

Student Achievement Gains by ability and ethnicity, 2013-14

Compiled from Portland data

Margaret DeLacy, January 25, 2016

Student Learning is best measured by gains, not scores

Portland reported OAKS gains for all students annually

Broken down into five achievement levels:
very low, low, nearly meets, meets and exceeds

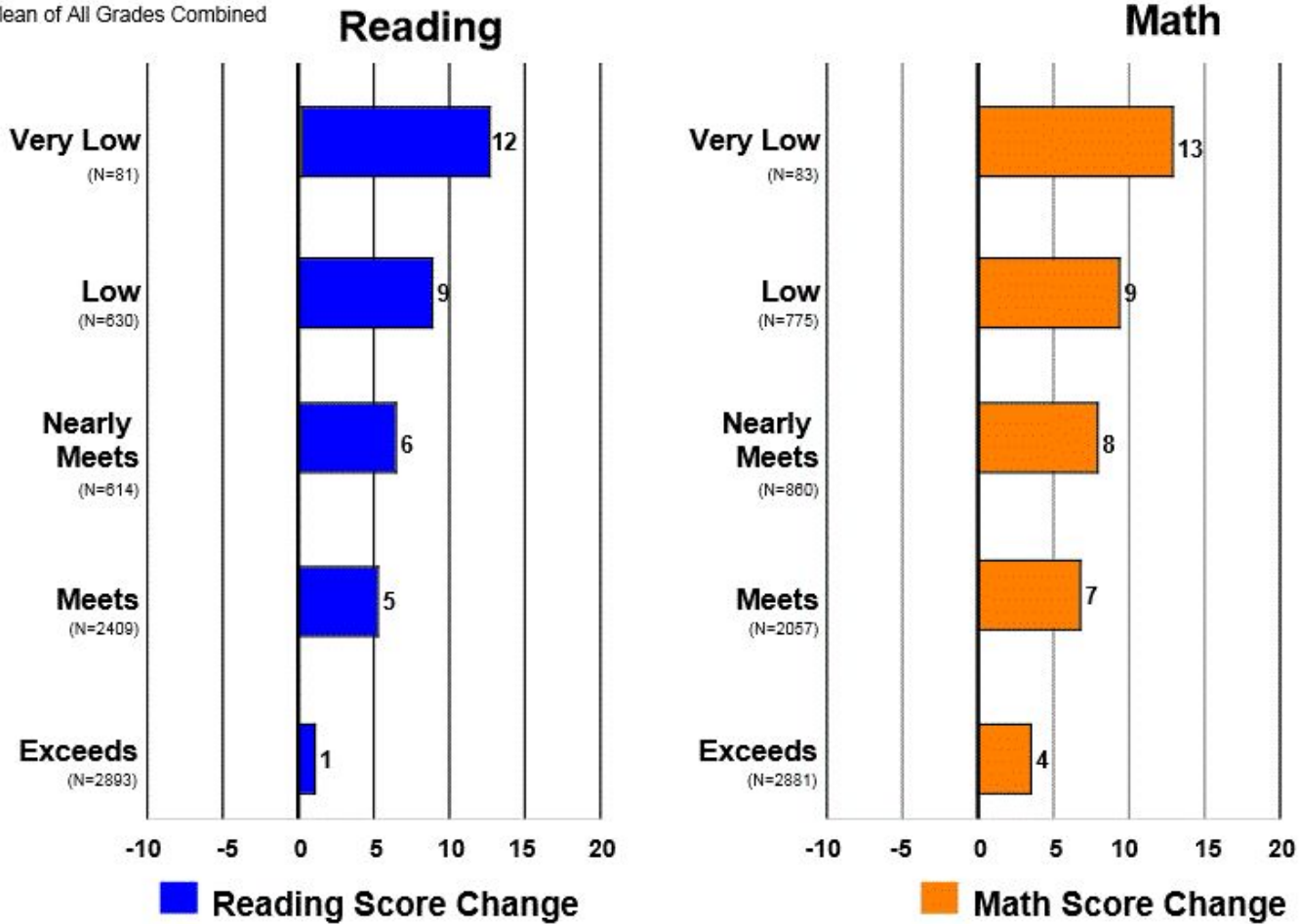
Reported for three school levels in the assessment overview

Portland Student Achievement Data Start Page

http://www.tagpdx.org/portland_student_achievement_dat.htm

Are students at all performance levels showing growth?

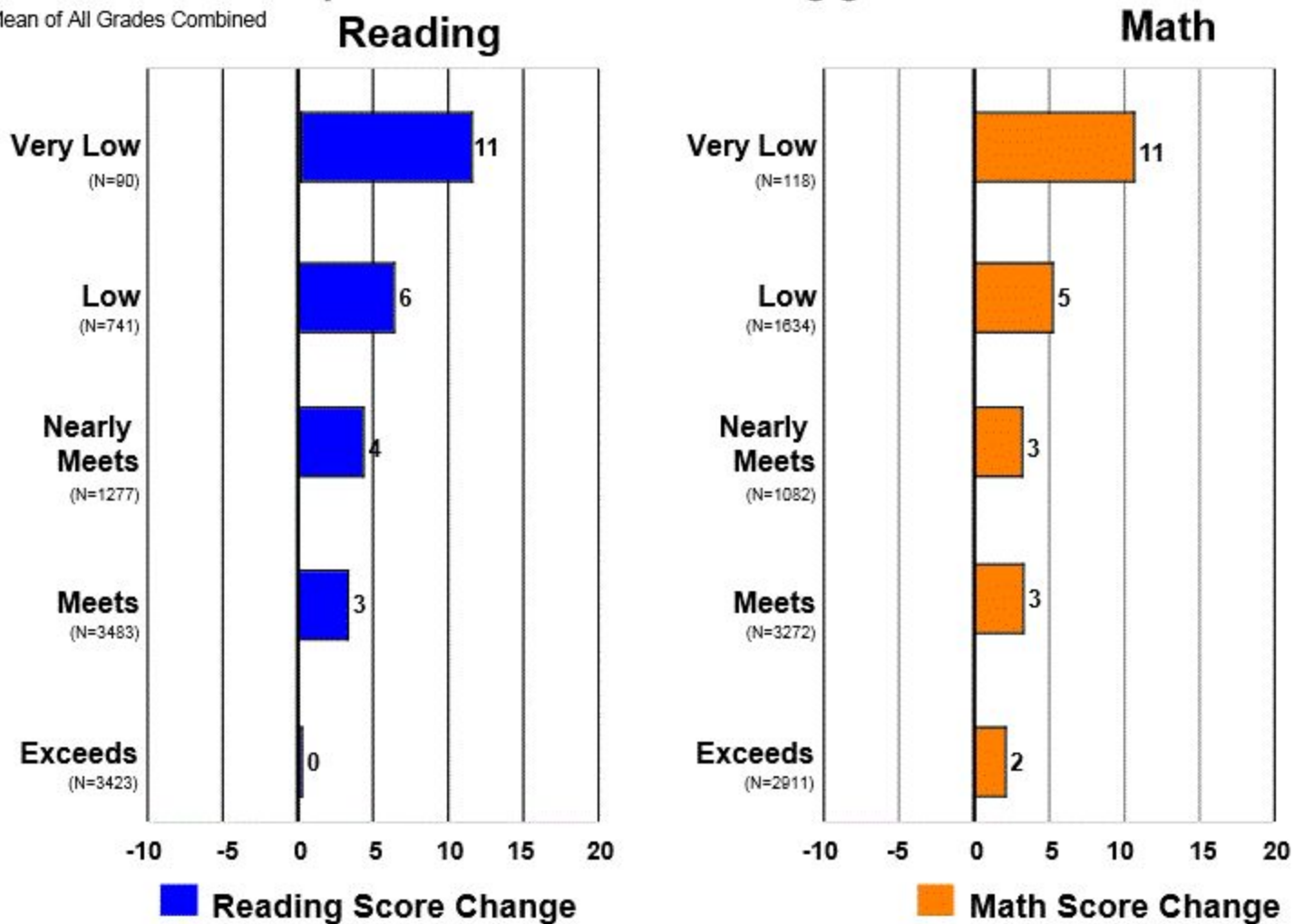
Mean of All Grades Combined



Change in Mean Test Scores by Prior Performance Level

Are students at all performance levels showing growth?

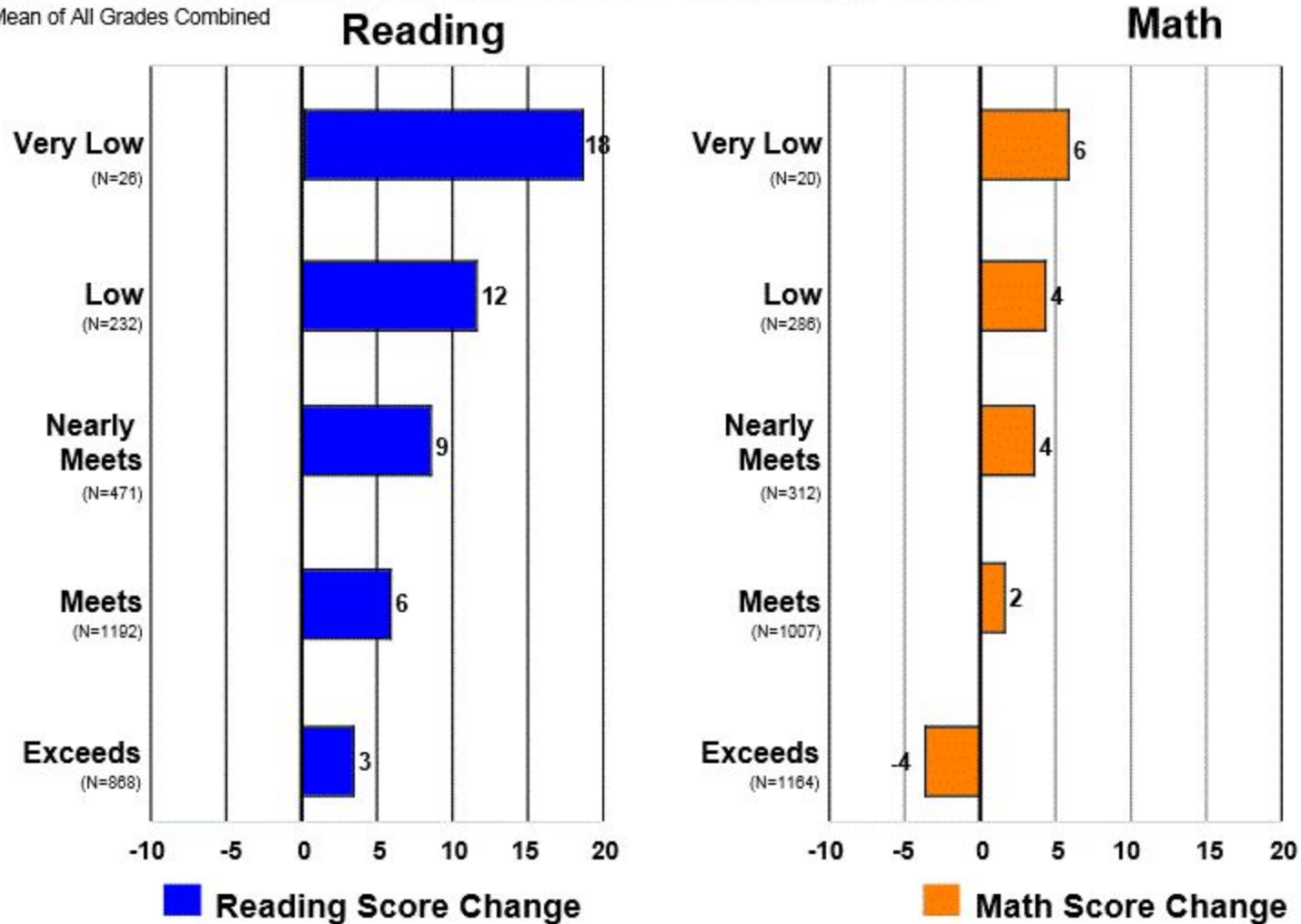
Mean of All Grades Combined



Change in Mean Test Scores by Prior Performance Level

Are students at all performance levels showing growth?

Mean of All Grades Combined



Change in Mean Test Scores by Prior Performance Level

Ethnicity is further broken into subgroups

- American Indian
- Asian
- Black
- Hispanic
- Pacific Islander
- White
- Multi-Ethnic

.....Some of these groups are small

Gains by ability level are also broken out by grade level and further broken out by other student characteristics:

- **All Students**
- **Free/Reduced Meal**
- **English Language Learner (ELL)**
- **Special Education**
- **Ethnicity**
- **Gender**
- **TAG**

I compiled the gains for some of these groups from the PPS website

Gains for both reading and math

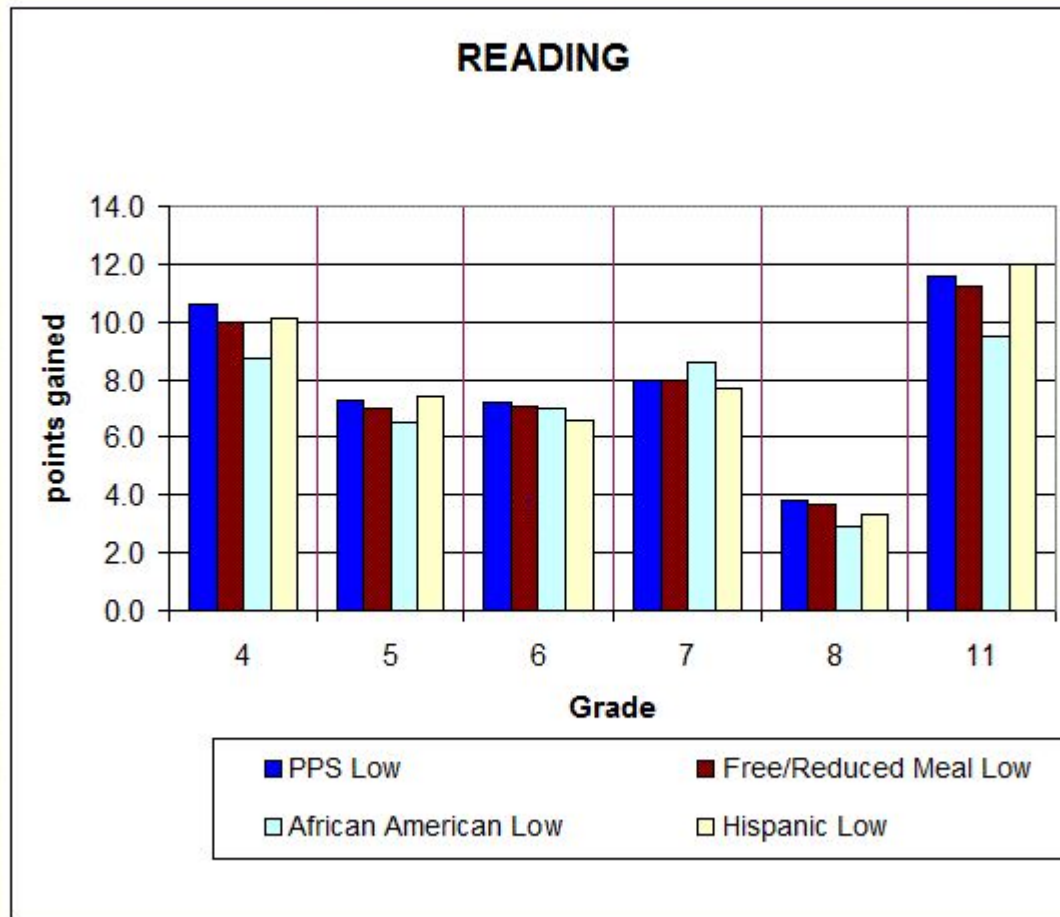
By 4 ability levels, from Low to Exceeds (Very Low was too small)

And charted the gains by grade for the following groups:

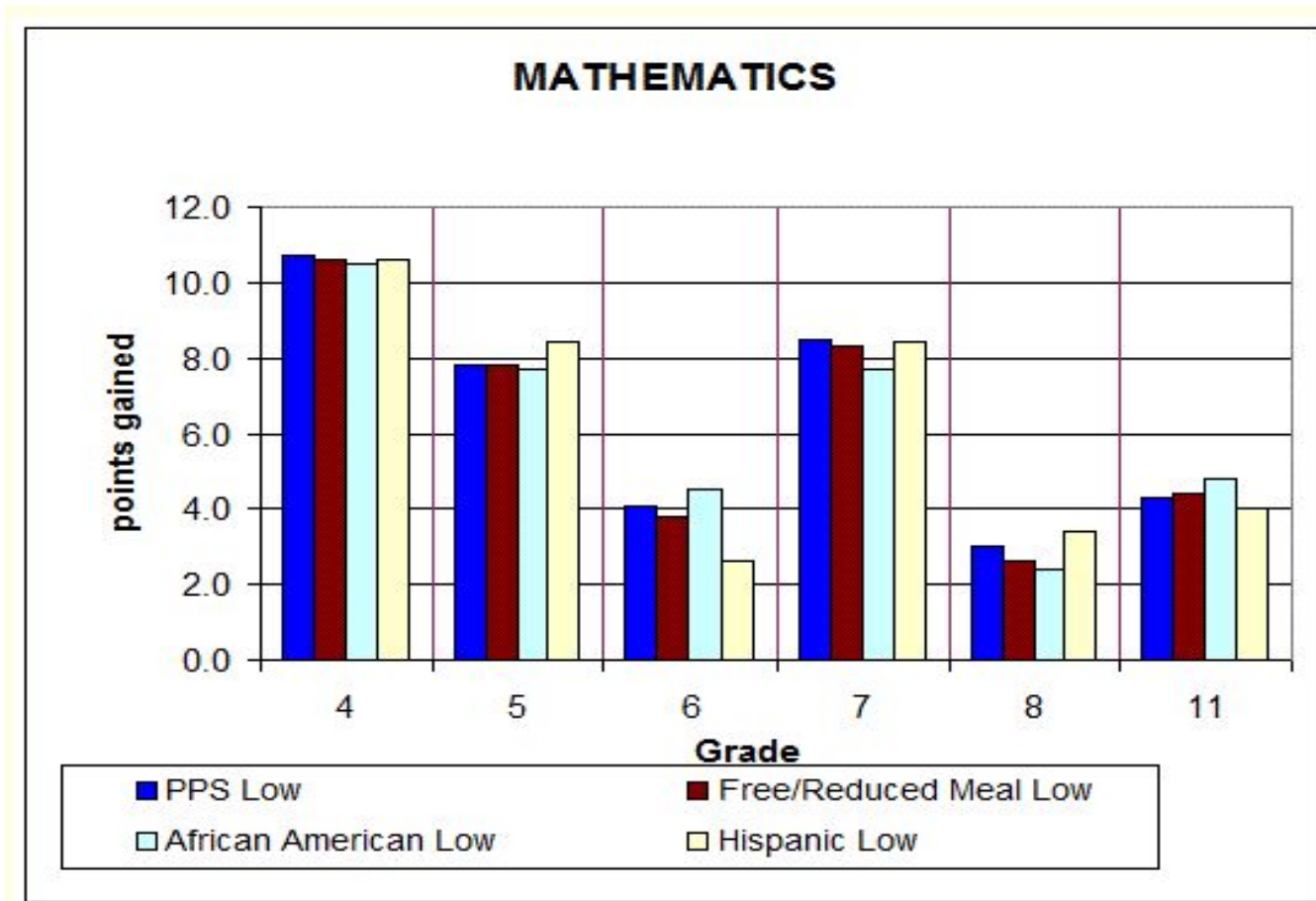
- All Students
- Free/reduced Meals
- Hispanic
- Black (African American)

Reading Gains for "Low" students by income/ethnicity

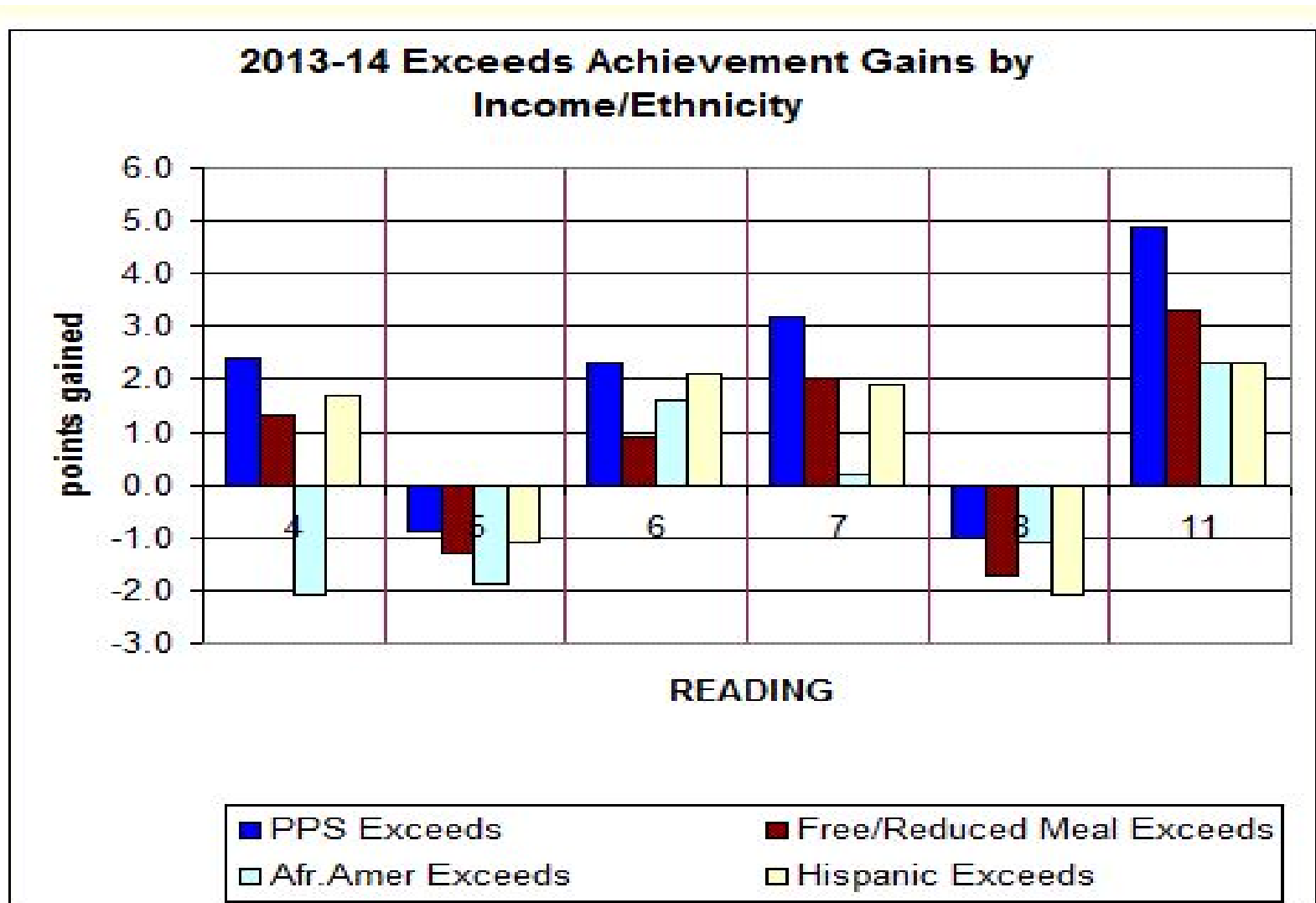
2013-14, Gains by Low-Performing Students broken out by Income and Ethnicity



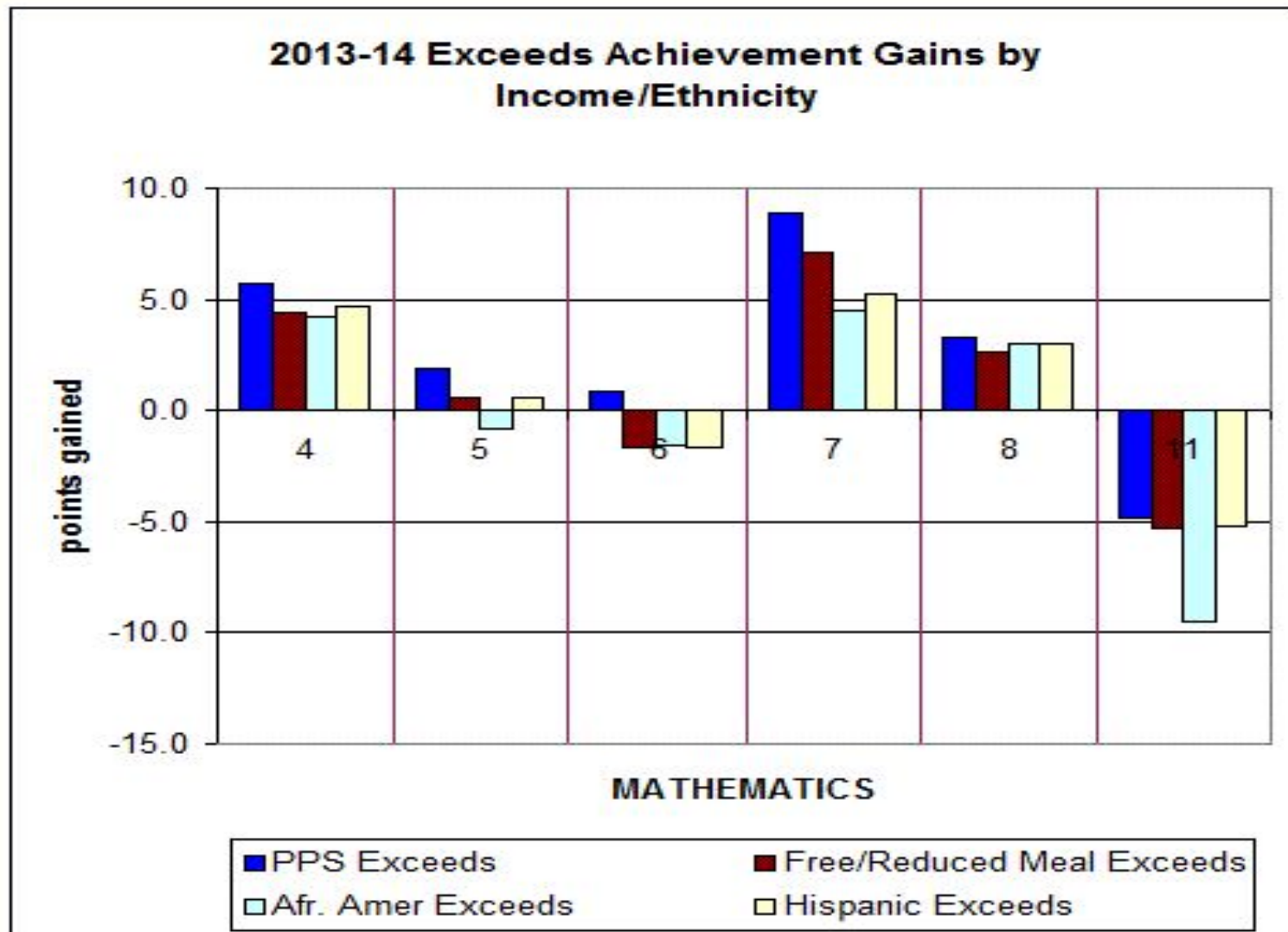
Math gains for "Low" students by income/ethnicity



Reading gains by "Exceeds" students by income/ethnicity



Math gains for "Exceeds" students by income/ethnicity



The Achievement Gap is at the top

There is a much bigger difference between all students and low-income, Hispanic and African-American students among the students who exceed than among "low performing" students

Tables of differences in gains

The gains attained by all PPS students at a given grade level and achievement level give us a starting point for comparing the gains of students in income/ethnicity groups at a given achievement level.

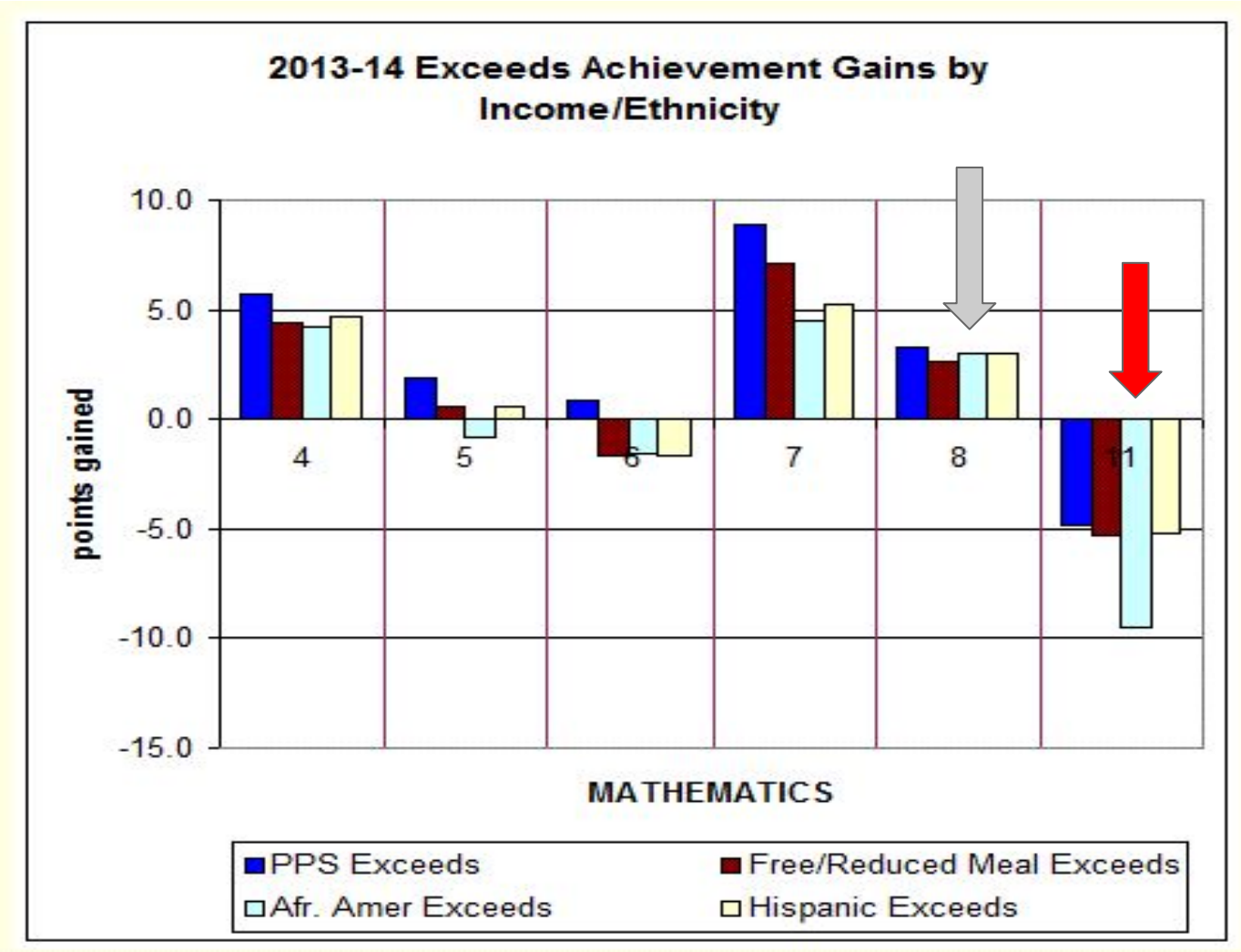
For example:

- Take the reading gains for all “meets” PPS students in fifth grade.
- Subtract the reading gains reported for “meets” F/R Meal students, the gains reported for Hispanic students, and the gains reported for African-American Students in fifth grade.

This produces a table that shows the *difference in height* among each of the bars of each of the bar charts shown above.

These differences in height correspond to the *differences in gains* among these groups.

Example



In the example above, among students who exceeded in math

- In 8th. Grade, African-American students (light blue) made nearly the same gains as other students (dark blue) yielding a small number (0.3) in the table (gray arrow).
- In 11th. Grade, African-American students (light blue) trailed other students (dark blue) by a greater amount, yielding a larger number (4.7) in the table (red arrow).

If any group had *outperformed* the overall average it would yield a *negative* number (the gains of the group were bigger than those of the whole).

The bigger the number is, the more members of a given group underperformed the average of students of the same ability.

Differences in 2013-14 Gains between PPS students and students in selected groups, by ability level: [1] **low-achieving students**

READING

	PPS Low-	PPS Low-	PPS Low-
Grade	F/R Meal	Af. Am	Hispanic
4	0.6	1.9	0.5
5	0.3	0.8	-0.1
6	0.1	0.2	0.6
7	0.0	-0.6	0.3
8	0.1	0.9	0.5
11	0.4	2.1	-0.4
total	1.5	5.3	1.4

MATH

	PPS Low-	PPS Low-	PPS Low-
Grade	F/R Meal	Af. Am	Hispanic
4	0.1	0.2	0.1
5	0.0	0.1	-0.6
6	0.3	-0.4	1.5
7	0.2	0.8	0.1
8	0.4	0.6	-0.4
11	-0.1	-0.5	0.3
total	0.9	0.8	1.0

Differences in gains between PPS students and students in selected groups, by ability level 2013-14:

[2] students who "nearly met" benchmarks

READING

	PPS-F/R	PPS-Afr.	PPS-
Grade	meal	Amer	Hispanic
4	0.8	2.0	1.0
5	0.3	0.7	1.2
6	0.7	0.5	0.8
7	0.4	0.6	0.5
8	0.4	1.1	1.4
11	0.7	2.1	0.9
Total	3.3	7.0	5.8

MATH

	PPS-F/R	PPS-Afr.	PPS-
Grade	meal	Amer	Hispanic
4	0.8	1.2	0.3
5	1.0	1.6	0.7
6	0.9	0.9	2.4
7	0.9	1.7	0.9
8	0.2	0.2	0.7
11	0.7	3.0	1.7
Total	4.5	8.6	6.7

Differences in gains between PPS students and students in selected groups, by ability level

2013-14: **[3] students who met benchmarks**

READING

Grade	PPS-F/R Meal	PPS-Afr. Am	PPS-Hispanic
4	1.4	2.7	0.8
5	0.8	2.5	0.6
6	1.1	0.9	2.5
7	0.9	1.8	0.1
8	0.9	0.8	0.6
11	1.1	1.3	1.3
Total	6.2	10.0	5.9

MATH

Grade	PPS-F/R Meal	PPS-Afr. Am	PPS-Hispanic
4	1.4	1.9	1.5
5	1.4	2.4	1.3
6	1.5	1.9	2.2
7	1.3	1.5	2.0
8	0.7	0.4	1.0
11	0.3	0.6	-0.1
total	6.6	8.7	7.9

Differences in gains between PPS students and students in selected groups, by ability level 2013-14:

[4] students who exceeded benchmarks

READING

2013-14 Exceeds Table of Differences

Grade	F/R Meal Exceeds	Afr. Amer Exceeds	Hispanic Exceeds
4	1.1	4.5	0.7
5	0.4	1.0	0.2
6	1.4	0.7	0.2
7	1.2	3.0	1.3
8	0.7	0.1	1.1
11	1.6	2.6	2.6
Total	6.4	11.9	6.1

MATHEMATICS

2013-14 Table of Differences

Grade	F/R Meal Exceeds	Afr. Amer Exceeds	Hispanic Exceeds
4	1.3	1.5	1.0
5	1.3	2.7	1.3
6	2.6	2.5	2.6
7	1.8	4.4	3.7
8	0.7	0.3	0.3
11	0.5	4.7	0.4
Total	8.2	16.1	9.3

The Achievement Gap is at the top

As we move up the achievement scale, in most cases the differences between F/R meal, African-American, and Hispanic students, and all PPS students in the same achievement group increases. For example, in all grades combined, “low” Hispanic students trailed all “low” students by one point in math whereas “exceeds” Hispanic students trailed all “exceeds” students by a cumulative 9.3 points.

Conclusions

- This system for reporting results provides helpful information and should be reinstated
- As a group, high-achieving students make lower gains than other students. Within that group, there is a much greater achievement gap among high-performing students of different incomes/ethnicities than there is among lower-achieving students.
- Portland will never succeed in reducing the actual achievement gap without giving serious attention to the needs of high-achieving students. Policies that focus only on struggling students will not solve the problem.