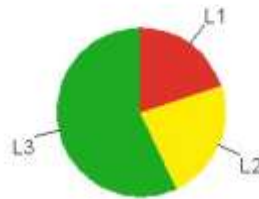
Total

121

Report: Comparative Detail

Compare - Assessments - Drill down: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2-10/1/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2 10/01/2010, District/Student: In District the year of the test



Assessments: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 2-10/1/2010

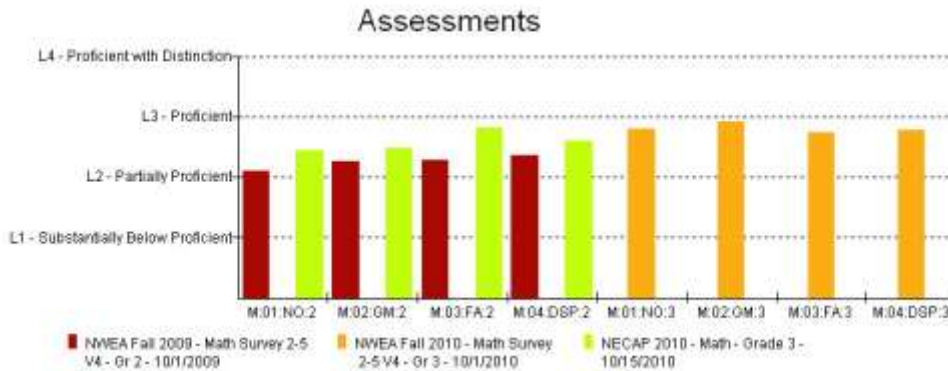
M:04:DSP:2 - DATA, STATISTICS, AND PROBABILITY

Proficiency Level	# of Tests	# of Students	Percent	View Students
(L3) L3 - Proficient	1	69	57.02%	Click to view the students
(L2) L2 - Partially Proficient	1	28	23.14%	Click to view the students
(L1) L1 - Substantially Below Proficient	1	24	19.83%	Click to view the students
Total		121		

Third Report: Comparative Report - Standards

Assessment: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 2 - 10/1/2009,NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 3 - 10/1/2010,NECAP 2010 - Math - Grade 3 - 10/15/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NECAP 2010 - Math - Grade 3 10/15/2010, NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 2 10/01/2009, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 3 10/01/2010, District/Student: In District the year of the test



Item 1: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 2 - 10/1/2009 50.38% Proficient

Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:2	NUMBER AND OPERATIONS	2.1 - L2 - Partially Proficient	130	1	1000	View
M:02:GM:2	GEOMETRY AND MEASUREMENT	2.262 - L2 - Partially Proficient	130	1	1000	View
M:03:FA:2	FUNCTIONS AND ALGEBRA	2.285 - L2 - Partially Proficient	130	1	1000	View
M:04:DSP:2	DATA, STATISTICS, AND PROBABILITY	2.354 - L2 - Partially Proficient	130	1	1000	View

Item 2: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 3 - 10/1/2010 67.65% Proficient

Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:3	NUMBER AND OPERATIONS	2.799 - L3 - Proficient	134	1	1000	View
M:02:GM:3	GEOMETRY AND MEASUREMENT	2.918 - L3 - Proficient	134	1	1000	View
M:03:FA:3	FUNCTIONS AND ALEGBRA	2.746 - L3 - Proficient	134	1	1000	View
M:04:DSP:3	DATA, STATISTICS, AND PROBABILITY	2.776 - L3 - Proficient	134	1	1000	View

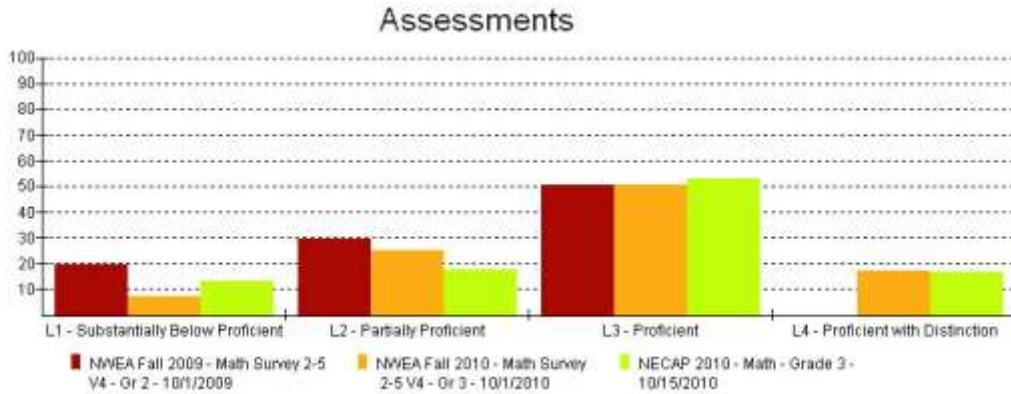
Item 3: NECAP 2010 - Math - Grade 3 - 10/15/2010 69.57% Proficient

Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:2	NUMBER AND OPERATIONS	2.442 - L2 - Partially Proficient	138	1	35	View
M:02:GM:2	GEOMETRY AND MEASUREMENT	2.486 - L2 - Partially Proficient	138	1	10	View
M:03:FA:2	FUNCTIONS AND ALGEBRA	2.812 - L3 - Proficient	138	1	10	View
M:04:DSP:2	DATA, STATISTICS, AND PROBABILITY	2.601 - L3 - Proficient	138	1	10	View

Third Grade Report: Comparative Report - Proficiency

Assessment: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 2 - 10/1/2009, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 3 - 10/1/2010, NECAP 2010 - Math - Grade 3 - 10/15/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NECAP 2010 - Math - Grade 3 10/15/2010, NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 2 10/01/2009, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 3 10/01/2010, District/Student: In District the year of the test; Sections: Math Scale Score, Total RIT Score, Total RIT Score



Item 1: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 2 - 10/1/2009 50.38% Proficient

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	26	19.85%	Click to view the students
L2 - Partially Proficient	1	39	29.77%	Click to view the students
L3 - Proficient	1	66	50.38%	Click to view the students
Total		131		

Item 2: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 3 - 10/1/2010 67.65% Proficient

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	10	7.35%	Click to view the students
L2 - Partially Proficient	1	34	25.00%	Click to view the students
L3 - Proficient	1	69	50.74%	Click to view the students
L4 - Proficient with Distinction	1	23	16.91%	Click to view the students
Total		136		

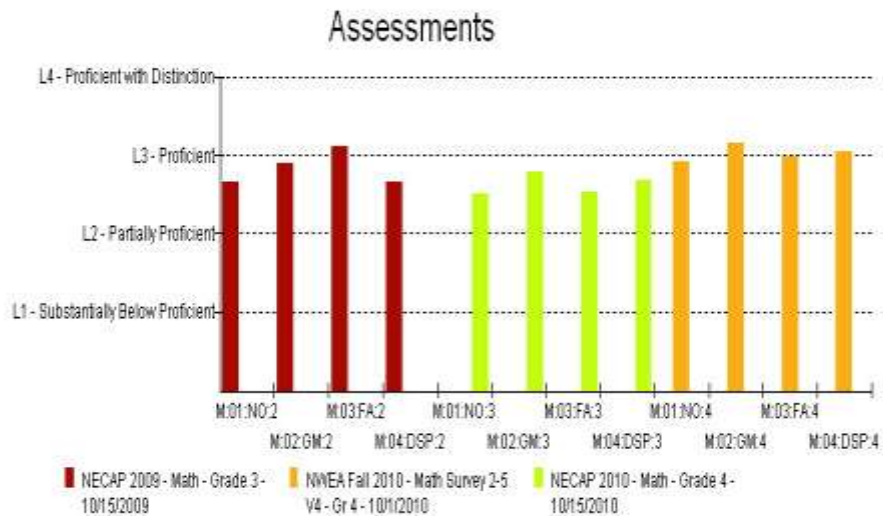
Item 3: NECAP 2010 - Math - Grade 3 - 10/15/2010 69.57% Proficient

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	18	13.04%	Click to view the students
L2 - Partially Proficient	1	24	17.39%	Click to view the students
L3 - Proficient	1	73	52.90%	Click to view the students
L4 - Proficient with Distinction	1	23	16.67%	Click to view the students
Total		138		

Fourth Report: Comparative Report - Standards

Assessment: NECAP 2009 - Math - Grade 3 - 10/15/2009,NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 - 10/1/2010,NECAP 2010 - Math - Grade 4 - 10/15/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NECAP 2009 - Math - Grade 3 10/15/2009, NECAP 2010 - Math - Grade 4 10/15/2010, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 10/01/2010, District/Student: In District the year of the test; Sections: Math Scale Score, Math Scale Score, Total RIT Score



Item 1: NECAP 2009 - Math - Grade 3 - 10/15/2009 69.84% Proficient						
Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:2	NUMBER AND OPERATIONS	2.659 - L3 - Proficient	126	1	35	View
M:02:GM:2	GEOMETRY AND MEASUREMENT	2.905 - L3 - Proficient	126	1	10	View
M:03:FA:2	FUNCTIONS AND ALGEBRA	3.127 - L3 - Proficient	126	1	10	View
M:04:DSP:2	DATA, STATISTICS, AND PROBABILITY	2.659 - L3 - Proficient	126	1	10	View
Item 2: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 - 10/1/2010 81.82% Proficient						
Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:4	NUMBER AND OPERATIONS	2.915 - L3 - Proficient	130	1	1000	View
M:02:GM:4	GEOMETRY AND MEASUREMENT	3.162 - L3 - Proficient	130	1	1000	View
M:03:FA:4	FUNCTIONS AND ALEGBRA	2.977 - L3 - Proficient	130	1	1000	View
M:04:DSP:4	DATA, STATISTICS, AND PROBABILITY	3.046 - L3 - Proficient	130	1	1000	View

Item 3: NECAP 2010 - Math - Grade 4 - 10/15/2010 **60.45% Proficient**

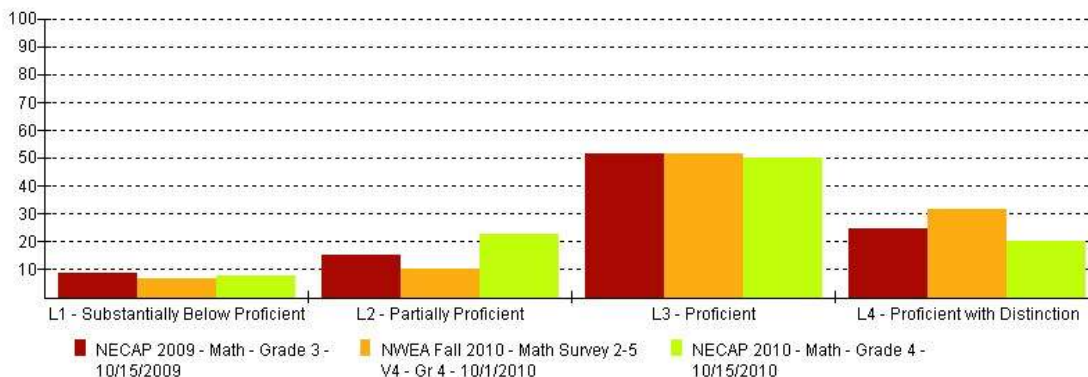
Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:3	NUMBER AND OPERATIONS	2.5 - L3 - Proficient	134	1	32	View
M:02:GM:3	GEOMETRY AND MEASUREMENT	2.791 - L3 - Proficient	134	1	13	View
M:03:FA:3	FUNCTIONS AND ALEGBRA	2.545 - L3 - Proficient	134	1	10	View
M:04:DSP:3	DATA, STATISTICS, AND PROBABILITY	2.687 - L3 - Proficient	134	1	10	View

Fourth Report: Comparative Report - Proficiency

Assessment: NECAP 2009 - Math - Grade 3 - 10/15/2009, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 - 10/1/2010, NECAP 2010 - Math - Grade 4 - 10/15/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NECAP 2009 - Math - Grade 3 10/15/2009, NECAP 2010 - Math - Grade 4 10/15/2010, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 10/01/2010, District/Student: In District the year of the test; Sections: Math Scale Score, Math Scale Score, Total RIT Score

Assessments



Item 1: NECAP 2009 - Math - Grade 3 - 10/15/2009 **76.19% Proficient**

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	11	8.73%	Click to view the students
L2 - Partially Proficient	1	19	15.08%	Click to view the students
L3 - Proficient	1	65	51.59%	Click to view the students
L4 - Proficient with Distinction	1	31	24.60%	Click to view the students
Total		126		

Item 2: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 - 10/1/2010 **83.33% Proficient**

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	9	6.82%	Click to view the students
L2 - Partially Proficient	1	13	9.85%	Click to view the students
L3 - Proficient	1	68	51.52%	Click to view the students

L4 - Proficient with Distinction	1	42	31.82%	Click to view the students
Total		132		

Item 3: NECAP 2010 - Math - Grade 4 - 10/15/2010 **70.15% Proficient**

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	10	7.46%	Click to view the students
L2 - Partially Proficient	1	30	22.39%	Click to view the students
L3 - Proficient	1	67	50.00%	Click to view the students
L4 - Proficient with Distinction	1	27	20.15%	Click to view the students
Total		134		

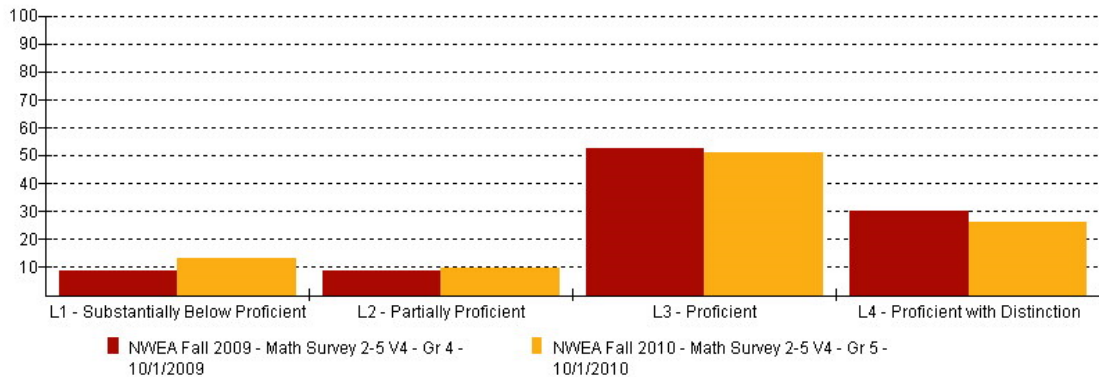
Report: Comparative Report - Proficiency

Assessment: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 4 - 10/1/2009,NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 5 - 10/1/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 4 10/01/2009, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 5 10/01/2010,

District/Student: In District the year of the test; Sections: Total RIT Score, Total RIT Score

Assessments



Item 1: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 4 - 10/1/2009 **82.54% Proficient**

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	11	8.73%	Click to view the students
L2 - Partially Proficient	1	11	8.73%	Click to view the students
L3 - Proficient	1	66	52.38%	Click to view the students
L4 - Proficient with Distinction	1	38	30.16%	Click to view the students
Total		126		

Item 2: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 5 - 10/1/2010 **77.17% Proficient**

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	17	13.39%	Click to view the students
L2 - Partially Proficient	1	12	9.45%	Click to view the students
L3 - Proficient	1	65	51.18%	Click to view the students

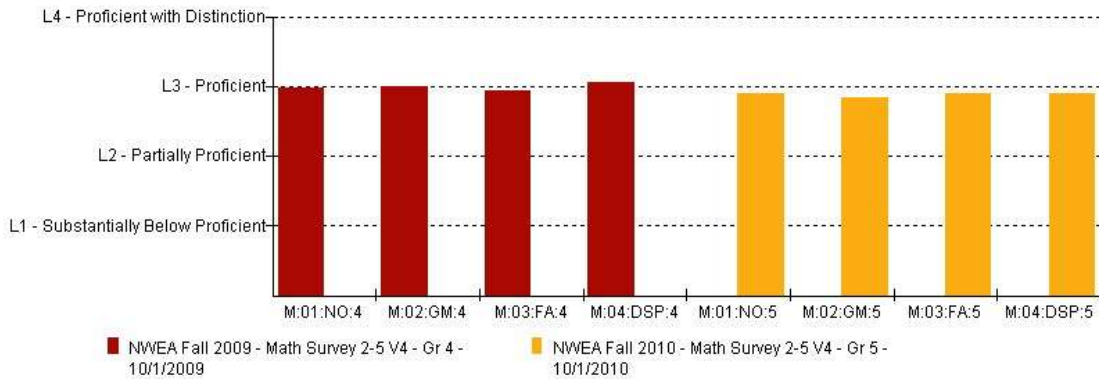
L4 - Proficient with Distinction	1	33	25.98%	Click to view the students
Total		127		

Fifth Grade Report: Comparative Report - Standards

Assessment: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 4 - 10/1/2009, NWEA Spring 2010 - Math Survey 2-5 V4 - Gr 4 - 5/1/2010, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 5 - 10/1/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 4 10/01/2009, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 5 10/01/2010, NWEA Spring 2010 - Math Survey 2-5 V4 - Gr 4 05/01/2010, District/Student: In District the year of the test

Assessments



Item 1: NWEA Fall 2009 - Math Survey 2-5 V4 - Gr 4 - 10/1/2009 **82.54% Proficient**

Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:4	NUMBER AND OPERATIONS	2.976 - L3 - Proficient	126	1	1000	View
M:02:GM:4	GEOMETRY AND MEASUREMENT	2.992 - L3 - Proficient	126	1	1000	View
M:03:FA:4	FUNCTIONS AND ALEGBRA	2.937 - L3 - Proficient	126	1	1000	View
M:04:DSP:4	DATA, STATISTICS, AND PROBABILITY	3.063 - L3 - Proficient	126	1	1000	View

Item 2: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 5 - 10/1/2010 **77.17% Proficient**

Standard	Description	Average Proficiency Level	Nbr Students	Nbr Scores	Total Points	View
M:01:NO:5	NUMBER AND OPERATIONS	2.912 - L3 - Proficient	125	1	1000	View
M:02:GM:5	GEOMETRY AND MEASUREMENT	2.84 - L3 - Proficient	125	1	1000	View

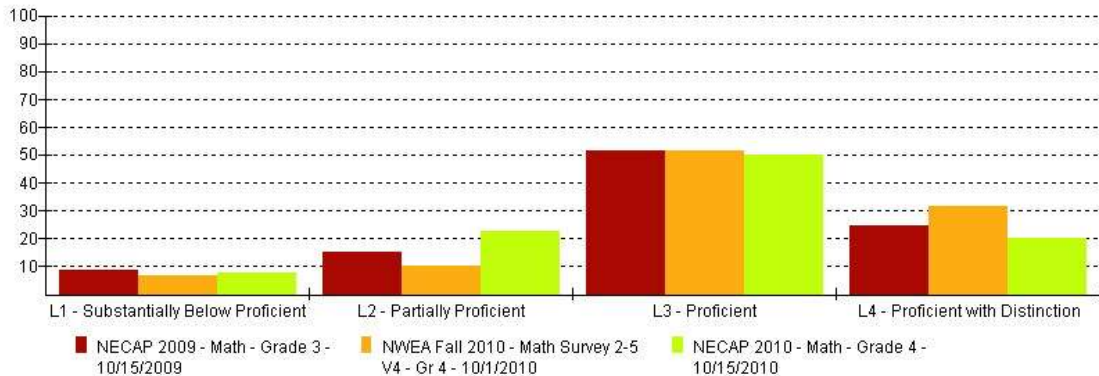
M:03:FA:5	FUNCTIONS AND ALEGBRA	2.896 - L3 - Proficient	125	1	1000	View
M:04:DSP:5	DATA, STATISTICS, AND PROBABILITY	2.912 - L3 - Proficient	125	1	1000	View

Fourth Report: Comparative Report - Proficiency

Assessment: NECAP 2009 - Math - Grade 3 - 10/15/2009,NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 - 10/1/2010,NECAP 2010 - Math - Grade 4 - 10/15/2010

Filter: Schools: Nottingham West Elementary School-2010-11, Assessments: NECAP 2009 - Math - Grade 3 10/15/2009, NECAP 2010 - Math - Grade 4 10/15/2010, NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 10/01/2010, District/Student: In District the year of the test; Sections: Math Scale Score, Math Scale Score, Total RIT Score

Assessments



Item 1: NECAP 2009 - Math - Grade 3 - 10/15/2009 **76.19% Proficient**

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	11	8.73%	Click to view the students
L2 - Partially Proficient	1	19	15.08%	Click to view the students
L3 - Proficient	1	65	51.59%	Click to view the students
L4 - Proficient with Distinction	1	31	24.60%	Click to view the students
Total		126		

Item 2: NWEA Fall 2010 - Math Survey 2-5 V4 - Gr 4 - 10/1/2010 **83.33% Proficient**

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	9	6.82%	Click to view the students
L2 - Partially Proficient	1	13	9.85%	Click to view the students
L3 - Proficient	1	68	51.52%	Click to view the students
L4 - Proficient with Distinction	1	42	31.82%	Click to view the students
Total		132		

Item 3: NECAP 2010 - Math - Grade 4 - 10/15/2010 **70.15% Proficient**

Proficiency Level	# of Tests	# of Students	Percent	View
L1 - Substantially Below Proficient	1	10	7.46%	Click to view the students
L2 - Partially Proficient	1	30	22.39%	Click to view the students
L3 - Proficient	1	67	50.00%	Click to view the students
L4 - Proficient with Distinction	1	27	20.15%	Click to view the students
Total		134		

Grade 3 Report

The third grade at Nottingham West Elementary School is comprised of 5 classrooms, with approximately 28 students in each classroom (roughly 140 students). Our school is in its first year of SINI in the area of mathematics. Our SINI Plan intends to increase our scores in the area of Number and Operations and lessen the gap between our regular education and special education populations. The Hudson School District is not a District In Need Of Improvement at this time.

Upon looking at the data, it is apparent that our students are lowest in the area of Number and Operations. This is true across all grade levels. Each grade level uses the Everyday Math program as part of their Mathematics curriculum. We have also met several times with Professor Mahesh Sharma and grade levels have implemented the strategies he has suggested in order to strengthen math instruction and student achievement.

According to the comparative report (standards), third graders have improved in all areas of the NWEA from the Fall of 2009 to the Fall of 2010. In the Fall of 2009, 130 students participated in the NWEA, whereas in the Fall of 2010, 134 students took the test.

TEST	N & O	G & M	F & A	DSP	Total
FALL 2009	55 42%	63 48%	65 50%	70 54%	130 students
FALL 2010	93 69%	99 74%	92 69%	91 68%	134 students

** Scores based on Levels 3 and 4 (combined).

Proficiency Level Report: 67.65% of third graders are proficient in Math.

Item Analysis Report:

Assessment Scores Report: Number and Operations had the most students scoring in L1 and L2.

How can the third grade team modify instruction based upon findings?

The third grade Team has worked closely in their PLC group this year. We have aligned our math curriculum with the GLE's and from there have identified Power Standards necessary for third grade mastery. Our daily math lessons reflect these Power Standards, using both the Everyday Math curriculum and additional supplementary activities and assignments. We have also implemented the strategies we have learned from Professor

Mahesh Sharma, and we incorporate them into daily math lessons. Last school year, our Team created formative assessments that align with our Power Standards. This year we have begun administering them to our classes. The results of these assessments provide us with feedback that guides our instruction. It lets us know which students have grasped a concept or skill, and which students may need some additional instruction. This year we have also been afforded the opportunity to work with a Title 1 math tutor who works with students who qualify for services. Students meet in a small group setting daily to work on and strengthen basic math skills, such as number & operations and computation.

Certain questions that have been raised in our building include:

- How can we raise our scores in the area of Number and Operation?
- Are performance assessments providing us with the necessary information to guide instruction?
- How do we provide the necessary instruction for our higher level students?

Grade 4 Math Report

The fourth grade at Nottingham West consists of five classes with 26 students in each class. There are a total of 130 in grade 4. Nottingham West is a SINI school in the area of math. NWES is primarily focusing their improvements on the area of Number and Operations according to the goals in its SINI plan. The fourth grade team collaborates in math to ensure that all students are receiving instruction according to the NH State GLEs with a focus on the Power Standards that the grade 4 team identified as being the strongest areas of instructional need in accordance with the NECAP Assessment.

Proficiency Levels

Item 1: NECAP 2009 - Math - Grade 3 - 10/15/2009 76.19% Proficient			
Proficiency Level	# of Tests	# of Students	Percent
L1 - Substantially Below Proficient	1	11	8.73%
L2 - Partially Proficient	1	19	15.08%
L3 - Proficient	1	65	51.59%
L4 - Proficient with Distinction	1	31	24.60%
Total		126	
Item 2: NECAP 2010 - Math - Grade 4 - 10/15/2010 70.15% Proficient			
Proficiency Level	# of Tests	# of Students	Percent
L1 - Substantially Below Proficient	1	10	7.46%
L2 - Partially Proficient	1	30	22.39%
L3 - Proficient	1	67	50.00%
L4 - Proficient with Distinction	1	27	20.15%
Total		134	

In looking at the current grade 4 class' 3rd grade NECAP scores compared to their fourth grade scores, one will see the following trends:

- The Partially Proficient level appeared to grow whereas most of the others were maintained.
- There were a few less students in the Level 4 range that appear to have fallen into the Level 3 range.
- There was also an increased student population of 8 students which may have attributed to the larger change in the Level 2 (Partially Proficient) score range.
- The number of students Proficient in math also decreased from 76% down to 70% this school year.

ANALYSIS of FINDINGS

Standards Analysis

In the standards analysis report, the following trends were noted:

- Number and Operations appears to be the area in greatest need of improvement as previously noted.
- The most difficult standard in N&O is

M:01:NO:3.4 (S)	Accurately solves problems involving addition and subtraction with regrouping; the concept of multiplication; and addition or subtraction of decimals (in the context of money).
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-In most other standards, NWES was in the range of all other Hudson Schools.

Comparative Report – Standards

Trends:

- On average, the class did not reach the level of “Proficient” in any content strand
- The greatest area of strength is Geometry and Measurement.
- The area most in need of Improvement is Number and Operations
- Within the area of N&O—

Proficiency Level	# of Students	Percent
(L4) L4 - Proficient with Distinction	20	14.93%
(L3) L3 - Proficient	49	36.57%
(L2) L2 - Partially Proficient	43	32.09%
(L1) L1 - Substantially Below Proficient	22	16.42%
Total	134	

-Number of Operations seems to be the area of greatest difficulty for 4th graders most likely because of the great numbers of standards that are covered within this strand.

-Number and Operations is the foundation for all other strands of math content—if N&O is a weakness, it will affect the other strands.

-With new methods and practices by Prof. M. Sharma, N&O is being approached at all grade levels differently in a scientifically proven sequence to allow for easier mastery.

- The grade level teachers meet to share resources and plan units together while also implementing common assessments to discuss and map student progress across the grade level. This provides consistency in curriculum and instruction across the grade level. The Grade Four Team also implements common unit assessments as well as formative and summative assessments according to a created timeline.

Data Informed Instruction

Data has been used to drive instruction by showing teachers which standards in math individual students are having difficulty with. This enables teachers to target students and individual skill sets to help intervene and provide more scaffolding to help that student reach proficiency within that standard. Data is also helping teachers to plan their math units and by using the state GLEs and Power Standards, teachers are able to adjust the emphasis on instruction to target those skills that are most crucial in accordance to the NECAP assessment.

At NWES, we have aligned our Everyday Math curriculum to the NH GLEs in such a way as to focus on the power standards while also providing instruction on all of the other NH state standards as well. It is from these standards that we base our goals and assessments to ensure that all students are provided with instruction and intervention based on the state standards.

Teachers at Nottingham West are required to set curriculum based goals yearly at the school and district level that closely align with the district's master plan and correlates with class data.

Teachers reflect on this data and use the data from assessments to drive instruction. This year, since we are now a SINI school, the fourth grade team made the decision to have the NWES SINI goals also be our grade level goals as well. This assures that we are indeed using the SINI plan to help improve student achievement in math.

The fourth grade team is very familiar with the state standards through all of the alignment work in the PLC groups to properly teach NH State GLEs using the Everyday Math program as well as extensive support materials that have been developed. We are also familiar with the standards by using PerformancePlus to analyze assessment data.

The main question at the forefront for our building is, what is the cause of low achievement scores in math, particularly in the area of Number and Operations and what can we do as a school and as grade levels to address this concern in the most efficient way for students?

Grade 5 Report

Trends within the 5th grade Assessments of NECAP & NWEA 2010

NWES School: Currently in the 2010-2011, Nottingham West Elementary School has grades kindergarten through fifth grade. The common goal of all grade levels is to improve student achievement. All grade levels recognize the need to increase students' proficiency in numbers & operations in math. The following provides the breakdown of the number of classes per grade level and the number of students in each class:

Kindergarten: 110 students (am and pm), 3 classrooms, 18-20 each
First grade: 118 students, 6 classrooms, 20-22 students in each
Second grade: 121 students, 6 classrooms, 20-22 students in each

Third grade: 138 students, 5 classrooms, 26-27 students in each
Fourth grade: 134 students, 5 classrooms, 26-27 students in each
Fifth grade: 130 students, 5 classrooms, 26-28 students in each

The school became a SINI school in 2010 in the area of math. The goals that will be addressed by the SINI plan is to reduce identified achievement gaps that have been identified. Addressing objectives such as insuring student learning through teacher instruction of curriculum aligned to the state standards consistently at all grade levels.

The Hudson School district is a DINI. As of 2010, the district has been a DINI in the areas of reading and math. The goals that will be addressed in the DINI plan is to improve instruction through professional development to create a foundation for new student based instruction through formative assessments which will help to increase student achievement.

School data has helped to identify target areas that are in need of improvement; one such area is Numbers & Operations. Through PLC within the building, curriculum has been aligned to the GLE's. Through collaboration, consistency and data analysis, teachers will drive their instruction to identify student weaknesses and improve student achievement.

Through Performance Plus, some areas of strengths that were revealed were Data Statistics & Probability in several grade levels. This might be due to the fact that this was an area of weakness identified a couple of years ago. Focus may have shifted to that area to improve students' achievement. In analyzing the data from various reports such as standards reports and comparison reports; data showed that 50 % of the schools population of students is not proficient in Numbers & Operations.

This was consistent within each grade level where 50% of the students were not proficient.

Identifying this area of weakness will help to target and refocus instruction to improve student achievement.

Data informed Instruction

Data, when analyzed can and should change instruction. When data is analyzed, teachers need to drive their instruction to help improve student achievement; and administration needs to ensure that programs and supports help improve student achievement. Ensuring that power standards are clearly identified will help teachers drive their instruction. Through the work of PLC, alignment of NH state standards and the math curriculum was completed. Teachers and administration need to recognize the importance of continuously monitor lessons and assessments to ensure alignment to the standards.

NWES staff understands the need for improving student achievement. And to achieve this, goals must be in place for school improvement. As with any new programs or systems, it takes time to become familiar and comfortable working with them. Teachers are increasingly become more confident with standards and analyzing data from assessments and learning how to drive their instruction. Teachers are also communicating more with each other to have those valuable discussions about results of assessments and lessons. This type of learning environment fosters school improvement.

Are there any programs or supports that not in place that could be developed to help student achievement? Are there any assessments that need to be changed to provide better data that would help drive instruction more? What professional development can be offered to help student

achievement? Do teachers drive their instruction to the identified standards or to the basal manuals?

The data team analyzed the results of the NECAP & NWEA taken this past Fall 2010 to identify any observable trends per grade level. There are 130 students within the 5th grade here at NWES. Analyzing the data from the NWEA that the current fifth graders took this past fall, only 76% of our students were proficient in math. A further look into the math strands revealed that only 75% of the students were proficient in the Numbers & Operations strand.

Using comparison reports through the Performance Plus, the data was consistent when comparing students in each of the classes. All 5 of the fifth grade classes were in the 70-76% range for all the 4 strands in math (N&O, G&M, D&S, F&A). This was also consistent with all fifth grade students within the district.

Analyzed the results of the 2010 NECAP for the current 5th grade students, 33% of these students are not proficient in math. However, a deeper look into the strands, a shocking 55% of these students are not proficient in Numbers & Operations. I took a look at the current 6th grade students, 26% of the students that attended NWES, were not proficient in math. Comparing to the state, 28% of the students were not proficient. NWES students were only 1 point above state and district in math.

In looking at all the available data, the data team, along with the help of the rest of the staff, we will be looking at possible reasons for this drop in our schools' scores/performance. Things to keep in mind:

- Need to make sure that we are all consistently teaching to the state standards
- Need to determine which strategies are working, and can we all use them
- Need to determine which strategies are not working –and why not
- What can we do or put into place