Pine-Richland School District

Academic Achievement Report

September 23, 2013

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Pine-Richland School Board

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Introduction

The mission of the Pine-Richland School District is *to provide a strong academic foundation which challenges students to realize their fullest potential and encourages them to become engaged, thoughtful citizens*. The teaching and learning processes of the district serve as the core method for achieving that mission. From an educational perspective, we focus on the three big topics of curriculum, instruction, and assessment as the important elements of a successful program. These areas are naturally connected in the day-to-day operation of schools.

From a broad perspective and as a strategic priority, we are working to develop benchmarks of success as the method for evaluating the progress of the district. This concept of a "balanced scorecard" will encompass a wide variety of indicators for organizational excellence. It is our intention to focus on a combination of process improvements and a results orientation. Although this concept is a current work-in-progress, the basic framework surrounds the following:

However, the bottom line for public school districts relates to the evidence of academic achievement and learning. It is not the only important measure, but it is a fundamental measure of schools. This is the first comprehensive *Academic Achievement Report* developed at the Pine-Richland School District that attempts to consolidate key results into one resource. It is a first iteration. Over time and similar to other aspects of organizational improvement, we expect to refine this approach and achieve higher levels of integration of results into the core areas of curriculum, instruction, and assessment. A data-driven approach is something that becomes embedded into the culture of an organization over time.

With data, we want to consider several important concepts:

"*Assessment of Learning*" vs. "*Assessment for Learning*"

Most of the data included in this data analysis report falls under the "*assessment of learning*" category. In many cases, we are reporting levels, trends, and comparisons of performance on end-of-year tests (e.g., PSSA, SAT, ACT, and AP exams). It is important to analyze these results. Sometimes, though, the analysis of summative data can lead to the "DRIP" concept (i.e., Data Rich Information Poor). As a future-focused goal, it is even more necessary to begin emphasizing the role of "*assessment for learning*" in our educational program. In this way, we utilize formative assessments at the beginning of a unit of instruction to help make instructional decisions about the whole class and individual students. When teachers utilize formative assessments, they are able to create flexible groups and/or differentiate their approach to meet the needs of the learners. This is a challenging but important concept in education.

Report Overview

The 2013 *Academic Achievement Report* describes data from the 2012-2013 school year and places it within a five year history. To the greatest extent possible, this summative data is provided in a visual manner to illustrate levels, trends, and comparisons of performance. Disaggregated results by gender help provide further insight into student achievement levels. The results of standardized tests included in this report are:

- Pennsylvania System of School Assessment (PSSA);
- Keystone Exams;
- Performance PLUS with select examples;
- Pennsylvania Value-Added Assessment System (PVAAS) with select examples;
- Scholastic Aptitude Test (SAT);
- American College Test (ACT); and
- Advanced Placement (AP) Exams.

As we continue to focus on organizational improvement, it is the intention of the Pine-Richland School District to utilize data as one important element in a series of systematic processes. There is usually a significant gap between the administration of standardized tests and the ability of the district to analyze results. Students have generally transitioned to the next grade level and to a different course in the content area sequence. Summative assessments, therefore, serve as "lagging indicators" of student learning. It is important information, but it is only one piece of a comprehensive approach. Emerging statistical analyses, such as the Pennsylvania Value-Added Assessment System (PVAAS), provide important information about the growth of students over time. The combination of measures is being embedded into the Pennsylvania School Performance Profile and into the new Educator Effectiveness model as well. We intend to engage principals and teacher-leaders more heavily in the future iterations of this process.

Overview of Assessments

Pennsylvania System of State Assessment (PSSA)

Chapter 4 of the State Board of Education regulations outlines assessments for mathematics and reading skills of students in grades 3 through 8; an assessment for writing skills of students in grade 5 and 8; and an assessment for science skills of students in grades 4 and 8. Chapter 4 has been revised recently and the impact of those revisions will become clearer in the upcoming months. The PSSA is the Pennsylvania Department of Education's assessment to meet the requirements of No Child Left Behind (NCLB). The PSSA is administered annually.

The following performance levels are utilized:

> **Advanced:** The Advanced Level reflects superior academic performance. Advanced work indicates an in-depth understanding and exemplary display of the skills included in the Pennsylvania Academic Standards.
>
> **Proficient:** The Proficient Level reflects satisfactory academic performance. Proficient work indicates a solid understanding and adequate display of the skills included in the Pennsylvania Academic Standards.
>
> **Basic:** The Basic Level reflects marginal academic performance. Basic work indicates a partial understanding and limited display of the skills included in the Pennsylvania Academic Standards. This work is approaching satisfactory performance but has not yet reached it. There is a need for additional instructional opportunities and/or increased student academic commitment to achieve the Proficient Level.
>
> **Below Basic:** The Below Basic Level reflects inadequate academic performance. Below Basic work indicates little understanding and minimal display of the skills included in the Pennsylvania Academic Standards. There is a substantial need for additional instructional opportunities and/or increased student academic commitment to achieve the Proficient Level.

Keystone Exams

The Keystone Exams are end-of-course assessments designed to assess proficiency in the subject areas of Algebra I, Literature, and Biology. These exams have replaced the grade 11 PSSA tests in reading, mathematics, writing, and science. The Keystone Exams are one component of Pennsylvania's new system of high school graduation requirements. For accountability purposes, the results of these exams will be utilized as the high school assessment related to NCLB and the new Pennsylvania School Performance Profile.

For each assessment, similar performance levels to the PSSA are utilized (i.e., Advanced, Proficient, Basic, and Below Basic). The overall performance level is based on the score earned in two testing modules. One of the main differences in the Keystone Exams is the fact that three different testing windows are available each year in the Winter, Spring, and Summer. Non-proficient students are required to retake the exam. The best two module scores are combined to recalculate the overall performance level. School districts have the responsibility of some form of supplemental instruction for non-proficient students.

PerformancePLUS

The Pine-Richland School District purchased PerformancePLUS as a data warehouse tool for state and local assessments. Data is uploaded from a variety of sources into this system to allow for various analyses at the district, school, grade level, classroom, and student levels. Select analyses are included in this report to illustrate the nature of information generated by PerformancePLUS.

Pennsylvania Value-Added Assessment System (PVAAS)

The Pennsylvania Value-Added Assessment System (PVAAS) is a statistical analysis of state assessment data and provides Pennsylvania districts and schools with growth data to add to achievement data. This lens of measuring student learning provides educators with valuable information to ensure they are meeting the academic needs of groups of students, as well as individual students. PVAAS is one of the tools provided to districts from the Pennsylvania Department of Education. Districts and schools are using PVAAS (growth data), in conjunction with achievement data, to make sure students are on the path to proficiency and beyond.

Scholastic Aptitude Test (SAT)

As written on the College Board website, the SAT is a globally recognized college admission test that lets students show colleges what they know and how well they can apply that knowledge. It tests knowledge of reading, writing and math — subjects that are taught every day in high school classrooms. Most students take the SAT during their junior or senior year of high school, and almost all colleges and universities use the SAT to make admission decisions. For each of the sub-tests, a score of 800 is possible for a combined total of 2400. The results can be compared on a state and global level.

American College Test (ACT)

The ACT assessment measures skills in English, reading, mathematics, and science reasoning. These areas are tested because they include the major areas of instruction in most high school and college programs. The ACT college readiness assessment is a curriculum- and standards-based educational and career planning tool that helps assess students' academic readiness for college. For each sub-test, a score of 36 is possible. Based on all four scores, an overall composite score is also calculated. The results can be compared on a state and national level.

Advanced Placement (AP)

The Advanced Placement Test is a test on which students demonstrate and confirm mastery of particular subjects. Student performance on AP Tests are graded one through five, with a grade of five indicating a student who is well-qualified to receive college credit and/or advanced placement.

Pennsylvania School Performance Profile (SPP)

The PA School Performance Profile is designed to:

- Provide a building level academic score as part of the Educator Effectiveness (Act 82) beginning in 2013-2014;
- Inform the public of the performance of each public school, comprehensive career and technical center, cyber charter, and charter school in Pennsylvania; and
- Provide parents and taxpayers with performance measures for the school/district of residence, neighboring schools/districts, and school/ districts across the state.

The score for a school is based upon indicators that define a high performing school, including Indicators of Academic Achievement (40%), Indicators of Academic Growth/PVAAS (40%), Indicators of Closing Achievement Gaps (10%); and other Academic Indicators (10%).

References

American College Testing. Retrieved September 12, 2013 from http://www.act.org/products/k-12-act-test/.

College Board. Retrieved September 12, 2013 from http://sat.collegeboard.org/about-tests/sat.

Pennsylvania Department of Education. Retrieved September 12, 2013 from http://www.portal.state.pa.us/portal/server.pt/community/state_assessment_system/20965.

Pennsylvania System of State Assessment (PSSA)

In the pages that follow are results for five years of PSSA tests for math, reading, writing, and science in grades 3 through 8. Also included are the 2013 test results for math, reading, writing, and science assessments disaggregated by gender. Historic data for grade 11 is given from 2009-2012 only. In 2013 Pennsylvania eliminated the grade 11 PSSA as a measure of student achievement and began to require instead that students pass exams called Keystones in individual subject areas. Keystone exam results are given in the next section.

For math and reading results in grade 3, performance level results are shown first, individual primary school results are given second, and gender differences in performance levels are presented third. For all tests in grades 4-8, performance levels for each grade are given first followed by gender differences. For each test reported, state level data for the year 2012 are given for comparative purposes. Test results are reported with data tables presented on the left and graphs of the results shown directly opposite on the right.

For each assessment, a page of findings and suggested areas for future study is included at the end of the test results, data tables, and graphs. Below is a table of contents for the detail of this section.

Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels over Time

MATH

PSSA Math Grade 3 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	57.5	66.7	71.9	75	67.8	43.6
Proficient	36.6	30.1	26.4	22.2	26.8	36.4
Advanced/Proficient	94.1	96.8	98.3	97.2	94.6	80
Basic	4.3	3.3	1.7	1.9	5.1	13.3
Below Basic	1.5	0	0	0.9	0.3	6.6
# Taking Test	325	366	345	324	354	126,139

HANCE PSSA Math Grade 3 over Time

	2009	2010	2011	2012	2013
Advanced	52.7	68.9	66.1	65.4	56.8
Proficient	38.4	26.2	31.2	28.4	35.1
Advanced/Proficient	91.1	95.1	97.3	93.8	91.9
Basic	5.4	4.9	2.8	3.7	8.1
Below Basic	3.6	0	0	2.5	0
# Taking Test	112	103	109	81	111

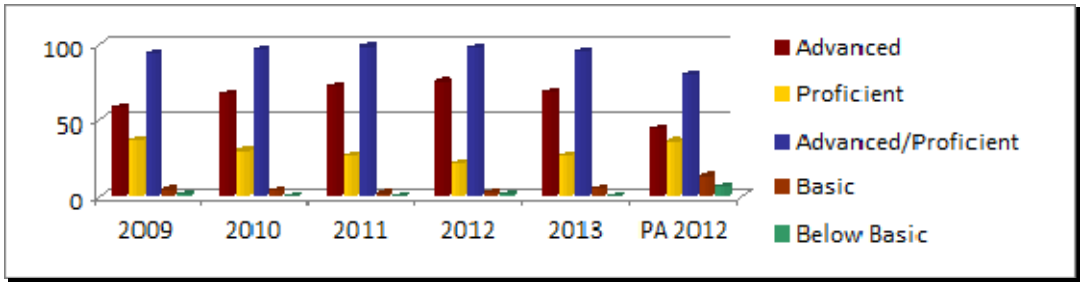
RICHLAND PSSA Math Grade 3 over Time

	2009	2010	2011	2012	2013
Advanced	53.5	72.5	69.8	72.1	66.4
Proficient	40.6	25.4	27.6	27.1	28.6
Advanced/Proficient	94.1	97.9	97.4	99.2	95
Basic	5	2.2	2.6	0.8	4.2
Below Basic	1	0	0	0	0.8
# Taking Test	101	138	116	129	119

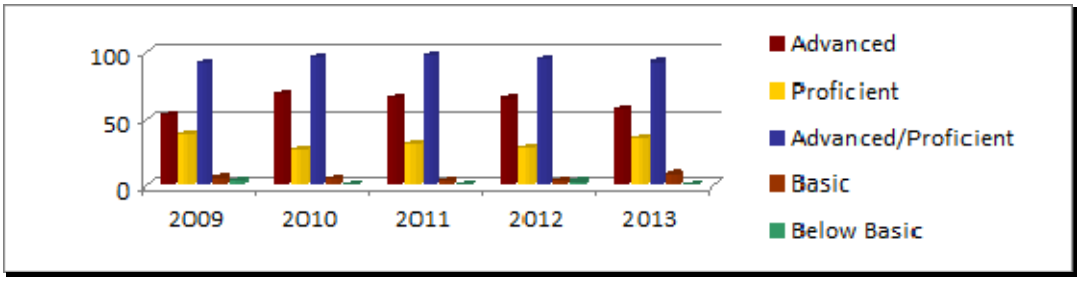
WEXFORD PSSA Math Grade 3 over Time

	2009	2010	2011	2012	2013
Advanced	66.1	58.7	79.3	85.1	78.6
Proficient	31.2	38.1	20.7	12.3	18.3
Advanced/Proficient	97.3	96.8	100	97.4	96.9
Basic	2.7	3.2	0	1.8	3.2
Below Basic	0	0	0	0.9	0
# Taking Test	112	126	121	114	126

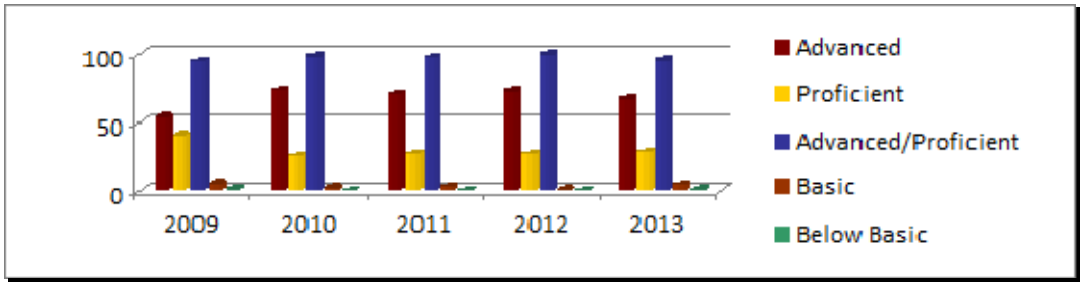
PSSA Math Grade 3 over Time



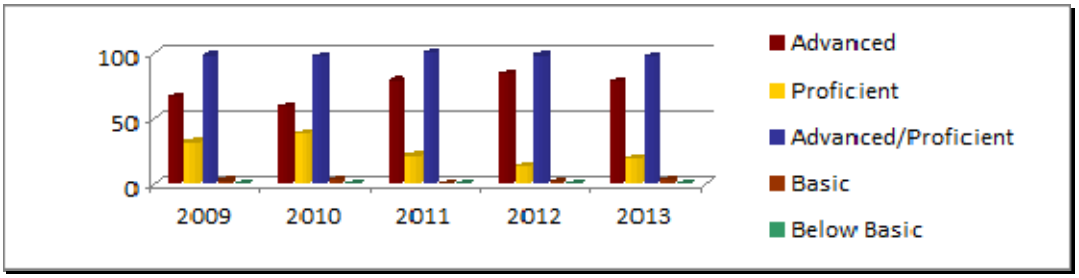
HANCE PSSA Math Grade 3 over Time



RICHLAND PSSA Math Grade 3 over Time



WEXFORD PSSA Math Grade 3 over Time

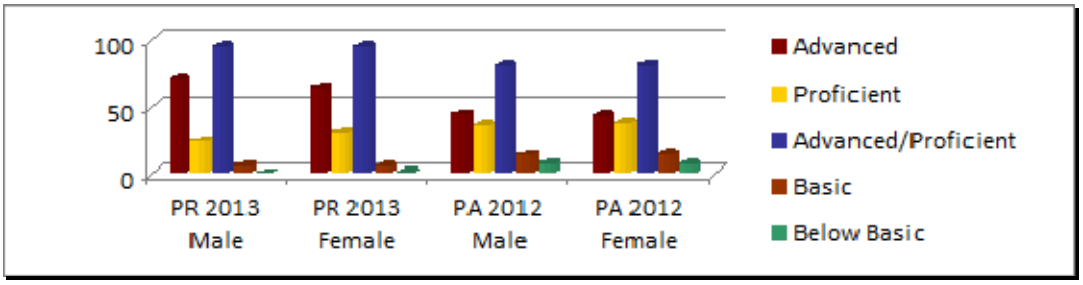


Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

2013 Math Grade 3 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	71	64.3	44.2	43
Proficient	23.5	30.4	35.7	37.2
Advanced/Proficient	94.5	94.7	79.9	80.2
Basic	5.5	4.7	13.1	13.5
Below Basic	0	0.6	6.9	6.3
# of Tests Taken	183	171	64,186	61,906

2013 Math Grade 3 by Gender



Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

PSSA Math Grade 4 over Time

	2009	2010	2011	2012	2013	PA-2012
Advanced	66.4	67.4	72.1	74.8	69.5	53.4
Proficient	22.5	25.3	19.6	20.6	21.6	29.2
Advanced/Proficient	88.9	92.7	91.7	95.4	91.1	82.6
Basic	5	3.4	5.4	3.4	5	8.6
Below Basic	6.1	4	2.9	1.1	3.8	8.7
# Taking Test	342	328	373	349	338	122,526

2013 Math Grade 4 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	69.2	69.9	54.9	51.9
Proficient	22	21.2	28.1	30.4
Advanced/Proficient	91.2	91.1	83	82.3
Basic	5.5	4.5	8.2	9
Below Basic	3.3	4.5	8.7	8.7
# of Tests Taken	182	156	62,529	59,966

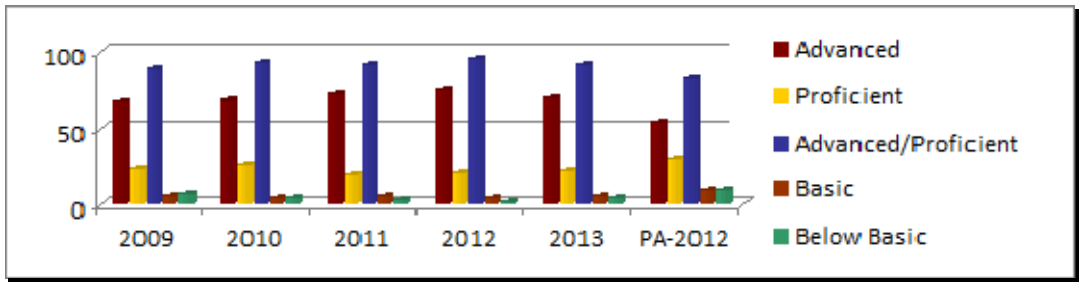
PSSA Math Grade 5 over Time

	2009	2010	2011	2012	2013	PA-2012
Advanced	51.9	57.1	57.3	61.6	64.4	45.8
Proficient	26.6	25.2	28.5	24	27	27.5
Advanced/Proficient	78.5	82.3	85.8	85.6	91.4	73.3
Basic	16	13.1	11	11.5	8.3	17.3
Below Basic	5.4	4.6	3.3	2.9	0.3	9.5
# Taking Test	349	329	337	375	348	124,973

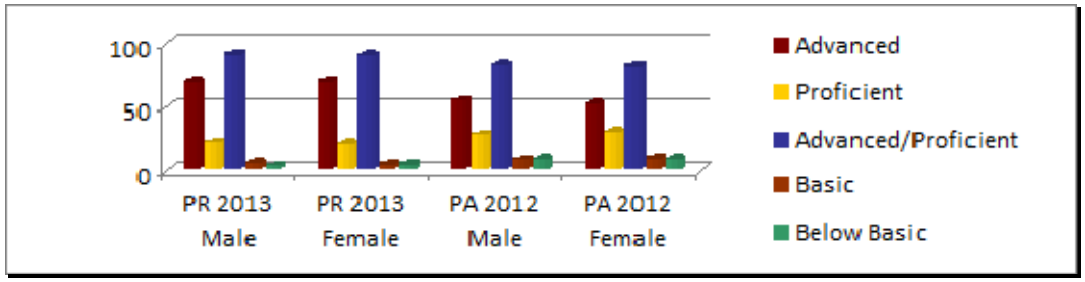
2013 Math Grade 5 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	65.4	63.3	47.3	44.2
Proficient	25.8	28.3	26.5	28.4
Advanced/Proficient	91.2	91.6	73.8	72.6
Basic	8.2	8.4	16.7	17.9
Below Basic	0.5	0	9.5	9.5
# of Tests Taken	182	166	63,540	61,405

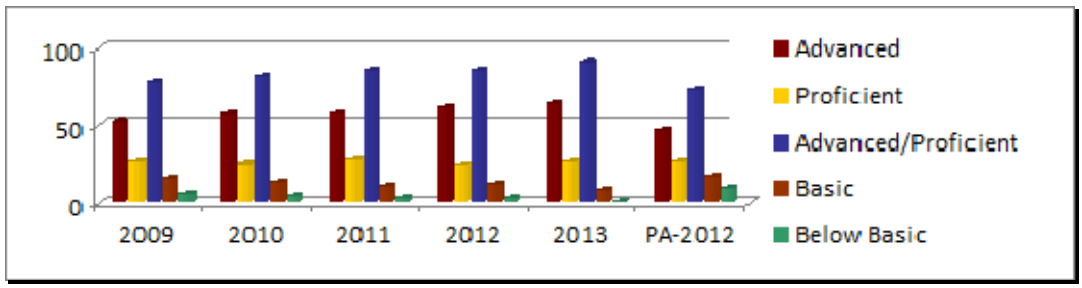
PSSA Math Grade 4 over Time



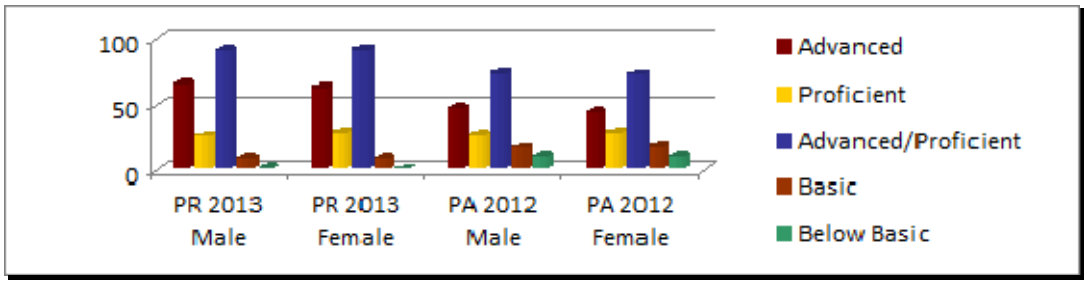
2013 Math Grade 4 by Gender



PSSA Math Grade 5 over Time



2013 Math Grade 5 by Gender



Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

PSSA Math Grade 6 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	64.8	68.4	76.1	77.6	70.5	50.5
Proficient	22.1	18.4	15.2	15.7	19.9	26.7
Advanced/Proficient	86.9	86.8	91.3	93.3	90.4	87.2
Basic	9.8	7.9	4.8	4.4	4.7	13.8
Below Basic	3.3	5.4	3.9	2.3	4.9	9
# Taking Test	366	354	335	343	387	126,661

2013 Math Grade 6 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	70.3	70.8	50.1	51
Proficient	19.2	20.8	26.1	27.2
Advanced/Proficient	89.5	91.6	76.2	78.2
Basic	4.1	5.4	13.9	13.7
Below Basic	6.4	3	9.8	8
# of Tests Taken	219	168	64,471	62,175

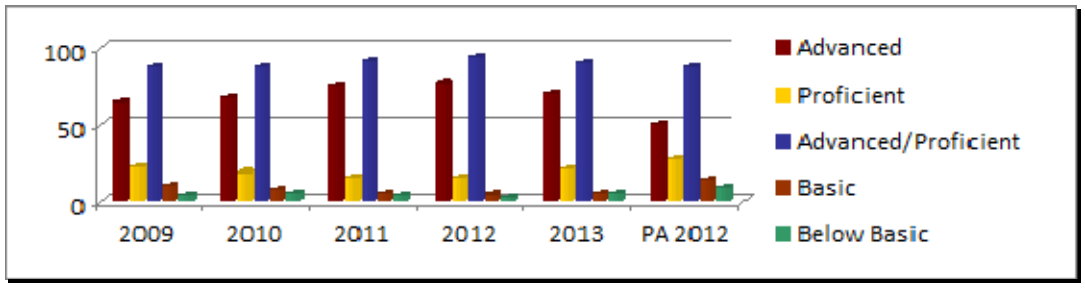
PSSA Math Grade 7 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	50.1	66.9	68.6	77.2	72.3	55.4
Proficient	31.7	23.7	19.3	15.7	17.9	24.7
Advanced/Proficient	81.8	90.6	87.9	92.9	90.2	80.1
Basic	12	6.4	6.8	4.7	5.5	10.8
Below Basic	6.2	3.1	5.4	2.4	4.4	9.2
# Taking Test	357	358	353	333	364	127,152

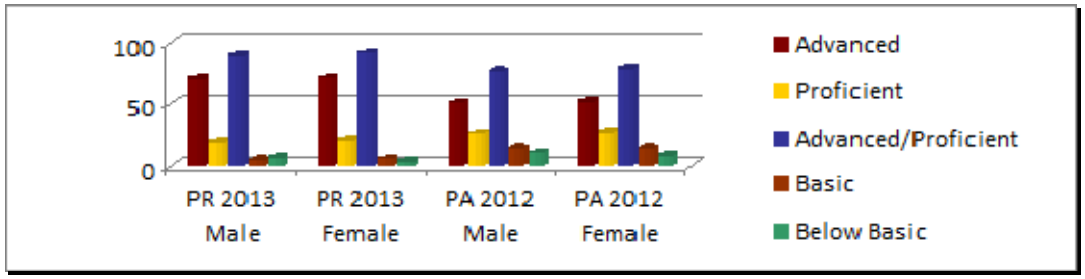
2013 Math Grade 7 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	72.3	72.3	54.6	56.1
Proficient	16	19.9	24	25.4
Advanced/Proficient	88.3	92.2	78.6	81.5
Basic	6.9	4	11.1	10.5
Below Basic	4.8	4	10.4	7.9
# of Tests Taken	188	176	64,787	62,354

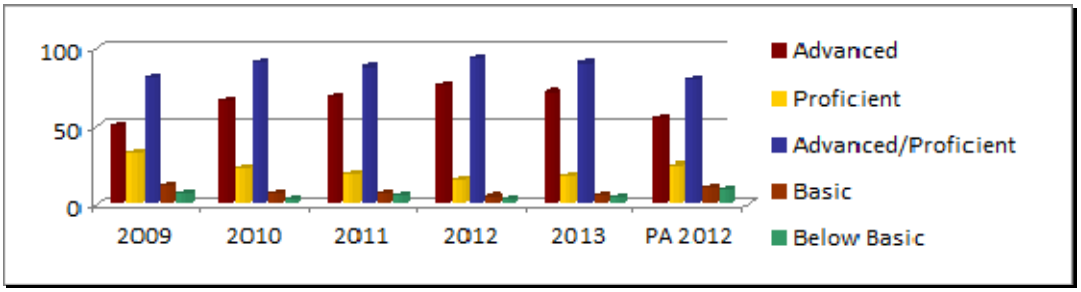
PSSA Math Grade 6 over Time



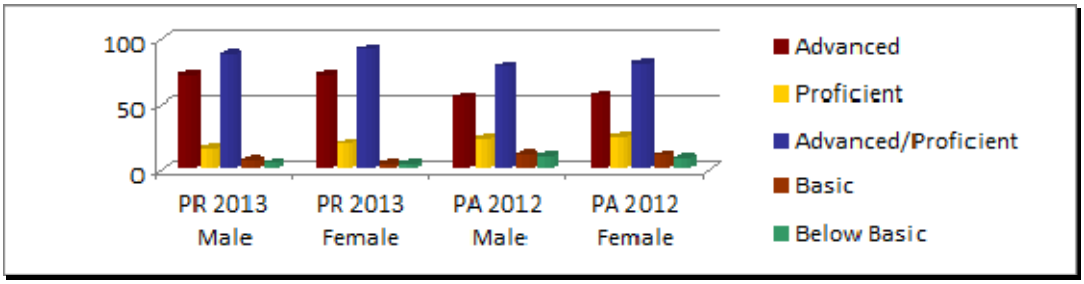
2013 Math Grade 6 by Gender



PSSA Math Grade 7 over Time



2013 Math Grade 7 by Gender



Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

PSSA Math Grade 8 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	67.3	66.4	70.8	76.7	69.9	51.4
Proficient	23.2	24	23.1	19.3	22.9	25
Advanced/Proficient	90.5	90.4	93.9	96	92.8	76.4
Basic	5.4	8.2	5.4	2.9	3.7	12.2
Below Basic	4.1	1.4	0.8	1.2	3.4	11.4
# Taking Test	367	354	373	347	349	126,204

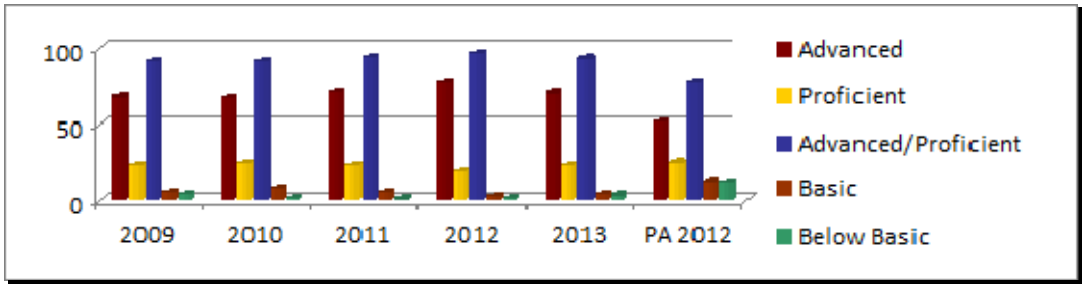
2013 Math Grade 8 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	74.3	65.1	50.7	52.2
Proficient	17.5	28.9	24.4	25.7
Advanced/Proficient	91.8	94	75.1	77.9
Basic	3.3	4.2	12.3	12.1
Below Basic	4.9	1.8	12.6	10
# of Tests Taken	183	166	64,238	61,931

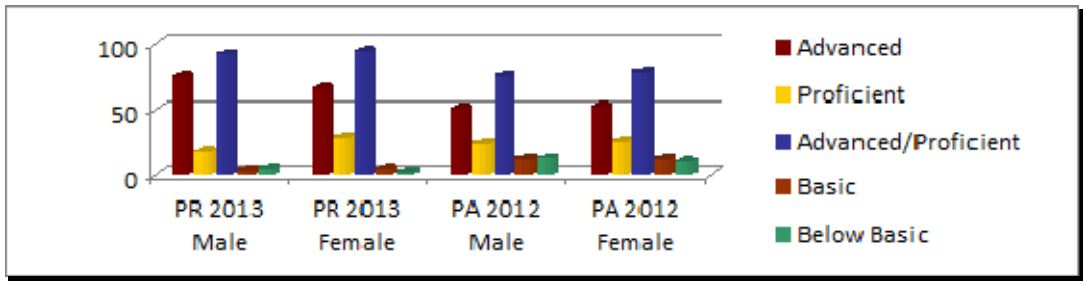
PSSA Math Grade 11 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	37.8	45.4	41.1	54.5	N/A	30.4
Proficient	39.9	31.6	34.9	30.6	N/A	29.6
Advanced/Proficient	77.7	77	76	85.1	N/A	60
Basic	13.1	10.4	12.6	8	N/A	16.8
Below Basic	9.2	12.6	11.3	6.9	N/A	23.2
# Taking Test	336	326	372	363	N/A	125,113

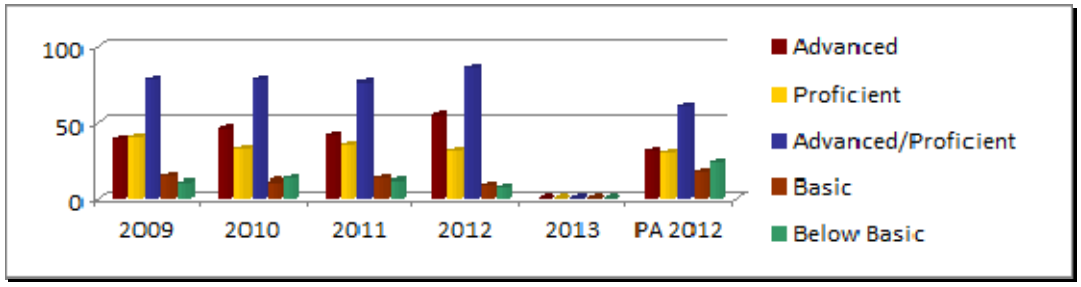
PSSA Math Grade 8 over Time



2013 Math Grade 8 by Gender



PSSA Math Grade 11 over Time



PSSA Math: Results and Findings

- Pine-Richland students consistently outperform the state average in all grade levels and tested areas.
- Based on 2013 results, PRSD achieved 90% or above combined advanced/proficient results in PSSA math for the first time at all grade levels.
- All grades met the state target of 89% proficient in math.
- From a broad perspective, a five year comparison of PRSD levels and trends in mathematics indicates high, stable scores.
- In 3rd grade math, 94.6% of students scored at the advanced/proficient level. A three year trend indicates a slight decline in the advanced/proficient performance level. In 2013, 3rd grade advanced/proficient data are among the lowest percentages in the last five years.
- In 3rd grade overall the percent of students scoring basic has increased for the past three years with 5.1% in 2013, a five year high.
- In 5th grade math, 91.4% of students scored at the advanced/proficient level. A five year positive trend indicates an increase in students at the advanced level (i.e., 64.4% last year). A five year trend also demonstrates a decrease in the percentage of students scoring at the below basic level (i.e., 0.3% last year).
- Except for 5th grade, percentages of students scoring at the advanced/proficient level in all other grades decreased in 2013 from 2012.
- In PSSA math, the 2013 results demonstrate that male and female students are performing at similar levels across all tested grade levels.
- With respect to combined advanced/proficient performance in PSSA math, females outperform males in grades 3, 5, 6, 7, and 8. The differences do not appear significant.

Areas for Future Study

- What change, if any, has occurred in the curriculum and instructional approach with mathematics at all levels of the program?
- What are the specific standards or eligible content areas that are strengths? Opportunities for improvement? What trends exist, if any, related to content?
- Given the high level of achievement on the PSSA math exams, are students – in general and by performance groups – making “a year’s worth of growth in a year’s time”?
- Do the PSSA gender differences continue at the high school level?

Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

READING

PSSA Reading Grade 3 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	36.3	44.5	39.1	45.7	43.2	27.9
Proficient	51.1	44.8	53.3	46.9	47.7	46.9
Advanced/Proficient	87.4	89.3	92.4	92.6	90.9	74.8
Basic	5.8	6	4.6	3.1	4	10
Below Basic	6.8	4.6	2.9	4.3	5.1	15.9
# Taking Test	325	366	345	324	360	126,062

HANCE PSSA Reading Grade 3 over Time

	2009	2010	2011	2012	2013
Advanced	35.7	40.8	39.4	43.2	40.5
Proficient	46.4	48.5	52.3	44.4	50.5
Advanced/Proficient	82.1	89.3	91.7	87.6	91
Basic	8	6.8	4.6	3.7	3.6
Below Basic	9.8	3.9	3.7	8.6	5.4
# Taking Test	112	103	109	81	111

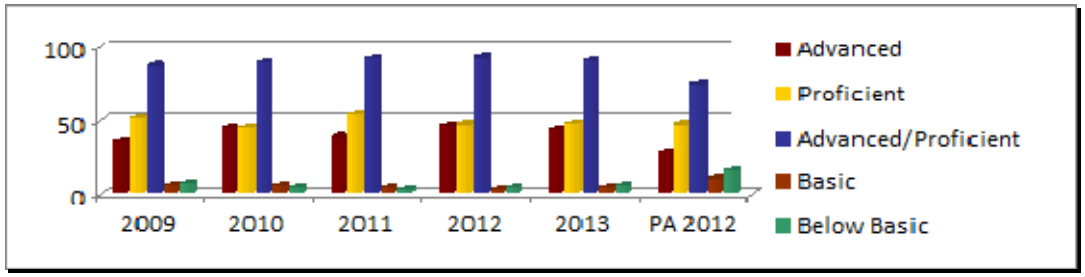
RICHLAND PSSA Reading Grade 3 over Time

	2009	2010	2011	2012	2013
Advanced	29.7	51.4	37.9	35.7	41.2
Proficient	58.4	43.5	51.7	60.5	46.2
Advanced/Proficient	88.1	94.9	89.6	96.2	87.4
Basic	5.9	2.9	6.9	3.1	4.2
Below Basic	5.9	2.2	3.4	0.8	8.4
# Taking Test	101	138	116	130	119

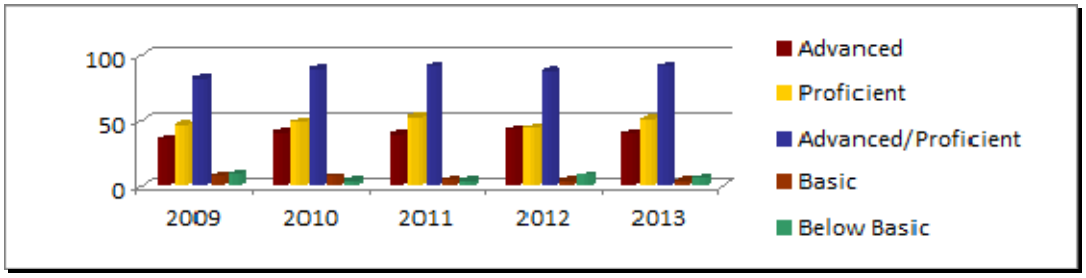
WEXFORD PSSA Reading Grade 3 over Time

	2009	2010	2011	2012	2013
Advanced	42.9	39.7	40.5	58.8	46.8
Proficient	49.1	43.7	55.4	33.3	46.8
Advanced/Proficient	92	83.4	95.9	92.1	93.6
Basic	3.6	8.7	2.5	2.6	4
Below Basic	4.5	7.9	1.7	5.3	2.4
# Taking Test	112	126	121	114	126

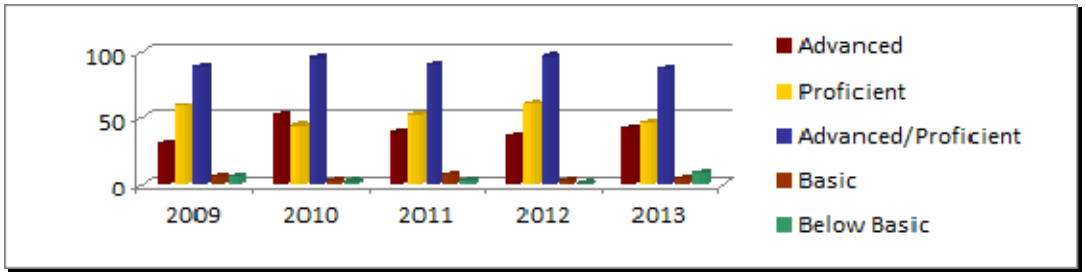
PSSA Reading Grade 3 over Time



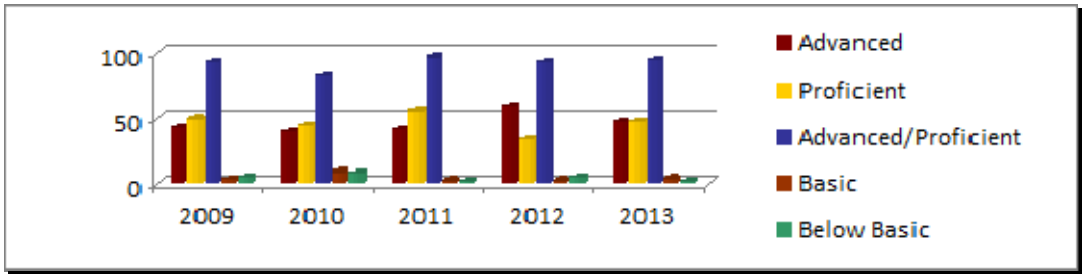
HANCE PSSA Reading Grade 3 over Time



RICHLAND PSSA Reading Grade 3 over Time



WEXFORD PSSA Reading Grade 3 over Time

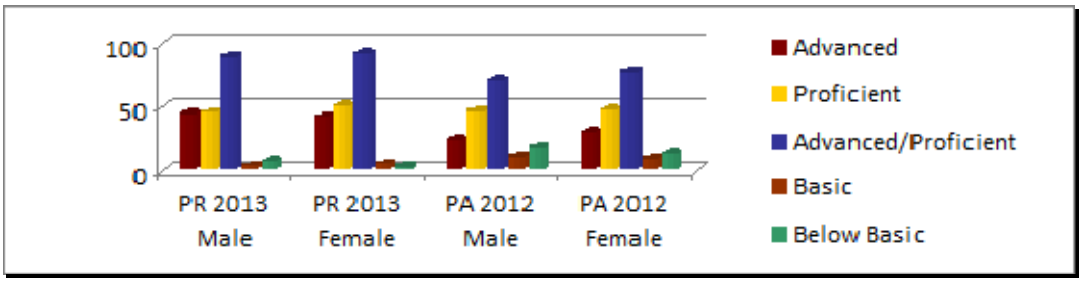


Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

2013 Reading Grade 3 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	44.3	42.1	24.1	30.3
Proficient	45.4	50.3	46.6	47.2
Advanced/Proficient	89.7	92.4	70.7	77.5
Basic	3.3	4.7	10.6	9.3
Below Basic	7.1	2.9	18.6	13.1
# of Tests Taken	183	171	64,143	61,872

2013 Reading Grade 3 by Gender



Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

PSSA Reading Grade 4 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	52.5	45.2	46.3	41.7	43.7	30.8
Proficient	36.1	37.1	42.1	49.4	40.4	41.3
Advanced/Proficient	88.6	82.3	88.4	91.1	84.1	72.1
Basic	5	11.1	9.9	6.8	12.1	14.4
Below Basic	6.5	6.6	1.7	2.1	3.8	13.5
# Taking Test	341	334	363	336	339	121,479

2013 Reading Grade 4 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	35.7	52.9	28.1	33.5
Proficient	44.5	35.7	41.3	41.2
Advanced/Proficient	80.2	88.6	69.4	74.7
Basic	15.4	8.3	14.9	13.9
Below Basic	4.4	3.2	15.6	11.4
# of Tests Taken	182	157	61,756	59,695

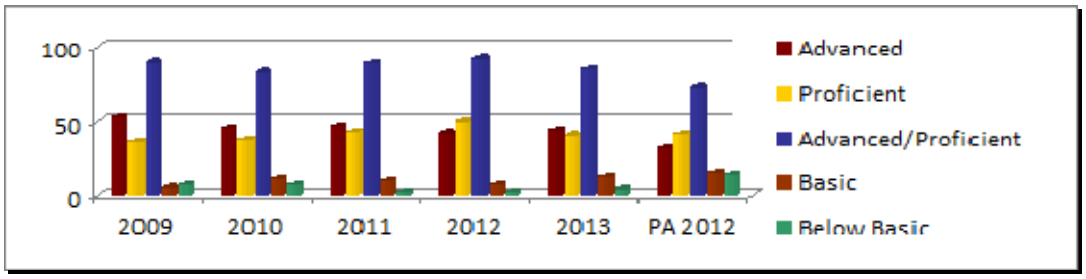
PSSA Reading Grade 5 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	27.6	27	29.9	41.5	36.5	28.3
Proficient	49.1	47.2	49.7	40.2	44.8	36.7
Advanced/Proficient	76.7	74.2	79.6	81.7	81.3	65
Basic	11.5	16	15.6	13.7	13.2	18
Below Basic	11.8	9.8	4.8	4.6	5.5	17
# Taking Test	348	337	334	371	348	124,007

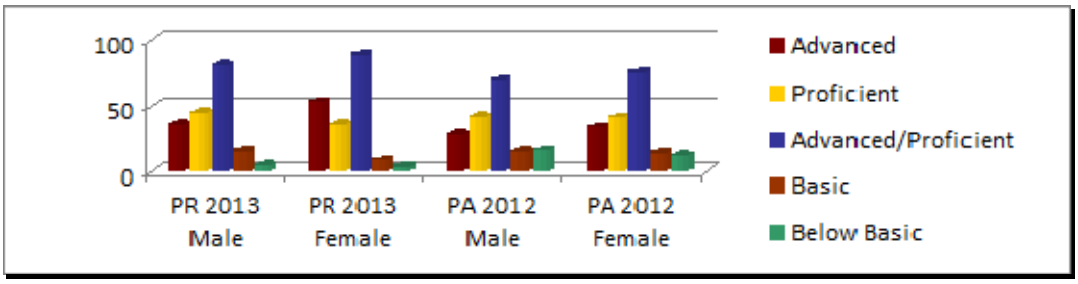
2013 Reading Grade 5 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	30.2	43.4	24.8	32
Proficient	44	45.8	36.7	36.6
Advanced/Proficient	74.2	89.2	61.5	68.6
Basic	17	9	18.9	17.1
Below Basic	8.8	1.8	19.6	14.3
# of Tests Taken	182	166	62,752	61,227

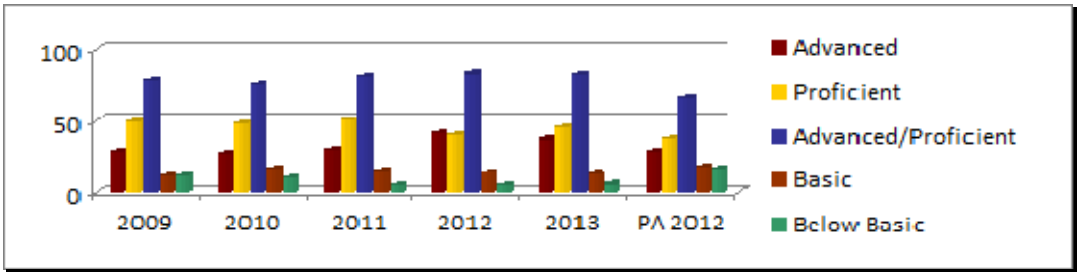
PSSA Reading Grade 4 over Time



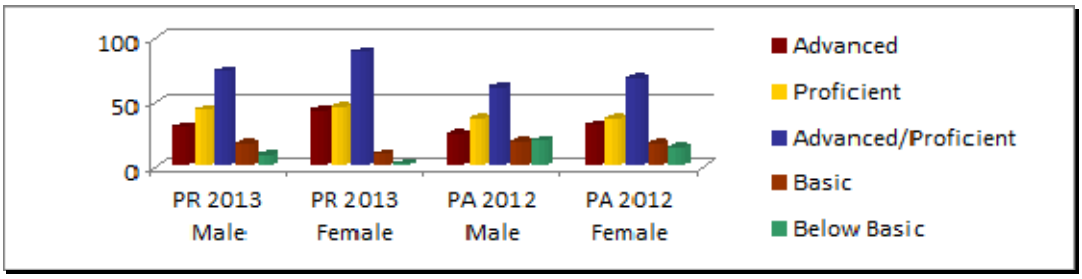
2013 Reading Grade 4 by Gender



PSSA Reading Grade 5 over Time



2013 Reading Grade 5 by Gender



Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

PSSA Reading Grade 6 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	47.5	51	62.9	51.5	51.4	37.4
Proficient	35.5	28.3	27.2	34.5	29.4	31.1
Advanced/Proficient	83	79.3	90.1	86	80.8	68.5
Basic	12	12.5	5.7	10.5	14.3	17.3
Below Basic	4.9	8.3	4.2	3.5	4.9	14.2
# Taking Test	366	361	334	342	385	126,146

2013 Reading Grade 6 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	46.5	57.7	32.6	42.4
Proficient	28.6	30.4	31.7	30.6
Advanced/Proficient	75.1	88.1	64.3	73
Basic	18.4	8.9	18.5	16.1
Below Basic	6.5	3	17.3	11
# of Tests Taken	217	168	64,025	62,106

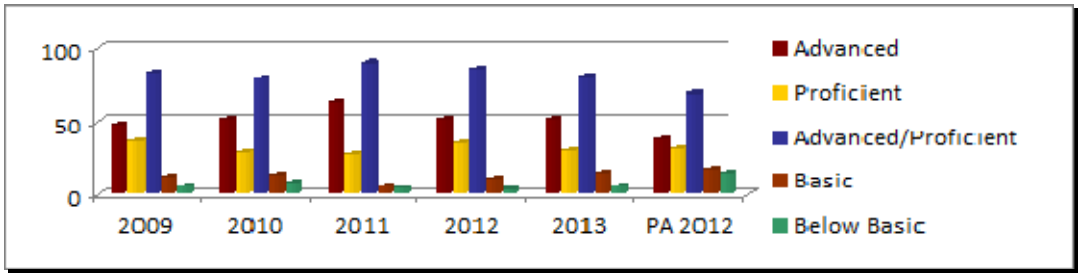
PSSA Reading Grade 7 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	58	58.9	61.7	60.1	64.5	41.3
Proficient	23.8	30.4	27.3	34	24	34.7
Advanced/Proficient	81.8	89.3	89	94.1	88.5	76
Basic	14.8	7.7	6.2	4.4	7.7	13.2
Below Basic	3.4	3	4.8	1.5	3.9	10.7
# Taking Test	357	365	355	338	363	128,765

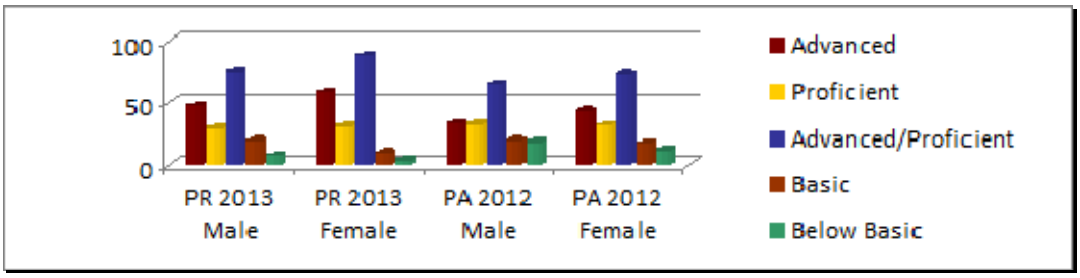
2013 Reading Grade 7 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	60.4	68.8	37.1	45.7
Proficient	23	25	34.9	34.6
Advanced/Proficient	83.4	93.8	72	80.3
Basic	9.6	5.7	14.2	12.2
Below Basic	7	0.6	13.8	7.5
# of Tests Taken	187	176	64,449	62,304

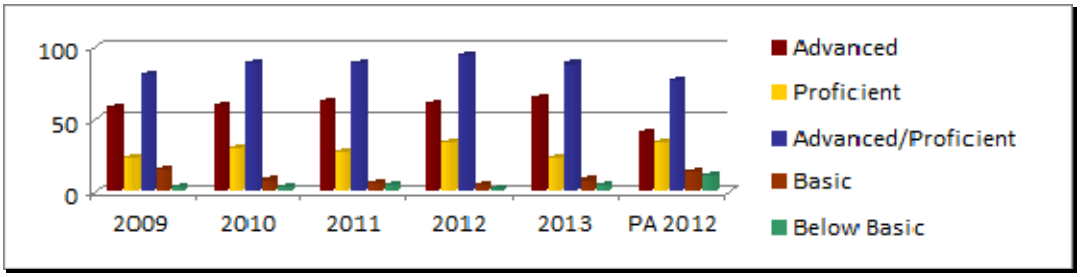
PSSA Reading Grade 6 over Time



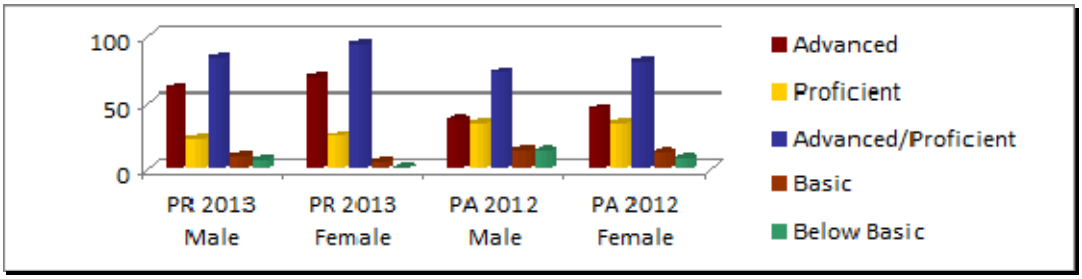
2013 Reading Grade 6 by Gender



PSSA Reading Grade 7 over Time



2013 Reading Grade 7 by Gender



Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

PSSA Reading Grade 8 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	76.2	71.1	77.5	80.7	75.9	55.7
Proficient	16.9	21.4	19.3	14.7	18.1	24.1
Advanced/Proficient	93.1	92.5	96.8	95.4	94	79.2
Basic	3.6	5.3	2.9	3.5	2.3	11.3
Below Basic	3.3	2.2	0.3	1.2	3.7	9
# Taking Test	366	360	374	341	349	126,250

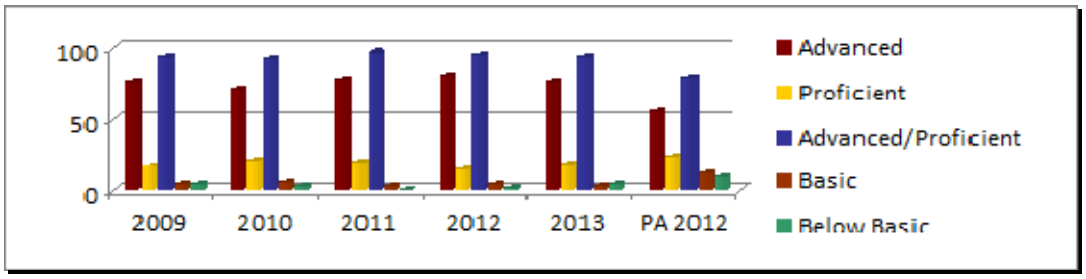
2013 Reading Grade 8 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	70.5	81.9	49.9	61.8
Proficient	20.8	15.1	25.4	22.7
Advanced/Proficient	91.3	97	75.3	84.5
Basic	3.3	1.2	13	9.5
Below Basic	5.5	1.8	11.7	6.1
# of Tests Taken	183	166	64,155	62,064

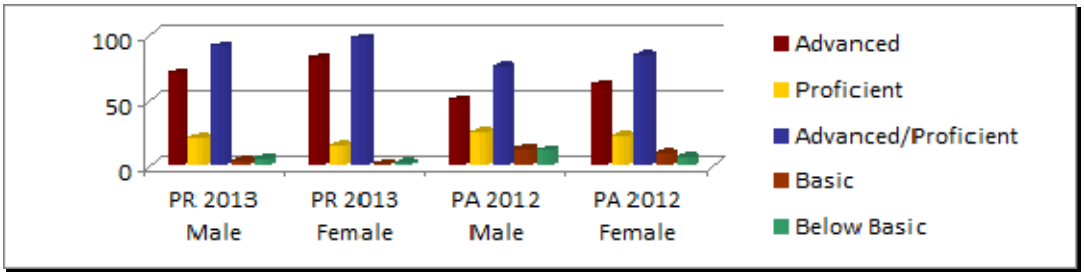
PSSA Reading Grade 11 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	40.1	46.8	47.5	53.3	N/A	34.2
Proficient	39.8	32	33.6	35.1	N/A	33.6
Advanced/Proficient	79.9	78.8	81.1	88.4	N/A	67.8
Basic	13.4	10.8	9.6	8.3	N/A	16.5
Below Basic	6.8	10.5	9.3	3.3	N/A	15.7
# Taking Test	336	325	366	362	N/A	125,380

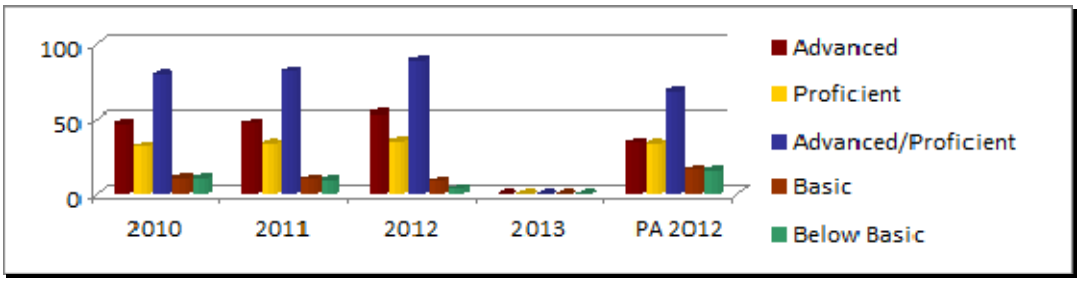
PSSA Reading Grade 8 over Time



2013 Reading Grade 8 by Gender



PSSA Reading Grade 11 over Time



PSSA Reading: Results and Findings

- From a broad perspective, a five year comparison of PRSD levels and trends in reading indicates high, stable scores.
- From a state-wide perspective, the "average" combined advanced/proficient results for students in reading are approximately 8% lower than the "average" combined advanced/proficient results in mathematics.
- From a broad perspective, PRSD students are outperforming the "state average" in a similar ratio in both reading and mathematics.
- In 3rd grade reading, 90.9% of students scored at the advanced/proficient level. A three year trend indicates a slight increase in the percentage of students scoring at the below basic level (i.e., 5.1% in 2013 from 4.3% last year). A similar below basic trend occurs in 4th grade and 8th grade.
- In 8th grade, 94% of students scored at the advanced/proficient level.
- Every grade level saw a decrease in the percentage of students scoring in the advanced/proficient level from 2012 to 2013 with 5th grade having the smallest decrease.
- Given the high, stable results in reading, little additional trend data is evident from an analysis of achievement results on the PSSA.
- In PSSA reading, the 2013 combined advanced/proficient results demonstrate that female students are outperforming male students at all grade levels. In many cases, this gap approaches or exceeds a 10% difference.
- In PSSA reading, the 2013 results demonstrate that a greater percentage of male students perform at the basic/below basic level than do female students, a gap that approaches or exceeds a 10% difference.

Areas for Future Study

- What change, if any, has occurred with the reading curriculum at all levels of the program?
- What are the specific standards or eligible content areas that are strengths? Opportunities for improvement? What trends exist, if any, related to content?
- Given the high level of achievement on the PSSA reading exams, are students – in general and by performance groups – making "a year's worth of growth in a year's time"?
- How can more students achieve at the advanced level for reading?

Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

WRITING

PSSA Writing Grade 5 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	11.2	3.5	3.5	1	2	1.7
Proficient	66.5	77.4	81.2	75.6	74.6	62.5
Advanced/Proficient	77.7	80.9	84.7	76.6	76.6	64.2
Basic	21.8	18.2	15	23.4	23.3	34
Below Basic	0.6	0.9	0.3	0	0	1.8
# Taking Test	349	341	346	381	343	127,549

2013 Writing Grade 5 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	1.1	3	0.8	2.6
Proficient	64.2	86	55.1	70.3
Advanced/Proficient	65.3	89	55.9	72.9
Basic	34.6	11	41.4	26.2
Below Basic	0	0	2.7	0.9
# of Tests Taken	179	164	65,074	62,453

PSSA Writing Grade 8 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	32.6	21.8	14.2	26.6	20.7	10.5
Proficient	58.4	71.5	75.7	66.7	71.5	62.2
Advanced/Proficient	91	93.3	89.9	93.3	92.2	72.7
Basic	8.8	6.7	10	5.9	6.9	24.1
Below Basic	0.3	0	0	0.8	0.9	3.2
# Taking Test	365	358	379	354	347	129,035

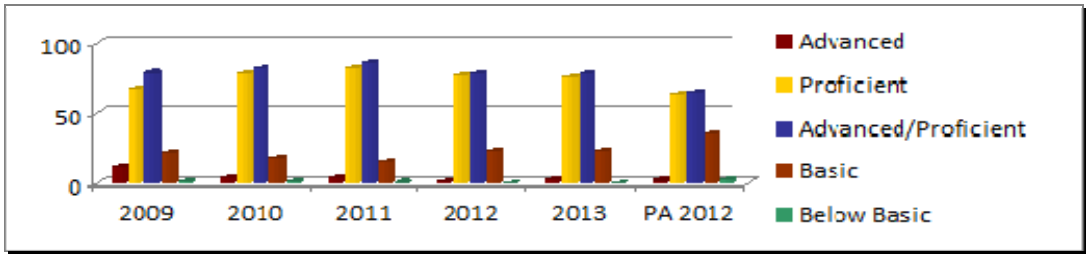
2013 Writing Grade 8 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	15.4	26.7	6.9	14.4
Proficient	72.5	70.3	58.2	66.4
Advanced/Proficient	87.9	97	65.1	80.8
Basic	10.4	3	30.1	17.7
Below Basic	1.6	0	4.8	1.5
# of Tests Taken	182	165	65,923	63,076

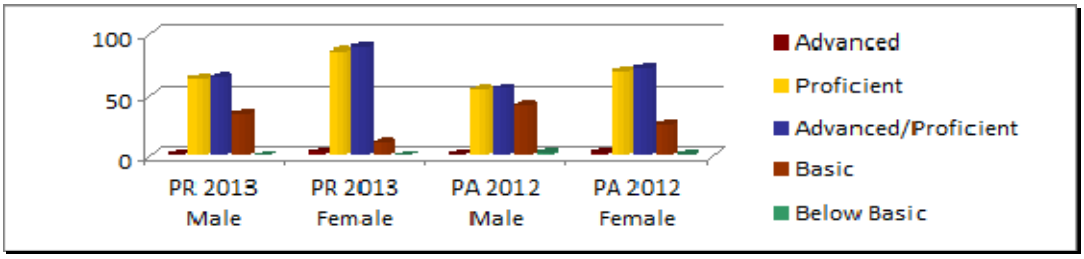
PSSA Writing Grade 11 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	19.2	12	29.7	12.7	N/A	13.6
Proficient	71.1	64.6	58.3	81.6	N/A	69.3
Advanced/Proficient	90.3	76.6	88	94.3	N/A	82.9
Basic	9.3	20.9	10.4	5.7	N/A	14.6
Below Basic	0.3	2.5	1.6	0	N/A	2.5
# Taking Test	342	316	367	370	N/A	125,095

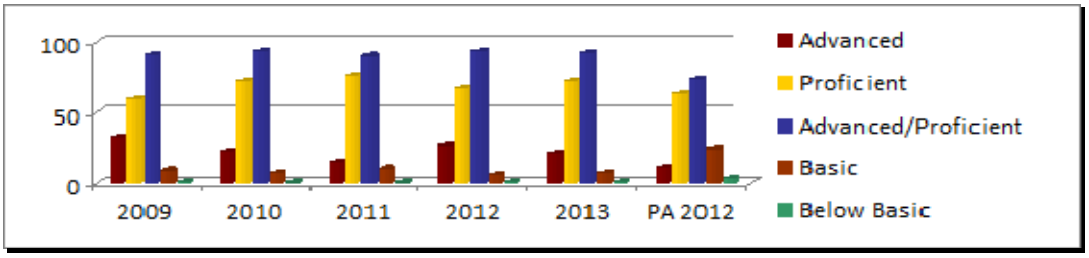
PSSA Writing Grade 5 over Time



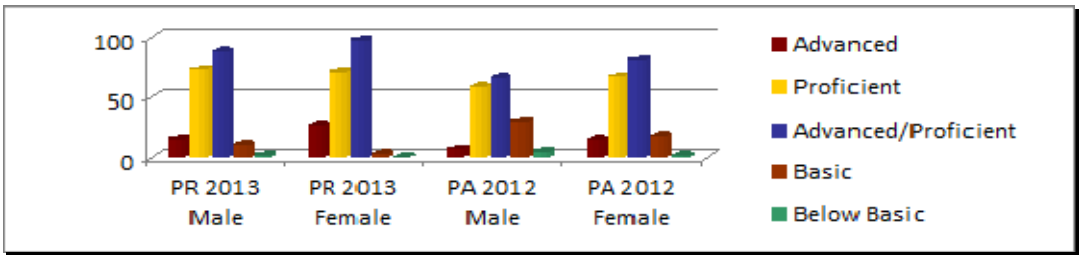
2013 Writing Grade 5 by Gender



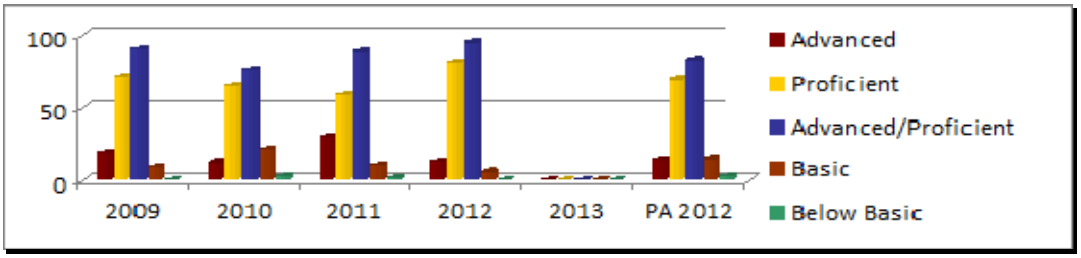
PSSA Writing Grade 8 over Time



2013 Writing Grade 8 by Gender



PSSA Writing Grade 11 over Time



PSSA Writing: Results and Findings

- In the area of writing, the state "average" percentage for the advanced performance level is markedly lower than any other assessment.
- For NCLB accountability proposes, Pennsylvania has set no proficiency targets for writing.
- PRSD performance on the PSSA writing assessment is stable with little trend information.
- The percentage of students at the advanced level is markedly lower than that of the proficient level. This effect is different first, from math test scores in which the percentage of students scoring advanced is, at each grade level, much higher than proficient, and second, from reading test scores in which the percentage of students in advanced rather than proficient grows across the grade levels.
- The possibility of moving more students into the advanced category exists.
- In PSSA writing, the 2013 combined advanced/proficient results demonstrate that female students outperform males by 24% and 9% in the 5^{th} and 8^{th} grade respectively.
- This same performance gap exists in the combined basic and below basic category with a greater percentage of male students scoring basic and below basic than female students.

Areas for Future Study

- What are the specific standards or eligible content areas that are strengths? Opportunities for improvement? What trends exist, if any, related to content?
- What kinds of writing are assigned at the primary and upper elementary levels? How rigorous are they?
- How can more students score advanced in writing?
- Do the PSSA gender differences continue at the high school level?
- How can the achievement of boys be better supported?
- Would a consistent, developmentally appropriate rubric help improve the type and consistency of feedback in writing assignments?

Pine-Richland School District
PSSA Test Results
Percentages in Performance Levels by Grade Level over Time and by Gender

SCIENCE

PSSA Science Grade 4 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	56.3	56.1	64.2	56.9	54.4	44.5
Proficient	34.9	32.8	29.8	37.1	37.9	37.8
Advanced/Proficient	91.2	88.9	94	94	92.3	82.3
Basic	5.6	7.5	4.6	4.6	6	11.6
Below Basic	3.2	3.6	1.3	1.4	1.6	6.1
# Taking Test	341	335	372	348	340	125,170

2013 Science Grade 4 by Gender

	PR 2013 Male	PR 2013 Female	PA 2012 Male	PA 2012 Female
Advanced	54.4	54.4	46.5	42.5
Proficient	37.9	38.6	35.7	39.9
Advanced/Proficient	92.3	93	82.2	82.4
Basic	6	5.7	11.2	12
Below Basic	1.6	1.3	6.6	5.6
# of Tests Taken	182	158	64,106	61,021

PSSA Science Grade 8 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	37.6	37.1	36.5	41.6	39.4	24.3
Proficient	37.6	40.7	42.1	40.4	45.1	35.4
Advanced/Proficient	75.2	77.8	78.6	82	84.5	59.7
Basic	14.7	13.3	14.7	13.7	10.6	19.5
Below Basic	10.1	8.9	6.7	4.4	4.9	20.9
# Taking Test	367	361	373	344	348	126,112

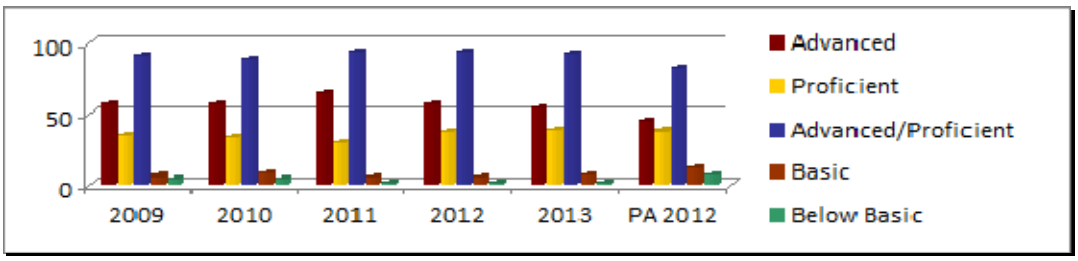
2013 Science Grade 8 by Gender

	PR 2013 Male	PR 2013 Male	PR 2013 Male	PR 2013 Male
Advanced	50	27.7	28	20.4
Proficient	34.1	57.2	33.4	37.4
Advanced/Proficient	84.1	84.9	61.4	57.8
Basic	9.9	11.4	17.3	21.8
Below Basic	6	3.6	21.2	20.5
# of Tests Taken	182	166	64,199	61,865

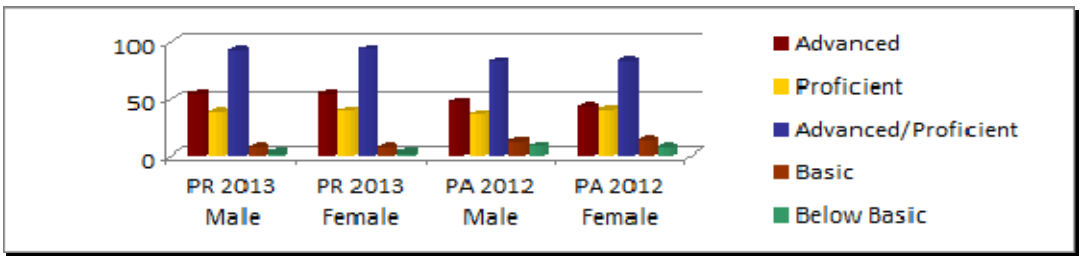
PSSA Science Grade 11 over Time

	2009	2010	2011	2012	2013	PA 2012
Advanced	23.9	25.9	22.6	24.9	N/A	14.2
Proficient	28.9	31.5	39.1	37.6	N/A	27.6
Advanced/Proficient	52.8	57.3	61.7	62.5	N/A	41.8
Basic	41.6	35.5	31.4	35.1	N/A	41.8
Below Basic	5.6	7.2	6.9	2.5	N/A	16.3
# Taking Test	339	321	363	362	N/A	121,693

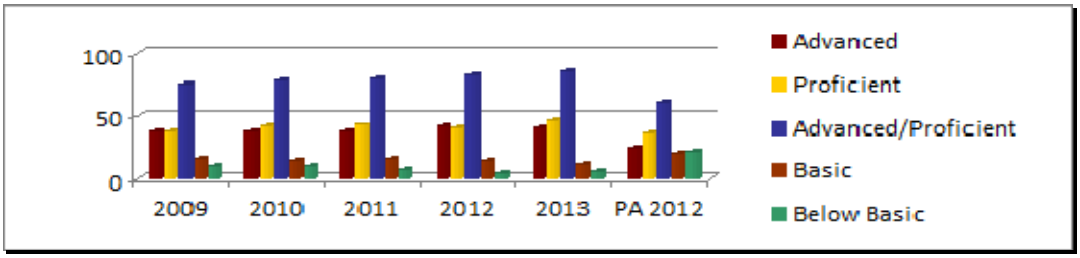
PSSA Science Grade 4 over Time



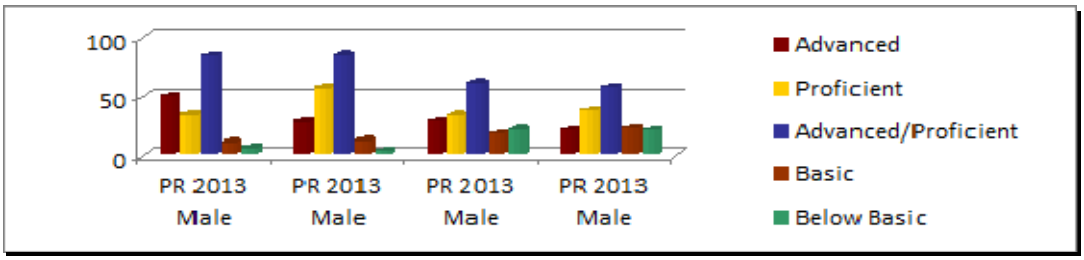
2013 Science Grade 4 by Gender



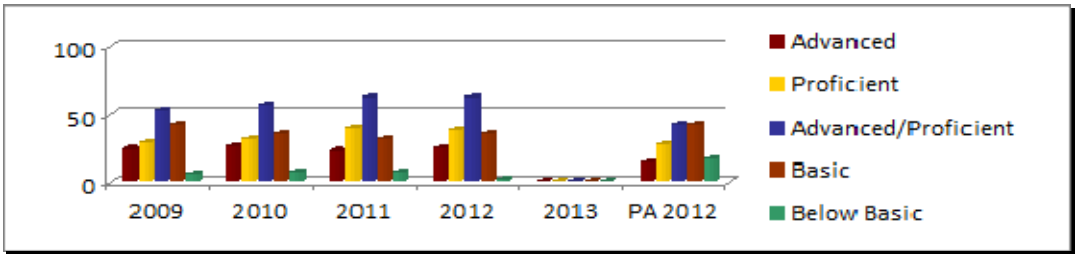
PSSA Science Grade 8 over Time



2013 Science Grade 8 by Gender



PSSA Science Grade 11 over Time



PSSA Science: Results and Findings

- In 4th and 8th grade, PSSA science results indicate a high level of combined advanced/proficient performance compared to the state.
- For NCLB accountability proposes, Pennsylvania has set no proficiency targets for science.
- In PSSA science, less than one percentage point separates the performance of male and female students at the advanced/proficient level in both 4th and 8th grade.
- In 4th grade, the percentage of students scoring advanced is the same for both male and female students.
- In 8th grade, the percentage of male students scoring advanced (50%) is almost twice the percentage of female students scoring advanced (27.7%).
- In 8th grade, a five year positive trend demonstrates an increase in advanced/proficient performance, from 75.2% in 2009 to 84.5% in 2013, a five year high.
- A three year positive trend in 8th grade demonstrates a decrease in students scoring basic, from 14.7% in 2009 to 10.6% in 2013, a five year low.

Areas for Future Study

- What are the specific standards or eligible content areas that are strengths? Opportunities for improvement? What trends exist, if any, related to content?
- In what ways do the math and science standards reinforce each other?
- How can science be integrated into other content areas?
- Do the PSSA gender differences continue at the high school level?

Keystone Exams

The Keystone Exams are end-of-course assessments designed to assess proficiency in designated subject areas. In 2013 Keystone Exams were given in Algebra I, Literature, and Biology. The Algebra I and Literature Keystone Exams include items written to the Assessment Anchors/Eligible Content aligned to the Pennsylvania Common Core Standards in Mathematics and English Language Arts. The Biology Keystone Exam includes items written to the Assessment Anchor/Eligible Content aligned to the enhanced Pennsylvania Academic Standards for Science.

Beginning in 2013, the Keystone Exams have replaced the grade 11 PSSA tests in math, reading, writing, and science. Student performance is measured with the same levels as the PSSA tests: advanced, proficient, basic, and below basic. The Keystone Exams are one component of Pennsylvania's new system of high school graduation requirements. The results of these exams at the student level serve as high school accountability measures for both federal and state purposes.

In the pages that follow are:

Pine-Richland School District
2013 Keystone Exam Results
Performance Level Percentages by Grade Level

2013 Keystone Algebra I

	Grade 7	Grade 8	Grade 9	Grade 10
Advanced	91.9	46.9	7.2	8.3
Proficient	8.1	44.1	36	16.7
Advanced/Proficient	100	91	43.2	25
Basic	0	9	45.3	58.3
Below Basic	0	0	11.5	16.7
# Tests Taken	62	211	139	12

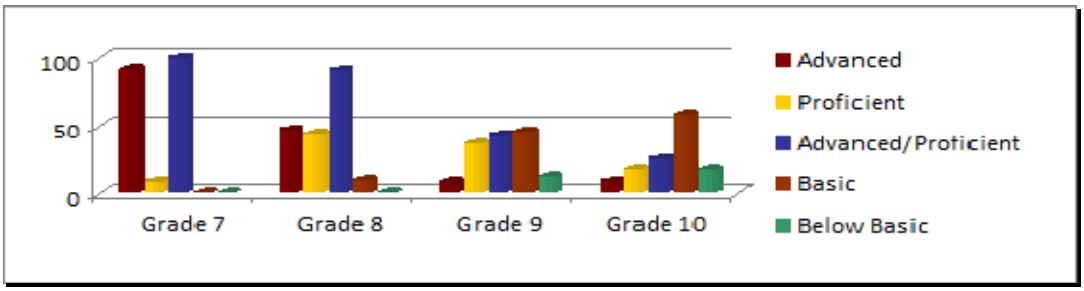
2013 Keystone Literature

	Grade 9	Grade 10
Advanced	18	23.1
Proficient	64.1	63.3
Advanced/Proficient	82.1	86.4
Basic	15.6	12.5
Below Basic	2.3	1.1
# Tests Taken	384	376

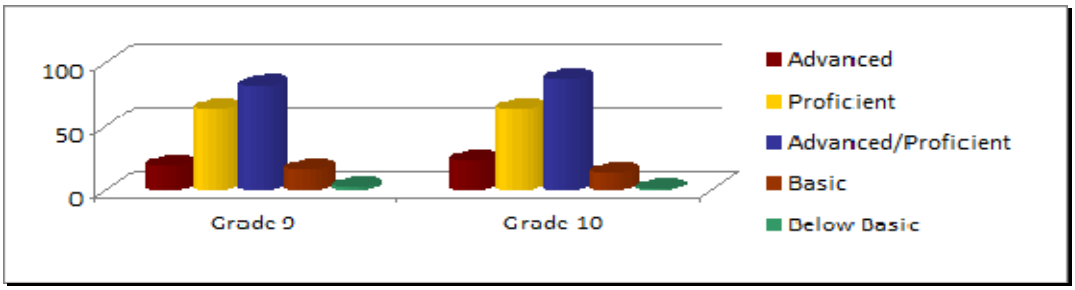
2013 Keystone Biology

	Grade 9	Grade 10
Advanced	60.1	14.3
Proficient	36	52.6
Advanced/Proficient	96.1	66.5
Basic	4	26.3
Below Basic	0	6.9
# Tests Taken	228	175

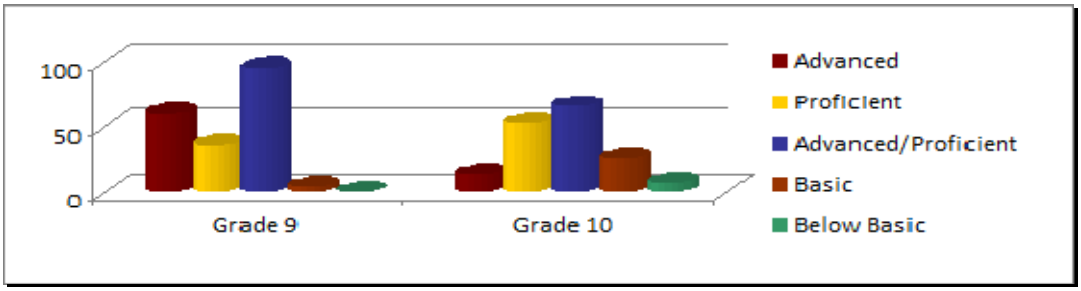
2013 Keystone Algebra I



2013 Keystone Literature



2013 Keystone Biology



Keystone Exams: Results and Findings

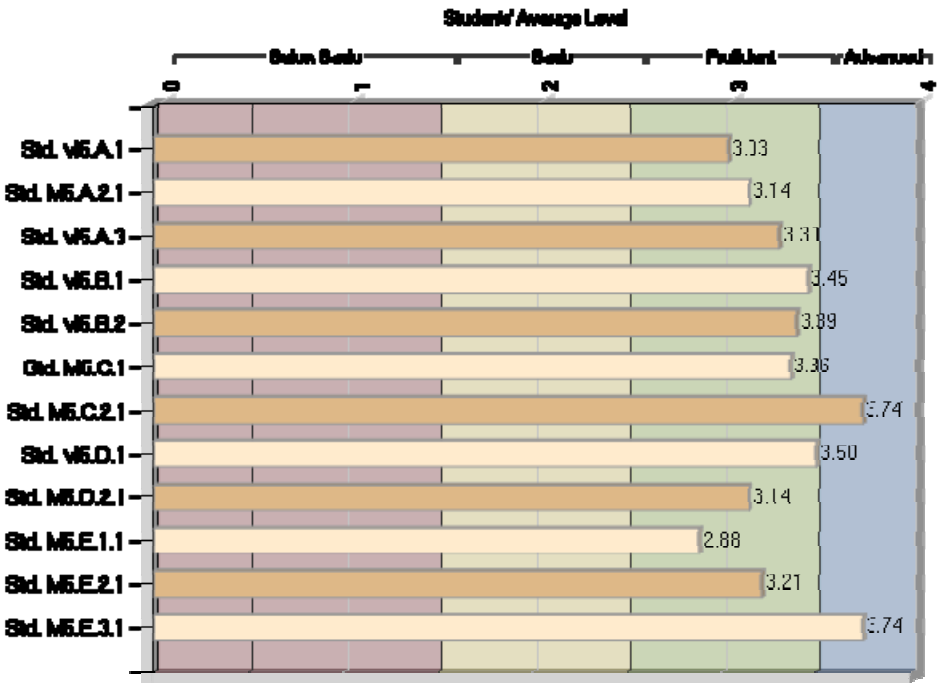
- Keystone Exam results become more difficult to analyze given the fact that testing occurs across multiple windows and the same test is given at multiple grade levels. In addition, the student's "best" performance reflects the combination of their best two "modules" of performance.
- In an analysis of 2013 results, student performance demonstrates a clear link to the pathways and course sequence for students in the areas of Algebra 1 and Biology. This may indicate that the placement system is functioning effectively.
- In the area of Literature, a decision can be made by PRSD to test at any time. The 2013 results show similar performance results when the test was taken by 9th and 10th grade students. By continuing to test in 9th grade, the district can focus intervention strategies on a smaller number of students in grade 10 and beyond.

Areas for Future Study

- What are statewide averages?
- How does the Keystone Exam performance correlate to the final report card grade of each student in each subject area?
- Does student performance on Keystone Exams correlate to performance on other tests, such AP exams?

PerformancePLUS Data Warehouse

At Pine-Richland, PSSA data is uploaded from the DRC file format into the eSchool data warehouse system known as PerformancePLUS. Report tools within PerformancePLUS allow the district to drill into the PSSA data to identify levels and trends by Standard/Assessment Anchor/Eligible Content. We have included some sample data to demonstrate the usefulness of this system. The following table provides a snapshot of the *2012-2013 5th Grade Math* results:



Relative Strengths

Organized by the standards, the following areas demonstrate the highest level of combined achievement by last year's fifth grade students:

- M5.C.2.1 Analyze transformations and/or use symmetry to analyze mathematical situations. (Reference: 2.9.5.K, 2.9.5.L)
- M5E.3.1 Predict or determine all possible combinations, outcomes and/or calculate the probability of a simple event. (Reference: 2.7.5.E, 2.7.5.H, 2.7.5.J)

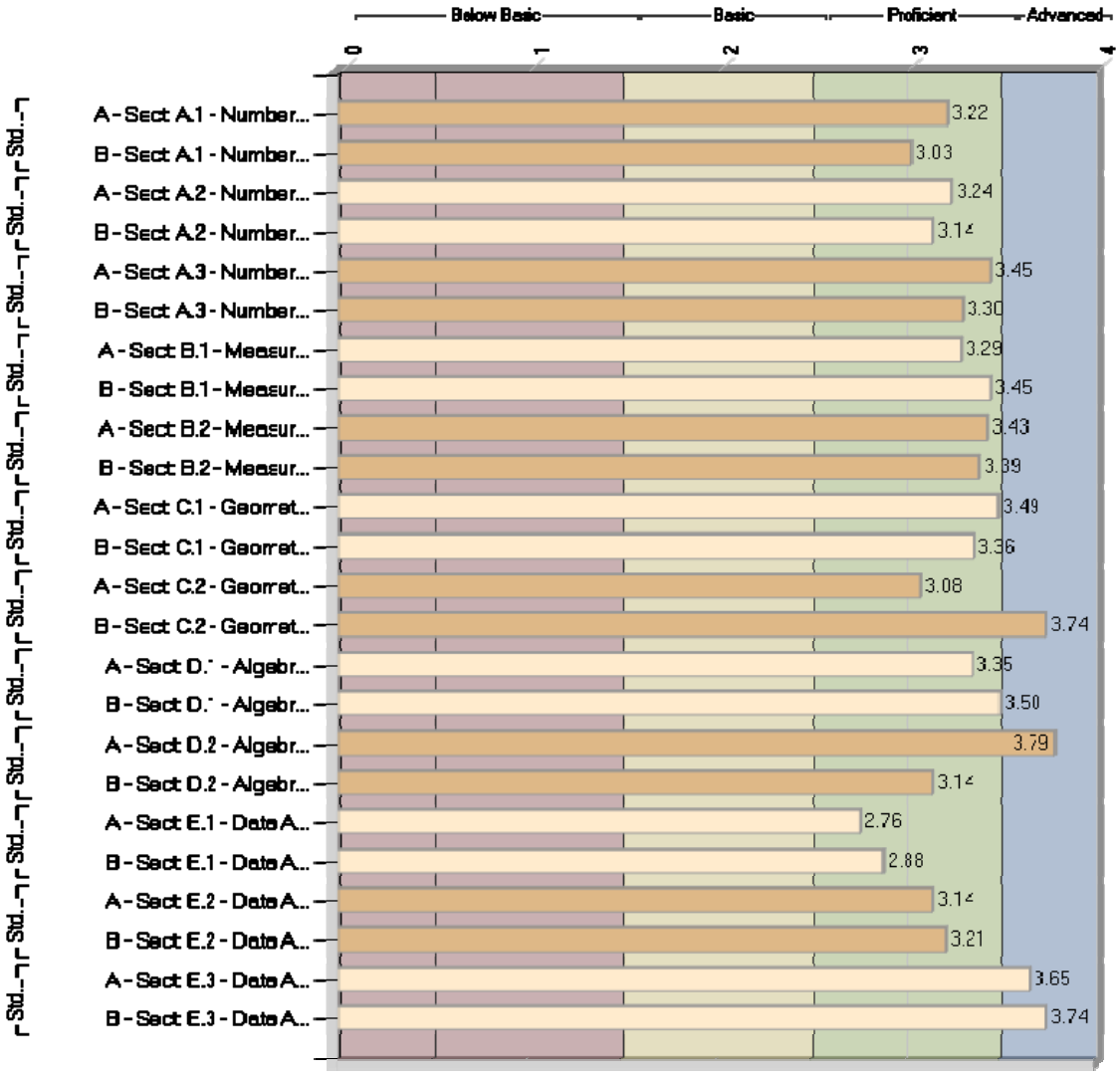
Relative Needs

In a similar manner, the lowest areas of performance were:

- M5.E.1.1 Organize, display and/or interpret data using pictographs, tallies, tables, charts, line, bar graphs. (Reference: 2.6.5.A, 2.6.5.C)
- M5.A.1 Numbers and Operations: Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers and number systems.
    - M5.A.1.1 : Express numbers in equivalent forms. (Reference: 2.1.5.A)
    - M5.A.1.2 : Demonstrate understanding of place value of whole numbers and decimals. (Reference: 2.1.3.I)
    - M5.A.1.3 : Compare quantities or magnitudes of numbers. (Reference: 2.11.5.A)
    - M5.A.1.4 : Use simple applications of negative numbers (number line, counting, temperature). (Reference: 2.1.5.F)

- M5.A.1.5 : Use or develop models to represent fractions and/or mixed numbers. (Reference: 2.1.5.D)
- M5.A.1.6 : Apply number theory concepts (i.e., primes, factors, multiples, composites). (Reference: 2.1.5.E)

As another example and extension of data analyses in PerformancePLUS, we also have the ability to compare different cohorts across the same assessment to determine trend performance by standard. This allows us to draw conclusions and/or inferences about areas of strength and focus. The following table compares a snapshot of *2011-2012 5th Grade Math (A) vs. 2012-2013 5th Grade Math (B):*



From a data analysis perspective, we have the tools to continue "drilling down" through the data to look for trends or levels that lead to additional questions. For example, we can now see that *M5.E.1.1-Organize, display and/or interpret data using pictographs, tallies, tables, charts, line, bar graphs* is the lowest performance standard for two years with two different sets of students. We can now ask a set of more specific questions about curriculum, alignment, instructional approach, etc. The purpose of this PerformancePLUS example is to demonstrate the fact that a variety of data tools exist to evaluate student performance and determine potential modifications in our instructional and curricular approach.

Pennsylvania Value-Added Assessment System (PVAAS)

For many years, school district performance and student learning was purely measured by achievement levels on the PSSA. The combined percentage of advanced and proficient students was used to comply with NCLB and determine adequate yearly progress (AYP). As a result, much attention was given to non-proficient students with less of a clear understanding of or focus on strategies to ensure that all students are growing in their learning as measured by the PSSA.

Advanced statistical methodologies have been developed to utilize available assessment results for students and cohorts of students to determine the degree of learning (i.e., growth). This is to help discern whether the students have made "one year of progress in one year's time." Both achievement and growth have become an even bigger emphasis in Pennsylvania as they relate to educator effectiveness (i.e., Act 82). Achievement and growth data combine to form various elements of the Pennsylvania School Performance Profile.

PVAAS has two primary purposes:

- Look back at school performance; and
- Look forward at individual student projections.

The 2013 PVAAS reports which are based on the 2012-2013 testing year were not available at the time this report was developed. Similar to PerformancePLUS, sample PVAAS analyses are included in this report to highlight the opportunities for data-driven decision-making in the district. A significant amount of training will be necessary to ensure that administration and staff are confident with the purpose and function of the PVAAS model. It will take time, communication, and ongoing training to embed this approach into the district.

The following examples are included for illustration purposes:

- Value-Added Report: Provides an overview of a building so the administration and staff can quickly identify strengths and challenges.
- Performance Diagnostic (Single Grade): Used to further disaggregate growth by predicted performance levels. It can be helpful when attempting to see the effectiveness of interventions and extensions.
- Quintile Diagnostic (Single Grade): Since PRSD has many high achieving students, this reports helps us further stratify a grade level.

The following table provides a snapshot of the *2012 District Value-Added Reading* results:

Estimated District Growth Measure								
Grade	3	4	5	6	7	8	Growth Measure over Grades Relative to	
Growth Standard		0.0	0.0	0.0	0.0	0.0		
State 3-Yr-Avg		0.8	-1.0	2.2	-0.2	0.7	Growth Standard	State
2010 Growth Measure		0.7 G	-6.2 R	3.9 DB	2.2 DB	0.3 G	**0.2 G**	**-0.3**
Standard Error		0.8	0.7	0.7	0.7	0.7	0.3	0.3
2011 Growth Measure		-3.3 R	0.1 G	12.0 DB	1.9 DB	1.3 LB	**2.4 DB**	**1.9**
Standard Error		0.7	0.7	0.8	0.7	0.7	0.3	0.3
2012 Growth Measure		-0.5 G	1.3 LB	3.4 DB	-3.1 R	3.1 DB	**0.9 DB**	**0.3**
Standard Error		0.7	0.7	0.8	0.8	0.7	0.3	0.3
3-Yr-Avg Growth Measure		-1.0 R	-1.6 R	6.5 DB	0.3 G	1.6 DB	**1.1 DB**	**0.6**
Standard Error		0.4	0.4	0.4	0.4	0.4	0.1	0.1

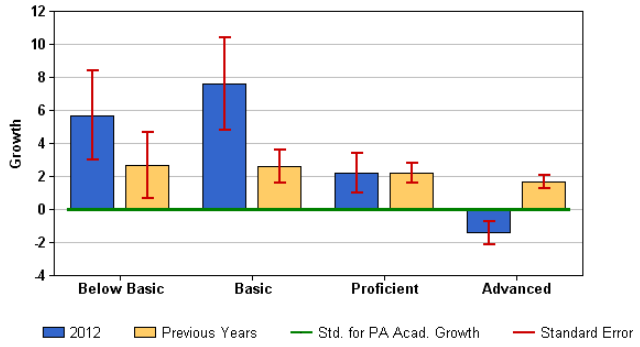
Estimated District Avg Achievement						
Grade	3	4	5	6	7	8
State Base Year (2006)	50.0	50.0	50.0	50.0	50.0	50.0
State 3-Yr-Avg	51.6	52.5	51.8	53.5	53.3	54.3
2009 Avg Achievement	57.9	61.8	56.8	60.7	61.1	65.5
2010 Avg Achievement	63.1	58.6	55.6	60.7	62.8	61.4
2011 Avg Achievement	61.0	59.8	58.7	67.7	62.5	64.2
2012 Avg Achievement	61.4	60.5	61.1	62.1	64.6	65.7

DB	Significant evidence that the district exceeded the standard for PA Academic Growth
LB	Moderate evidence that the district exceeded the standard for PA Academic Growth
G	Evidence that the district met the standard for PA Academic Growth
Y	Moderate evidence that the district did not meet the standard for PA Academic Growth
R	Significant evidence that the district did not meet the standard for PA Academic Growth

Achievement results (PSSA) and growth results (PVAAS) must be used together to get a complete picture of student learning.
PA Academic Growth defined as:
Math & Reading Grades 4-8: The standard for PA Academic Growth is met when the student group makes one year's growth/maintains their relative achievement level from one year to the next in relation to the statewide distribution (2006 baseline).

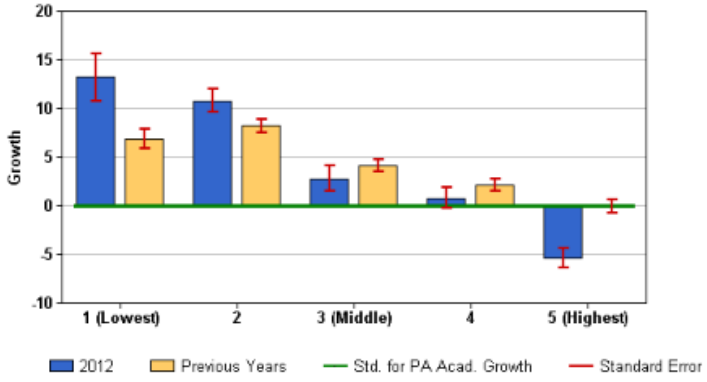
For the purpose of this initial report and presentation, a high level explanation of the *District Value-Added* report will be provided. The key at the bottom reflects the color/rating system. In the middle section, the "Estimated District Avg Achievement" outlines the normal curve equivalent score (NCE) that is used to report PSSA results by that cohort of students. It can be interpreted in a similar manner as percentile scores. In the top section, we see a single year and three year analysis of the learning progress made by a cohort in each grade level. The "Growth Measure over Grades" demonstrates the overall "net effect" of the district's educational programs on student learning. Again, this analysis is confined to performance on the PSSA reading assessment.

The following table provides a snapshot of the *2012 District Performance Diagnostic* results for seventh grade mathematics:



			Predicted Performance Level Group			
			Below Basic	Basic	Proficient	Advanced
Math	Std. for PA Acad. Growth		0.0	0.0	0.0	0.0
	2012	Growth	5.7	7.6	2.2	-1.4
		Standard Error	2.7	2.8	1.2	0.7
		# of Students	10	13	58	226
		% of Students	3.3	4.2	18.9	73.6
	Previous Years	Growth	**2.7**	**2.6**	**2.2**	**1.7**
		Standard Error	2.0	1.0	0.6	0.4
		# of Students	26	85	255	602
		% of Students	2.7	8.8	26.3	62.2

The following table provides a snapshot of the *2012 District Quintile Diagnostic* results for eighth grade mathematics:



			Prior-Achievement Quintile Group				
			1 (Lowest)	2	3 (Middle)	4	5 (Highest)
Math	Std. for PA Acad. Growth		0.0	0.0	0.0	0.0	0.0
	2012	Growth	13.2	10.8	2.8	0.8	-5.4
		Standard Error	2.4	1.2	1.3	1.1	1.0
		# of Students	18	41	63	100	111
		% of Students	5.4	12.3	18.9	30.0	33.3
	Previous Years	Growth	**6.9**	**8.2**	**4.1**	**2.1**	**-0.1**
		Standard Error	1.0	0.7	0.6	0.6	0.7
		# of Students	84	202	233	271	261
		% of Students	8.0	19.2	22.2	25.8	24.8

Growth is defined as average gain

Again, a high level explanation of this particular report will be provided. The *District Value - Added* report summarizes the growth of the entire cohort of students at a grade level. In order to look at smaller segments of each cohort, the *District Performance Diagnostic* and *District Quintile Diagnostic* reports are designed to look at student growth in a smaller cohort based on their past performance. The performance diagnostic report measures the growth based on prior performance level (i.e., Did students at the advanced level on the prior assessment maintain their relevant position to other advanced students on the new assessment? To what degree did that occur?). In the quintile diagnostic report, a deeper level of stratification occurs. This report is helpful when a district, like Pine-Richland, has a high percentage of students at the advanced level. It helps differentiate between "levels of advanced performance" in the analysis process. Each of these different tools helps the continuous improvement process.

Scholastic Aptitude Test (SAT)

The SAT is published by the College Board and administered typically to juniors and seniors in high school. Many colleges and universities require that applicants take the SAT as part of their admissions processes. The SAT is a four hour test that measures the critical thinking skills students need for academic success in college. Tests are given in math, critical reading, and writing. SAT scores are one indicator of a student's potential to do college work.

Each SAT test has a maximum score of 800 points; perfect scores on all three tests result in a combined score of 2400. The mean test score is set by the College Board at or near 500 in the score scale of 200-800. In 2013 the Pennsylvania School Performance Profile tracks the number of grade 12 students scoring 1550 or higher on the SAT. At Pine-Richland, 235 out of 328 seniors (71.6%) met this mark.

In the pages that follow are SAT test results for the past five year for math, critical reading, and writing for Pine-Richland School District, Pennsylvania and the Total Group. The Total Group refers to all students both nationally and internationally who took the SAT test. Also given is five years of participation data for Pine-Richland School District. Finally, test results for the past five years in how male students and female students scored on the SAT are given for both Pine-Richland School District and the Total Group so that comparisons can be made. Specific data can be found on the following pages:

Pine-Richland School District
SAT Results

PRSD Average SAT Scores over Time

	2009	2010	2011	2012	2013
Math	555	568	571	561	577
Critical Reading	532	544	546	543	549
Writing	530	532	533	535	550
Combined Total	1617	1644	1650	1639	1676

Pennsylvania Average SAT Scores over Time

	2009	2010	2011	2012	2013
Math	501	501	501	501	504
Critical Reading	493	492	493	491	494
Writing	483	480	479	480	482
Combined Total	1477	1473	1473	1472	1480

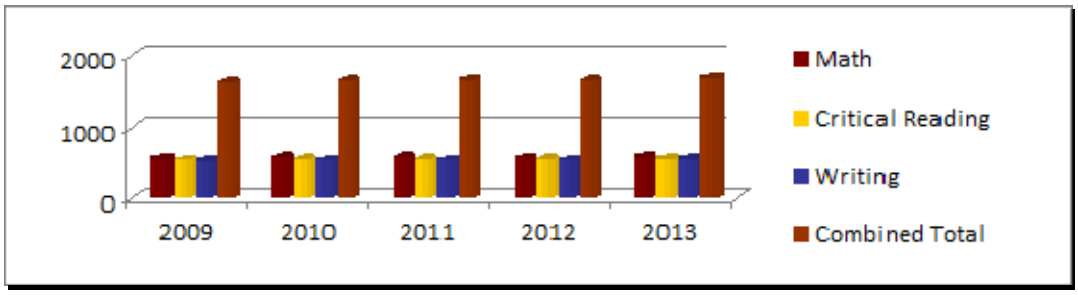
Total Group Average SAT Scores over Time

	2009	2010	2011	2012	2013
Math	515	516	514	514	514
Critical Reading	501	501	497	496	496
Writing	493	492	489	488	488
Combined Total	1509	1509	1500	1498	1496

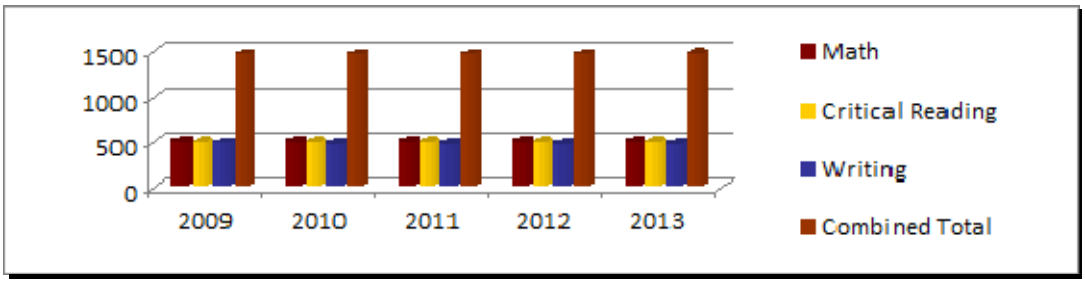
PRSD SAT Participation over Time

	2009	2010	2011	2012	2013
Total # taking test	285	289	295	331	328
Total # graduates	333	333	333	363	372
% taking test	85.6	86.8	88.6	91.2	88.2

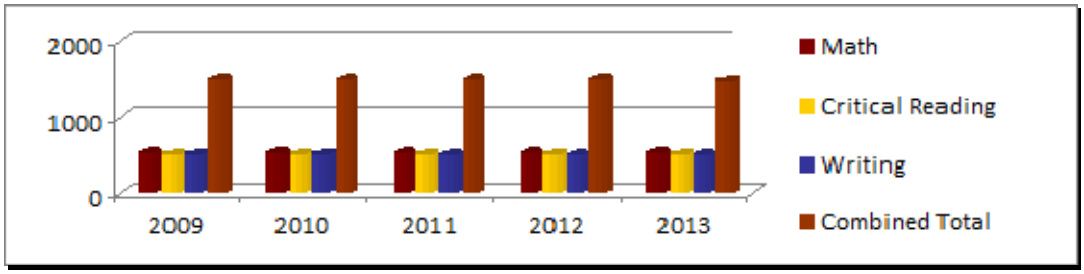
PRSD Average SAT Scores over Time



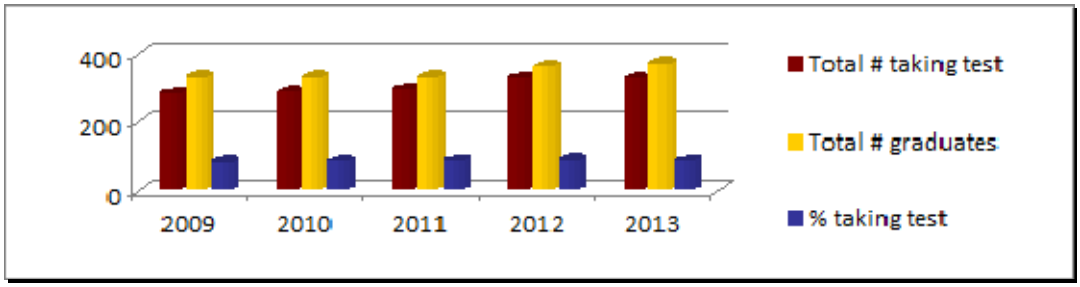
Pennsylvania Average SAT Scores over Time



Total Group Average SAT Scores over Time



PRSD SAT Participation over Time



Pine-Richland School District
SAT Results

PRSD Average Math SAT Scores by Gender over Time

	2009	2010	2011	2012	2013
Male	571	576	584	562	591
Female	540	559	556	560	562

Total Group Average Math SAT Scores by Gender Over Time

	2009	2010	2011	2012	2013
Male	533	533	531	532	531
Female	498	499	500	499	499

PRSD Average Critical Reading SAT Scores by Gender over Time

	2009	2010	2011	2012	2013
Male	526	532	551	533	547
Female	537	557	540	553	552

Total Group Average Critical Reading SAT Scores by Gender Over Time

	2009	2010	2011	2012	2013
Male	502	502	500	498	499
Female	497	498	495	493	494

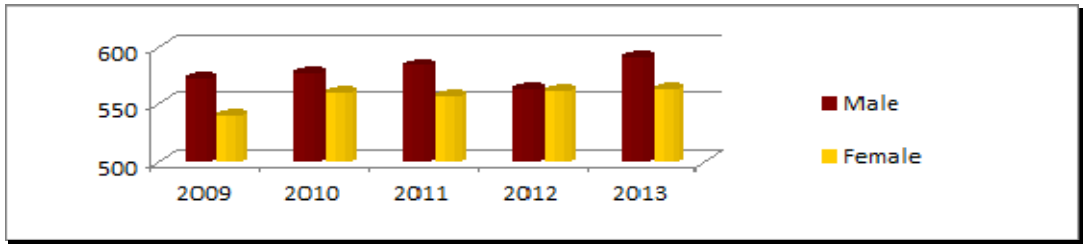
PRSD Average Writing SAT Scores by Gender over Time

	2009	2010	2011	2012	2013
Male	513	506	523	515	539
Female	547	559	544	555	564

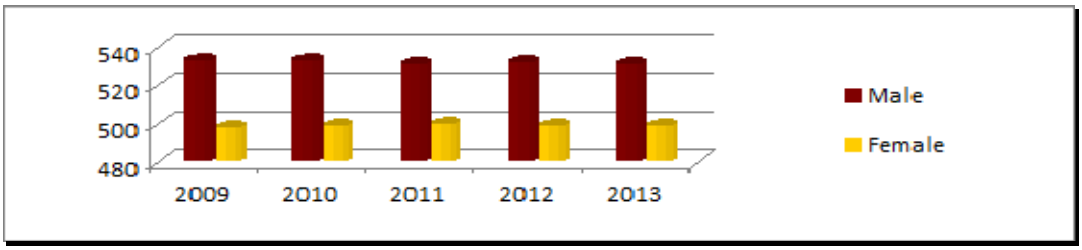
Total Group Average Writing SAT Scores by Gender Over Time

	2009	2010	2011	2012	2013
Male	485	485	482	481	483
Female	498	497	496	494	493

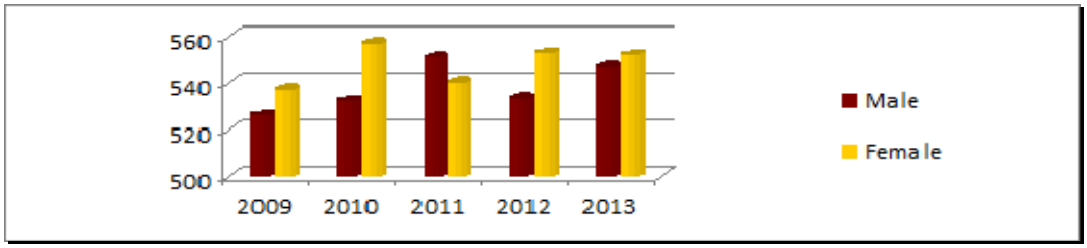
PRSD Average Math SAT Scores by Gender over Time



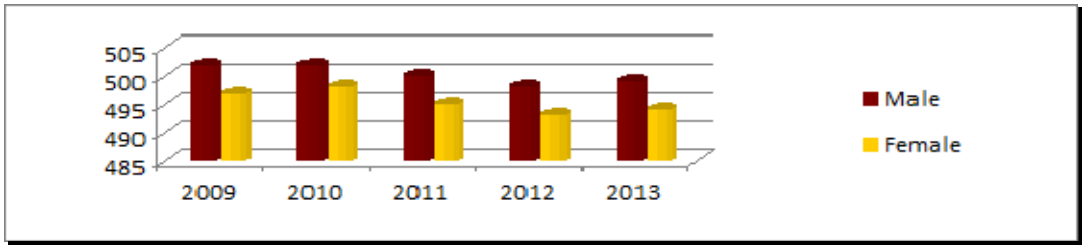
Total Group Average Math SAT Scores by Gender Over Time



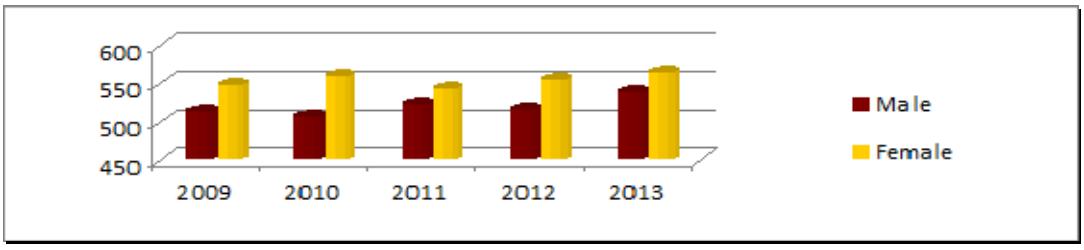
PRSD Average Critical Reading SAT Scores by Gender over Time



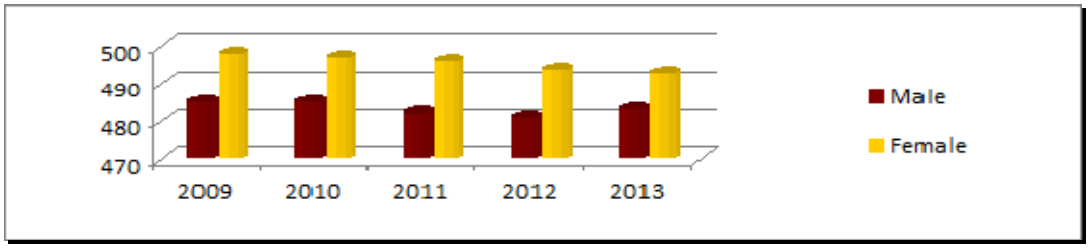
Total Group Average Critical Reading SAT Scores by Gender Over Time



PRSD Average Writing SAT Scores by Gender over Time



Total Group Average Writing SAT Scores by Gender Over Time



SAT: Results and Findings

- In 2013, PRSD students had the highest combined total of 1676 on the SAT in school history..
- SAT writing results demonstrate a five year positive trend.
- Each score in math, critical reading and writing was at a five year high in 2013.
- PRSD students outperformed both the Total Group (i.e., US and International) and Pennsylvania in math, critical reading and writing.
- Over the past five years, the number of graduates taking the SAT has increased and the percentage is stable at approximately 88%.
- In 2013, the PRSD average writing score was higher than the average critical reading score, a result opposite from state and total group scores in writing and critical reading.
- From a gender comparison, a gap has existed in SAT results at the national level. Historically, male students outperform female students in both math and reading while female students outperform male students in writing.
- At PRSD, male students outperform female students in SAT math at a similar ratio to the national average.
- At PRSD, female students outperform male students in the SAT reading and writing results at levels that contrast the national results. In writing, female students outperformed males by 25 scaled score points.

Areas for Future Study

- How or do we alaign instructional strategies and/or content to prepare students for the SAT?
- Are courses offered to assist students?
- Do students understand the differences between the SAT and ACT tests and know which one(s) to take?
- Why are the male and female math scores closer on the PSSA tests than the SAT tests? Are different high school courses chosen by male students than female students?

American College Test (ACT)

The ACT is designed to measure high school students' general education development and their ability to complete college-level work. The ACT measures skills in English, math, reading, and science reasoning. Test results can help students with career as well as educational planning. The highest possible scaled score for each subject area test as well as a composite score across all four subject areas is 36. Beginning in 2013, Pennsylvania's School Performance Profile reports the number of seniors taking the ACT who achieved a composite score of 22 or above. At Pine-Richland, 160 out of 206 students (77.7%) met this mark.

In the pages that follow are test results for the past five years for Pine-Richland School District, Pennsylvania, and United States students in math, reading, English, and science as well as their composite scores. Pine-Richland School District participation rates are given for five years both generally and disaggregated by gender. Finally, math, reading, English, science and composite test scores for Pine-Richland School District by gender are presented for the past five years.

The specific page numbers of the different types of data are:

Pine-Richland School District
ACT Results

PRSD Average ACT Scores over Time

	2009	2010	2011	2012	2013
Math	23.9	25.3	25.6	25.6	25.5
Reading	24.4	24.6	24	25.1	24.5
English	23.8	24.3	24	24.5	24.1
Science	23.2	24	24.2	24.1	23.8
Composite	23.9	24.7	24.5	25	24.6

PRSD Average ACT Scores vs. State and National Average Scores

Math

	2009	2010	2011	2012	2013
Pine-Richland	23.9	25.3	25.6	25.6	25.5
Pennsylvania	22.2	22.1	22.6	22.7	23
United States	21	21	21.1	21.1	20.9

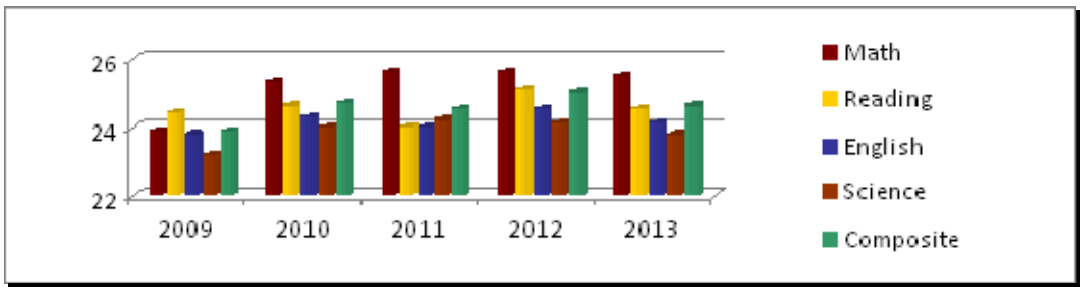
Reading

	2009	2010	2011	2012	2013
Pine-Richland	24.4	24.6	24	25.1	24.5
Pennsylvania	22.4	22.1	22.6	22.7	23
United States	21.4	21.3	21.3	21.3	21.1

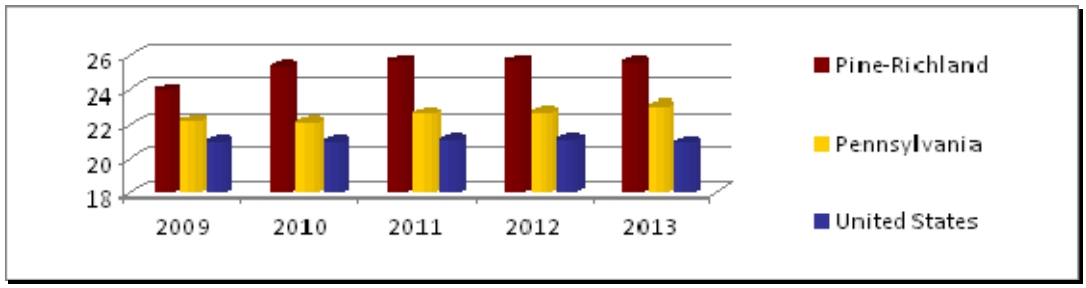
English

	2009	2010	2011	2012	2013
Pine-Richland	23.8	24.3	24	24.5	24.1
Pennsylvania	21.7	21.3	21.9	22	22.2
United States	20.6	20.5	20.6	20.5	20.2

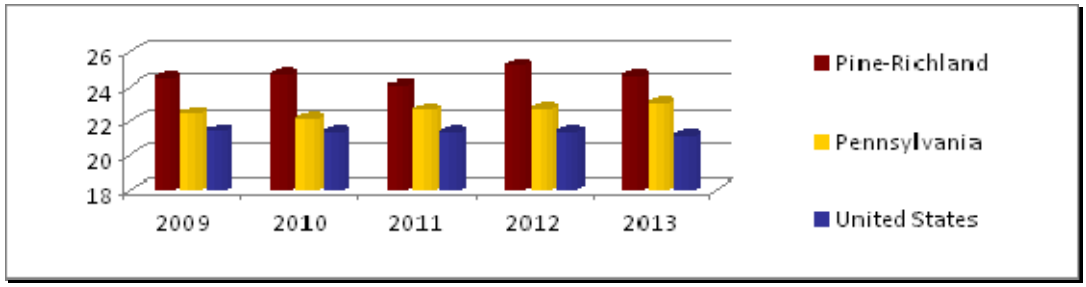
PRHS Average ACT Scores over Time



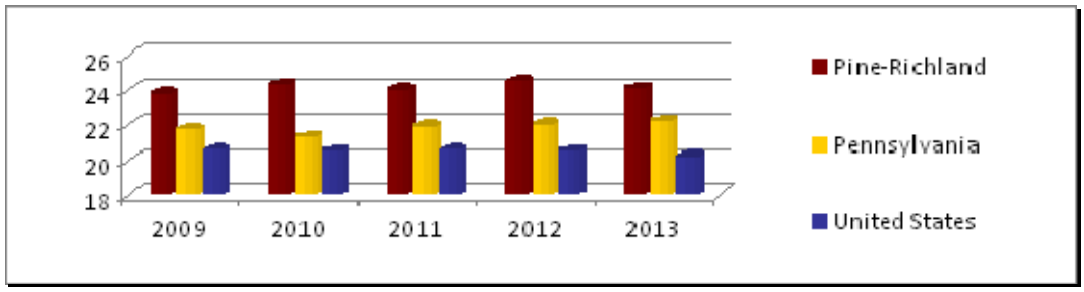
PRHS Average ACT Test Scores vs. State and National Average Scores - Math



PRHS Average ACT Test Scores vs. State and National Average Scores - Reading



PRHS Average ACT Test Scores vs. State and National Average Scores - English



Pine-Richland School District
ACT Results

PRHS Average ACT Scores over Time

Science

	2009	2010	2011	2012	2013
Pine-Richland	23.2	24	24.2	24.1	23.8
Pennsylvania	21.5	21.4	21.8	21.9	22.2
United States	20.9	20.9	20.9	20.9	20.7

Composite

	2009	2010	2011	2012	2013
Pine-Richland	23.9	24.7	24.5	25	24.6
Pennsylvania	22.1	21.9	22.3	22.4	22.7
United States	21.1	21	21.1	21.1	20.9

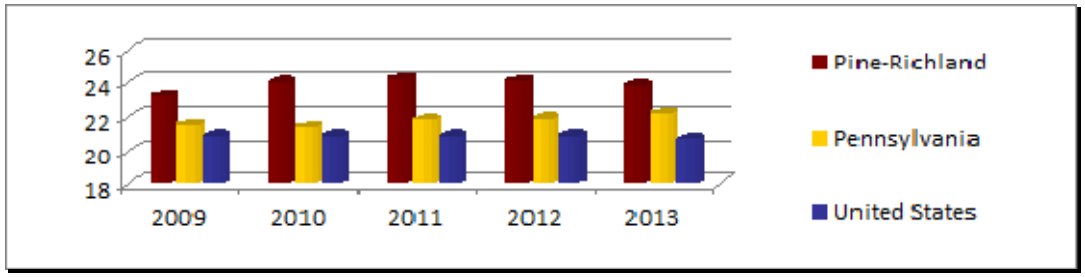
PRSD ACT Participation over Time

	2009	2010	2011	2012	2013
Total # taking test	135	138	161	171	206
Total # graduates	333	333	333	363	372
% taking test	40.5	41.4	48.3	47.1	55.4

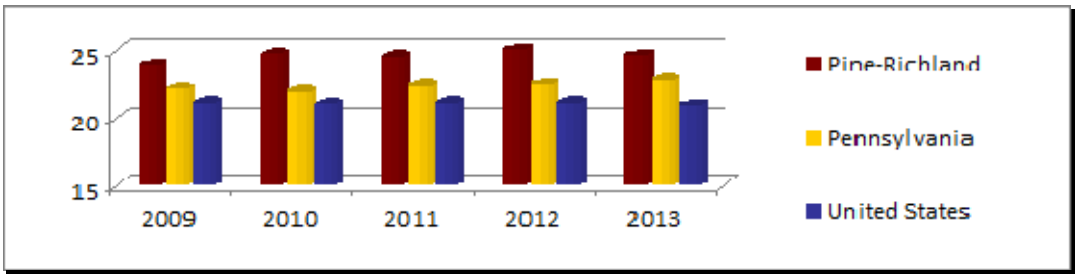
PRSD Number Taking ACT by Gender over Time

	2009	2010	2011	2012	2013
# of boys tested	60	68	80	77	96
# of girls tested	75	70	81	94	110
Total # taking test	135	138	161	171	206

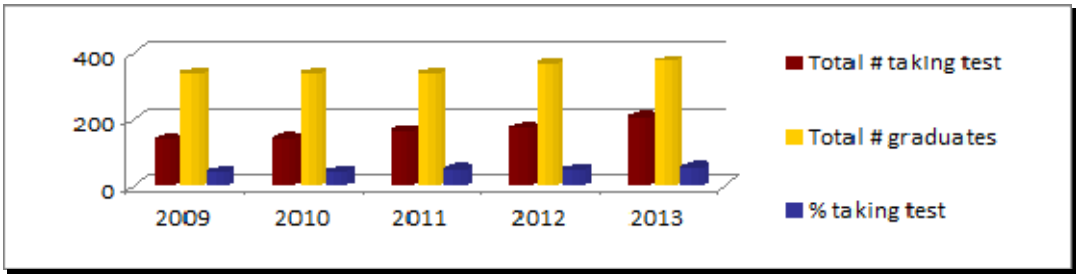
PRSD Average ACT Test Scores vs. State and National Average Scores - Science



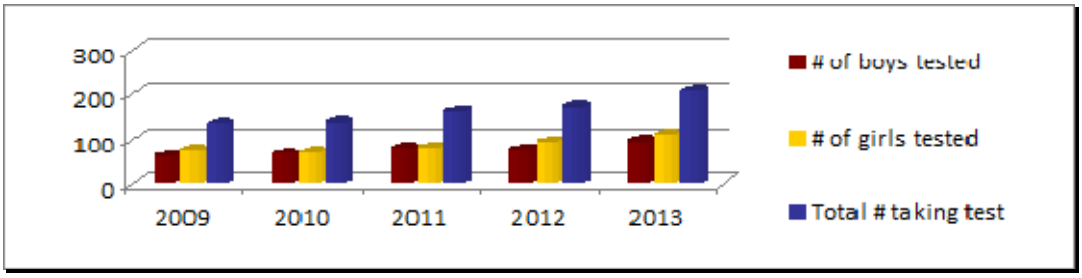
PRSD Average ACT Test Scores vs. State and National Average Scores - Composite



PRSD ACT Participation over Time



PRSD Number Taking ACT by Gender over Time



Pine-Richland School District
ACT Results

PRSD Average ACT Scores by Gender over Time

Math

	2009	2010	2011	2012	2013
Male	25	26.1	26.6	25.5	26
Female	22.9	24.6	24.6	25.7	25

Reading

	2009	2010	2011	2012	2013
Male	24.3	24.1	24.3	24.2	23.9
Female	24.5	25.1	23.6	25.8	25

English

	2009	2010	2011	2012	2013
Male	23.3	23.5	24.3	23.3	23.1
Female	24.2	25.1	23.8	25.5	24.9

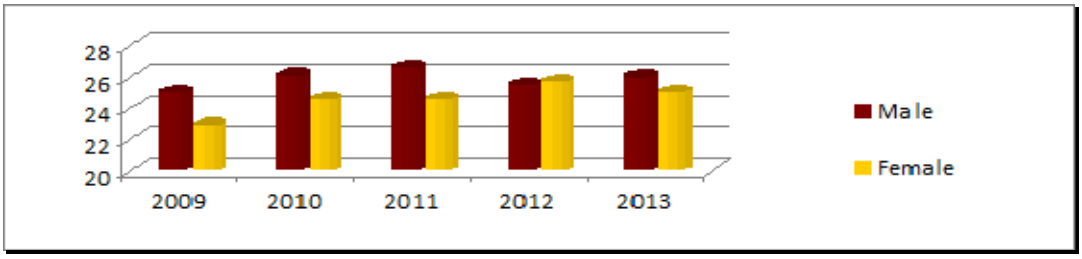
Science

	2009	2010	2011	2012	2013
Male	24.1	24.4	25	24	23.9
Female	22.4	23.6	23.3	24.1	23.7

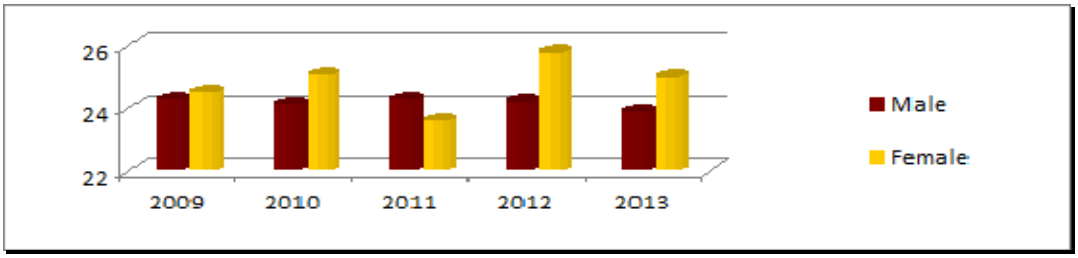
Composite

	2009	2010	2011	2012	2013
Male	24.3	24.6	25.1	24.4	24.4
Female	23.6	24.8	23.9	25.1	24.8

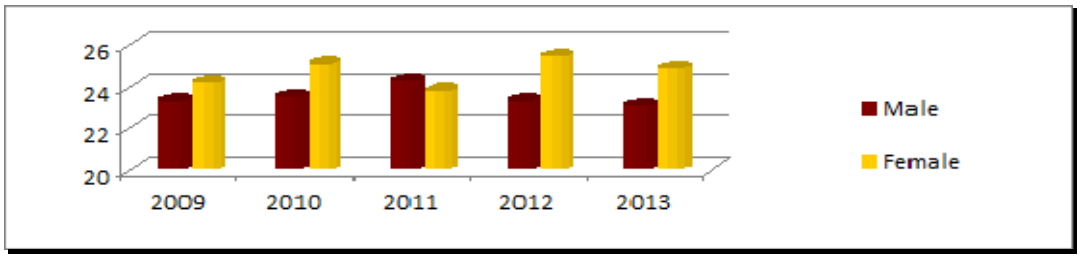
PRSD Average ACT Scores by Gender over Time - Math



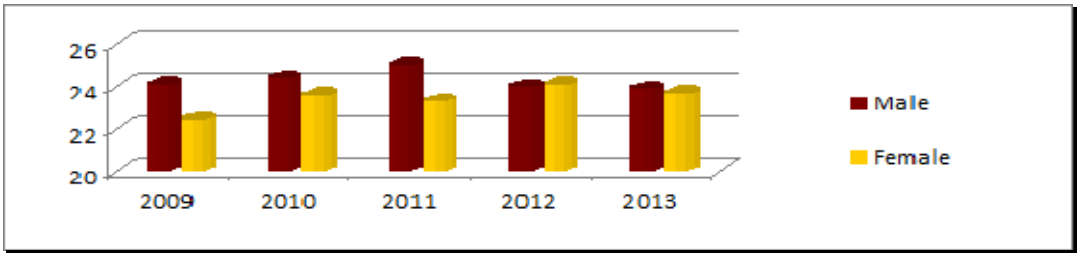
PRSD Average ACT Scores by Gender over Time - Reading



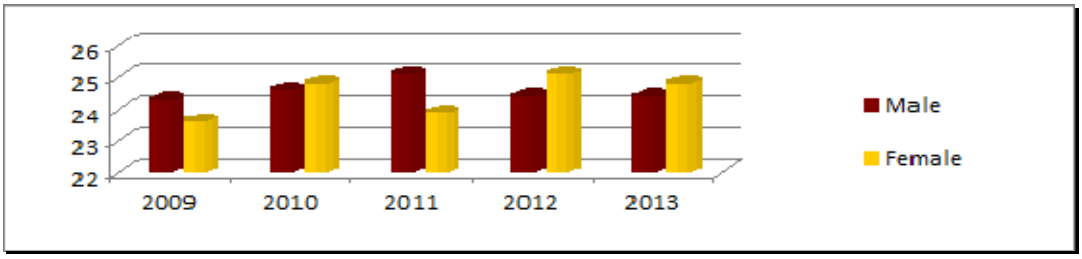
PRSD Average ACT Scores by Gender over Time - English



PRSD Average ACT Scores by Gender over Time - Science



PRSD Average ACT Scores by Gender over Time - Composite



ACT: Results and Findings

- PRSD student performance on the ACT is stable in all tested areas and in the composite score (i.e., math, reading, English, science, and composite).
- The percentage of students taking the ACT has increased from 40.5% in 2009 to a historic high of 55.4% in 2013. This mirrors a national increase in ACT participation.
- Male and female performance on the ACT is similar: males slightly outperform females in math and science; and females outperform males in reading, English, and the composite score.
- PRSD students outperform students as compared to other students in Pennsylvania and the United States.

Areas for Future Study

- How or do we align instructional strategies and/or content to prepare students for the ACT?
- Are courses offered to assist students?
- Do students understand the differences between the SAT and ACT tests and know which one(s) to take?
- Why are the male and female math scores closer on the PSSA tests than the ACT tests? Are different high school courses chosen by male students than female students?

Advanced Placement (AP) Test

AP tests are published by the College Board. By taking Advanced Placement courses and taking the AP tests, students have the opportunity to experience college-level work in high school and gain valuable skills and study habits for college. At Pine-Richland School District, students enrolled in AP courses must take the end-of-course AP exam. Scores range from a low of one through a high of five, with a five indicating a student is well-qualified to receive college credit and/or advanced placement in college programs. Colleges and universities vary in the ways they use AP test scores.

Test results for the subjects in which at least 10 students have taken the AP test over the past five years are included in the pages that follow. Each of these subjects is offered as a course at Pine-Richland High School. Subjects in which fewer than 10 students have taken the AP test over the past five years but for which Pine-Richland High School has offered the course include Computer Science A, Physics, and Studio Art: 3-D Design. AP subjects not offered as courses at Pine-Richland High School include Art History, Comparative Government and Politics, Environmental Science, Latin, Microeconomics, Music Theory, and World History.

For the 2013 School Performance Profile, Pennsylvania tracked how many seniors scored a 3 or above on an AP test. At Pine-Richland, 242 seniors took an AP test and, of those seniors, 171 (70.7%) scored a 3 or above. Specific test results and findings are presented in the pages listed below:

Pine-Richland School District
AP Test Results

PRHS AP Test Participation over Time

	2009	2010	2011	2012	2013
Total # PRHS AP Students	296	342	389	453	450
Total # PRHS AP Tests Taken	529	664	721	900	944
Total # PRHS Tests, Scored 3+	210	264	278	326	337

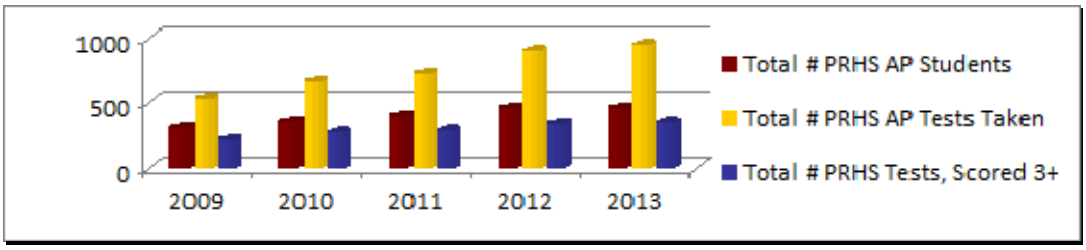
PRHS AP Test Performance vs. State and Global Performance over Time

	2009	2010	2011	2012	2013
% PRHS Students Scoring 3+	70.9	77.2	71.5	72	74.9
% State Students Scoring 3+	67.9	67.4	67.1	68.2	68.3
% Global Students Scoring 3+	61.1	60.2	60.2	61.5	60.9

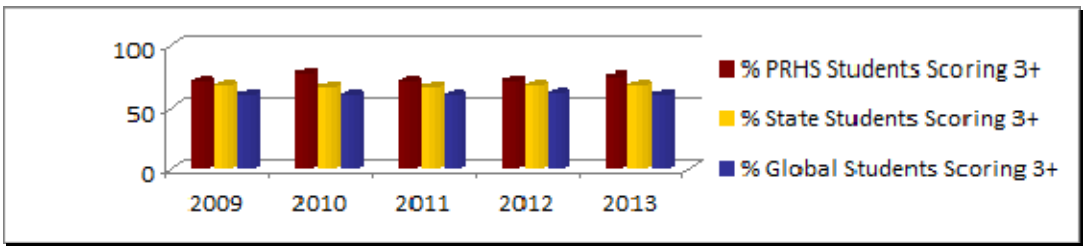
2013 PRHS AP Test Results

Subject Area Test	# Tests Taken	# Scored 3+	% Scored 3+	Avg Score
Biology	76	61	80.3	3.08
Calculus AB	27	21	77.8	3.78
Calculus BC	28	26	92.9	3.75
Chemistry	54	53	98.1	4.13
English Language	106	81	76.4	3.38
English Literature	82	69	84.1	3.15
European History	27	24	88.9	3.41
French Language	28	11	39.3	2.25
German Language	20	14	70	3.2
Microeconomics	84	47	56	2.75
Psychology	160	95	59.4	2.89
Spanish Language	12	11	91.7	3.83
Statistics	63	57	90.5	3.92
Studio Art: 2-D	9	9	100	3.44
Studio Art: Drawing	13	10	76.9	3.31
US Government	40	25	62.5	2.75
US History	106	75	70.8	3.09

PRHS AP Test Participation over Time



PRHS AP Test Performance vs. State and Global Performance over Time



Pine-Richland School District
Average AP Test Scores by Subject Area over Time

Biology

	2009	2010	2011	2012	2013
Total Tests Taken	40	45	51	77	76
Average Score	3.13	3.16	3.12	2.81	3.08

Calculus AB

	2009	2010	2011	2012	2013
Total Tests Taken	29	42	37	18	27
Average Score	2.9	3.17	3.76	3	3.78

Calculus BC

	2009	2010	2011	2012	2013
Total Tests Taken	14	8	8	16	28
Average Score	3.71	5	4.63	4.44	3.75

Chemistry

	2009	2010	2011	2012	2013
Total Tests Taken	26	32	53	56	54
Average Score	3.77	3.75	3.53	4.05	4.13

English Language

	2009	2010	2011	2012	2013
Total Tests Taken	116	126	124	168	106
Average Score	3.17	3.23	2.91	3.15	3.38

English Literature

	2009	2010	2011	2012	2013
Total Tests Taken	48	62	51	61	82
Average Score	3.6	3.58	3.22	3.25	3.15

European History

	2009	2010	2011	2012	2013
Total Tests Taken	40	32	0	66	27
Average Score	3.1	2.84	0	3.17	3.41

French Language and Culture

	2009	2010	2011	2012	2013
Total Tests Taken	11	11	16	2	28
Average Score	2.09	1.73	1.44	2.5	2.25

German Language and Culture

	2009	2010	2011	2012	2013
Total Tests Taken	5	7	6	8	20
Average Score	3.2	1.71	3.33	3.75	3.2

Pine-Richland School District
Average AP Test Scores by Subject Area over Time

Microeconomics

	2009	2010	2011	2012	2013
Total Tests Taken	0	23	41	75	84
Average Score	0	3.35	3.1	2.81	2.75

Psychology

	2009	2010	2011	2012	2013
Total Tests Taken	8	106	135	161	160
Average Score	3.5	3.65	3.16	2.84	2.89

Spanish Literature

	2009	2010	2011	2012	2013
Total Tests Taken	5	13	10	10	12
Average Score	3.6	3.38	3.3	3.6	3.83

Statistics

	2009	2010	2011	2012	2013
Total Tests Taken	20	20	20	55	63
Average Score	4.05	4.4	4.3	4.04	3.92

Studio Art: 2-D Design

	2009	2010	2011	2012	2013
Total Tests Taken	8	13	10	11	9
Average Score	2.25	3.08	3.1	3.36	3.44

Studio Art: Drawing Portfolio

	2009	2010	2011	2012	2013
Total Tests Taken	5	0	8	8	13
Average Score	2.4	0	3.75	3.25	3.31

United States Government

	2009	2010	2011	2012	2013
Total Tests Taken	65	42	6	22	40
Average Score	2.74	3	3	3.09	2.75

United States History

	2009	2010	2011	2012	2013
Total Tests Taken	82	75	136	77	106
Average Score	2.65	3.23	2.89	2.61	3.09

AP Tests: Results and Findings

- The total number of students taking an AP course and test has increased significantly in the last five years.
- Comparing 2009 and 2013, the number of AP students has increased from 296 to 450; the number of AP tests taken has increased from 529 to 944; and the total number of test results at a 3 or above has grown from 210 to 337.
- A greater percentage of PRSD students (74.9%) score at a 3 or above on AP tests than do state (68.3%) or worldwide students (60.9%).
- Of the 17 AP courses offered at PRSD, 8 courses have average test scores between 3.0 and 3.49, 5 courses have average test scores of 3.5 and above, and 5 courses have average test scores below 3.0.
- Six AP courses show a three year trend of enrollment growth, including Calculus BC, English Language, English Literature, Microeconomics, Statistics and US Government and Politics.
- Four AP courses demonstrate a three year trend of average score increase, including Chemistry, English Language, Spanish Language, and Studio Art: 2-D Design.
- Six AP courses have average scores that were the highest for each subject area in the past five years, including Calculus AB, Chemistry, English Language, European History, Spanish Language and Studio Art: 2-D Design.

Areas for Future Study

- Are there gender differences in AP enrollment and test scores?
- What are teachers doing differently over time such that their test scores keep improving?
- Do teachers of AP courses receive regular, on-going professional development from College Board in the development and teaching of AP curriculum?

Conclusion and Next Steps

The 2013 *Academic Achievement Report* included a significant amount of data from a variety of standardized tests. Where possible, five years of data were included for the purpose of establishing a historical record of those results within a single report. Results demonstrate that Pine-Richland School District students are performing at a consistently high level on each assessment as compared to average performance at the state, national, and even international levels. Given the district scale of the data, it is important to continue "drilling down" through various levels of results to the classroom and even student data.

As we continue to focus on organizational improvement, it is the intention of Pine-Richland School District to utilize data analysis as one important element in a series of systematic processes. The Executive Summary of this report introduced the concepts of "assessment of learning" and "assessment for learning." It is important that a variety of assessments, such as classroom-based formative assessments, are utilized to guide instruction in a more practical manner. The connections between results from various types of assessment should be used in conjunction with the processes for developing curriculum and instruction in the district.

The *Pine-Richland School District Strategic Plan* serves as an important resource in guiding the work of the staff and community. Several emerging strategic priorities are becoming evident. Examples include: Data Analysis Approach; Academic Leadership Council; Curriculum Audit; Curriculum Review Process; and Intervention Framework and Approach. There are significant linkages between these areas. High performing organizations are able to integrate the findings from one aspect of the program into other areas. For example, trend data on a particular math standard may lead to further analysis in a curriculum audit and recommendations for improvement through a systematic curriculum review process. Principals, assistant principals, and teacher-leaders will be more heavily involved in the future iterations of this process.