Tool. 2.1

Discussing Our District's Data

Department: **Math**   Data Analyzed By:**Department**
Data Collection Period: **2012-2013**   Date of Analysis: **5/24/2013**

Type of Data Analyzed: *(Check the data source being analyzed)*
Iowa Assessments/NWEA
      Diagnostic:
      Grades or Progress Indicators
      Teacher Data
      Other:

1.   What do you notice when you look these district level data?

	07-08	**08-09**	**09-10**	**10-11**	**11-12**	**12-13**
9th ITED Scores	87.8	89.91	94.4	93.3	90.35	92.5
10th ITED Scores	83.6	79.4	86.8	89.5	91.3	92.2
11th ITED Scores	85.5	81.2	89.2	91.9	89.8	86.0
Class of …			2011	2012	2013	2014

Why was there a drop in the number of students proficient from sophomore to junior year?
It seems that the opts out have really benefited our Iowa Assessment results.
Determining one years growth is also affected by the fact that our highest achieving kids may not achieve one years growth but are still above the 90th percentile. The data does not show those kids that maintain the 90th percentile. Some kids were not proficient but did show one years growth.

Data for each class. The percent of kids who made one years growth.

9th	80%
10th	49%
11th	40%

60% of the Juniors that did not make a years growth were already above the 90th percentile.

a.How does our student performance in reading, math, science, and social studies compare with state and national achievement norms?
     We are well above the national norms in both state and national standards

b.Are our median percentile reading, math, science, and social studies scores consistent at the elementary, middle school, and high school levels?

In math, the levels of achievement grow consistently at all levels. The only exceptions are in the class of 2014 and 2016 which showed a dip in 8th grade results.

c.How does the achievement of our various subgroups (e.g., Special Education, English Language Learners, Low Socioeconomic Status, ethnic minorities, etc.) compare with our district averages in reading, math, and science? Are we serving all students equally?

There are 33 out of 343 out of students in 9-11 that were not proficient in mathematics in the 2012-2013 school year. Out of these students, 14 are Special Education, 14 are At-Risk, 1 is ELL and 3 are either in Alternative school or are not currently enrolled at CHS and 1 is a Regular Ed student.

d.How often are students with low scores in reading, math, science, and social studies absent?

Students that were not proficient were not what we would consider "chronically" absent, (10 or more absences).

e.How often do poor readers (or students struggling with math, science, or social studies) get referred to the office in a given year? We can think of maybe 3 students who have been sent out of class (math) for behavior concerns (2 of those students are in special education for behavior concerns and 2 were proficient). Are poor readers referred to the office for discipline problems more often than good readers?

f.How many of our students are proficient in reading? Math? Science? Social Studies?

310 out of 343 students are proficient in math.

g.How many of our students are "marginally" proficient (e.g., scoring between the 41st and 50th percentile in reading, math, science , and social studies on the Iowa Assessments/NWEA?)

23 out of 343 scored between the 41st and 50th percentile.

Tool 2.1, Discussing Our District's Data, continued

2.What are you comfortable saying about students or staff performance based on these results?

We have had good results over the past years but we need to continue to find new ways to improve.

3.What additional questions do these data generate?

As we were going through item analysis, we saw trends that need to be addressed within our mathematics curriculum at the right time to target those items on the test.

4.What do these data indicate students need to work on?

9th Grade: solving equations and inequalitites, numerical patterns, geometric properties, patterns, & relationships;

10th Grade: solving equations and inequalitites, geometric properties, patterns, & relationships; understanding and applying rate; estimation; modeling situations; interpreting data

11th Grade: describe geometric prop., patterns; use expressions and equations to mode; perimeter, area;

probability; interpret data; solving equations; order of operations.

5.Based on these data, what can we infer teachers/administrators need to work on?

Specific areas such as probability, statistics, geometric patterns and measurement and functions need to be addressed earlier in our curriculum. Since we will be changing requirements in the sequence of classes this will need to be discussed next fall.

6.What do the results and their implications mean for your instructional practices and the district-level professional development plan?

Technology will be a focus for our staff development next school year, so incorporating the new technologies of our district can help us meet the need that were revealed through the item analysis.

Tool. 2.2

Discussing Our District's Data

Department Math   Data Analyzed By: Eric, Amy, Karen, Denise

Data Collection Period: 2012-2013   Date of Analysis: 5/24/13

Type of Data Analyzed: *(Check the data source being analyzed)*

       Iowa Assessments/NWEA
       Diagnostic:
       Grades or Progress Indicators
       Teacher Data
       Other:

1.   What do you notice when you look these data?
        Sample of school questions:

      a.What areas of reading/math/science are most difficult for our students? (For example, item analyses of Iowa Assessments/NWEA data will reveal scores for sub-categories of reading such as "decoding", "using context clues," "determining main ideas," etc.)? What are the strongest skill areas for our students in reading, math, science, and social studies? What are the weakest areas? See above 2.1 #4

      b.   Do we have overlap among our sub-groups? (For example, how many of our students with disabilities receive free/reduced lunch? How many of our low SES students belong to ethnic minorities? Etc.) Yes we do.

      c.Did any sub-groups score lower on portions of the Iowa Assessments than the rest of our student population? Yes

      d.   What are the reading, math, science, and social studies scores of students who have dropped out of school this year? Don't have the data because students either moved or dropped out before the assessment was given.

      e.How much independent reading do our students do at school? Varies from student to student--not easy to determine. At home? cannot say/determine

      f. What supports for struggling students are present in our school, neighborhood, and community? At risk, Special Education, Learning Center Do we know how effective they are? Yes, because of our high graduation rate.

Tool 2.2, Discussing Our Building's Data, continued

Sample of department/grade level questions

1.   What specific comprehension tasks account for any decline in overall comprehension scores on the Iowa Assessments?

   b.   How many of the 9th grade students reading below the 40th percentile on Iowa Assessments are earning D's or F's in Freshman English, English 10, etc.? 11 students in the low range had a D or F in their current math class.

   c. When we examine the item analysis data for each academic area on the ITBS/ITED, are there any weaknesses discovered in specific items consistently across all the grades?
Laws of exponents, graphing, solving functions and inequalities inconsistently

   d.   How many of our students failed specific classes? For example how many failed Freshman English? (Analyze for your department.)
It's anticipate that 4 - 6 students may fail their current math course (some grades are not completed yet).
1-Algebra II; 1-Geometry; 1-Fundamentals of Algebra; 1-Algebra

2.   What are your comfortable saying about student or staff performance based on these results?
With the number of students enrolled in math classes, staff and students did an exceptional job during the 2012-2013 school year.

3.   What additional questions do these data generate?
With that high of a percentage passing their classes, what can we do to help/better assist those students that struggle gain credit for particular classes.

4.   What do these data indicate students need to work on?

Generalization of math skills; application and problem solving

5.   Based on these data, what can we infer teachers/administrators need to work on?

Address how we word our math questions so students are better prepared for how IA Assessment questions are worded/asked.

6.   What do the results and their implications mean for your instructional practices and the district-level

professional development plan? Our math students continue to make growth and progress in the area of math. Next year we are eliminating one of the pre-algebra classes so that all students will be required not only to take Algebra but also Geometry.