

Data Report

Refusal Rates and Student Achievement, 2016

Presented to the New Paltz Central School District Board of Education

September 2016

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Refusal Rates

During the 2015 – 2016 New York State Assessment administration, the New Paltz Central School District demonstrated the following refusal rates¹:

NYS Assessments 2015-16

	# students tested	# students not tested	Total # students	Refusal rate
ELA3	71	75	146	51%
ELA4	69	115	184	63%
ELA5	64	93	157	59%
ELA6	48	101	149	68%
ELA7	70	141	211	67%
ELA8	59	131	190	69%
Math3	59	87	146	60%
Math4	58	126	184	68%
Math5	62	95	157	61%
Math6	38	111	149	74%
Math7	54	157	211	74%
Math8	34	156	190	82%
Science4	76	105	181	58%
Science8	36	154	190	81%

Recently, New York State has published data reflecting refusal rates within districts.

Additionally, these reports include the State's prediction of the level of achievement for students who refused to take the assessments. An examination of these data released from the State provides the following distributive information:

¹ From the NYSED data warehouse, SIRS 301, Tested/Not Tested reports for 2015-2016.

New York State ELA Assessments Grades 3 – 8 (New Paltz Central School District)

Total refusal rate: 62%

Percentage of students who refused the assessments in 2016, and who would have received a Level 1 or Level 2 based on their 2015 test results: 10%

Percentage of students who refused the assessments in 2016, and who would have received a Level 3 or Level 4 based on their 2015 test results: 2%

Of the 62% of students who refused the test, 22% were economically disadvantaged students

Of the 62% of students who refused the test, 18% were students with disabilities

New York State Math Assessments Grades 3 – 8 (New Paltz Central School District)²

Total refusal rate: 65%

Percentage of students who refused the assessments in 2016, and who would have received a Level 1 or Level 2 based on their 2015 test results: 10%

Percentage of students who refused the assessments in 2016 and who would have received a Level 3 or Level 4 based on their 2015 test results: 2%

Of the 65% of students who refused the test, 25% were economically disadvantaged students

Of the 65% of students who refused the test, 18% percent were students with disabilities

Considerations.

How has the State determined the level of achievement for students whose tests were Coded 96?

What do these data tell us?

With such a small “n” size, how do we eliminate spuriousness?

The 2016 Test is different than in previous years; specifically, less questions and unlimited time.

² Data taken from <http://www.p12.nysed.gov/irs/press.html> 2016 data.

Evaluation.

The achievement levels for students whose tests were Coded 96 (test refusals) are not predictive.

The basis for the prediction would be the students' previous assessment scores (2015) in the same content area. What is problematic about this prediction is that there is no correlation coefficient supplied to determine the strength of the relationship between the two tests.

Secondly, there is no demonstration of causality therefore the prediction is not well supported.

Also, since many students refused in BOTH 2015 and 2016, there are fewer students left for whom this predication can be made. Finally, the test changed in 2016—fewer questions and unlimited testing time. Therefore one must question the validity of predicting performance on the 2016 test based on performance on the 2015 test.

Achievement Data Discussion

**Achievement Outcomes
New York State Grade 3 -8 ELA Assessments**

Grade 3

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank NYS	Number Tested	% Passing	Percentile Rank NYS
Grade 3 All	71	28.2	46.5	71	38	44.5
Grade 3 Economically Disadvantaged	19	10.5	19.5	22	22.7	36.3
Grade 3 Special Education	7	0	52	8	0	35.4

Grade 4

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank NYS	Number Tested	% Passing	Percentile Rank NYS
Grade 4 All	64	32.8	52.1	69	53.6	78
Grade 4 Economically Disadvantaged	23	8.7	13.3	20	35	76
Grade 4 Special Education	12	0	51.7	9	33.3	97.6

Grade 5

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank NYS	Number Tested	% Passing	Percentile Rank NYS
Grade 5 All	41	24.4	43.3	66	37.9	69.6
Grade 5 Economically Disadvantaged	15	20	70	19	5.3	7.6
Grade 5 Special Education	5	0	58.2	14	7.1	71.9

**Achievement Outcomes
New York State Grade 3 -8 ELA Assessments**

Grade 6

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 6 All	72	30.6	50.9	48	20.8	21.3
Grade 6 Economically Disadvantaged	19	26.3	81.1	18	22.2	57.3
Grade 6 Special Education	11	0	58.2	5	0	53.3

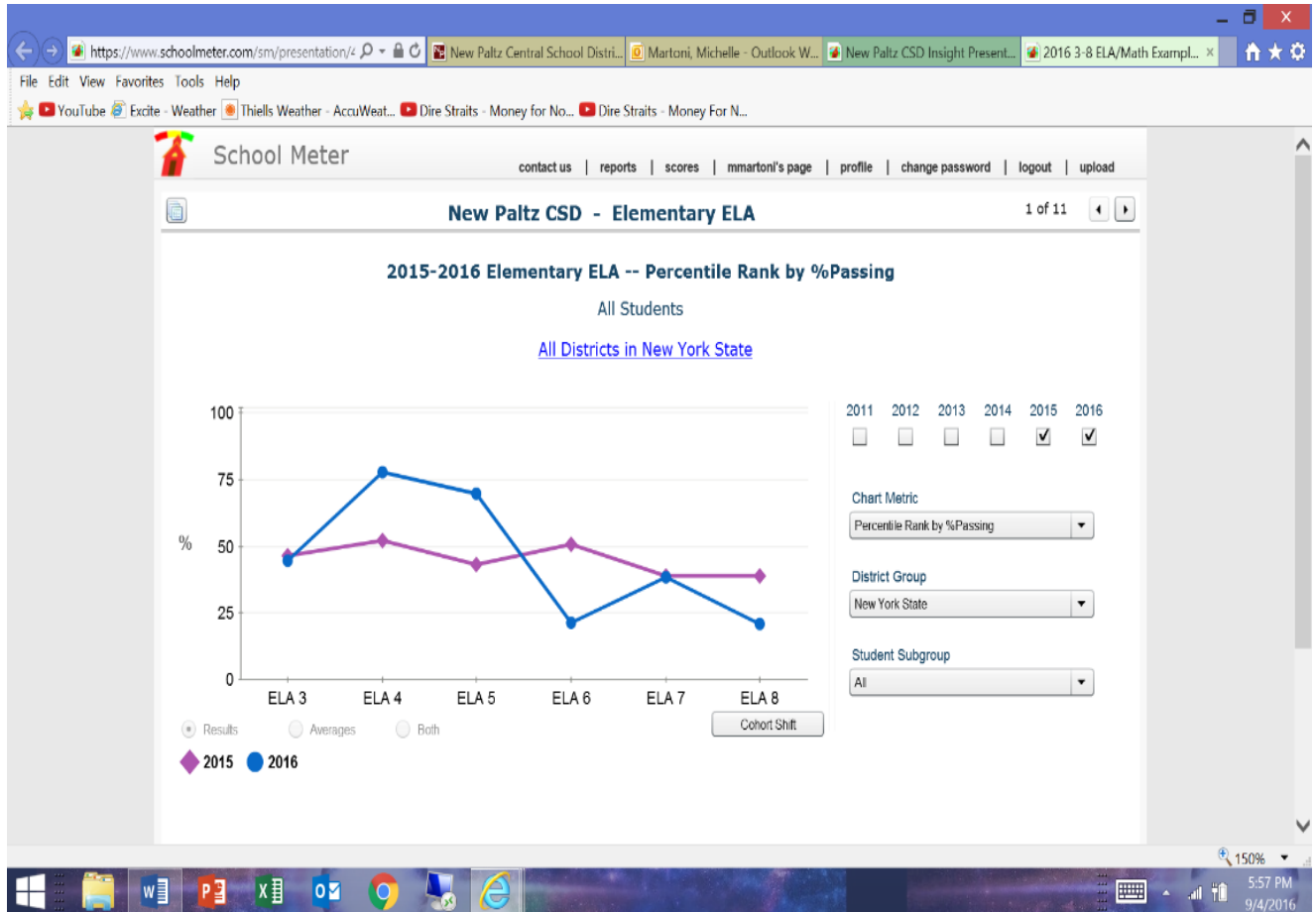
Grade 7

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 7 All	66	24.2	39.1	70	28.6	38.5
Grade 7 Economically Disadvantaged	18	11.1	34.9	22	9.1	14.9
Grade 7 Special Education	10	0	61.5	12	0	57.1

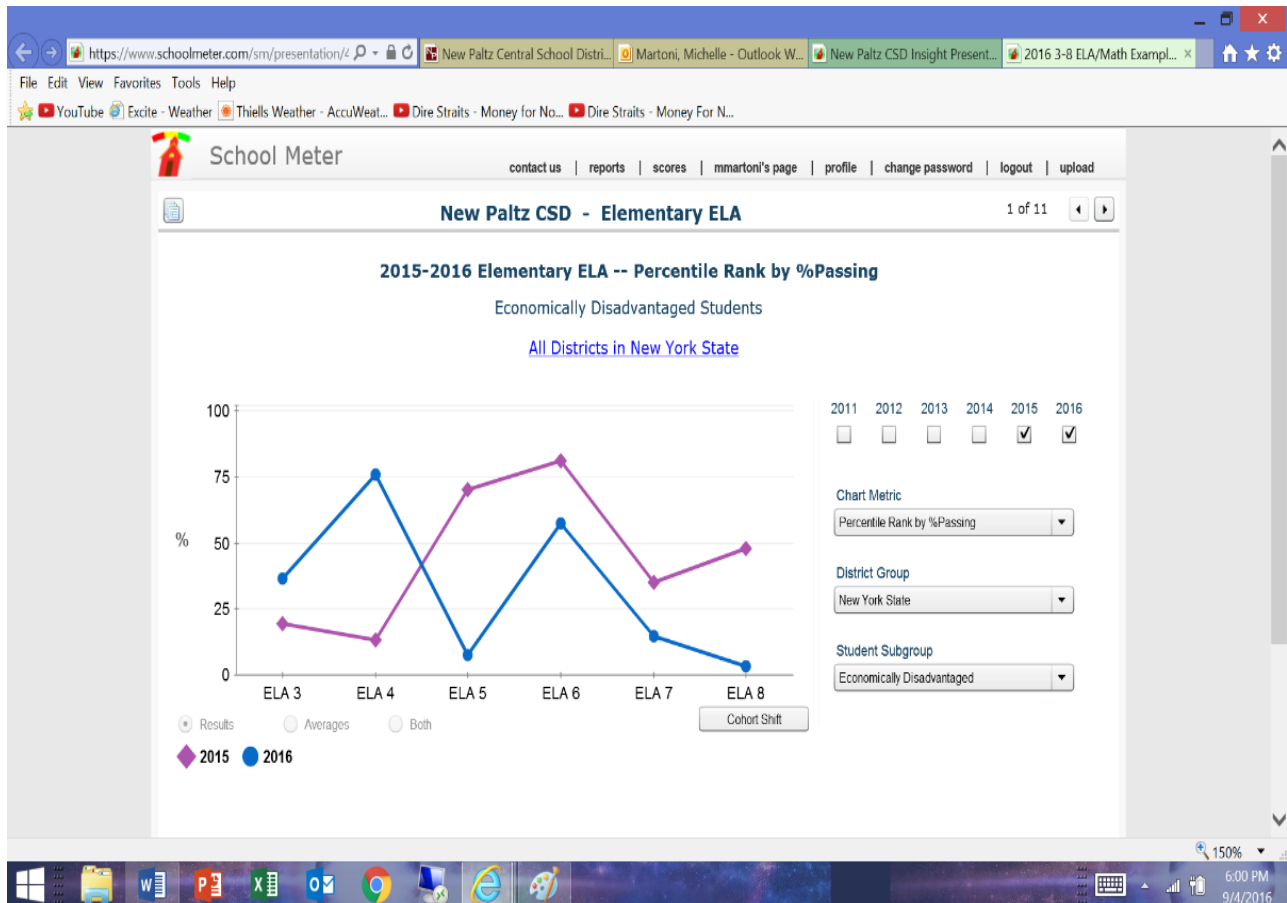
Grade 8

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 8 All	65	30.8	38.7	59	27.1	21.1
Grade 8 Economically Disadvantaged	10	20	48.1	15	0	3.1
Grade 8 Special Education	9	0	52.6	9	0	46.9

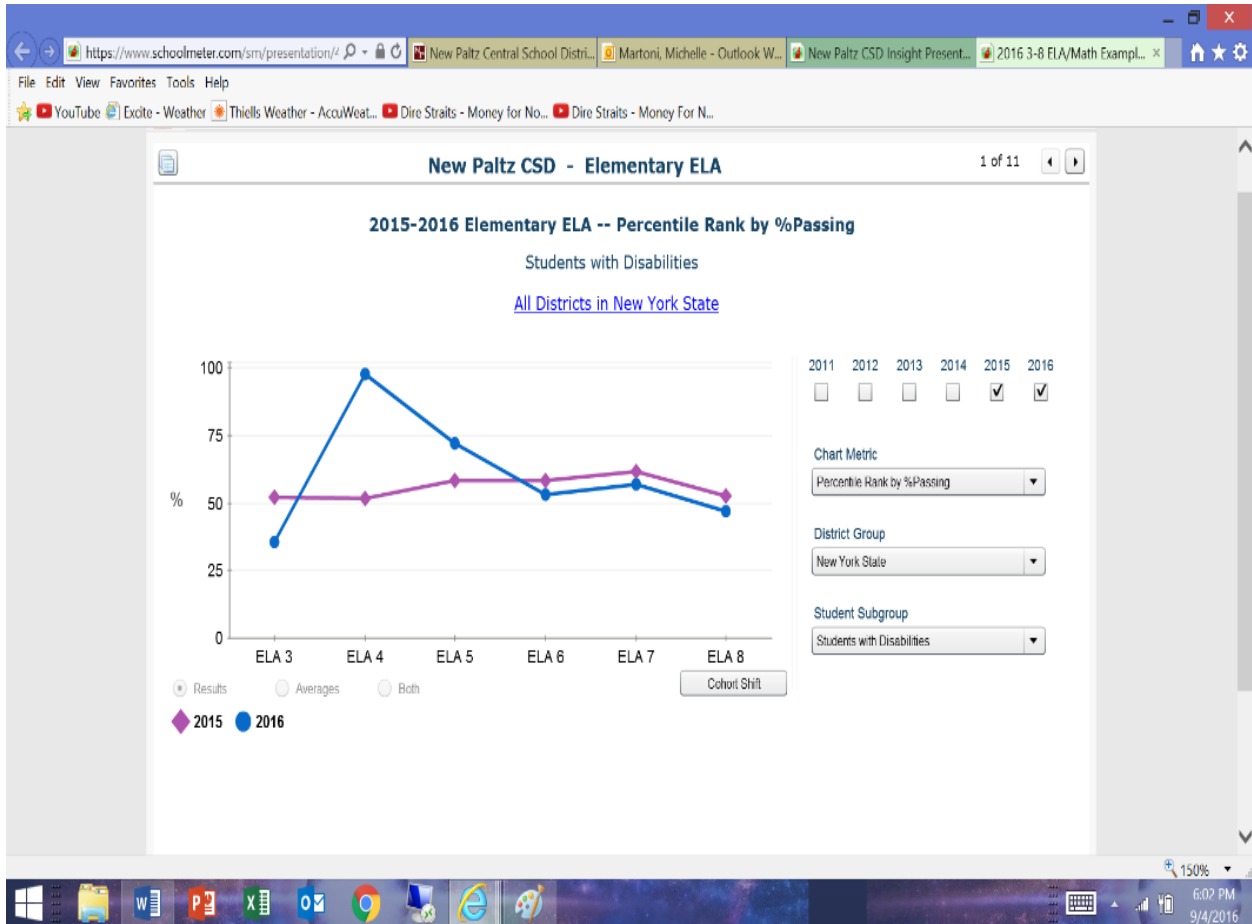
Grades 3 – 8 ELA Assessments, “All Students”



Grades 3 – 8 ELA Assessments, Economically Disadvantaged



Grades 3 – 8 ELA Assessment Data, Students with Disabilities



With the exception of Grades 6 and 8, percentile ranks for “All Students Tested” held relatively steady or increased. It is important to note the decrease in percentile rank in Grades 6 and 8 are accompanied by a decrease in the number of students taking the test. In Grade 6 the number of students taking the test decreased from 72 to 48. Though not as dramatic as Grade 6, in Grade 8 the number of students taking the test decreased from 65 to 59.

Also noteworthy are the “n” sizes for both the economically disadvantaged student subgroup and the special education student subgroup. Namely, the “n” is consistently 23 students or below with occurrences of “n” < 10. Indeed, in one instance (Grade 6, special education, 2016) the “n” includes five students.

**Achievement Outcomes
New York State Grade 3 -8 Math Assessments**

Grade 3

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 3 All	64	34.4	26.3	59	37.3	33.1
Grade 3 Economically Disadvantaged	14	14.3	8.4	15	20	20.7
Grade 3 Special Education	*No Data			*No Data		

Grade 4

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 4 All	63	39.7	36.6	58	34.5	26.7
Grade 4 Economically Disadvantaged	23	8.7	3.5	15	13.3	7.6
Grade 4 Special Education	11	0	27.7	9	11.1	53.1

Grade 5

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 5 All	37	51.4	65.5	63	38.1	42.9
Grade 5 Economically Disadvantaged	14	42.9	80.8	18	16.7	20.3
Grade 5 Special Education	5	20	82.9	13	15.4	70.9

**Achievement Outcomes
New York State Grade 3 -8 Math Assessments**

Grade 6

	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 6 All	58	29.3	27.8	38	23.7	18.7
Grade 6 Economically Disadvantaged	14	14.3	18.9	15	33.3	65.3
Grade 6 Special Education	7	0	38.5	*No Data		

Grade 7

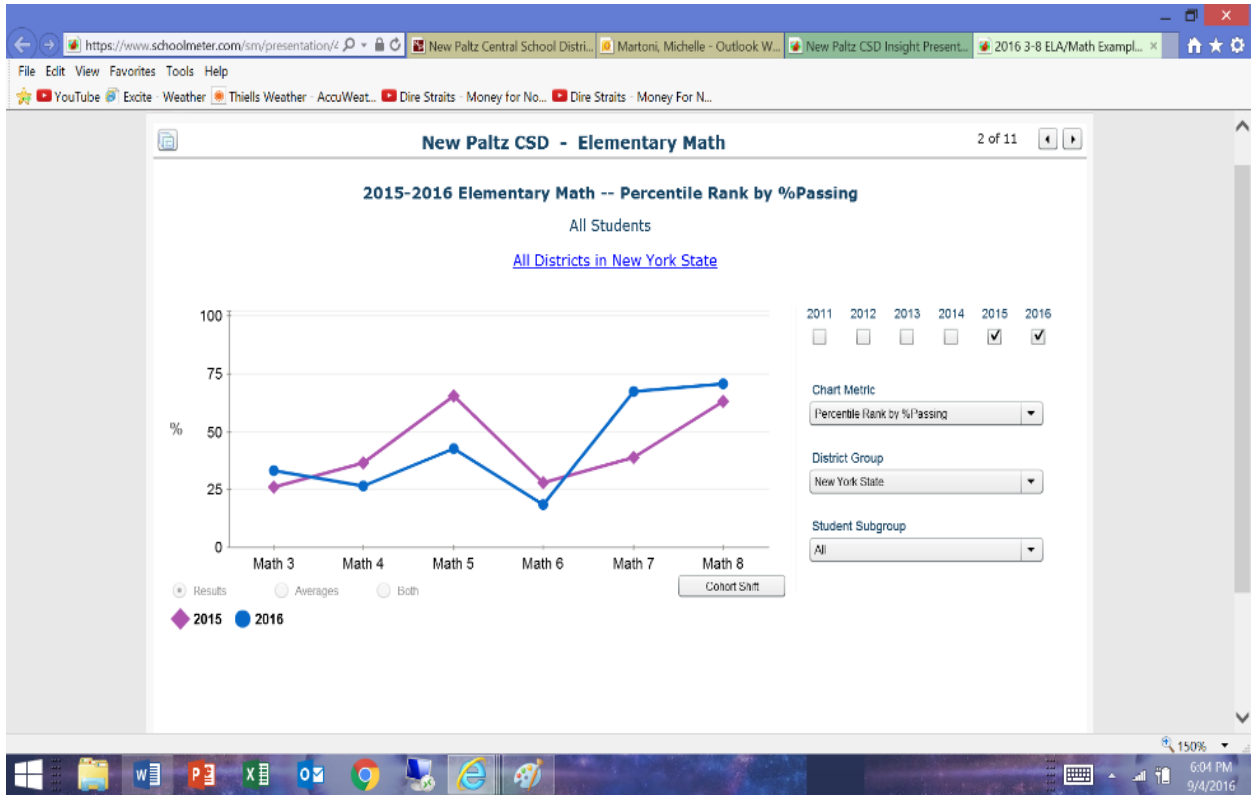
	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 7 All	54	27.8	38.9	55	43.6	67.4
Grade 7 Economically Disadvantaged	13	7.7	15.9	12	8.3	18.2
Grade 7 Special Education	9	0	52.9	10	0	48.2

Grade 8

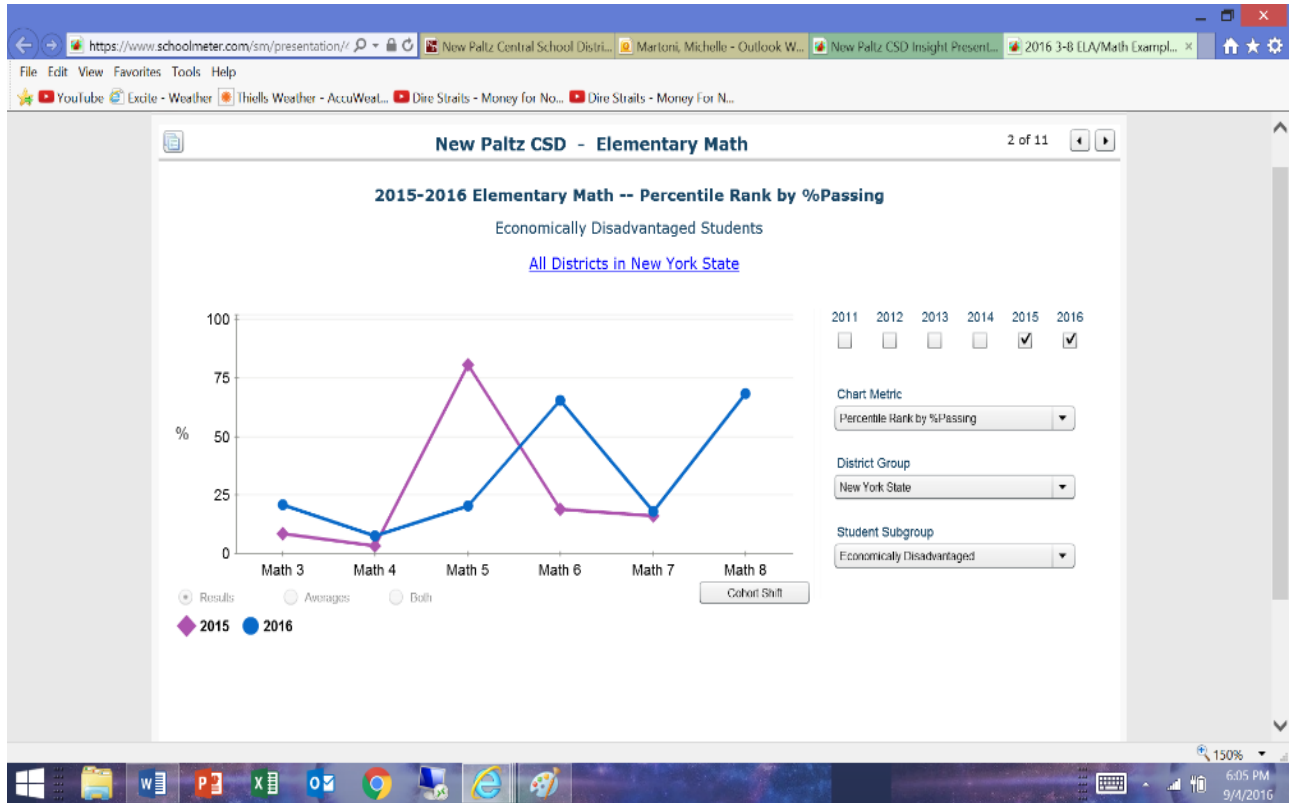
	2015			2016		
Grade/Subgroup	Number Tested	% Passing	Percentile Rank	Number Tested	% Passing	Percentile Rank
Grade 8 All	33	21.2	63.2	34	26.5	70.7
Grade 8 Economically Disadvantaged	*No Data			6	16.7	68.2
Grade 8 Special Education	6	16.7	91.4	*No Data		

*N is too small to generate data

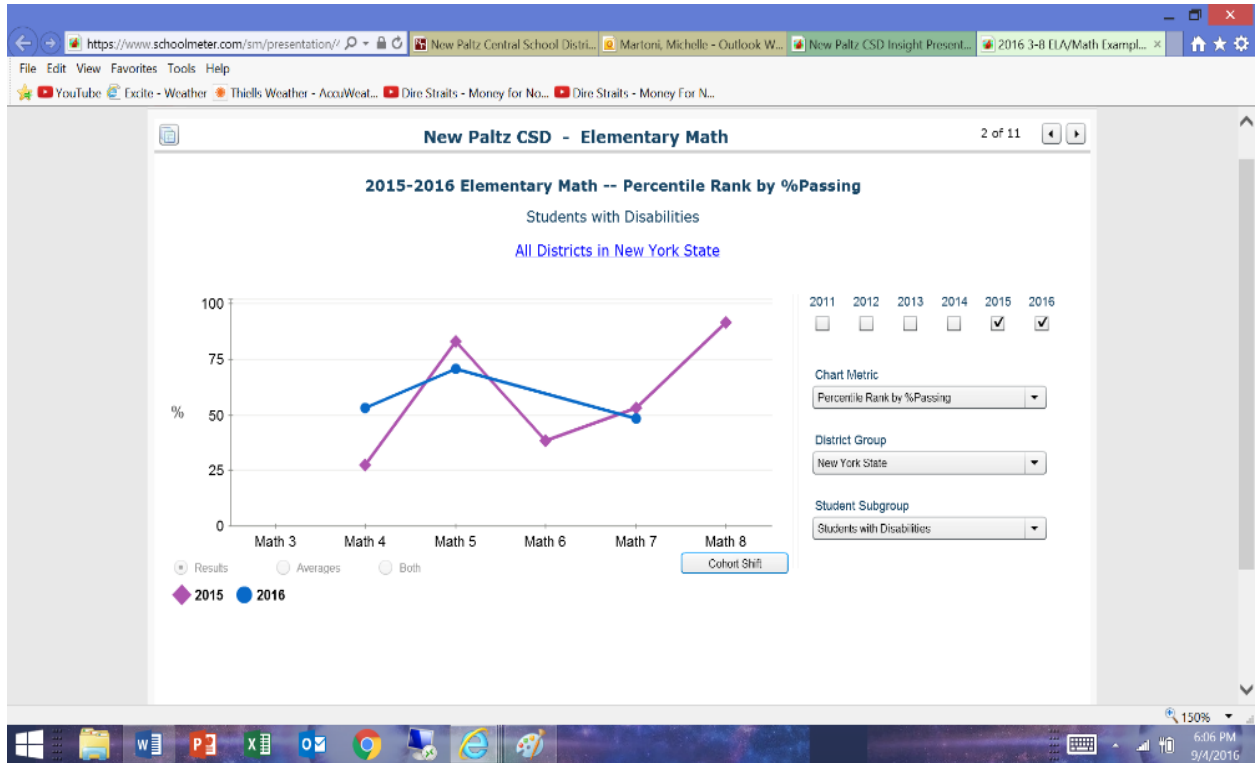
Grades 3 – 8 Math Assessment Data, “All Students”



Grades 3 – 8 Math Assessment Data, Economically Disadvantaged Students



Grades 3 – 8 Math Assessment Data, Students with Disabilities



Within the “All Students Tested” category, Grades 3, 7, and 8 demonstrate an increase in percentile rank from 2015 to 2016. At the same time, Grades 4, 5, and 6 demonstrate a decrease in percentile rank from 2015 to 2016. In regard to the subgroup “students with disabilities,” it is important to note that on four occasions, the number of students tested in this group was so small that no data were generated (Grade 3, 2015 and 2016; Grade 6, 2016; Grade 8, 2016). This was also the case for the economically disadvantaged subgroup for Grade 8, 2015. Similar to the ELA Assessment data, the “n” size in both the economically disadvantaged subgroup and the special education subgroup tended to be low. Indeed, in 2016, at no grade level did either of these subgroups reflect an “n” greater than 18. In addition to the instances noted above where “n” was too small to generate data, the tables herein reveal two occasions in which $n < 10$ for these subgroups; namely, Grade 8, economically disadvantaged, 2016 and Grade 4, special education, 2016. These small “n” sizes and the occurrences of “no data” make it difficult to draw comparative conclusions for these subgroups from one year to the next.

For both the ELA and Math Assessment data, perhaps more mitigating than the small “n” sizes are the anecdotal data collected by teachers during the administration of the State Assessments. These data reveal a pattern of students engaged in activities which would diminish the validity of the achievement outcomes. These activities include but are not limited to:

Students completed Book 1 and then refused Books 2 and 3

Students entered a name on Book 1 and then refused the test (would be scored)

Students entered a name on Book 1 and “connected the dots” on the answer sheet

Students entered a name on Book 1 and drew pictures (doodling)

Students entered a name on Book 1 and wrote opinion letters to the State

Additionally, external factors such as setting and test anxiety should be considered. Administrators have reported considerable confusion on the day of testing as parents and students refuse the test on the day of the administration. Also, in an atmosphere of high stakes testing where teachers' performance evaluations have been tied to assessment data, some students have reported a level of anxiety related to this evaluation method.

Questions about the internal validity of the assessments also come into play. Many organizations including the School Administrators Association of New York State (SAANYS) have called for a study of the Assessments to determine just that. Such a study has not to this date been undertaken. Further muddying the waters, is the fact that changes were made to this year's assessments. The number of questions, the type of question, and the time allotted to take the test all changed. In sum, these changes presented a conundrum in terms of measuring performance (growth) from 2015 to 2016. In the common tongue: We do not have an "apples to apples" scenario. Instead, we are comparing "apples" to "oranges."

Conclusions.

Overall, both intrinsic flaws and external factors cannot be ruled out as having had an impact on the achievement outcomes. Taking into consideration the small "n" size, instances of "No Data", the anecdotal data submitted by teachers, and the "apples-to-oranges" scenario outlined above, it would be premature to render any programmatic recommendations vis-à-vis the achievement data. Alternatively, a review of the individual questions and student performance would allow for individual pupil recommendations where students attended to the assessment with fidelity. In any case, recommendations related to the learning of individual students are made based on multiple sources of data. State Assessment data provide only one point of information.