

# Formats to Present Information

A spreadsheet is available that has the tables that were used to create the graphs shown in this document.

## Growth Model

- Select a desired level of proficiency on an assessment, 50<sup>th</sup> percentile, 70<sup>th</sup> percentile, reading at grade level, etc
- Calculate the percentage of students that are meeting that level in the 4<sup>th</sup> grade.
- Take the **same group of students** in the 5<sup>th</sup> grade and calculate the percentage students that are meeting that level.
- Divide the 5<sup>th</sup> grade percentage by the 4<sup>th</sup> grade percentage.
- If the number is greater than one, your students are improving.
- If the number is less than one, your students are not improving.

## What this looks like.

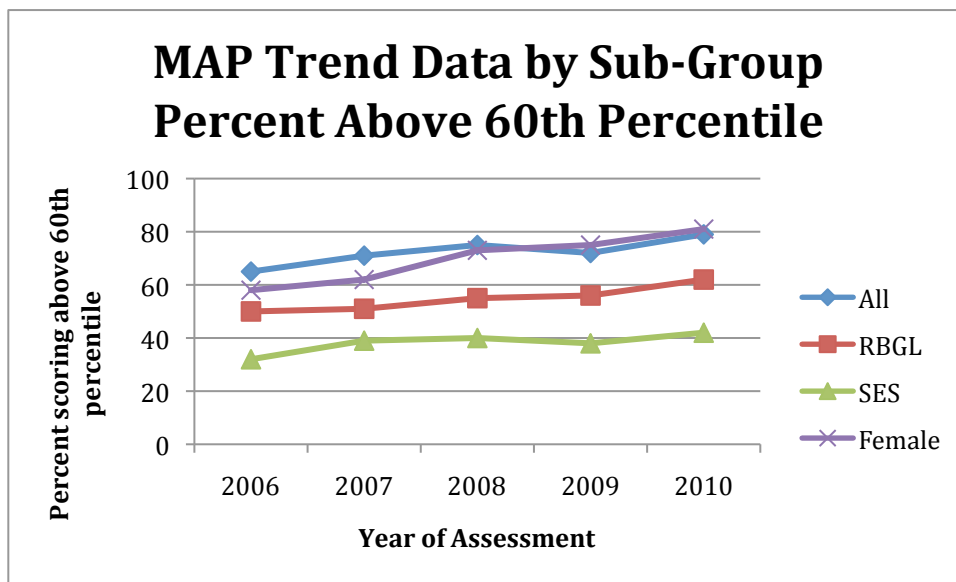
<u>Efficiency Rates</u> Comparison of Same Students Above the 60 <sup>th</sup> percentile Across School Years by Subtest Area Shows Improvement in Achievement from Year to Year			
	Reading	Language	Math
Grade 4 to 5	97.7	111.4	108.9
Grade 5 to 6	110.0	107.1	92.5
Grade 6 to 7	88.1	91.7	96.8

Thanks to Carla Noerrlinger, Director of Research Division, Omaha Public Schools, Omaha for these ideas to display data.

## Gap Analysis

- Select a desired level of proficiency on an assessment, 50<sup>th</sup> percentile, 70<sup>th</sup> percentile, reading at grade level, etc
- Ideally look at the same group of students from year to year. If students change take into consideration the change in demographics.
- On the same graph plot
  - All student achievement
  - Sub group achievement
- Look at the gap between the subgroup and the whole group.
- Determine if the gap is closing or getting wider.

What this looks like.



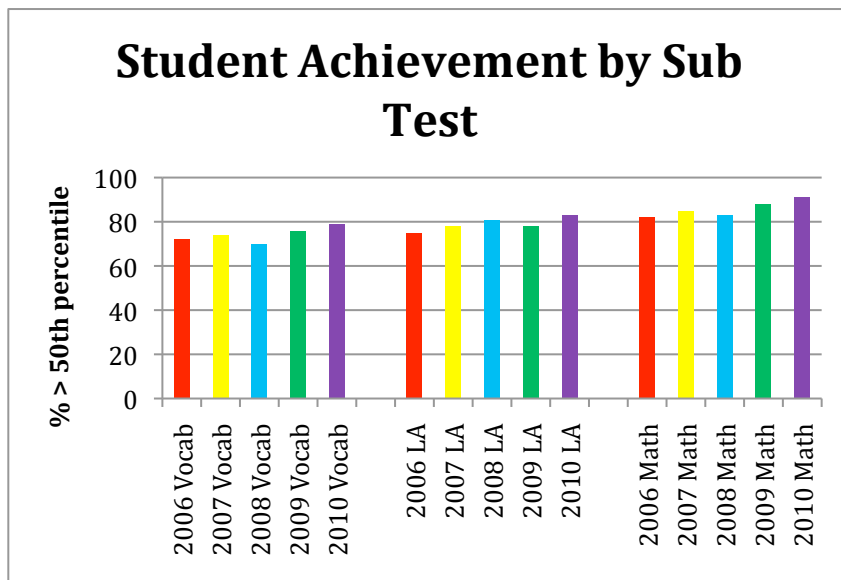
Column1	2006	2007	2008	2009	2010
Read Below Grade Level	15	20	20	16	17
Social Economic Status	33	32	35	34	37
Female	7	9	2	-3	-2

\*Note positive negative are below the level of achievement and negative numbers are above the level of achievement.

## Trend Data Student Achievement by Sub Test

- Select a desired level of proficiency on an assessment, 50<sup>th</sup> percentile, 70<sup>th</sup> percentile, reading at grade level, etc
- Determine a time interval to look at trend data
- Determine which scores will be graphed
  - Data could include total score
- Scores graphed could represent
  - Program data—same grade over several years
  - Cohort data—same students over several years

What this looks like.



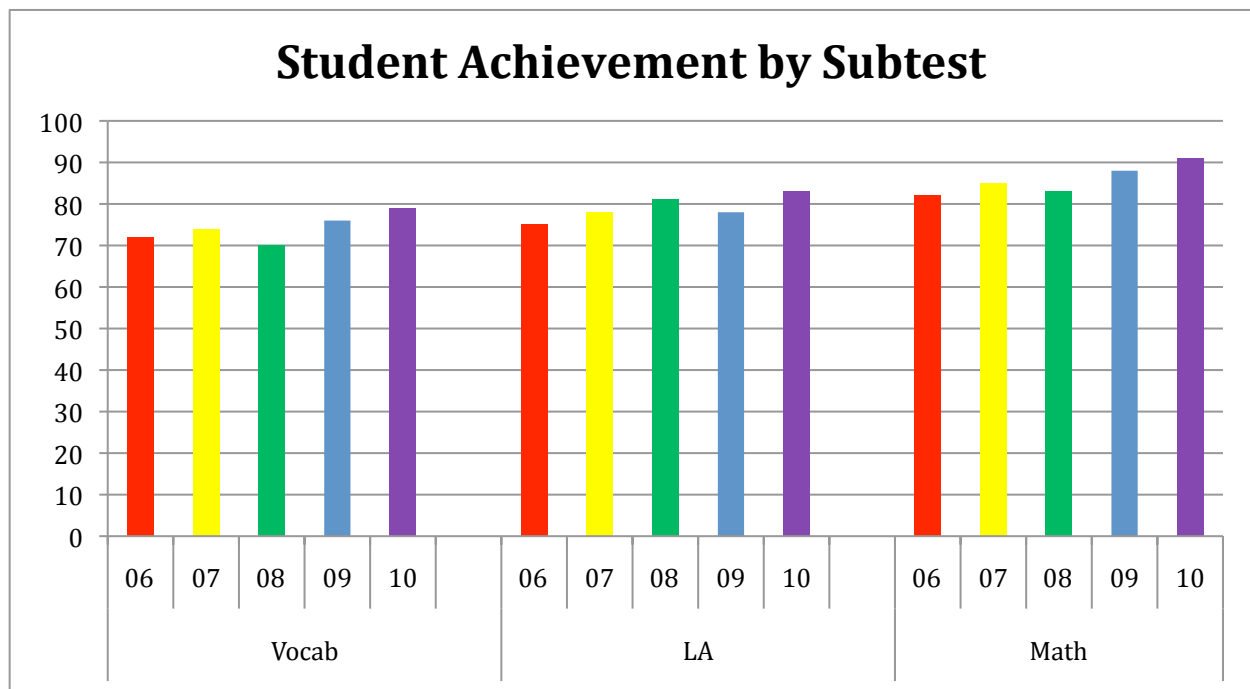
2006 Vocab	72
2007 Vocab	74
2008 Vocab	70
2009 Vocab	76
2010 Vocab	79
2006 LA	75
2007 LA	78
2008 LA	81
2009 LA	78
2010 LA	83
2006 Math	82
2007 Math	85
2008 Math	83
2009 Math	88
2010 Math	91

To the right is the table with data that was used to generate the graph above.

A slight change in how the data is entered into the cells will produce a graph of a slightly different format that I like a little better. The x-axis labels show the groups that are compared.

Vocab	06	72
	07	74
	08	70
	09	76
	10	79
LA	06	75
	07	78
	08	81
	09	78
	10	83
Math	06	82
	07	85
	08	83
	09	88
	10	91

The colors of the bars match the same year. When looking at the data with teachers add the data labels to the graphs or add a data table. A blank row has been added to the data to create a better grouping of the sub-scores.



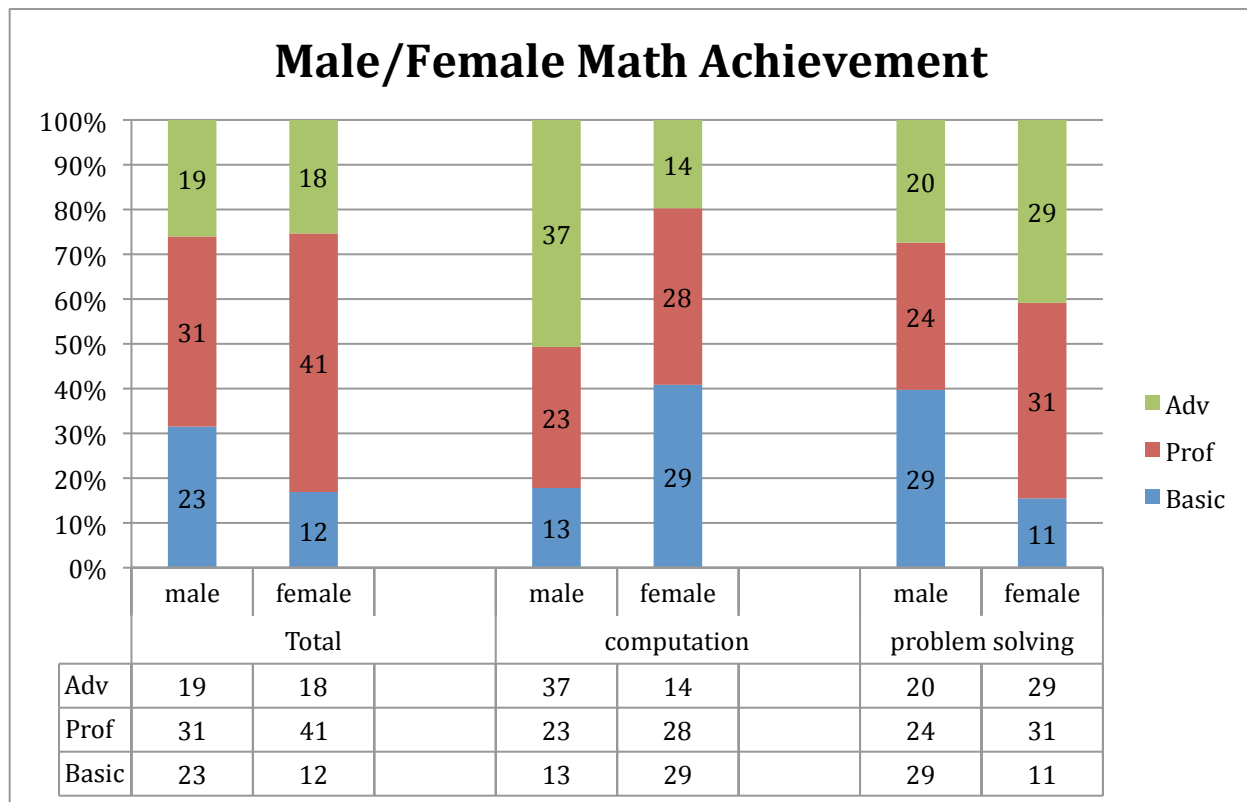
## Compare two groups, with levels on several assessments

These graphs focus on the comparison between the two groups in one year. You may want to look at trend data for each group separately as shown on the previous page.

The total column is not used in the graph

The blank row separates different assessments.

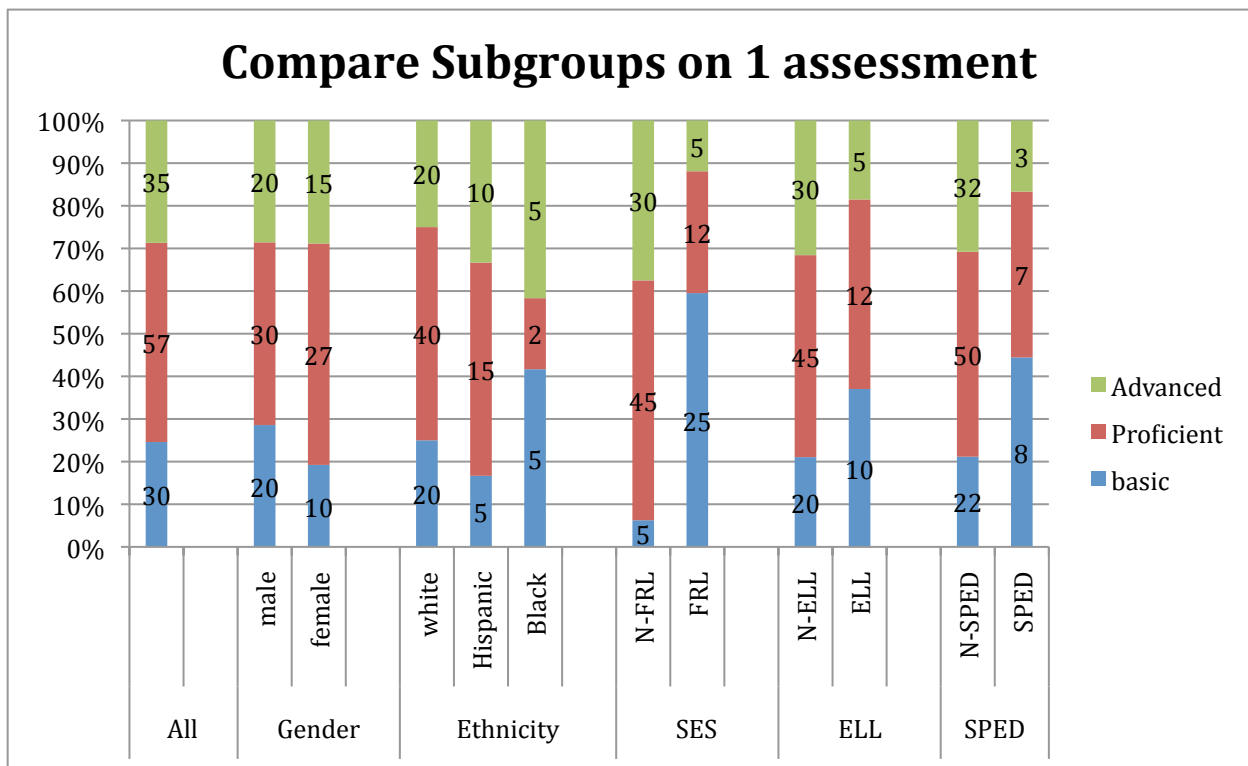
		Basic	Prof	Adv	total
Total	male	23	31	19	73
	female	12	41	18	71
computation	male	13	23	37	73
	female	29	28	14	71
problem solving	male	29	24	20	73
	female	11	31	29	71



## Compare Subgroups on One Assessment

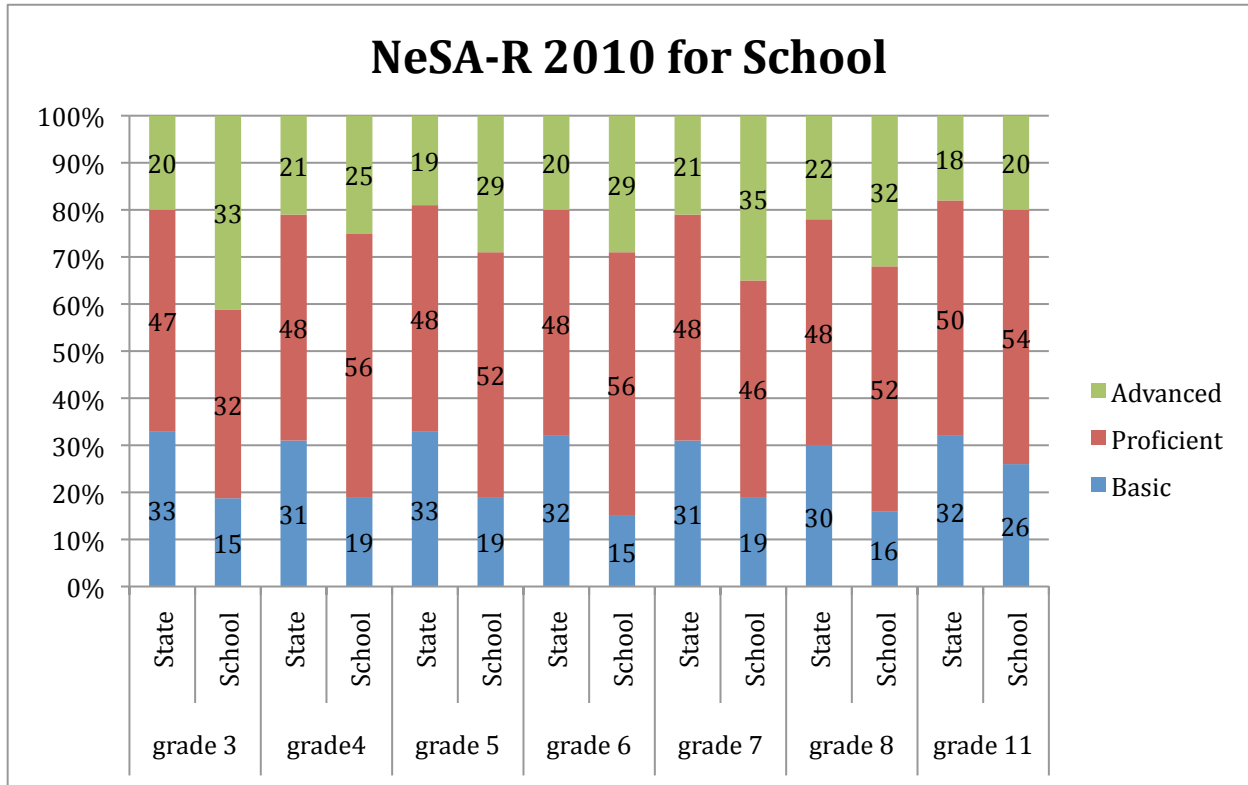
The table and graph below takes one assessment and compares each subgroup as well as the achievement of all of the students. Note that comparisons are made between the subgroup SPED and the Non-SPED. Percents are shown on the graph. Be sure to look at the number in each group as well.

		Basic	Proficient	Advanced
All		30	57	35
Gender	male	20	30	20
	female	10	27	15
Ethnicity	white	20	40	20
	Hispanic	5	15	10
	black	5	2	5
SES	N-FRL	5	45	30
	FRL	25	12	5
ELL	N-ELL	20	45	30
	ELL	10	12	5
SPED	N-SPED	22	50	32
	SPED	8	7	3



## Comparing Grade Level Scores with State Scores on the NeSA-R

A similar graph could be created to compare different schools at the same grade level. The numbers shown in the graph are percents. When looking at the data it would be good to also have the number of students in each category.

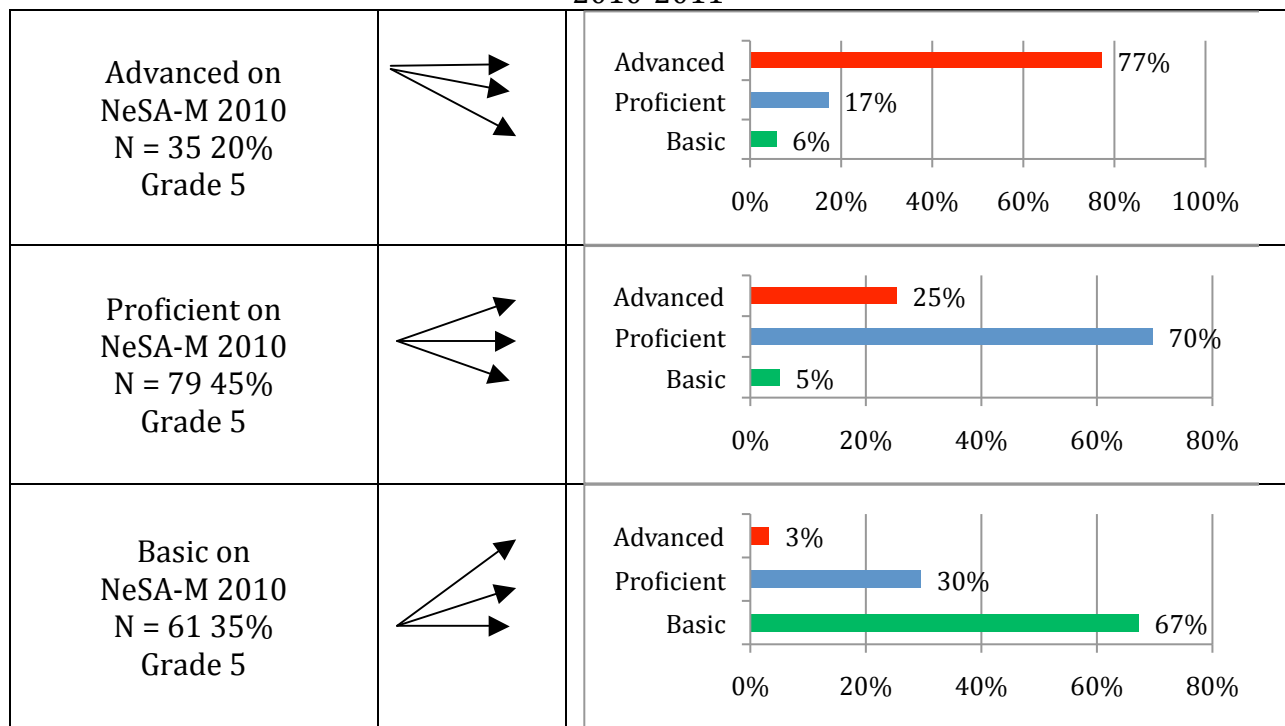


## Changes in Levels from Year to Year

Students in 2010 were placed into three performance levels by their scores on the NeSAM. Percentage in three levels was; advanced (20%), proficient (45%) and basic (35%). The same students are then assessed during the 2011 school year. Of the students that were advanced 77% remained advanced, 17% remained proficient, and 6% were classified as basic. Similar information is displayed for students that were proficient and students that were basic. This graph provides information on how the students at each performance level did during the next year of testing.

Question: Did the school show improvement from 2010 to 2011?

Grade 5 to 6 Progress on Mathematics Achievement by Level  
2010-2011



Data from 2010 Advanced—20%, Proficient—45%, Basic—35%

Data from 2011 Advanced—28%, Proficient—45%, Basic—27%



Darin Kelberlau from Elkhorn Public School has a slightly different graph. Below is the graph with the same information. The data from the same students would need to be used to generate the data.

	<b>Grade 3 (2010-11)</b>	<b>Grade 4 (2011-12)</b>
<b>Advanced</b>	20%	77%
		17%
		6%
<b>Proficient</b>	45%	25%
		70%
		5%
<b>Beginning</b>	35%	3%
		30%
		67%

Below is what the chart could look like after 3 years of charting the same students.

	<b>Grade 3 (2010-11)</b>	<b>Grade 4 (2011-12)</b>	<b>Grade 5 (2012-13)</b>
<b>Advanced</b>	20%	77%	95%
			5%
			0%
		17%	55%
			45%
			0%
		6%	0%
			0%
			0%
<b>Proficient</b>	45%	25%	30%
			70%
			0%
		70%	25%
			70%
			5%
		5%	0%
			60%
			40%
<b>Basic</b>	35%	3%	0%
			0%
			0%
		30%	5%
			35%
			50%
		67%	0%
			40%
			60%