

SCHOOL ADMINISTRATIVE UNIT #81

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Re: **District Assessment Results - Executive Summary**

Background Information:

The 2009-2010 school year was the first full application of the NWEA Measures of Academic Progress (MAP) assessment. Elementary schools administered the assessment in grades 1 through 12 to all students in the fall and spring. Along with the fall administration of the MAP assessment, students also participated in the state's NECAP assessment. The NECAP assessment is given in the fall only and gains based results are not available for that particular assessment. The MAP assessment provides classroom teachers with immediate results that allows for learning plans to be developed to remediate weaknesses or to plan advanced instruction for all students.

The usefulness of the MAP assessment was realized early in the year when teachers received immediate feedback and were able to tailor learning plans geared to student strengths and challenges. For the purposes of this report, the first half of this report will discuss the results for grades 3-5 because they share a NECAP score for the fall period. The second half of the report will respond to scores for grades 6-8. Unfortunately, high school scores will not be discussed because the MAP tests students through 10th grade and gives no meaningful or reliable scores for 11th and 12th grade and the NECAP tests students in 11th grade.

Results:

Student performance in reading is most remarkable. While the district has infused professional development, new textbook materials, remediation, and tier two and three interventions, the scores indicate that students are responding to these measures.

Dr. H.O. Smith School's - Reading:

Grade	Fall - % Proficient MAP	Fall - % Proficient NECAP	Spring - % Proficient MAP
Grade 3	76	84	98
Grade 4	75	71	92
Grade 5	78	63	85

Dr. H.O. Smith School's - Math:

Grade	Fall - % Proficient MAP	Fall - % Proficient NECAP	Spring - % Proficient MAP
Grade 3	66	73	96
Grade 4	75	61	88
Grade 5	68	59	85

The chart represents that percent of student scoring proficient or better and in all cases, scores improved from fall to spring. It should also be noted that the NECAP score, while not exact, is within the standard error of measure. A standard error of measure is the range that you can expect a student to score within on any given day. It is that range + or - that represents the standard error of measure. Most assessments report a 10 to 15 point standard error of measure, however, the state does not report the exact standard error of measure for the NECAP. An additional feature that the MAP assessment

provides, that NECAP does not, is the ability to have adaptive questions. This adaptability translates in the questions changing level of difficulty as students answer, providing a more exact level of performance than that of the NECAP.

In Dr. H.O. Smith's case these results demonstrate strong growth over the course of the year. Student progress is strong and teachers are working on capturing each student's strengths and needs and honing in to provide direct instruction to improve student performance. While this growth is commendable, the question is can it be sustained over 10 weeks of vacation where there is no instruction? Can students transition to a new grade and maintain the level of progress that they made from the year before? These are questions that certainly will be answered with the fall administration of the MAP assessment and the NECAP assessment. As stated before, the results for the NECAP will not be available to the district until sometime in February and will be of little use at that point with more than half of the year passed.

Hills Garrison School's - Reading:

Grade	Fall - % Proficient MAP	Fall - % Proficient NECAP	Spring - % Proficient MAP
Grade 3	86	90	98
Grade 4	82	73	97
Grade 5	76	73	85

Hills Garrison School's - Math:

Grade	Fall - % Proficient MAP	Fall - % Proficient NECAP	Spring - % Proficient MAP
Grade 3	81	76	96
Grade 4	80	72	93
Grade 5	80	80	89

Hills Garrison's students begin at a higher level of proficiency in the fall. The students make smaller gains but this is mainly because there were such a high number of students who are already proficient. Similar to Dr. H.O. Smith, Hills Garrison students make progress throughout the year and move many more students into the proficient range. Those students who score proficient with distinction top out of the assessment because the MAP assessment moves to materials that they have not been exposed to, particularly in mathematics. Percentages are always nice to look at, especially when a school demonstrates this level of growth through the course of the year. However, percentages translate into real numbers and those real numbers in our case represent children. So, if 2% of third grade students are not proficient in reading, what does that mean? In Hills Garrison's situation 2% represents 2 students. And when we look at grades 3 through 5, there are 21 students who do not score proficient. The largest populations of students, who are not proficient in reading, tend to be those fifth grade students who belong to a sub-group such as special education or English Language Learners. These students have not had the benefit of five years of a new reading series. In fact they are the only remaining class to go through the old language arts series. While it is impossible to assign one solution to this event, such as a new textbook series, certainly this may be a strong contributing factor. Finally, our goal is to move from just proficiency to proficiency with automaticity. This next step will make the lasting change that we hope for all children related to their academic growth and achievement.

Nottingham West School's - Reading:

Grade	Fall - % Proficient MAP	Fall - % Proficient NECAP	Spring - % Proficient MAP
Grade 3	89	87	92
Grade 4	85	77	94
Grade 5	87	78	93

Nottingham West School's - Math:

Grade	Fall - % Proficient MAP	Fall - % Proficient NECAP	Spring - % Proficient MAP
Grade 3	77	77	78
Grade 4	81	69	90
Grade 5	72	77	93

As demonstrated by both the NECAP and the MAP assessments, fall performance in mathematics is lacking and students have much ground to make up during the course of the year. It is clear that mathematics education must become a priority of the district not only in programs and services but also in professional development for teachers. The current program lacks sufficient interventions and the interventions that do exist are implemented sporadically. Teachers have felt bound by the textbook rather than following the written curriculum, thus content have been, at times, disjointed and not sequential in nature. While textbooks should never replace the curriculum, because mathematical competency for many teachers is lacking, they rely on the textbook to teach. It will be essential that we move from that model of instruction to a competency based performance model. As we continue to examine our mathematical instruction processes, the math curriculum team is nearing completion of the curriculum. Elementary and middle school curriculum has been completed and is ready to be vetted by the staff before it is presented as a final draft. Simultaneously, the committee is also looking at a new textbook series that demands equal parts of concept and skill knowledge. What the committee has found is that as students move through the grades from elementary to middle and middle to high school the gap in mathematical performance widens. There are various reasons for this situation that include the following:

- If a student has not mastered the fundamental skills of adding, subtracting, multiplying, and dividing whole numbers, fractions and decimals they will struggle with higher order operations
- If a student is placed in a lower level math class or remedial math class, because they lack the basic concepts, then they are not exposed to higher level concepts
- The district does not provide additional remedial support at the elementary level like it does with reading so students continue to have gaps that widen throughout the years.
- The state and the district require algebra 1 for graduation but the state tests concepts well beyond algebra 1 to include geometry and algebra 2.
- For special education students, who have weaknesses in math, it is an either or situation. They either receive instruction from their classroom teacher or they receive instruction from a special education teacher. These students require more instruction, not either or instruction. This really speaks to the length of the school day and instructional calendar and is not an easy fix by virtue of this report.

Certainly, these scores alone do not speak to the success of the elementary schools. Each elementary school, while unique in composition and collegial community, has made a concerted effort to look at the individual child and provide a unique educational experience for him or her. Students no longer require an educational disability to be provided additional support. Each building has made it their mission to provide all students with exactly what they need. Our teachers and especially our administrators are to be commended for recognizing that all children can succeed and it is within their power to make it happen.

Hudson Memorial School's - Reading:

Grade	Fall - % Proficient MAP	Fall - % Proficient NECAP	Spring - % Proficient MAP
Grade 6	75	76	79
Grade 7	74	73	78
Grade 8	68	73	75

Hudson Memorial School's - Math:

Grade	Fall - % Proficient MAP	Fall - % Proficient NECAP	Spring - % Proficient MAP
Grade 6	63	68	74
Grade 7	67	67	75
Grade 8	63	68	74

While the growth in reading was modest, the growth in mathematics was more substantial. The middle school is clearly moving more students towards proficiency and working hard to close achievement gaps. Innovative ideas and programs like the after school support continue to support student academic growth. The middle school faces its own sets of challenges in supporting students and increasing sub-group performance. This was the fourth year that special education did not make adequate progress in

mathematics. Recognizing that the gap in mathematical performance has a ripple effect and each subsequent grade will experience the effects of the year before, we recognize that we need to reform our mathematical practices from k-8 immediately. We believe that moving to a competency based system will support our endeavors but we also recognize that many other things will need to occur to make lasting change. Reading, while improving, is still looking for opportunities for change and growth. The district, through a grant is proposing to add a reading specialist to the middle school who will offer specific instruction to our lowest performing readers. This coupled with additional programs that are targeted to specific reading weaknesses will continue the middle school's efforts on increasing reading performance. The middle school struggles with two major transitions and a host of developmental changes so finding unique approaches to capture the students and springboard their academic growth is crucial. We have been able to do this with READ 180 and are hoping that similar programs will continue to drive growth in reading.

High School:

Certainly, it would be easy enough to provide MAP scores for 9th and 10th grade but after an extensive review, both the building administration and I believe that they are not valid. We are concerned with the administration of the test and procedures used to move students in and out of class and testing sessions. We recognize that having information about student progress at the high school is vital but how to best gather that information for the size of the population still eludes us. However, using MAP as a tool to gauge success at the high school is just a small window with which we can look at the high school. There are so many other tools that we can use that tell us how we are doing. This report will examine, AP, SAT, and PSAT results. It will look at graduation rates and how they have influenced college acceptance. Finally, the report will examine clubs and organizations that focus on student achievement and a high degree of intellectual prowess.

ACT: The ACT[®] test assesses high school students' general educational development and their ability to complete college-level work.

- The multiple-choice tests cover four skill areas: English, mathematics, reading, and science.
- The Writing Test, which is optional, measures skill in planning and writing a short essay.

Year	# Tested	English Ave.	Math Ave.	Reading Ave	Science Ave.	Composite Ave.
Alvirne						
2009	44	23.4	24.4	23.7	22.5	23.6
2008	49	22.5	22.4	24.6	22.2	23.1
2007	44	23.7	24.8	24.5	24.0	24.4
2006	44	22.2	24.3	22.7	23.3	23.3
2005	42	21.2	22.0	23.4	22.4	22.4
2004	18	19.4	21.7	21.5	21.0	20.9
2003	68	22.0	22.5	22.5	22.6	22.5
2002	87	19.9	21.5	21.4	21.2	21.1
2001	48	20.1	21.8	21.9	21.5	21.4
State Averages						
2009	2469	23.3	23.4	24.1	22.6	23.5
2008	2548	23.0	23.0	23.7	22.2	23.1
2007	2269	22.7	22.7	23.3	22.2	22.9
2006	1779	22.4	22.5	23.2	21.8	22.6
2005	1578	21.9	22.1	23.0	21.8	22.3

2004	1340	22.1	22.1	23.3	21.9	22.5
2003	1210	21.7	21.9	22.9	21.7	22.2
2002	993	21.6	21.9	22.6	21.6	22.0
2001	523	21.7	22.1	22.9	21.9	22.3

National Averages

2009		20.6	21.0	21.4	20.9	21.1
2008		20.6	21.0	21.4	20.8	21.1
2007		20.7	21.0	21.5	21.0	21.2
2006		20.6	20.8	21.4	20.9	21.1
2005		20.4	20.7	21.3	20.9	20.9
2004		20.4	20.7	21.3	20.9	20.9
2003		20.3	20.6	21.2	20.8	20.8
2002		20.2	20.6	21.1	20.8	20.8
2001		20.5	20.7	21.3	21.0	21.0

PSAT: The AHS guidance department has been making an effort to have sophomores take the PSAT's and then retake them their junior year. They also have made an effort to have students taking the SAT's take the exam more than once.

Year	Grade	Total #	Crit. Read. Ave.	Math Ave.	Writing Skills	State Cr. Rd. Ave.	State Math Ave.	State Writ. Ave.	National Cr. Rd. Ave	National Math Ave.	National Writ. Ave.
2009	11	149	48.0	50.1	48.1	50.2	50.6	48.3	46.9	48.2	45.8
2009	10	87	50.3	53.5	48.2	48.4	48.6	46.9	42.0	43.3	41.0
2008	11	171	49.2	49.3	46.9	49.9	51.1	47.6	46.7	48.8	45.8
2008	10	88	48.3	50.3	46.0	48.3	49.6	46.2	41.6	44.0	41.0
2007	11	184	49.3	50.5	46.5	49.2	50.3	47.7	46.7	48.2	45.9
2007	10	89	47.4	49.6	46.1	47.5	48.1	46.1	41.8	43.1	41.2
2006	11	175	49.3	49.2	46.8	49.7	50.2	47.3	47.7	48.5	45.8
2006	10	47	49.0	52.3	48.1	48.9	49.3	46.6	42.6	43.5	40.8
2005	11	217	48.4	50.2	49.0	49.9	50.9	50.6	47.5	49.2	49.3
2004	11	195	46.5	46.6	47.4	48.1	49.1	50.8	47.0	48.9	50.5
2003	11	188	46.3	45.6	46.1	48.9	48.8	50.7	47.2	48.1	49.8
2002	11	122	47.6	48.0	47.9	49.6	49.8	49.4	48.0	49.2	48.8
2001	11	138	50.1	48.5	49.2	N/A	N/A	N/A	48.3	49.0	48.9
2000	11	147	47.5	46.4	46.6	N/A	N/A	N/A	48.3	49.4	48.7

SAT: While high school grades are a very useful indicator of how students will perform in college, there is great variation in grading standards and course rigor within and across high schools. More than 80 years ago the College Board created the first standardized college entrance test to help colleges and universities identify students who could succeed at their institutions and to connect students with educational opportunities beyond high school. The high school's scores trail behind the state's scores in writing two out of the four years. We continue to work hard to increase student performance with SAT prep classes and specific work in vocabulary.

Year	Graduates	AHS Ave. CR	AHS Ave. Math	AHS Ave. Writing	State Ave. CR	State Ave. Math	State Ave. Writing	Nat. Ave. CR	Nat. Ave. Math	Nat. Ave. Writing
2009	366	524	538	503	523	523	510	501	515	493
2008	330	523	524	518	521	523	511	502	515	494
2007	363	514	519	513	521	521	512	502	515	494
2006	340	505	519	504	520	524	509	503	518	497
2005	304	506	514	N/A	525	525	N/A	508	520	N/A
2004	270	513	515	N/A	522	521	N/A	508	518	N/A
2003	295	517	516	N/A	522	521	N/A	507	519	N/A
2002	348	496	484	N/A	519	519	N/A	504	516	N/A
2001	320	507	506	N/A	511	508	N/A	506	514	N/A

Plans After Graduation: As illustrated by this chart, more than 70% of our students are going onto a 2,4, or military program. Additionally, we have students who are also attending licensing programs such as HVAC, fire, or police programs, plumbing, etc. As we continue to work on increasing graduation requirements, aligning to the core standards, and working on course competencies, we hope to see these numbers continue to rise. Of the 349 students who graduated this spring, 5 students were reclassified once but graduated.

Class of 2010 - Future Plans (self reported)		
<i>Plans</i>	<i>Number</i>	<i>% of students</i>
2 Yr College	67	19.20%
4 Yr College	171	49.00%
Career Education	5	1.43%
College Prep School	0	0.00%
Dropped-out	0	0.00%
Employed	43	12.32%
Military	7	2.01%
Non-U.S. College	1	0.29%
Other Schools	6	1.72%
Undecided/No Plans	0	0.00%
Unknown	49	14.04%
Totals	349	100%

Observations and Recommendations:

Reading

- The new elementary reading program has made a noticeable difference in student performance. It would be prudent to add that program through 6th grade and not stop at 5th.
- Language arts, reading, and writing continue to be a challenge at the Middle School. They require sufficient staff to provide interventions to those students who are below grade level. This should include a reading specialist. The position will be funded by the Title IIa grant for the next two years. The district will need to identify priorities beyond that point. Further, as the students move up from the elementary program and have had SF for five years at the elementary, we should see an improvement in performance at the middle school.

- The elementary needs to consolidate their reading interventions for Tier 3 and focus on what works. Lips, Language! and Read Naturally should be targeted for this population.
- READ 180 and System 44 at both the middle and high school are bringing about the desired results. We need to ensure that we have a tier 3 intervention for those students who are too low for READ 180 and that we have the staff to implement those programs

Math

- The curriculum revision is nearing revision and a materials adoption will follow. The district should put the same support into math as it did with language arts.
- Math is a critical weakness at both the middle and high school based on state and district testing. More emphasis needs to be placed on mathematics at the elementary school to ensure that all students have the foundation skills necessary to move on. The addition of three elementary reading specialists would be the best way to approach this weakness along with professional development of staff.
- At the middle and high school, students need to be taking algebra in 8th grade and ready for more advanced math by high school.
- Tier 2 interventions (Odyssey Math) currently exist in all buildings. It will be important to build Tier 3 interventions for those students who are our lowest functioning.
- Professional development is essential in mathematics and our continued relationship with Mahesh Sharma will assist us in teaching students and improving achievement