District Ends 1.0

Monitoring Report

Prepared for the Poudre School District

Board of Education



Dr. Sandra Smyser Superintendent

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Executive Summary

Poudre School District (PSD) is a high achievement district. There are many indicators of our students' successes and the entire PSD community can celebrate these outcomes. Evidence from the TS GOLD, DIBELS Next, NWEA MAP, PSAT, SAT, AP exams, IB Exams, and post-secondary outcomes for PSD graduates all support the claim that PSD students achieve at high levels. Likewise, PSD is a high growth district as can be evidenced by both the state assessment systems student growth percentiles and the results from the NWEA MAP test. While there are many success stories and indicators of progress, PSD also has opportunities for improvement and this report specifies some of these areas. Based on the extensive data displays and analyses evident in this report, four key findings are highlighted below.

The PSD 4-year graduation rate has decreased slightly (0.8 percentage points) from 84.0% in 2018 to 83.2% in 2019. The PSD class of 2019 graduation rate (83.2%) is above the statewide graduation rate of 81.1% (up 0.4 percentage units from 2018). Statewide, graduation rates have been steadily increasing. The 4-year graduation rate for many subgroups of students in PSD such as Hispanic students, students supported with an IEP, and students eligible for free/reduced lunch have been lagging on-time graduation rates for similar subgroups statewide since 2015. PSD has declining subgroup graduation rates as of 2013, or earlier. Additionally, PSD graduation rate gaps between these subgroups and their PSD peers are larger than the respective statewide gaps. To interact with a PSD developed graduation rate data visualization tool that provides greater detail, please click <u>GRADUATION RATES</u>.

Achievement, academic growth, and postsecondary experiences/success are each high overall for PSD. Middle school English language arts has shown a three-year pattern of lagging other subjects and grade levels in both achievement and academic growth. The PSD student group identified as "Additional Support" in our Student Insight system, as well as other special groups, have academic outcomes that lag overall PSD results. English language learners in PSD have demonstrated exceptional growth along the language development continuum as measured by ACCESS. To interact with a PSD developed data visualization tool that allows exploration of these outcomes please click <u>ACHIEVEMENT and GROWTH</u>.

Mobility rate disparities between subgroups of students (Hispanic, IEP, and Free/Reduced Lunch eligible) and others in PSD have declined and are all lower than the statewide comparable rates. Overall attendance rates are steadily declining statewide and locally. Unexcused absence rates (truancy) are increasing statewide (since 2011/12) and locally (since 2014/15). Elementary students did not hit the PSD attendance target in 2018/19 for a second year in a row. Elementary was down 0.1 percentage units, middle school down 0.4 percentage units, and high school down 3.7 percentage units. Lower attendance rates are especially prevalent among student groups associated with lower academic performance, lower academic growth, and lower graduation rates. To interact with PSD developed data visualization tools that display mobility rates please click <u>MOBILITY RATES</u>, and/or to explore attendance rates click <u>ATTENDANCE RATES</u>.

Student connections feedback from our 4th-12th grade students has provided us with a treasure trove of actionable insight. One of the biggest overall "stories" in the data bridges between the "Foundations for Success" End and the "Connections" End. PSD students identified as candidates for additional support in our Student Insight system, students that self-report they are not sure if they will graduate, and students not involved in extracurricular activities each indicate significantly lower levels of "connectedness" with adults in our schools, with their peers at school, and with their interests while at school. To interact with a PSD developed "Student Connections" visualization tool that provides much greater detail, please click <u>STUDENT CONNECTIONS</u>.

Introduction and Background

The Poudre School District Board of Education (BOE) adopted the policy governance model. In this system of governance, the Board of Education sets broad policy that establishes the vision and direction of Poudre School District (PSD) for the Superintendent to implement. <u>The District Ends 1.0</u> are aspirational and visionary goals for the district from which the Superintendent can create opportunities for students that align with the community's values.

"Ends policies define what results an organization holds itself accountable for producing in the world, for which people, and at what cost. Ends policies, thus, are very distinctive statements. They are not vague generalizations about improving the quality of life. They are not about what an organization does (that is, the activities it engages in) but about the impact it intends to have. As a result, no matter how broadly stated, Ends are ultimately measurable" (The Policy Governance Field book, p 81).

In June of 2014, the Board of Education provided the Superintendent with a substantially revised set of Ends for which an initial interpretation, with measures and targets, were subsequently developed. The following Ends, and related outcomes for 2018/19, are the subject of this report.

- 1.1 <u>Foundations for Success</u>: PSD students attain milestones to ensure long term academic success. PSD measures and monitors individual student progress against these milestones.
- 1.2 <u>Success in a Changing World</u>: PSD students are prepared for college and workforce success. PSD ensures access and encourages participation in a wide range of experiences that reflect expectations of a changing world.
- 1.3 <u>Above and Beyond:</u> PSD students are challenged, motivated, and inspired to reach their personal level of excellence. PSD offers students a broad and diverse set of opportunities that cultivates their talents and offers multiple pathways to high levels of success.
- 1.4 <u>Connections</u>: PSD students feel academically and socially connected to their school and community. PSD provides engaging opportunities to support students' individual pursuits and interests.

There are two types of data being reported in the Monitoring Report. The first type includes measures for which specific performance targets are set. These targets are selected such that our system can organize toward their attainment, and such that changes in the level of attainment over time should be related to the effectiveness of our system. The other type of data being reported in the Monitoring Report is what can be termed auxiliary data and there may be "benchmarks" associated with these auxiliary data that are identified to provide some amount of validation or additional insight regarding progress toward the district Ends. The NWEA MAP growth data falls into this category, as there are no targets set in relation to NWEA outcomes, but the data are useful in validating student achievement and growth in math and reading.

There are several purposes for setting targets on key performance indicators and systematically monitoring our progress toward attaining these targets. One purpose is to communicate clearly to the public we serve regarding those outcomes that we aspire to attain. An example of an "aspirational target" is that 100% of our students successfully complete their K-12 educational experience. A second purpose of setting and monitoring targets is to indicate whether key outcomes are increasing, decreasing, or remaining consistent. This purpose reflects a desire to track continuous improvement efforts.

Targets have been set under the premise that continued progress toward the sustainable attainment of the performance targets will require system-wide alignment and ongoing improvement efforts across all grade levels. The metrics selected for target setting should provide Poudre School District (PSD) with a

rich source of information that is responsive to changes in policy and practice and will therefore provide indicators of real successes and areas in need of further attention. The district's goals are intended to ensure that all students are prepared to capitalize on the opportunities available in our rapidly changing world. The best way to ensure that choosing metrics and setting targets impacts the system itself is to ensure that the same metrics and data views are available to individual teachers, counselors, principals, and community partners.

To promote and support movement toward optimal outcomes system wide, decisions regarding metrics and data sources/displays have been made while considering school team access to similar school and student level metrics. An example of this is the use, wherever possible, of data visualization tools provided by the Colorado Department of Education (CDE) and PSD. PSD-developed data visualization tools are collectively referred to as the PSD Analytics Platform. The three levels of the PSD Analytics Platform (Student Insight, Staff Insight, and System Insight) are heavily utilized throughout the DE 1.0 Monitoring Report. Providing views pulled directly from the data analytic tools and then providing context for interpretation within this Monitoring Report should promote wide use and increasing understanding among the many district/school leadership teams and our community partners. Promoting shared understandings, uncovering longitudinal patterns that have leadership value, empirically testing intuition-based assumptions, and thereby promoting data-informed leadership actions are the intended outcomes of the PSD Analytics Platform. Utilizing the Analytics Platform in the DE 1.0 Monitoring Report should aid in furthering all these intended outcomes and ultimately contribute to higher levels of student outcomes and improved student experiences.

There are multiple hyperlinks included in this report that provide direct access to fully functional data visualizations that are part of the PSD Analytics Platform. Student identifiable information is NOT INCLUDED in these data visualization tools. The analytic tools provided do include drill-down to the school, grade, and student group levels. Aggregate information, broken out in many possible variations of cross-referencing groups through filter selections, is a very powerful tool for exploring mountains of information and identifying key insights. The information provided in the appendices of this report has been substantially reduced over recent iterations due to the inclusion of links to the very powerful and dynamic PSD Analytics Platform.

Finally, there are two important distinctions to make within the context of the Monitoring Report. There is a difference between a normative interpretation of outcomes and a criterion-referenced interpretation of outcomes. This report contains both forms of contextualizing outcomes and often reports these types of data in conjunction with one another. There are reasons to understand how students perform compared to others, and there are reasons to understand how students are performing compared to an objective performance criterion. An example is to monitor what we commonly call "closing the gap." PSD endeavors to close the achievement gap by raising achievement levels for any group of students historically performing below any other group of students (a norm-referenced view of achievement gap). PSD also endeavors to close the gap between individual performance and grade level expectations for each individual student, and groups of students, currently performing below grade level expectations (a criterion referenced view of achievement gap). Regarding the role the Monitoring Report plays in the grand scheme of system accountability and improvement, efforts to close gaps benefit from both criterion-referenced interpretations and norm-referenced interpretations of student outcome data.

The Monitoring Report is not intended to convey the "means" by which results are achieved, but rather it focuses on the "ends." This is the second important distinction to make at the outset of the following report, as the reader will note that the entire report is focused on student outcomes relative to the defined measures and targets. With that said, the PSD BOE has expressed an interest in some level of

synthesis and interpretation as opposed to just providing tables of outcomes and target attainment statements. The current report will attempt to provide a balanced level of interpretation regarding outcome patterns that appear to reflect systemic causes or associations. This report helps inform the annual work of the district on the Unified Improvement Plan (UIP). The UIP is a companion document to the DE 1.0 Monitor Report, and it is where the district documents a root-cause analysis, major improvement strategies, action steps, and related timelines. These two documents form the basis of the Poudre School District's annual cycle of system improvement and accountability. Direct indications of where these two documents intersect will be provided in this DE 1.0 Monitoring Report. Red text will be used to aid readers in quickly identifying these linkages (or "sign-posts") throughout this report. Please keep in mind that successful implementation of any action step contained in the district UIP is likely to have an immediate, or long term, impact on virtually all the targets outlined in this report.

To set context for the outcomes evidenced in the remainder of this report, a quick set of information on longitudinal demographic changes is provided below. The following graphs reflect changes in the PSD community of students over the past five years. The views below come directly from the <u>Pupil</u> <u>Membership Statewide</u> dashboard developed by PSD and available via the PSD website.



Enrollment by Student Characteristics (October Count)

Enrollment by race/ethnicity in the district has been relatively stable for the past five years, with students identified as White varying by about 0.7% and Latino population proportions varying by about 0.4% over the past five years. Student subgroups by program type have been very stable with English Language Learner percentages decreasing slightly over time (7.1% to 6.3% over 5 years), the percentage of students served with an IEP increasing slightly (7.8% to 8.7% over 5 years), and students with a 504 plan increasing (3.0% to 4.1%) representing three gradual, but consistent, trends within PSD.







Enrollment by Instructional Programs (October Count)

As we explore our data, identify meaningful patterns, and empower our educational leaders and community partners to act in support of student outcomes and experience; a shifting overall demographic is unlikely to resonate as a root cause for systemic changes in other outcomes of interest. Yet, PSD does recognize that **the increasing percentage of students supported with 504 plans and supported with Individual Education Plans (IEPs) does imply that the raw number of students receiving special education services is growing at a faster pace than the overall population count. In terms of staff and services utilized in support of this important group of students, PSD is continually monitoring and adjusting resources allocated. The federal and state governments have recently introduced tools to monitor Local Education Agencies (LEA) regarding disproportionate identification by race/ethnicity group within disability type. These efforts by federal and state governments may put downward pressure on the percentage of students identified for IEP supports over the next several years. To further explore student characteristics over time for PSD schools and all schools and districts statewide, feel free to explore the PSD created <u>Pupil Membership Statewide</u> data visualization report in System Insight.**

Summary List of Targets and Alignment to BOE Priorities

- 1) <u>Attendance (Λ)</u>: PSD students will have \geq 95% attendance rate.
- School Readiness (Λ): ≥ 85% of PSD preschool students demonstrate school readiness on four key early-language/reading-readiness items and three social-emotional development indicators available via the TS Gold assessment.
- 3) Early Literacy (Λ): \geq 85% of PSD K-3 students will meet End-of-Year DIBELS Next benchmarks.
- 4) <u>Achievement (A)</u>: PSD effect size \geq 0.25 for State assessment subject by grade combinations.
- 5) <u>Academic Growth (Λ)</u>: PSD student growth will exceed that of academic peers statewide.
- 6) <u>Additional Support (Λ , Δ)</u>: 100% of annual School Unified Improvement Plans (SUIP) will contain action steps that specifically address the Additional Support group needs at their sites and student growth in English language arts and math will exceed academic peers statewide.
- 7) <u>Credit Accumulation (Σ)</u>: \geq 85% of 9th-12th grade students will be on track to graduate within 4 years of transition into 9th grade.
- 8) <u>Completion/Graduation (Σ)</u>: 100% of PSD students will successfully complete their PreK-12 education. As a leading indicator toward this completion target, ≥ 85% of PSD students will graduate within 4 years of transition into 9th grade.
- 9) <u>Dropout Rate (Σ)</u>: Less than 1% of PSD students will dropout each year.
- 10) <u>College Readiness</u> (δ): \geq 85% of PSD students will meet or exceed SAT college readiness benchmarks in Evidence Based Reading and Writing and Mathematics.
- <u>AP/IB/Concurrent Enrollment/Work-Based Learning Participation (δ</u>): ≥ 50% of PSD students in grades 11 and 12 will have an AP, IB, Concurrent Enrollment, and/or work-based learning experience each year.
- 12) <u>AP/IB Performance (δ)</u>: PSD classroom teacher weighted z statistics \geq 1.96 (indicates advanced student performance significantly higher than typical international outcomes).
- 13) <u>Postsecondary Outcomes (δ)</u>: All percentages and rates higher than related rates for Colorado.
- 14) <u>Health and Wellness (Δ)</u>: Key Healthy Kids Colorado Survey items directly related to the school environment are more favorable than the state's respective percentages and the SEL composite score from the Student Connection Survey exceeds 75% and has increased from the prior year.
- 15) <u>Student Connections (Λ, Σ, Δ)</u>: Percent agreement \ge 90% indicating strong connections to school adults, other students, and interests.

*Board Priority Alignment: Λ = Achievement Gap; Σ = Graduation Rates; Δ = Social Emotional Learning; δ = Post-Secondary & Workforce Readiness

Highlighted Outcomes for 2018/19

Foundations for Success

PSD students attain milestones to ensure long term academic success. PSD measures and monitors individual student progress against these milestones.

Foundations for success contains many of the specific measurable outcomes that both educators and the public we serve have traditionally associated with the academic aspect of the school experience. We have much to be proud of regarding the work of our students, the PSD staff, and our many community partners. Please see



the appendices and use provided hyperlinks to the PSD Analytics Platform to explore student outcomes related to school-readiness, attendance, early literacy, achievement, academic growth, credit accumulation, advanced studies, graduation rates, postsecondary outcomes, and health/wellness.

The careful reader of this report will notice the many occurrences of targets greater than or equal to (\geq) 85%. A quick discussion of why this specific target has been selected may be helpful in motivating a deeper appreciation of the intended purpose of this Monitoring Report. The 85% target is derived from a careful consideration of a graduation rate that we can then backward map to appropriate measures along the student journey in PSD. In this way we can better align our expectations and student supports to promote progress toward the successful completion of the PreK-12 experience.

PSD works toward 100% of our students successfully completing their PreK-12 experience. While there is great inherent appeal in this aspirational target, the nature of a Monitoring Report is that key performance indicators are measurable, timely, and able to inform our understanding of the district's relative performance. We don't have access to the percentage of students statewide that successfully complete their PreK-12 experience, unbounded by time. The best proxy that we have access to statewide is the 7-year completion rate. Completion rates include students who attain a GED or non-diploma certificate. The most recent 7-year completion rate lacks the timeliness (reported by the CDE 4 academic years after the graduation date) that a more ideal Monitoring Report measure would have. One solution to the timeliness issue regarding what we want to measure, successful completion of the PreK-12 experience, is to pick an indicator that is related to a true completion rate. The 4-year (or on-time) graduation rates and rises and falls with the extended rates (5-year, 6-year, and 7-year).

Why an 85% on time graduation rate? PSD has attained that level of outcome in our recent past (Class of 2012 at 86%) and there are multiple other large districts (Saint Vrain, Academy 20, and Douglass County) that have a graduation requirement of 240 credits or more and that have exceeded an 85% graduation rate twice or more in the past several years. It is attainable. For PSD to sustainably meet or exceed 85% on the 4-year graduation rate, it is likely that we will need to increase the graduation rates of one or more subgroups that have historically had lower graduation rates. In this sense, by setting our 4-year graduation rate target at \geq 85%, PSD is promoting the aspirational goal of closing historic outcome gaps and improving outcomes for all students. When it comes to monitoring the improvement of a key outcome like completion/graduation rates, the timeliness of the 4-year rate is attractive. We will also monitor the extended completion and graduation outcomes to honor our overall goal of 100% of students successfully completing their PreK-12 experience. To interact with a PSD developed graduation rate data visualization tool that provides much greater detail, please click <u>GRADUATION RATES</u>.

1) Attendance Target: PSD students will have \geq 95% attendance rate.

<u>Met Target in 2018/19?</u> No, in 2018/19 PSD had an attendance rate of 92.7%. This target is supported by Action Step 3A – "<u>Transition Strategies</u>" of the 2018/19 and 2019/20 PSD Unified Improvement Plans.

The 2018/19 rate is 0.3% below the 2017/18 rate. In 2018/19 the PSD attendance rate is higher than the overall state rate by 0.4% units. Both PSD and State attendance rates have declined over the past five years. Reported attendance data comes from CDE source documents available by clicking here <u>CDE DATA SOURCE</u>. To interact with a PSD developed attendance data visualization tool for districts and schools statewide please click <u>ATTENDANCE RATES</u>. Appendix 1 of this report also contains additional information for the interested reader.



Attendance Percentage by Level 2018/19

		Attendance Change from General PSD	Attendance Change from Same Subroup
Level	Attendance %	Population Same Year	Prior Year
Elementary Schools	94.8%	2.2%	-0.1%
Middle Schools	92.7%	0.1%	-0.4%
High Schools	89.2%	-3.4%	-3.7%
PSD Overall Rate	92.6%		



We see that elementary students did not hit the PSD attendance target for the second time in many years. Asian students as a subgroup did meet the PSD attendance target of 95% in 2018/19. There are not substantial gender differences in attendance, but there are differences by grade level, ethnicity, IEP status, and identified needs for academic support based on prior performance outcomes. Students identified as candidates for Additional Support (in both math and ELA), students supported with an IEP, and American Indian students are subgroups with the largest attendance disparities as well as having the largest drops in attendance rates from the prior year. The attendance decreases we see in PSD overall, are evident for virtually every subgroup of students as evidenced in the final column of each attendance tables displayed in this report (see Appendix A for more detail).

 School Readiness Target: ≥ 85% of PSD preschool students demonstrate school readiness on four key early-language/reading-readiness items and three social-emotional development indicators available via the TS Gold assessment.

<u>Met Target in 2017/18</u>? No, target was not met on four (8a, 9a, 9b, and 3b) of the seven indicators. The target was met on the other three indicators of school readiness. This target is supported by Action Step 1D – "<u>Readiness in Early Literacy</u>" of the 2018/19 PSD Unified Improvement Plan (Action Step 1C 2019/20 UIP).

Serving expectant mothers and children from birth to kindergarten, Poudre School District's Early Childhood Education (ECE) Program uses multiple funding sources to provide critical educational services across the District and Larimer County. Services include educational, vision, and hearing screenings, home visits, socialization opportunities, parenting classes, and more. In 2013, the PSD ECE Program adopted Teaching Strategies GOLD as its assessment tool. This assessment tool can be used from birth through Kindergarten and aligns to the Colorado Academic Preschool Standards.

The first two key items/indicators (items 8a and 8b) are measuring how well young people listen to and understand increasingly complex language. The specific items being used in this Monitoring Report as indicators are referred to as 8a and 8b in the GOLD assessment. The next two indicators are measuring how well young people use language to express thoughts and needs. The specific items being used in this Monitoring Report as indicators are referred to as 9a and 9b in the GOLD assessment. The final three items/indicators (1a, 1b, and 3a) are measuring how well young people are managing their feelings, following limits and expectations, and solving simple social problems that arise. Meeting the benchmark performance level on these items is considered meeting the age appropriate levels of school readiness on these objectives. Growth from fall to spring on all seven key items/indicators and the spring percentage of students meeting the benchmark expectation are illustrated below. Percent gains from fall to spring are substantial.





3) Early Literacy Target: ≥ 85% of PSD K-3 students will meet End-of-Year DIBELS Next benchmarks. Met Target in 2017/18? No, in 2018/19 approximately 76% of kindergarten through grade 3 students met the End of Year Benchmarks. This target is supported by Action Steps 1A – 1D of the 2018/19 PSD Unified Improvement Plan (Action Steps 1A – 1C 2019/20 UIP).

This DIBELS Next result is down from 77% in 2017/18, 79.2% in 2016/17 and 80.0% in 2015/16. Results from grades 1-3 contributed to this decline. Kindergarten students saw a slight increase (from 80.0% in 2017/18 to 80.6% in 2018/19). MAP achievement data indicates a similar pattern of declines over a three year period for grades 2 and 3. Once again, we see the largest gains from Beginning-of-Year to End-of-Year in percentage meeting expectations for the early grades (Kindergarten and 1st grade). Regarding subgroup performance in 2018/19, the largest disparities are evident for Hispanic (54%), Free Lunch Eligible (56%), and supported with an IEP (24%). Please see Appendix 2 for more detail and/or click <u>ACHIEVEMENT and GROWTH</u> to explore the related data visualization.



Reading Performance Levels (DIBELS Next - Grades Kindergarten – 3rd):

		Well Below	Below	At or Above	
Test Session	Grade	Benchmark	Benchmark	Benchmark	
	К	16.7%	13.9%	69.3%	
	1	24.0%	13.7%	62.4%	
Beginning of Year	2	17.8%	7.9%	74.3%	At or Above
	3	18.6%	8.3%	73.1%	Benchmark
	Total	19.3%	10.9%	69.8%	Change
	К	8.0%	11.4%	80.6%	11.3%
	1	17.2%	11.5%	71.3%	8.9%
End of Year	2	14.3%	8.6%	77.1%	2.8%
	3	12.1%	7.7%	80.1%	7.0%
	Total	13.0%	9.8%	77.2%	7.5%

DIBELS Next Criterion Refernced Outcomes - 2018/19

From the 7,611 students with both the Beginning-of-Year and End-of-Year DIBELS Next measures, we can see that the number and percentage of students that meet Benchmarks increased during the school year at every grade level. The "Beginning-of-Year" to "End-of-Year" comparisons displayed above, are true cohorts. Tracking a cohort is used so that we are comparing post outcomes (End of Year) to the same exact student group's pre-scores (Beginning of Year) and observed gains in the percent of students "At or Above Benchmark" are not due to differences in groups of students being compared. Because we are using only students with pre and post scores, the N-count (7,611) is slightly reduced from the results for all 8,014 students that have a spring score reflected in the bar chart above. As a result, the 77.2% of students meeting spring benchmarks in the table above varies slightly from the 76% reported in the bar chart.

4) <u>Achievement Target:</u> PSD effect size ≥ 0.25 for State assessment subject by grade combinations. <u>Met Target in 2018/19?</u> No; 7th and 8th grade ELA did not meet the PSD target (0.20 and 0.24 respectively). This target is supported by Action Steps 1A – 1D of the 2018/19 PSD Unified Improvement Plan (Action Steps 1A – 1C 2019/20 UIP).

This marks the third year in a row that 7th grade English Language Arts fell short of the PSD target indicating it is consistently missing the PSD performance target. Additionally, and perhaps related, 7th grade Social Studies did not meet the PSD target (0.16, please note the small sample size of 393). SAT 11th grade math also fell short of the PSD target at 0.22 for the second year in a row. It is important to recall that a positive effect size does indicate performance levels that exceed statewide grade-level peers. PSD students exceeded statewide grade-level peers in every subject and at every grade level. Nonetheless, middle school English language arts achievement does show a three-year pattern of lagging the rest of the district in performance.

We did not meet or exceed 0.25 achievement effect sizes for most subgroups traditionally associated with low relative performance (free/reduced lunch eligible, Hispanic, African American, English language learners, students supported with an IEP). In fact, many of these subgroups are associated with negative achievement effect sizes in multiple years and across multiple subjects when compared to the overall student population. This means PSD has achievement gaps that are commonly experienced across the country. At the same time, PSD

subgroup performance at the elementary level exceeds like-peers statewide in every subject and in every year, of the past five years, for free/reduced lunch eligible, English language learners, minority status, and Gifted and Talented students. In middle and high school, we see similar high relative achievement except that there are a few subjects by year combinations where our English language learners do not exceed their statewide like-peers. Students supported with an IEP are often associated with achievement slightly below their statewide likepeers. In 2018/19, students supported with an IEP did exceed their statewide like-peers achievement in elementary and middle school math and science. Students supported with an IEP had equivalent outcomes on PSAT8/9 math and English language arts in 2018/19. Please see Appendix 3 for more detail and/or click <u>ACHIEVEMENT and GROWTH</u> to explore the related data visualization.

Poudre School District uses standardized scores (or z-scores) to display and aid interpretation of achievement outcomes for individual students. Z-scores answer the fundamental question of how far to the right or left of the state-norm the student's score is. In other words, z-scores help us understand "how unusual an outcome is" relative to statewide peers. Positive z-scores indicate an outcome that is greater than average. Negative z-scores indicate an outcome that is less than average. Taking the average for a set of z-scores results in what is traditionally called an "effect size." So, where z-scores are useful in understanding the meaning of individual scores, effect sizes help us understand the meaning of a group of scores. As with z-scores, positive effect sizes indicate a mean outcome for the group being described that exceeds the mean outcome for statewide grade level peers. The larger the effect size, the more unusually high the achievement outcome. As a visual guide, effect sizes that are small and positive (0.25 to 0.49) are shaded green, medium to large and positive (0.5 up) are shaded blue, small and negative (down to -0.25) are shaded yellow, and larger negative effect sizes (-0.25 down) are shaded red. This shading convention is used throughout the achievement effect size displays in this Monitoring Report. An effect size or z-score of zero indicates the exact mean outcome of the norm group.

The negative effect size for 8th grade math in 2017/18, a very unusual negative result for PSD, corrected back up to a very high outcome of 0.40. As of 2018/19, the state assessment system in math is once again based on grade level rather than specific course. As a result, math performance and growth data will become more stable and comparable in a normative sense relative to statewide grade-level peers. The past several years of math data from the state assessment system has included nuances that make interpretation challenging whether you are looking at performance data relative to grade-level expectations (criterion referenced) or performance relative to grade-level peers (norm-referenced). As a result, the interpretation of Student Growth Percentiles and Median Growth Percentiles have been challenging (perhaps nonsensical) for mathematics at the 7th-10th grades for several years. These impacts have been particularly difficult and impactful for PSD as our district has a high percentage of once and twice accelerated math students and these accelerated pathways are at the center of the interpretation challenges when using grade-level peers as a norming group. The Colorado Growth Model makes use of up to three prior years of scores to create academic peer groups that are at the heart of the normative growth model, so it may be as far out as 2021/22 before the mathematics student growth percentiles for 8th through 11th are as robust as the student growth percentile of earlier grades.

English Language Arts (CMAS – Grades 3-8):

		-				
Year by	201	6/17	2017/18		2018/19	
Level	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
1) ES	0.34	6148	0.35	6153	0.36	6264
2) MS	0.24	5266	0.26	5606	0.24	5834
Total	0.29	11414	0.31	11759	0.30	12098

Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
3	0.34	1989	0.36	2032	0.29	1995	
4	0.36	2042	0.37	2047	0.40	2129	
5	0.33	2117	0.34	2074	0.38	2140	
6	0.25	1869	0.29	2027	0.28	2090	
7	0.20	1808	0.24	1841	0.20	2010	
8	0.27	1589	0.25	1738	0.24	1734	
Total	0.29	11414	0.31	11759	0.30	12098	

Evidence Based Reading and Writing (PSAT8/9 – Grade 9):

Year by	201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	
9	0.43	1825	0.48	1847	

Evidence Based Reading and Writing (PSAT – Grade 10):

Year by	2016/17		2017/18		2018/19	
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
10	0.44	1681	0.43	1725	0.37	1774

Evidence Based Reading and Writing (SAT - Grade 11):

Year by	2016/17		2017/18		2018/19	
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
11	0.39	1717	0.35	1756	0.27	1726

Math (CMAS – Grades 3-8):

		-				
Year by	201	16/17	2017/18		2018/19	
Level	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
1) ES	0.42	6180	0.41	6193	0.39	6299
2) MS	0.31	5296	0.16	5652	0.40	5849
Total	0.37	11476	0.29	11845	0.39	12148

Year by	2016/17		201	2017/18		2018/19	
Grade	Effect	Data	Effect	Data	Effect	Data	
	Size	Points	Size	Points	Size	Points	
3	0.40	2015	0.36	2066	0.32	2022	
4	0.43	2051	0.43	2048	0.42	2135	
5	0.44	2114	0.44	2079	0.42	2142	
6	0.31	1883	0.32	2044	0.43	2094	
7	0.33	1815	0.22	1858	0.36	2011	
8	0.29	1598	-0.08	1750	0.40	1744	
Total	0.37	11476	0.29	11845	0.39	12148	

Math (PSAT8/9 – Grade 9):

Year by	201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	
9	0.39	1825	0.40	1847	

Math (PSAT – Grade 10):

Year by	2016/17		2017/18		2018/19	
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
10	0.37	1681	0.34	1725	0.26	1774

Math (SAT – Grade 11):

Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
11	0.29	1717	0.22	1756	0.22	1726	

Science (CMAS - Grades 5, 8, and 11):

Year by	2016	5/17	201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
5	0.37	2108	0.39	2075	0.38	2138	
8	0.28	1565	0.22	1718	0.28	1719	
11	0.29	467	0.25	321	0.33	397	
Total	0.33	4140	0.31	4114	0.34	4254	

Social Studies (CMAS - Grades 4 and 7):

Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
4	0.40	708	0.41	679	0.41	709	
7	0.26	656	0.16	769	0.15	393	
Total	0.33	1364	0.28	1448	0.31	1102	

Note the small sample sizes associated with Social Studies and 11th grade science outcomes. This is due to a sampling design for social studies and opt-outs for 11th grade science. These low N-counts limit interpretabilities of results relative to the entire grade levels performance levels.

5) <u>Academic Growth Target</u>: PSD student growth will exceed that of academic-peers statewide (students in the same grade level and who have similar prior year achievement scores). <u>Met Target in 2018/19?</u> No, PSD did not exceed the growth of academic peers statewide for middle school language arts or 9th grade math. This target is supported by Action Steps 1A – 1D of the 2018/19 PSD Unified Improvement Plan (Action Steps 1A – 1C 2019/20 UIP).

Based on median growth percentiles (MGP) PSD met the growth target in math for every grade except 9th (CMAS to PSAT8/9). There may be anomalies with 9th grade math growth data due to Student Growth Percentiles not being calculated for any twice accelerated students as well as the CDE's stated position of not calculating SGPs from 9th grade CMAS to PSAT8/9 for English language arts due to technical concerns. Interpret 9th grade math growth data with caution as the use of prior-year scores to create academic peer groups will remain problematic due to the course specific assessments used prior to spring 2019. The following two tables include results from PSD charter schools.

Median Growth Percentile		ENGLISH LANGUAGE ARTS				MATH							
1.0 99.0		10000000	District			State			District			State	
	50.0	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
ALL STUDENTS	All Students	49.0	52.0	51.0	50.0	50.0	50.0	55.0	54.0	56.0	50.0	50.0	50.0
GRADE LEVEL	04	59.0	59.0	61.0	50.0	50.0	50.0	66.0	58.0	61.0	50.0	50.0	50.0
	05	53.0	53.0	55.0	50.0	50.0	50.0	61.0	57.0	55.0	50.0	50.0	50.0
	06	42.5	48.0	46.0	50.0	50.0	50.0	48.0	45.0	54.0	50.0	50.0	50.0
	07	41.0	48.0	45.0	50.0	50.0	50.0	49.0	54.0	54.0	50.0	50.0	50.0
	08	45.0	50.0	47.0	50.0	50.0	50.0	52.0	54.0	57.0	51.0	50.0	50.0
	09	52.0			50.0			43.0			50.0		

Median Growth Percentile		EVIDENCE-BASED READING AND WRITING District State				MATH District State							
	50.0	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
ALL STUDENTS	All Students	54.0	57.0	54.0	49.0	50.0	50.0	54.0	47.0	54.0	50.0	50.0	51.0
GRADE LEVEL	09								44.0	47.0		50.0	51.0
	10		58.0	52.0		51.0	50.0		50.0	60.0		50.0	52.0
	11	54.0	57.0	57.0	49.0	50.0	49.0	54.0	49.0	52.0	50.0	50.0	51.0

DIBELS Next growth effect sizes allow us to ascertain if PSD grades kindergarten through 3 meet the growth target in reading. As evidenced by DIBELS Next growth effect sizes that exceed zero, PSD kindergarten students through grade 3 do exceed national growth outcomes in reading. It is worth noting that DIBELS Next reading growth has declined over the past three years in grades 1-3 and that for each of these three grades, growth remains well above national peers.

Year by	2016	5/17	201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
0	0.11	1907	0.05	1988	0.10	1971	
1	0.47	1887	0.39	1953	0.36	2037	
2	0.40	2017	0.32	1943	0.23	1999	
3	0.32	2053	0.31	2103	0.26	2007	
Total	0.32	7864	0.27	7987	0.24	8014	

Reading Growth (DIBELS Next - Grades Kindergarten – 3rd):

As evidenced by NWEA MAP growth effect sizes that exceed zero, PSD grade 2 through grade 5, grades 7 and 8 do exceed national growth outcomes in reading. Grade 6 reading did not exceed national growth outcomes. This aligns with the grade 6 reading outcome from CMAS.

Year by	201	6/17	201	7/18	2018/19		
Grade	Zgain	Data Points	Zgain	Data Points	Zgain	Data Points	
2	0.23	1922	0.24	1859	0.25	1885	
3	0.21	1955	0.17	1997	0.16	1887	
4	0.16	1967	0.10	1971	0.11	2028	
5	0.11	2067	0.11	2014	0.01	2008	
6	0.01	1894	-0.01	2070	-0.08	1975	
7	0.08	1964	0.00	1890	0.03	1972	
8	0.06	1897	0.02	1909	0.03	1792	

Reading Growth (MAP - Grades 2 – 8):

As evidenced by NWEA MAP growth effect sizes that exceed zero, PSD grade 2 through grade 3 do exceed national growth outcomes in math. This outcome aligns with what we see in the CMAS data.

Year by	Year by 2016/17		201	7/18	201	8/19
Grade	Zgain	Data Points	Zgain	Data Points	Zgain	Data Points
2	0.11	1933	0.13	1853	0.07	1907
3	0.11	1959	0.11	1999	0.10	1904
4	0.11	1985	0.16	1992	0.08	2045
5	0.04	2082	0.12	2025	0.04	2032
6	0.04	1910	0.12	2045	0.10	2023
7	0.08	2006	0.15	1913	0.08	2026
8	0.08	1927	0.11	1937	0.10	1819

Math Growth (MAP - Grades 2 – 8):

The elementary level of PSD continues to show the strongest evidence of academic growth. Middle school English language arts is the main area of concern based on 2018/19 results and a pattern that has emerged over the past three years. There are subgroups of students that are not attaining the PSD growth target (free/reduced lunch eligible, Hispanic, African American, English language learners, students supported with an IEP). Please see Appendix 4 for more detail and/or click <u>ACHIEVEMENT and GROWTH</u> to explore the related data visualization. 6) <u>Additional Support Target</u>: 100% of annual School Unified Improvement Plans (SUIP) will contain action steps that specifically address the Additional Support group needs at their sites and student growth in English language arts and math will exceed academic peers statewide. <u>Met Target in 2018/19?</u> No, academic growth for the Additional Support group did not exceed statewide academic peers. This target is supported by Action Step 1C – "Data Informed Leadership" of the 2018/19 PSD Unified Improvement Plan (Action Step 1A 2019/20 UIP).

PSD has developed a data visualization tool, Levels of Support, which allows for a shared understanding districtwide regarding which PSD students are most in need of additional academic support in English/Language Arts and Math. PSD students meeting and exceeding performance levels of other students nationwide and statewide are also identified. This shared understanding is based on a body of evidence from the prior academic year for each returning student. The "Additional Support" group consists of students grades 1-12 that scored below the 35th percentile on each district/state assessment (DIBELS Next, MAP, PARCC, CMAS, PSAT, SAT) and each assessment occasion (Fall, Winter, Spring) during the prior school year in either math or in English/reading. These students are supported with our schools' best efforts to help them make gains relative to national and statewide academic peers as they are currently performing among the lowest 1/3 of students statewide and/or nationwide. "Exceptional Outcomes" scored consistently above the 35th percentile, and "Team Awareness" had at least one prior score in the "Additional Support" range and at least one score in the "Met Targets" range.

The Levels of Support tool is available to teachers and school administrators in the first week that teachers are back on contract at the beginning of each school year. Current year classifications of evidence-based support level recommendations are only available to appropriate school and district staff. Recommended support classifications are not part of a student's permanent record, they are time-limited recommendations to current educational staff working directly on behalf of students. The current year designations are based on a body of evidence from the prior school year. Classifications do not fluctuate based on the latest single scores attained in the current school year because the designations are based on a body of evidence rather than the latest individual score. This stability of support classification within a single school year allows for the systematic effectiveness studies of PSD's support systems. This is a critical component of system improvement efforts.

Every PSD school directly addressed the needs, to some extent, of their students identified as candidates for Additional Support within their 2019/20 School Unified Improvement Plan (SUIP). Currently in math, 50.1% (1,683) of the 3,358 students identified as "Additional Support" have an individual support plan of some type, for ELA/Reading Additional Support it's higher, 64.8% (2,101/3240). In math, this represents a slight increase from this time last year when the percentage was 47.3%. In ELA/Reading, this represents a slight increase from this time last year when the associated percentage was 64.5%. PSD will continue to monitor and refine the School Improvement Process as it relates specifically to students' needs in the Additional Support category of the Levels of Support data tool.

CMAS Academic Performance Information for Additional Support – English Language Arts:

We see that performance remains relatively low for the Additional Support group in years after being identified as good candidates for staff awareness and purposeful assistance. The need for academic support persists into future years.

Year by	2016	/17	201	7/18	2018/19		
Grade	Effect	Data	Effect	Data	Effect	Data	
	Size	Points	Size	Points	Size	Points	
3	-1.05	255	-1.15	207	-1.11	231	
4	-1.26	235	-1.28	205	-1.22	210	
5	-1.21	135	-1.20	199	-1.18	203	
6	-1.30	96	-1.23	176	-1.24	178	
7	-1.19	228	-1.29	176	-1.13	215	
8	-1.21	197	-1.13	185	-1.11	156	
Total	-1.19	1146	-1.21	1148	-1.16	1193	

CMAS Academic Growth Information for Additional Support - English Language Arts:

Note that in almost every cell of the following table, Median Growth Percentiles (MGP) are below 50. The Colorado Growth Model suggests that academic peers (similar students statewide, when taking multiple prior years of scores into account) are making even more progress. MGP results are correctly indicating that more progress can be made within our system to support these students.

Year by	2016/	17	2017/	18	2018/19		
Level	MGP	Data Points	MGP	Data Points	MGP	Data Points	
1) ES	38	341	41	374	40	341	
2) MS	38	476	39	482	44	487	
Total	38	817	40	856	43	828	

Year by	2016/17		201	7/18	2018/19		
Grade	MGP	Data	MGP	MGP Data		Data	
•		Points		Points		Points	
4	34	212	39	185	39	168	
5	45	129	42	189	45	173	
6	34	87	32	164	40	166	
7	36	213	35	153	47	186	
8	44	176	49	165	46	135	
Total	38	817	40	856	43	828	

CMAS Academic Performance Information for Additional Support - Math:

Year by	2016	/17	2017/18		201	18/19
Grade	Effect	Data	Effect	Data	Effect	Data
	Size	Points	Size	Points	Size	Points
3	-0.83	352	-0.91	310	-0.84	310
4	-0.92	328	-0.89	259	-0.97	305
5	-0.93	302	-1.00	269	-1.04	260
6	-1.01	261	-1.17	240	-0.93	242
7	-1.03	259	-1.04	251	-1.04	272
8	-0.93	200	-0.88	231	-1.07	210
Total	-0.94	1702	-0.98	1560	-0.98	1599

We see that the need for academic support also persists into future years for mathematics as well.

CMAS Academic Growth Information for Additional Support - Math:

In math, based on median growth percentile outcomes, the 2018/19 grade 4 and grade 6 Additional Support students attained growth that exceeded growth of statewide academic peers. Note that Median Growth Percentiles (MGP) are above 50. For other grades, the outcomes are like those for language arts where we see these students did not grow as much as academic peers statewide.

Year by	2016/17		2017/18		2018/19	
Level	MGP	Data Points	MGP	Data Points	MGP	Data Points
1) ES	55	604	55	504	46	507
2) MS	46	687	43	659	52	656
Total	50	1291	48	1163	49	1163

Year by	2016/17		2017/18		2018/19	
Grade	MGP	Data	MGP	Data	MGP	Data
•		Points		Points		Points
4	56	315	58	244	53	275
5	54	289	52	260	42	232
6	46	250	33	225	57	225
7	48	249	41	228	45	243
8	41	188	51	206	48	188
Total	50	1291	48	1163	49	1163

It appears that PSD may have stronger evidence of supporting students and closing gaps in math as opposed to reading and English language arts.

Connections Information for Additional Support - Math:

The following associations between Level of Support group and student self-reported feelings of connection are provided below to suggest a possible relationship between connections and academic performance/growth. Patterns below are evident for both English/Reading and for Math. Please click <u>ACHIEVEMENT and GROWTH</u> and <u>STUDENT CONNECTIONS</u> to explore related data visualizations.



Student-to-Adult (% Agreement) by Level of Support_Math

Student-to-Student (% Agreement) by Level of Support_Math

	^{82%} 2017		2018	2019
	84%	83.1%	82.9%	84.4% 82.2%
	86%		85.5%	
 4) Exceptional Outcomes 	88%	87.4%	87.2%	87.3%
3) Met Targets	5070			
2) Team Awareness	90%		89.4%	89.8%
🛑 1) Additional Support	92%	90.9%		

Student-to-Interests (% Agreement) by Level of Support_Math



7) <u>Credit Accumulation Target</u>: ≥ 85% of 9th-12th grade students will be on track to graduate within 4 years of transition into 9th grade. <u>Met Target in 2018/19?</u> No, as of 2-11-20 approximately 77.7% of 9th-12th grade students were on track to graduate based on credit accumulation (down from 79.6% 2-12-19). This target is supported by Action Step 1C – "<u>Data Informed Leadership</u> and Action Step 3A – "<u>Transition</u> <u>Strategies</u>" of the 2018/19 PSD Unified Improvement Plan (Action Steps 1A & 3A 2019/20 UIP).

PSD school administrators, counselors, and district staff have worked together to put in place a more consistent credit accumulation tracking and response system. The focus for this system has been the 9th grade students, as this is a critical transition year and research shows that falling behind during the freshman year in credits earned is a strong predictor of future academic challenges. Please see Appendix 5 for more detail.



Off Track % by Grade Level

Off Track % by Grade Level



Note: As of 2/12/19 at 7:00 pm

Note: As of 2/11/20 at 4:20 pm

8) <u>Completion/Graduation Target</u>: 100% of PSD students will successfully complete their PreK-12 education. As a leading indicator toward this completion target, ≥ 85% of PSD students will graduate within 4 years of transition into 9th grade.

<u>Met Target in 2018/19?</u> No, the PSD Class of 2019 had graduation rate 83.2% based on official state calculations (down 0.8 percentage units from 84.0% the year before. This target is supported by Action Step 3C – "<u>Graduation Rates</u>" of the 2018/19 PSD Unified Improvement Plan (Action Step 3B 2019/20 UIP).

To interact with a PSD developed graduation rate data visualization tool that provides much greater detail, please click <u>GRADUATION RATES</u>. Please <u>click here for information on PSD</u> graduation requirements.



4-Year Graduation Rates (On Time Graduation Rates):

The PSD class of 2019 graduation rate (83.2%) is above the statewide graduation rate of 81.1% (up 0.4 percentage units from 2018). Statewide, graduation rates have been steadily increasing. As of the Class of 2018, ASCENT students are included statewide in the graduation rate numerator. This inclusion will put upward pressure on graduation rates but is not the only reason statewide graduation rates are consistently increasing.

The 7-year graduation rates (displayed below) had consistently declined from 91.2% in 2012, to 86.2% for the class of 2015. The class of 2016 sees the first increase to 87.9% (the most recent graduates for which this extended rate is available), which is not a surprise as these 7-year rates follow the same pattern of change across the various graduating classes as the 4-year on-time graduation rates had. The statewide 7-year rate has been steadily increasing over the same set of years. We can anticipate this 7-year rate going sharply down for the class of 2017 and then jumping up for the class of 2018.



7-Year Graduation Rates (Extended Graduation Rates):

The 7-year completion rates follow the same patterns as the 7-year graduation rates. PSD can anticipate a positive increase in both 7-year rates as of the Class of 2018.



7-Year Completion Rates (Extended Completion Rates):

The 4-year graduation rate for many subgroups of students such as Hispanic students, students supported with an IEP, and students eligible for free/reduced lunch are lagging on-time graduation rates for similar subgroups statewide. Additionally, PSD graduation rate gaps between these subgroups and their PSD peers are larger than the similar gaps that exists statewide. To interact with a PSD developed graduation rate data visualization tool that provides greater detail, please click <u>GRADUATION RATES</u>.



4-Year Graduation Rates (On Time Graduation Rates):

In the top half of the graph above, one can see the difference between the PSD 4-year on-time graduation rate for Hispanic students and the State's 4-year on-time graduation rate for Hispanic students. In the bottom half of the graph above, one can see the difference (disparity) between the PSD 4-year on-time graduation rate for Hispanic versus White students; and the State's corresponding metric. The graph above indicates that the PSD Hispanic 4-year graduation rate lags the State and that the disparities between Hispanic and White graduation rates are larger within PSD than corresponding statewide graduation rate disparities.



4-Year Graduation Rates (On Time Graduation Rates):

In the top half of the graph above, one can see the difference between the PSD 4-year on-time graduation rate for students eligible for free or reduced lunch and the State's 4-year on-time graduation rate for students eligible for free or reduced lunch. In the bottom half of the graph above, one can see the difference (disparity) between the PSD 4-year on-time graduation rate for free/reduced versus students not-eligible; and the State's corresponding metric. The graph above indicates that the PSD free/reduced 4-year graduation rate lags the State and that the disparities between free/reduced and not-eligible graduation rates are larger within PSD than corresponding statewide graduation rate disparities.

9) Dropout Rate Target: Less than 1% of PSD students will dropout.

Met Target in 2018/19? Yes, the PSD dropout rate was at 0.98% (145/14,737) in 2018/19. This target is supported by Action Steps 3A – "<u>Transition Strategies</u>" and 3B – "<u>Transition</u> Monitoring" of the 2018/19 PSD Unified Improvement Plan (Action Steps 3A & 3B – "<u>Graduation Rates</u>" 2019/20 UIP).

This represents a decrease of 0.04 percentage points from 2017/18 (148/14,431) and is approximately 1.0 percentage units below the state's 2018/19 dropout rate. By looking at the state and PSD dropout rates across the past five years, it appears that the change from 220 to 240 credits as a graduation requirement (Class of 2015) has had no impact on dropout rates. Dropout rates do vary dramatically by ethnicity, economic status, and other student characteristics. Please click <u>DROPOUT RATES</u> to explore related data visualizations.



For Latinx students, the PSD dropout rates have declined in recent years and are below statewide rates.



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For students eligible for free or reduced meal prices, the PSD dropout rates have declined in recent years and are below statewide rates. The overall count of students eligible for free or reduced meal prices has risen in recent years. As a percentage of the overall PSD population of students, the percentage of students eligible for free or reduced meal prices has remained very stable over the past five years (31.5% in 2014/15 to 31.0% in 2018/19).







For students supported with IEPs, the PSD dropout rates have declined in recent years and are below statewide rates. The overall count of students supported with IEPs has risen in recent years. As a percentage of the overall PSD population of students, the percentage of students supported with IEPs has consistently risen over the past five years (7.8% in 2014/15 to 8.7% in 2018/19).







One can see increasing rates of dropping out as the grade levels progress from 7th to 12th. Dropout rates are higher for Latino students than White students statewide and in PSD. In recent years (2015/16 and 2016/17), the PSD dropout rates were higher for 11th grade students than for 12th grade students. This is not true statewide. In 2017/18 and 2018/19, the dropout rate by grade level returned to a more typical pattern where dropout rate increases with grade level during the high school years.



2016/17

2017/18

2018/19

2015/16

0%

2014/15





PSD Dropout Rates by Grade Level - Latino Students

10) <u>College Readiness Target:</u> ≥ 85% of PSD students will meet or exceed SAT college readiness benchmarks in Evidence Based Reading and Writing; and in Math.
 <u>Met Target in 2018/19</u>? No, the 2018/19 grade 11 class had 72% and 53% of students meet the SAT college readiness targets for Evidenced-Based Reading and Writing and Math respectively. This target is supported by Action Steps 1A – 1D of the 2018/19 PSD Unified Improvement Plan (Action Steps 1A–1C 2019/20 UIP).

Evidence Based Reading and Writing achievement on the SAT does meet the 0.25 effect size target that PSD has set for all state assessments. Math achievement on the SAT does not meet the 0.25 effect size target. Outcomes for Evidence Based Reading and Writing decreased from 74% in the spring of 2018 (75.1% in 2017). Math held steady at 53%.



SAT Evidenced-Based Reading and Writing:

SAT Math:



11) <u>AP/IB/Concurrent Enrollment/Work-Based Learning Participation</u>: ≥ 50% of PSD students in grades 11 and 12 will have an Advanced Placement (AP), International Baccalaureate (IB), Concurrent Enrollment, and/or work-based learning experience each year.

<u>Met Target in 2018/19?</u> Yes, 61.8% of PSD juniors and seniors had a Postsecondary Workforce Readiness (PWR) experience. This target is supported by Action Step 3A – "<u>Transition Strategies</u>" of the 2018/19 and 2019/20 PSD Unified Improvement Plans as well as 4A-4D 2019/20 UIP.

Counting how many juniors or seniors were part of PSD in 2018/19 will depend on the time frame of the data pull. Using the CDE Pupil Membership by School and Grade official data source and removing the charter school students from the count, PSD had approximately 1,951 juniors and 2,139 seniors in 2018/19. An unduplicated count (no student is counted twice) of 2018/19 juniors and seniors who participated in one or more AP, IB, Concurrent Enrollment, and/or work-based learning experiences is 2,526 (1,160 juniors, 1,366 seniors). Approximately 59.5% of juniors had one of these PWR experiences (up for the third year in a row from 58.7% in 2017/18 and 54.2% in 2016/17 and 50.8% in 2015/16), while 63.9% of seniors had a PWR experience in 2018/19 (up from 59.4% in 2017/18). This is a total of 61.8% (2,526/4,090) of juniors and seniors considered collectively (up from 59.0% in 2017/18).

The outcomes reported above do not include students that participated in "CU Succeeds". Students participating in CU Succeeds take college classes taught at PSD campuses by highly qualified college level instructors and recorded on a CU Denver transcript. Rocky Mountain High School has the largest pool of students participating with approximately 200-250 students a year accessing this post-secondary experience. For the past three years CU Succeeds data has not been included in this report due to challenges in getting the student level information needed to generate unduplicated counts with AP, IB, other concurrent enrollment opportunities, and work-based learning experiences. In 2018/19 RMHS had 352 students (unduplicated count within the CU Succeeds data set) that participated in CU Succeeds (up from 287 in 2017/18).

12) <u>AP/IB Performance Target</u>: PSD classroom teacher z statistics ≥ 1.96 (indicates advanced student performance significantly higher than typical national and international outcomes). <u>Met Target in 2018/19?</u> Yes, PSD AP advanced classes exceeded national norms by 2.42 standard errors in 2018/19, down from 3.84 standard errors in 2017/18. IB advanced classes exceeded international norms by 2.76 standard errors in 2018/19, up from 2.21 standard errors in 2017/18. This target is supported by Action Steps 1A – 1D of the 2018/19 PSD Unified Improvement Plan (Action Steps 1A and 1B 2019/20 UIP).

Comparisons of our AP Exam outcomes to national outcomes are carried out as part of the PSD system for identifying evidence of instructional effectiveness for our teacher evaluation process. When the 2018/19 PSD AP teachers' mean AP exam scores are converted to z-statistics (z-scores using the standard error of the mean) and compared to the distribution of mean outcomes for all AP teachers nationally, the typical PSD AP teacher's mean is 2.42 standard error units to the right of the national average, and for IB advanced classes, PSD teachers are 2.76 standard errors to the right of the international average. This is strong evidence that our AP and IB students are performing at very high levels on the AP and IB exams relative to students nationwide. Keep in mind that moving a mean score greater than 1.96 standard errors is often used to indicate a statistically significant outcome (not likely due to chance alone).
13) **Postsecondary Outcomes Target:** All percentages and rates higher than related rates for Colorado.

<u>Met Target in 2018/19?</u> Yes. The Class of 2017 is the latest cohort for which the Colorado Department of Higher Education (CDHE) has released postsecondary data. Based on all 5 postsecondary success measures, and for all graduating classes (2009-2017) for which PSD and State data are available, PSD has consistently met this target.

Every PSD graduating class from 2009 to 2017 has had lower remediation rates, higher enrollment rates, higher first year GPA, higher average cumulative credit hours in their freshman year, and higher persistence into their second year of college. Please see Appendix 6 for more detail. <u>https://highered.colorado.gov/Data/K12/</u>

14) <u>Health and Wellness Target</u>: Key Healthy Kids Colorado Survey (HKCS) items that are directly related to the school environment are more favorable than the state's respective percentages and the Social Emotional Learning (SEL) composite score from the Student Connection Survey exceeds 75% and has increased from the prior year.

Met Target in 2018/19? No, based on the latest data available at this time which is from the 2017/18 Healthy Kids Colorado Survey. High school self-reported rates of participating in PE and organized sports were slightly lower than the related states rates. PSD met the target on the other five of seven items. (Results from the 2019/20 HKCS were not available prior to February 25th, 2020.) Also, the Social Emotional Learning (SEL) composite score district wide was 74.5%, falling just short of our 75% target. This target is supported by Action Step 2A – "Social Emotional Learning (SEL)" of the 2019/20 PSD Unified Improvement Plan.

The Healthy Kids Colorado Survey (HKCS) collects self-reported health information from Colorado public school students every other year. It allows for both state and regional-level estimates and is administered to students in randomly selected classrooms. The HKCS was administered in Fall 2017 to more than 56,000 students from more than 190 middle and high schools. HKCS is supported by Colorado Department of Public Health and Environment (CDPHE), Colorado Department of Education (CDE), and Colorado Department of Human Services (CDHS).

The Healthy Kids Colorado Survey is the primary source of direct student level measures that provide statewide norms to aid in interpretation of results. The Healthy Kids Colorado Survey has been in a period of revision and improvement over recent years. Key items selected for inclusion did not remain in effect as the survey evolved from 2015/16 to 2017/18. The specific items selected are a subset of the whole survey and were selected due to their measurement of factors a school staff can influence in a direct manner. There are many other risk-behavior and diet items on the Healthy Kids Colorado Survey that are useful information for a community to survey but may not be appropriate for inclusion in an accountability process. Please click <u>Healthy Kids Colorado Survey</u> to find additional information about the survey.

There are seven items for high schools that are related to school environments and can be appropriately included in the DE 1.0 Monitoring Report. Outcomes for PSD and the state of Colorado on these seven items are provided below. PSD percentages that met the target (more favorable) are shaded green. Others shaded yellow.

Also included in this Monitoring report for awareness building (i.e., no targets are set on these outcomes) are three key substance abuse questions. Although public school staff may not be able to impact substance abuse rates directly, the indicated self-reported rates relative to statewide outcomes are important to be aware of and intervene on when possible.

Healthy kids colorado Survey key items kelated to School							
		PSD	State	PSD	State		
Level	Students who	2017	2017	2015	2015		
	Think it's important to go to college.	92.5% *	89.3%	NA	NA		
	Have an adult to go to for help with a serious problem.	79.5% *	73.5%	NA	NA		
	Skipped school at least 1 day in last month.	21.0%	22.8%	2% *	5.5%		
High School	Carried a weapon on school property in past 30 days	2.9% *	4.4%	NA	NA		
	Been in a physical fight in past 12 months.	15.9%	18.0%	NA	NA		
	Have PE class at least 1 day per week, on average.	34.1% *	43.7%	NA	NA		
	Played on at least one sports team in the past 12	58.0%	60.6%	NA	NA		

Healthy Kids Colorado Survey Key Items Related to School

An asterisk (*) indicates a statistically significant difference between your district and the state.

	healthy kius colorado Survey key Substance Abuse behaviors							
		PSD	State	PSD	State			
Level	Students who	2017	2017	2015	2015			
High School	Used electronic vapor product 1+ days in past 30 days	30.8% *	27.0%	NA	NA			
	Drank alcohol in past 30 days	29.3%	28.7%	25.8%	30.2%			
	Used marijuana in past 30 days	18.6%	19.4%	13.0%	21.2%			

Healthy Kids Colorado Survey Key Substance Abuse Behaviors

An asterisk (*) indicates a statistically significant difference between your district and the state.

Academics aren't the sole focus in PSD. For years, we've looked at how we can best <u>support our</u> <u>students so they are physically and mentally healthy</u>, which in turn gives them the best opportunity to learn and grow. Monitoring whether the Social Emotional Learning (SEL) composite score from the Student Connection Survey exceeds 75% and has increased from the prior year is a timely addition to the DE 1.0 Monitoring Report as PSD has recently flowed additional resources toward this important student outcome. Fourteen PSD non-charter schools have exceeded a 75% SEL composite score and increased their schools SEL composite score from the prior year. Of these fourteen schools, 3 are comprehensive high schools, 3 are middle schools, and 8 are elementary schools. PSD attained a score of 74.5% in both 2018 and in 2019. These scores are up from 74.1% in 2017. The SEL items were not included in the 2016 Student Connections Survey. Monitoring SEL composite score outcomes over the next several years will provide PSD with one metric by which we can monitor the impact of our Unified Improvement Plan action steps (1A and 2A), and financial resources, targeted toward supporting student development of Social Emotional Learning competencies.

					•		
Level	SEL Composite	Self Awareness	Self Mgmt.	Relationship	Soc. Awareness	Decision Making	Students
1) ES	72.9%	64.4%	68.9%	64.1%	88.2%	76.6%	3898
2) MS	74.8%	66.9%	73.5%	64.2%	89.7%	78.2%	5936
3) HS	75.3%	67.5%	78.5%	62.4%	90.6%	77.2%	5231
Total	74.5%	66.4%	73.8%	63.6%	89.6%	77.5%	15065

Percent "Yes" for Overall SEL Composite and by Subscale

Success in a Changing World

PSD students are prepared for college and workforce success. PSD ensures access and encourages participation in a wide range of experiences that reflect expectations of a changing world.

As PSD prepares students for success in a changing world, we develop student awareness of exciting possibilities through career exploration and access to creative learning spaces. The following stories provide examples of these efforts throughout the 2018/19 school year. Many indicators of preparation for college and workforce success are available in the Foundations for Success section (AP/IB/PWR outcomes, SAT outcomes, Postsecondary outcomes, SEL outcomes, etc.)



Students simulate space mission: 'Whatever NASA does, we do'

The scene inside the expansive Webber Middle School science classroom could best be described as organized chaos.

In one corner, students quickly constructed satellites out of cardboard, aluminum foil and duct tape. Another group of kids wearing headsets huddled around computer screens, urgently communicating with their peers, who were busy manning a replica spacecraft some 50-feet away.

"Every team has objectives to fulfill," eighth grader Peyton Cunning said, one of the organizers of the simulated space mission. She added that these objectives are inspired by the tasks laid out for reallife astronauts and researchers. "Whatever NASA does, we do, basically."



The simulated space mission to Mars was part of Webber's Aerospace Ventures in Education Club, or WAVE. Students in WAVE run two simulated space missions every school year. These missions challenge students to combine skills from geology, engineering, biology, astronomy and even art, as they complete their tasks.

"The space mission simulation program really replicates the business environment," eighth-grader Riley Stone said.

Both Riley and Peyton worked together as the grant and public relations advisors for the project, which meant they helped get the word out and applied for grants to help fund the program.

"Students have to interview for their jobs, and even though we all have different learning styles, we work together," said Riley.



Students show off creative inventions in "Shark Tank" style pitches to local patent attorney

Picture this: A house that wards off fires, a padded suit that protects its wearer from unexpected hailstorms, and a pair of specialized boots that protects wild land firefighters.

Recently, Olander Elementary School third graders did a lot more than just imagine these fantastic creations – they built models, developed marketing plans, and pitched them to a local patent attorney, who offered them suggestions and feedback on their ideas.

"First, the whole group came up with the idea," third-grader Caleb said about his team's proposal to create a jacket that instantly melts hail.

"Then, we looked up comparable prices of products that were similar, and then we based our price off of those products," said Isla, who served as the group's chief financial officer. They settled on a price tag of \$50.



The presentations to the patent attorney were the culmination of a six-week project-based learning experience that helped students develop research skills, empathy, scientific understanding and group collaboration strategies. During the project, students were tasked with creating an invention or improving a product that would reduce the impacts of weather-related hazards.



Students worked in teams and decided who would be best at filling each role, from inventor to chief financial officer to engineer. This helped them acknowledge and celebrate each team member's unique skills and talents, teacher Kelsey Sutliff said.

"It's pretty impressive to have 8- and 9-year-olds doing that," she said.

Students take a trip around the globe with Flag Parade

At first glance, it might have looked like a school gymnasium. But for the Bauder Elementary school students seated inside, it was the ticket to a journey around the world as they watched the school's semiannual Flag Parade begin.



The parade provides students and families with an opportunity to share their own unique experiences and learn about other cultures. Many students in the parade carry flags representing the countries that they or their families immigrated from. Some students wore traditional attire from the countries they represented. Each student in the parade had the opportunity to stand on stage and teach their peers something new.

"Ciao from Italy!" one student exclaimed as he took the stage carrying the Italian flag. He quickly rattled off facts about the country.







The next group of students to take the stage represented Ethiopia, which, they pointed out, is known for coffee. And so, the parade continued, with students learning snippets about the rich cultures and histories belonging to these countries around the world. At the parade's conclusion, Principal Brian Carpenter took the stage. "All these cultures, and your own, come together in one school," he told the crowd. "What a wonderful place to be."



Above and Beyond

PSD students are challenged, motivated, and inspired to reach their personal level of excellence. PSD offers students a broad and diverse set of opportunities that cultivates their talents and offers multiple pathways to high levels of success.

The following exemplars will demonstrate that PSD students are experiencing opportunities that cultivate their talents and many are experiencing high levels of success. There are many examples of students, teachers, coaches, counselors, principals, other school staff,



parents, guardians, and community partners working together to create extraordinary experiences and support the successes of our community's young people. The following are selected examples that celebrate accomplishments experienced during the 2018/19 school year. We hope that the sharing of these stories inspires our staff and the communities we serve toward continued and expanded partnership in supporting all students toward their personal "Above and Beyond" experiences. Each year in this section of the DE 1.0 Monitor Report, we will move this "spotlight" around to highlight the diversity of extraordinary experiences and success students are having in performing arts, intellectual competitions, athletics, and all other manner of interests and passions.

Hundreds of PSD students recognized as AP scholars

Congratulations to PSD graduates from the class of 2019 who earned Advanced Placement scholar awards! A total of **545 PSD seniors received awards** at four levels based on their national AP test results at the end of the 2018-19 school year.

District-wide totals for AP scholar awards include:

• National AP Scholars earned an average grade of at least 4 on a 5-point scale on all AP exams taken, and grades of 4 or higher on eight or more AP exams. **45 students were named National AP Scholars**, including: 28 at Fossil Ridge High School, 15 at Fort Collins High School, 1 at Poudre High School and 1 at Rocky Mountain High School.

• **AP Scholars with Distinction** earned an average grade of at least 3.5 on all AP exams taken, and grades of 3 or higher on five or more of these exams. **199 students were named Scholars with Distinction**, including: 97 at Fossil Ridge High School, 68 at Fort Collins High School, 28 at Rocky Mountain High School and 6 at Poudre High School.

• **AP Scholars with Honor** earned an average grade of at least 3.25 on all AP exams taken, and grades of 3 or higher on four or more of these exams. **94 students were named AP Scholars with Honor**, including: 38 at Fossil Ridge High School, 36 at Fort Collins High School, 14 at Rocky Mountain High School and 6 at Poudre High School.

• **AP Scholars** earned grades of 3 or higher on three or more AP exams. **207 students were named AP Scholars**, including 75 at Rocky Mountain High School, 68 at Fossil Ridge High School, 48 at Fort Collins High School and 16 at Poudre High School.

PHS International Baccalaureate graduates get jump start on college credits – 93% earn full IB diploma

Congratulations to the 2019 graduating Poudre High School International Baccalaureate program graduates for earning full IB diplomas. These outstanding students exceeded the national and international average for diploma completion and individual exam scores.

Results showed that 93 percent of the IB senior class of 2019 earned their full IB diploma, far outpacing the international average of 79 percent and the national average of 70 percent. In addition, the average score earned by the 125 PHS upperclassmen who sat for IB exams was 5.0, well above the passing score of 4.

The rigorous two-year diploma program requires students to complete major self-directed projects, community service work and collegiate-level coursework. Each senior leaves high school with at least 24 college credits applicable at any public Colorado college or university.

In order to graduate, students took end-of-course exams in the subjects they studied – English, a second language, math, history, science and the arts.

"The staff at PHS is incredibly proud of the achievements of our 2019 IB graduates," IB Director and Assistant Principal Cori Hixon said. "These students represent some of the finest compassionate, openminded, and motivated individuals who undoubtedly have much to offer their communities. And, along with the social skills obtained in the IB program, academically they have the skills needed to tackle future pursuits. We wish them the best and celebrate their accomplishments."

Rocky Mountain High School students work together to give holiday cheer to families in need

As students weaved in between cafeteria tables at Rocky Mountain High School, it was hard to see them behind the towering stacks of colorfully wrapped presents.

The entire common area had been transformed from a high school dining area into a child's holiday dreams come true. New bikes with shiny bows leaned against some tables; large stuffed animals and playhouses sat next to others. Each table had a printed sign with a number indicating which local family in need would be receiving the carefully chosen presents.

The cheerful scene was part of Rocky's school-wide Adopt-A-Family program, now in its 24th year. The school "adopts" families within its feeder system, providing them with holiday gifts, food, and household necessities. This year, the school adopted 77 families, which include about 400 people.

"It's a huge piece of who we are," Rocky Assistant Principal Tyler Nickel said. "Everybody participates. It's a huge community effort."

Carla, a senior at Rocky, has been participating in the program as a peer counselor for three years. She said the excitement around the project is electric at the school. Giving back feels like a celebration. Rocky junior Connor said he has found the experience deeply rewarding and humbling, especially when he realized how many families need help getting necessities.

"It gave me a new perspective on what people are going through in Fort Collins and in this school," he said, adding that seeing his peers come together to contribute to this worthy cause made him feel inspired. "The community coming together is the best part."



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Highlighting student accomplishments and champions

Every year PSD students, their teammates, coaches, and families are honored by the display of superb performance needed to become a recognized champion. The following students and their teams brought home the gold for the Poudre family. We all recognize that these accomplishments embody the End called Above and Beyond. The accomplishments these young people achieved required dedication, focus, maturity, perseverance, strength, speed, and intelligence. Many, if not all, of these young people often provide an example to their peers regarding personality characteristics that lead to great accomplishment.

Prestigious Senior Scholarships Class of 2019

- U.S. Military Academy Appointments: Jonah Holt (U.S. Military Academy West Point), Fossil Ridge High School; Donovan Jones (Naval Academy), Liberty Common High School
- Daniels Fund Scholars: Jamison White, Rocky Mountain High School; Emma Ackerley, Fort Collins High School; Catherine Cecil, Poudre High School
- National Merit Scholar Finalists:

Jonathan Steiner, Fossil Ridge High School; Nathan Sima, Fort Collins High School; Kaitlyn Ko, Harper Lowrey, and Claire Panella, Poudre High School; Zach Harker, Michael Hofinger, Micaela McConahy, Joshua Rohrbaugh, Kayiyn Shoemaker, and Michael Yeh, Liberty Common High School

- Boettcher Foundation Scholars: Gabriela Carcasson, Fossil Ridge High School; Emily Winn, Fort Collins High School; Whitney Buckendorf and Zoe Drigot, Poudre High School
- National Hispanic Scholar Anna Sofia Calderon, Ridgeview Classical Schools

Music and Art Honors 2018/19

- **ASTA 2019 National Orchestra Festival** The Boltz Middle School Chamber Orchestra, under the direction of Melissa Claeys, and the Rocky Mountain High School Symphony Orchestra, under the direction of Courtney Dowling, have been selected to perform at the American String Teachers Association (ASTA) 2019 National Orchestra Festival in Albuquerque in March 2019. These ensembles are among a select group of school orchestras invited to perform.
- 2019 Colorado 5A State Marching Band Champions Fossil Ridge High School Marching Band
- The Kinard Core Knowledge Middle School Choir won the national No Bullying singing competition with <u>their video of "I Have a Voice."</u> They also performed at Carnegie Hall in New York on May 24, 2019, as part of the Vocal Colors Concert with Alexander L'Estrange, composer/conductor.

Academic State Championships and Honors 2018/19

- **2019 State Champions Lincoln-Douglas Debate** Katherine DeMaret and Caleb Schmitz, Rocky Mountain High School Co-Champions
- **2019 Colorado Science Olympiad champion titles at the high school and middle school levels** - Fossil Ridge High School and Preston Middle School
- 2019 Colorado Trout Bowl Ocean Sciences Champions Liberty Common High School
- Odyssey of the Mind World Competition Qualifying Teams Kruse Elementary, Riffenburgh Elementary, McGraw Elementary and Kinard Middle School.
- 1st place in the "Engineering and Technology" category of the Junior Science and Humanities Symposium held in Albuquerque, New Mexico - Alyssa Keirn, Rocky Mountain High School
- 2019 Colorado Middle School Regional Science Bowl Champions Preston Middle School's Science Bowl team. Team members include Sophie Wang, Jackson Dryg, Colin Magelky, Kary Fang, Christian Groendyk and Coach Logan Burke.

Outstanding Extra-Curricular Accomplishments 2018/19

• **PSD spelling bee winner** - Haley Kendall, Ridgeview Classical Schools

Athletic Awards and Honors 2018/19

- 5A State Boys Golf Team Champions Fossil Ridge High School Boys Golf Team
- 5A individual State Boys Golf Champion and Player of the Year Dillon Stewart, Fossil Ridge High School
- **5A Boys #4 Doubles State Tennis champions** Brady Elliot and John Shelby, Fossil Ridge High School
- Wrestling 5A Wrestling 195 lb State Champion Alec Hargreaves, Rocky Mountain High School
- Girls Swimming 5A 200-yard Freestyle Champion, 5A 500-yard freestyle champion, 5A Swimmer of the Year Coleen Gillilan Fossil Ridge High School
- Girls Swimming 5A 100-yard Butterfly Champion Renee Gillilan, Fossil Ridge High School
- Girls Swimming 5A 200-yard Individual Medley Champion Lucy Bell, Fossil Ridge High School
- **Girls Swimming 5A 400-yard Freestyle Relay Champions** Renee Gillilan, Lucy Bell, Mahala Erlandson, Coleen Gillilan (Fossil Ridge High)
- National High School Cheerleading Champions (Universal Cheerleaders Association) Fossil Ridge High School Spirit (Cheerleading)
- 5A Track and Field Triple Jump Champion Taryn Burkett, Fort Collins High School
- **5A Track and Field 4x400 Relay Champions** Spencer Thurgood, Joseph Maguire, Jack Sheesley, Micaylon Moore, Fort Collins High School
- 5A Track and Field 300 Meter Hurdle champion Garret Nelson, Poudre High School
- **5A Track and Field Long Jump and 5A Triple Jump Champion** Micaylon Moore, Fort Collins High School
- 5A Colorado Girls Golf Champions Fossil Ridge High School Girls Golf Team

Based on the accomplishments of all the PSD students highlighted in this report and the support of teachers, coaches, counselors, administrators, families, friends, and community partners that are important parts of these success stories; there appears to be evidence that the PSD community is reaching above and beyond to attain high level experiences, accomplishments and public recognition.

Connections

PSD students are academically and socially connected to their school and community. PSD provides engaging opportunities to support students' individual pursuits and interests.

To gather information regarding student connections and socialemotional learning competencies, the PSD Student Connections Survey was delivered to all 4th-12th grade PSD students during October and November of 2019. The online survey was made available to students during the school day and was delivered in three languages; English, Spanish, and Mandarin. Participation was



voluntary, with both parents and students having the ability to opt a student out of the survey.

Students' responses to the Connections Survey are intended to help PSD staff learn more about students' academic and social connections within school. Connections are the result of feeling understood, cared about, supported, and valued. Feeling connected to others helps us to be motivated toward a positive future and make the most of our educational experiences. The Student Connections Survey is designed with four areas of focus; student-to-adult connections, student-to-student connections, student-to-interests' connections, and student-to-future connections. During the second and third annual administrations of the Student Connections Survey, Social Emotional Learning (SEL) subscale items were included. Prior to the second administration of this survey PSD had added a couple of additional open-ended items regarding graduation expectations for 6th-12th grade respondents and interests and passions for all grade levels. Due to the Student-to-Interests subscale change from 2016 to 2017, results for this subscale are displayed for 2017, 2018 and 2019 only. The Student-to-Interests subscale data is comparable across 2017, 2018, and 2019. All other Connection Survey data is comparable across all four years.

Individual student responses do not become part of a student's educational record. There are two areas on the 6th-12th grade version of the survey where we ask students if we can share their responses with PSD staff. Other than those two areas on the secondary-level survey, individual student responses are not reported out (confidentiality is maintained). The data gathered are aggregated and used by PSD to improve our service to students and their families based on patterns that emerge across groups of students.

The version of the survey given to middle and high school students included multiple-choice and openended (free response) items. Demographic questions were not needed as the survey was delivered via student email accounts and this allows for PSD to merge in demographic information based on student IDs. Accuracy and efficiency are both increased by use of the student email accounts as a delivery mechanism. A complete copy of the Elementary version of the survey can be accessed by clicking <u>ELEMENTARY CONNECTIONS SURVEY</u> or going to the address below using your web browser. A complete copy of the Secondary (Middle School and High School) version of the survey can be accessed by clicking <u>SECONDARY CONNECTIONS SURVEY</u> or going to the address below using your web browser.

Elementary: (https://drive.google.com/open?id=1uo7EeduT8uY29s066gCeeBf24z1qZ--I)

Secondary: (https://drive.google.com/open?id=1mDeBa_HSzcUqsDqPhd6ASoXcDJcsUAP5)

Use of the PSD email system as a delivery mechanism for this survey also allows response rates to be accurately calculated overall and by subgroups of students. This ensures that PSD has a way of gauging

representativeness of the results. The response rate for this survey is calculated by dividing the number of completed, or partially completed, surveys by the number of students who received an invitation to participate in the survey. Response rate is an important indicator when assessing the likely representativeness of survey results. The 2019/20 response rates were 92.0% (elementary, down from 92.7% in 2018/19), 91.3% (middle school, up from 88.2% in 2018/19), and 62.2% (high school, down from 65.3% in 2018/19). Responses were collected from 15,065 students (up from 15,050 in 2018/19).

To check the likelihood of 2019/20 student responses being representative of the overall population of students we wished to survey, the following graphs can be inspected to see if the distribution of student characteristics differs substantially between the PSD population (top histograms) and the set of students that responded to the survey (bottom histogram). The representativeness graphs for the 2018/19 school year look very similar, where the only clear deviation between respondents and the population is within the grade level distributions.



Other than the reduced response rates as grade levels progress, the respondents have very similar student characteristic distributions when compared to the overall PSD student population.

All multiple choice survey items are writen such that they reflect positive sentiments regarding student connections when item agreement is indicated. Averaging results across multiple items and across many students leads to a measurement that indicates the collective level of agreement with these positively phrased items. This type of aggregation across items and students results in a distribution of outcomes that is numerical and varies by student characteristics and by school. Differences between different student groupings in aggregated outcomes (termed "Percent Agreement" in the reports developed) allow PSD staff to identify important patterns and discover opportunities to enhance student connections within their schools. To explore the outcome data from all three years of the Student Connections Survey, simply click <u>STUDENT CONNECTIONS</u> to access a data visualization tool developed to support use of the resulting information to inform PSD staff and community partners.

Now that survey data has been collected, analyzed, and reported out to school and district leadership teams; the real value comes in the work that follows. The specific actions taken may be unique to each school. However, a general approach that should work well for the district overall and individual school leadership teams is described below:

1) Celebrate Positive Outcomes as Reported by Our Students

PSD administrators always lead toward improvement, and this new data collection provides the opportunity to employ an effective system improvement strategy – identify what is going well and celebrate those successes to promote their continuation and expansion. Every one of our schools has areas within the Student Connections data to celebrate. Be sure to energize the whole staff by sharing those celebrations.

2) Develop a More Complete Picture

A careful review of survey data will often surface additional questions. Small group and one-onone discussions are great ways to ensure that you know what the real student stories are and how we may best respond to new insights. Start this process by exploring your Connections Survey results using the filters within the data visualization tool that allows for nuanced answers to thoughtful questions. Professional curiosity and a willingness to explore is the key.

3) Summarize the Findings that Your Team Believes are Actionable

You will rarely share raw survey data or prepared reports and then sit back and enjoy system improvements. Leadership is the next step. A team of school leaders should develop a succinct and informative summary that seeks to isolate key findings and prioritize those findings based on what is actionable. Actionable means that the information has led to an insight(s) that can be acted on to improve the student experience.

4) Integrate New Insights into Your School Improvement Efforts

Leadership should consider whether any of the actionable insights gained should give rise to development of specific action steps within their Unified Improvement Plan. Alternatively, there may be simple and immediate responses to actionable insights that can be accomplished through adjustments to the regular routines and ongoing development of school culture. School leadership teams will know how best to handle systematic responses to actionable insights at their school. The key point of this next-steps reminder is that change/improvement is not likely to occur without leadership.

5) Track Progress Over Time

As with any improvement effort, leadership will want to continuously evaluate where improvements have been realized and where opportunities exist.

<u>Student Connections Target</u>: Percent agreement \geq 90% indicating strong connections to school adults, other students, and interests.

Met Target in 2018/19? No, the target is not hit for each of the three subscales. Note that the target is hit for the Student-to-Adult Connections subscale in 2018/19 as it was in 2017/18 and is again in 2019/20. This target is supported by Action Step 1C – "Data Informed Leadership" of the 2018/19 PSD Unified Improvement Plan (Action Step 1A, 2A, 3A, 4A, 4B4C, and 4D 2019/20 UIP).

Although the PSD connections target is evaluated relative to the 2018/19 school year outcomes, the Student Connections section of this report includes fall 2019 outcomes as well as the fall of 2018. This is because, unlike achievement scores, attendance rates, graduation outcomes, etc.; the current year Student Connections data has been collected at the time of this report and its inclusion enhances our system's insights.

It is clear from evaluating multiple years of connections data across the three main subscales that students consistently selfreport the highest levels of connection to adults at school, followed by peer connections, and then interests/passions. Patterns in the Student Connections and Social-Emotional Learning (SEL) measures, that are consistent over time, and indicate associations with student characteristics as well as academic, attendance, and behavioral outcomes provide evidence of construct validity. Student Connections Survey outcomes being correlated in a theoretically predictable manner with other measures (convergent validity), not associated with measures of constructs theoretically not related (divergent validity evidence), as well as being predictive of future outcomes on theoretically related measures (predictive validity evidence) each provide evidence of construct validity.



The "Percent Agreement" across items and students are reported below for each level of PSD (elementary, middle, high school). Higher percentages indicate stronger student connections.



Overall levels of self-reported connection are fairly high district wide, and yet we see useful patterns across the levels of PSD, across the subscales, and among student characteristics. The following are just a few selected outcomes to demonstrate the types of insights that PSD has gained from the survey data. There is no way, within the DE 1.0 Monitoring Report, to adequately represent the tremendous leadership value that a data set such as that produced by the Student Connections Survey generates, especially now that we have three successive years of information and can see change (or lack thereof) over time. A data visualization tool is the only way to efficiently and effectively put the information in the hands of the many school and district leaders that explore outcomes by level (elementary, middle,

high), specific school within level, grade within school, and student characteristic combinations or even within specific responses to key items within the survey itself. The data visualization tool that is part of the PSD Analytics Platform is an efficient way to report out on the Connections Survey in a meaningful way to our community as well as our district staff. That data visualization tool can be accessed by clicking <u>STUDENT CONNECTIONS</u>. Insights being highlighted in this report are just examples that demonstrate the types of outcomes that Poudre School District has at its disposal to promote data-informed leadership.

Patterns of student connection are evident based on student mobility with mobile students showing lower levels of self-reported connections to adults, peers, and interests while at school. Although PSD staff may not be able to directly intervene on all factors driving student mobility, the awareness of these student connection associations/patterns may prompt PSD staff to explore methods for reducing the negative impact of mobility on student connections and thereby likely improve many other outcomes for mobile students. Note that complete mobility information for the 2019/20 school year is not available at the time of writing this report, but initial data follows the same clear pattern.



Patterns of student connection are evident based on student socio-economic levels with students eligible for free meals showing lower levels of self-reported connections to adults, peers, and interests while at school. Although PSD staff may not be able to directly intervene on a family's economic realities, the awareness of these student connection associations/patterns may prompt PSD staff to explore methods for reducing the negative impact of lower income levels on student connections and thereby likely improve many other outcomes for impacted students.



Student-to-Adult (% Agreement) by Free/Reduced Status



Student-to-Student (% Agreement) by Free/Reduced Status





Patterns of student connection are evident based on the "Levels of Support" student groups. PSD has developed a data visualization tool, Levels of Support, which allows for a shared understanding districtwide regarding which PSD students are most in need of additional academic support in English/Language Arts and Math. This shared understanding is based on a body of evidence from the prior academic year for each returning student.

Recall that there is a very strong pattern of increasing self-reported feelings of student connections to adults in school, peers, and interests/passions as students achieve at higher levels based on multiple prior year assessments. This strong pattern is evident at elementary, middle, and high school levels and across all three subscales of the Student Connections Survey. The implications for PSD staff regarding the opportunity to better connect with students at the lower end of the prior achievement scale may prove invaluable to our continuous improvement efforts.



Student-to-Adult (% Agreement) by Level of Support_Math

Student-to-Student (% Agreement) by Level of Support_Math

	82%	2017	2018	82.2% 2019
	84%	83.1%	82.9%	84.4%
	86%		85.5%	
 4) Exceptional Outcomes 	88%	87.4%	87.2%	87.3%
3) Met Targets				
2) Team Awareness	90%		89.4%	89.8%
1) Additional Support	92%	90.9%		

Student-to-Interests (% Agreement) by Level of Support_Math

1) Additional Support		82.0%		83.0%
 2) Team Awareness 3) Met Targets 	80%		81.8%	
 4) Exceptional Outcomes 		76.3%	76.2 %	
	75%	73.4%	73.8%	75.5%
	70%	2017	2018	70.6% 2019

Patterns of student connection are evident based on student ethnicity with Hispanic students showing slightly lower levels of self-reported connections to adults, peers, and their interests/passions while at school. It is interesting to note that the magnitude of difference between self-reported levels of connection for these two groups of students is relatively small compared to the differences that emerge across mobility, socio-economic status, or the Levels of Support groupings. Awareness of these student connection associations/patterns may prompt PSD staff to explore these relative patterns within their specific school environment.



Student-to-Adult Connections (% Agreement) by Ethnicity



Student-to-Student Connections (% Agreement) by Ethnicity

Student-to-Interests Connections (% Agreement) by Ethnicity



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For the second year in a row, students self reported that perceived support/interest from adults in exploring and shaping students hopes and plans for their future is much lower in reference to PSD staff when compared to parents, guardians, and friends. Additionally, the overall rate of approximately 2/5 of students responding "No" to the item depicted below is higher than it might be with intentional action. **Teacher/Coach played key role in exploring/shaping hopes/plans for your future.**



Parent/Guardians/Friends played key role exploring/shaping hopes/plans for your future.



The indication "Yes" regarding staff involvement has decreased to it's lowest rate in four years; 60.5% 2019/20, 64.2% in 2018/19, 63.3% 2017/18 and 65.2% in 2016/17. Likewise, the response for parent/guardian support has decreased to it's lowest rate in four years; 90.1% 2019/20, 93.0% in 2018/19, 91.9% 2017/18 and 91.9% in 2016/17. This outcome seems to suggest that it is important that staff focus on increasing the number/percentage of students that feel supported in exploring/shaping their plans by intentionally engaging students in conversations about their interests and hopes for their future. Additionally, PSD staff can continue to be a source of information and inspiration for connecting our youth with opportunities to explore their interests, both in our classrooms as well as through appropriate connections to community opportunities.

The idea behind these measures is deceptively simple. If there are systematic differences in the number and types of people actively supporting our students in forming a positive image of their future possibilities, we may be able to expand these networks of support. Recall that the Student Connections Survey is focused on providing actionable feedback to school leadership teams so we, as a system, can sustainably improve our service to students and their families.

PSD can explore patterns within the approximately 2/5 of students that did not indicate either a Teacher/Coach or Counselor as playing a key role in this fundamental process related to a fullfilling educational experience. The data visualization tool that is part of the PSD Analytics Platform allows staff (and community partners) to explore many nuanced questions regarding where this form of student connection is strongest and weakest by simply using appropriate filter combinations. For example, the outcome on this set of items filtered to those students in grades 6-12 that indicated they are not sure if they will graduate from high school (625 students) indicates that 59.5% of them do not feel that a teacher or coach played a key role in helping them explore their hopes and plans for the future.

For this same group of 625 students in 2019/20, their response to other key items on the Student Connections Survey varied significantly from the responses of the remainder of the student population. For example, the graph below depicts outcomes for the 625 students (grade 6-12) that indicated they do not know if they will graduate from high school. Similar patterns exist in 2018/19 and other prior years.



Compared to the remainder of the student respondents (grades 6-12) that indicated they did expect to graduate from high school.



Interpretations and Findings

Combining the summary of outcomes related to specific Ends identified above, with the additional data displays and auxiliary information provided in the appendices and data visualization tools included in this report, the following interpretations of important patterns are offered for the reader's consideration. This is not meant to be a comprehensive listing of insights gained, but rather highlights some of the key findings and relationships across the entire body of evidence that this report represents. There is very little evidence to suggest that shifting demographics are key factors in explaining changes in graduation, attendance, or mobility rates. All PSD student characteristic proportions have remained very stable over the past five years.

The Class of 2015 graduation rate of 78.6% garnered intense interest and scrutiny districtwide. PSD had enjoyed rising graduation rates for several years eventually hitting a high point of 86% for the class of 2012. Then in 2012/13 the graduation rate began a decline and that decline led to two years (2015 and 2017) where PSD on-time graduation rates hit 78.6%. Meanwhile, statewide graduation rates steadily climbed and even exceeded the PSD rate in 2017. With the Class of 2018 PSD saw a dramatic change in this trend hitting a graduation rate of 84%. The Class of 2019 on-time (4 year) graduation rate of 83.2% represents a slight decline. Special populations of students such as Latinx students and students eligible for free or reduced lunch prices continue experiencing lower graduation rates than their PSD peers and lower graduation rate graduation rates have increased over the past five years. The Class of 2019 graduation rate gaps between PSD and the state for these two groups of students is the largest it has been for the past five years. PSD dropout rates have declined slightly to be less than 1% in 2018/19. PSD dropout rates for Latinx and free or reduced lunch eligible students are both lower than rates for like-peers statewide.

Possibly more informative than a high or low rate for the most recent graduating class, it is the amount of variability in the PSD graduation rate itself that compels PSD to explore the policies and practices that influence graduation rates. N-count has a substantial impact on expected aggregate statistic variability. To motivate our understanding of typical year-to-year graduation rate variability among similar large districts, Boulder Valley on-time graduation rates have varied by at most 2.5 percentage units in the past five years. Cherry Creek on-time graduation rates have varied by at most 1.9 percentage units, Saint Vrain has varied by at most 3 percentage units, and Poudre on-time graduation rates have varied by at most 5.4 percentage units in the past five years (almost double each of the three comparison districts just cited). Excessive variability in any process outcome often indicates a lack of consistency regarding systematic implementation of policies/practices, or at least one key factor, if not several, that are not effectively addressed in the policies/practices. Examples of factors that may impact graduation rates include grading practices, entry criteria for specific courses, how students are supported through course sequences and extracurricular challenges, behavioral expectations and so on.

The year-to-year on-time graduation rate has varied by at most 2.5 percentage units in the past five years at one PSD comprehensive high school, while maximum year-to-year variability for the other three are 7, 6.4, and 5.9 percentage units. Keeping in mind that the typical graduating class for a PSD comprehensive high school is approximately ¼ of the 2,000 students in a typical PSD graduation class, we expect year-to-year variability to be higher within a high school, as compared to variability of the district rate. In each of the past three years, the one comprehensive high school with exceptionally low year-to-year graduation rate variability (2.5 units maximum), indicating a systematic and consistent approach to multiple factors that lead to the graduation event, also has the highest graduation rate within PSD for Latinx, Free/Reduced lunch eligible students, English language learners, and for students

supported with IEPs. The high school with the exceptionally low variability in overall graduation rates (less than ½ the variability of a district that is approximately 4 times larger), and the highest graduation rates for our most historically underserved populations, is the only comprehensive high school where students supported with IEPs graduate at a higher rate than similar students statewide. This school provides an in-district exemplar when it comes to graduation and completion outcomes.

High schools with the lowest graduation rates have the highest mobility rates. Higher instances of student mobility and lower levels of school attendance are factors that work against attaining high levels of academic outcomes. These same two factors have been associated with lower levels of self-reported feelings of connection with adults at school, peers at school, and connections to interests and passions while at school. Although these relationships may seem obvious to the average community member and PSD educator, PSD now has longitudinal measures of these important student success factors within our student population and can see patterns that can be leveraged in support of student success. It appears that attendance rates are declining statewide and locally, even at the elementary level. Mobility rates declined statewide and in PSD in 2018/19, and these changes are not due to a change in the calculation methodology from the prior year. These declines in mobility are evident for students overall, students eligible for free or reduced lunch prices, Latino students, and students supported with an IEP.

PSD students continue to have high levels of overall academic achievement. The z-score methodology indicates that PSD students demonstrate measurably higher performance than grade level academic peers. Evidence from the TS GOLD, DIBELS Next, NWEA MAP, CMAS, PSAT, SAT, AP exams, IB Exams, and post-secondary outcomes for PSD graduates all support the claim that PSD students achieve at high levels and continue to have positive, post-PSD, academic outcomes. This consistently high performance is evident overall and by subgroups when compared to like subgroups statewide or nationwide. The one exception to subgroup performance consistently exceeding like peers are the outcomes for students supported with an IEP. The academic area with the lowest relative performance in the general PSD population and across multiple years is middle school language arts. Although PSD DIBELS Next achievement outcomes remain high relative to nationwide peers, we see that our achievement effect size for DIBELS Next (grades 1-3) and MAP (grades 2 & 3) have declined over the past three years. Traditional achievement gaps between special groups of students within PSD and the overall PSD student population persists and are more fully described throughout Appendices 2 and 3.

Student growth, as measured by the Colorado Growth Model as well as the PSD analysis of z-score gains, indicates higher outcomes than state and national academic peers (MGP > 50 and/or Zgain > 0) at most grade level by subject combinations for each major assessment program that PSD uses to measure academic gains (DIBELS Next, MAP, and CMAS including PSAT89/PSAT/SAT). ACCESS for ELLs growth is outstanding in PSD for each of the past three years, overall and by all major subgroups including students supported with IEPs. ACCESS measures English language acquisition for English language learners, a special subgroup of learners who are also assessed in traditional academic subjects. Exceptions to these high growth outcomes are identified below.

Middle school English language arts growth is lagging middle school math growth and lags English language arts growth at all other grade levels. CMAS and MAP data illustrate this pattern and PSD is taking steps to further investigate and rectify this issue. Also, 9th grade math growth as measured by CMAS to PSAT8/9 where the median growth percentile (MGP) is below 50 (47.0 in 2018/19) is a second exception to the otherwise high levels of measured growth. PSD is not concerned about this anomaly as we believe the result is reflective of the state's decision not to calculate student growth percentiles (SGP) for our substantial number of twice accelerated students. Additionally, it is important to consider that the CDE is not calculating SGPs from 9th grade CMAS to PSAT8/9 for English language arts due to technical concerns. This raises a flag of caution regarding interpretation of 9th grade math growth data

even if the twice acceleration issue were not present. These cautions regarding the use of prior-year CMAS scores to create academic peer groups applied to the PSAT8/9 growth calculations, and twice accelerated students being excluded, will remain problematic for several years due to the use of course specific assessments in math prior to spring 2019. Simply put, apple-to-apple normative comparisons in 9th grade mathematics growth are challenging statewide and these challenges are compounded in PSD due to our substantial number of accelerated students. Approximately 1,100 student growth percentiles are going into the 2018/19 MGP calculation from a 9th grade class of approximately 2,000 students. In comparison, the PSD 10th grade PSAT8/9 to PSAT MGP and the PSD 11th grade PSAT to SAT MGPs each included approximately 1,500 student growth percentiles. Looking at the MAP growth results for approximately 600 9th grade students, the average z-score gain was greater than zero. This MAP result is based on approximately 1/4th of the 9th grade class and indicates growth at a rate slightly higher than national peers. Growth data for 9th grade math needs to be interpreted cautiously.

In 2018/19, and for the past three consecutive years, PSD subgroups of students, and students overall, have noticeably better growth outcomes in math as compared to English language arts. As an example, 4th-8th grade PSD students supported with an IEP exhibited math growth based on the Colorado Growth Model that has been higher than their statewide academic peers for each of the past three years. The same statement is true for English Language Learners, students eligible for free/reduced lunch, GT, minority status, Hispanic students, and students that tested below benchmark levels. Student growth in mathematics is very high for all student groups based on this state assessment system. In 4th-8th grade English language arts, PSD subgroups often lag their like-peer comparison groups statewide even though the combined growth results across all students was slightly higher than the state for the past two years.

The exact same subject-specific pattern can be seen when looking at the growth attained with student groups PSD designates as "Additional Support". Math growth for this important group exceeds statewide academic peers as often as it falls short of this normative comparison. English language arts on the other hand falls short of statewide academic peer growth comparisons and falls short of PSD math growth at each level and in each of the past three years. This stark and persistent contrast in subgroup growth based on academic subject is noteworthy and indicates that PSD should invest some time and energy in addressing English language arts growth among subgroups with special attention paid to the middle school level.

While comparing three successive years of student connections data we see very stable outcomes over time in each of the three main subscales with slight declines in 2019/20. We also see very reasonable patterns in the connections data such as clear differences in outcomes across student groups. These clear patterns that have sustained across three years of gathering connections data reinforces the validity and leadership value of the information students are providing. Student subgroups with the lowest levels of past academic performance self-report the lowest levels of feeling connected to others at school.

Even with evidence of positive achievement, academic growth, student connections, and postsecondary outcomes overall (across all students), PSD has evidence of persistent performance and outcome gaps for some subgroups of students. The outcome gaps being referred to show up to one degree or another across virtually all indicators for which we have set targets. Evidence of these gaps have been a persistent theme in PSD's District Performance Frameworks going back to the first year (2007/08) the state began reporting out on the Key Performance Indicators. Subgroups that have outcomes lagging others include students eligible for reduced or free meals, students supported with an IEP, English language learners, and Hispanic students. Student measures that appear to exhibit reliable associations with lower achievement/growth outcomes are mobility, truancy, and lower levels of self-reported connections with adults at school, peers, and interests/passions.

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District Ends Conclusions

In summary, the district has adopted four goals that interpret DE 1.0. The interpretations are intended to encompass key outcomes for students throughout their PreK-12 experience in Poudre School District. To focus on continuous improvement, PSD has set targets that while achievable, are rigorous, especially when applied to subgroups of students that have not historically performed as high as our general population. PSD has identified the closing of the outcome gaps, while continuing to support all students in academics and extracurricular pursuits, as a priority for many years. The data elements being gathered and reported through this Monitoring Report, and other district systems such as the Analytics Platform, are intended to help our educators, administrators, and community partners engage in systematic efforts toward optimal student experiences.

The Monitoring Report highlights the many opportunities students in our district are afforded toward developing their personal passions while connecting in meaningful ways with the world around them. The many opportunities PSD students enjoy are only available due to the support of their families, the dedication of PSD staff, and the high level of involvement consistently provided by the surrounding communities.

Overall, Poudre School District has many outcomes to be proud of. There is evidence throughout this Monitoring Report that PSD remains a statewide leader in many areas related to student outcomes. There are also areas that can be improved upon and the data presented in this report are designed to help inform our district regarding these areas of opportunity. This Monitoring Report helps inform our district's improvement processes and these processes are documented in the Unified Improvement Plan. While the Monitoring Report documents progress toward the district ends by reporting on the operationalized outcome goals, the Unified Improvement Plan documents the means being utilized to improve future outcomes. In this way the two documents complement one another and are inextricably linked in an ongoing continuous improvement process that is designed to promote optimal outcomes for all students.

This DE 1.0 Monitoring Report includes direct indicators of where outcome targets are most directly supported within the Unified Improvement Plan. The PSD Analytics Platform is also directly linked throughout this report to provide school leaders and our community partners the ability to explore outcome data in a much more robust manner. The intention of making such a wealth of de-identified and aggregate data easily available is to promote data-informed leadership among all PSD staff and our community partners. All PSD schools annually engage in site-specific improvement efforts, the availability and explicit public use of the PSD Analytics Platform within the context of this DE 1.0 Monitoring Report is intended to serve as a model of how the Analytics Platform can be used to support continuous improvement efforts districtwide and within specific schools.

Appendix 1: Attendance and Mobility

<u>Attendance Target:</u> PSD students will have \geq 95% attendance rate.

PSD 2018/19 Attendance Rate (All Schools): 92.7% (down 0.3 percentage units from 93.0%) PSD 2018/19 Attendance Rate (w/o Charters): 92.6% (down 0.3 percentage units from 92.9%) State 2018/19 Attendance Rate (All Schools): 92.3% (down 0.2 percentage units from 92.5%)

The numbers above are reported directly from CDE source documents available HERE.

Attendance Rate = Total Student Days Attended divided by the Total Student Days Possible

Total Days Possible = Total Days Attended + Total Student Days Excused Absence + Total Student Days Unexcused Absence



The following display is a snapshot of the CDE District Dashboard Tool.

To get a longer longitudinal view of State, district, and school attendance rate trends, PSD created a data visualization report within System Insight that allows one to explore attendance trends based on data from 2009/10 through the most recent school year. To interact with the PSD developed attendance data visualization tool for districts and schools statewide please click <u>ATTENDANCE</u>. The 2018/19 PSD attendance rate is higher than the overall state rate by 0.4% units. Both PSD and State attendance rates have declined over the past five or more years.



District to district comparisons of attendance and truancy rates must be interpreted with caution as the following message indicates. The following was retrieved from the Colorado Department of Education (<u>http://www.cde.state.co.us/cdereval/truancystatistics.htm</u>).

"The (truancy) data is not comparable between districts because attendance and excuses for absences are rooted in a local policy unique to the district. In some cases, it may be unique to the schools within the district. For example, a school administrator in one school may accept an excuse from a parent but another administrator in another school within that same district may not accept the same reason for the excuse by another parent. Some schools may take attendance more than once a day, which increases the chance of discovering students who have left during the school day. Others may not take attendance with the same frequency. A higher rate does indicate more unexcused absences being recorded. However, it may not necessarily indicate a higher number of truant students than another school with more lax procedures."



PSD calculates the attendance percentage for each individual student and has a sophisticated process for tracking these data and making the data available to staff via data visualization reports in Student Insight. PSD cannot share a link to these tools with the public, but we can share the following aggregated outcomes which are pulled directly from Student Insight.

When looking at just non-charter PSD schools, we see that there are not substantial gender differences in attendance, but there are differences by grade level, ethnicity, IEP status, and identified needs for academic support based on prior performance outcomes. Students identified as candidates for Additional Support (in both math and ELA), students supported with an IEP, and American Indian students are subgroups with the largest attendance disparities as well as having the largest drops in attendance rates from the prior year. The attendance decreases we see in PSD overall, are evident for virtually every subgroup of students as evidenced in the final column of each attendance table displayed below. We see that elementary students have not hit the PSD attendance target for the second time in many years. Asian students are the subgroup that met the PSD attendance target of 95% in 2018/19. Exceptional Outcomes in Math and English Language Arts are the two subgroups that came very close to 95% attendance but did not attain the PSD attendance target.

		Attendance Change from General PSD	Attendance Change from Same Subroup
Level	Attendance %	Population Same Year	Prior Year
Elementary Schools	94.8%	2.2%	-0.1%
Middle Schools	92.7%	0.1%	-0.4%
High Schools	89.2%	-3.4%	-3.7%
PSD Overall Rate	92.6%		

Attendance Percentage by Level 2018/19

Attendance Percentage by Gender 2018/19

		Attendance Change from General PSD	Attendance Change from Same Subroup
Gender	Attendance %	Population Same Year	Prior Year
Male	92.5%	-0.1%	-0.4%
Female	92.6%	0.0%	-0.4%
PSD Overall Rate	92.6%		

Attendance Percentage by Ethnicity 2018/19

		Attendance Change from General PSD	Attendance Change from Same Subroup
Ethnicity	Attendance %	Population Same Year	Prior Year
Asian	95.4%	2.8%	0.0%
Black	90.9%	-1.7%	0.2%
Hawaiian/Pacific	91.4%	-1.2%	-2.0%
Latino/Hispanic	89.8%	-2.8%	-0.7%
Indian / Alaskan	86.8%	-5.8%	-0.8%
Multi Race	92.5%	-0.1%	-0.9%
White	93.3%	0.7%	-0.2%
PSD Overall Rate	92.6%		

Attendance Percentage by IEP Support 2018/19

		Attendance Change	Attendance Change
		from General PSD	from Same Subroup
IEP	Attendance %	Population Same Year	Prior Year
Yes	89.5%	-3.1%	-0.4%
No	92.6%	0.0%	-0.6%
PSD Overall Rate	92.6%		

		Attendance Change	Attendance Change
Laural of Command	A M A A A A A A A A A A	from General PSD	Trom Same Subroup
Level of Support	Attendance %	Population Same Year	Prior rear
Additional Support	87.6%	-5.0%	-1.5%
Team Awareness	92.2%	-0.4%	-0.3%
Met Targets	93.5%	0.9%	-0.3%
Exceptional Outcomes	94.9%	2.3%	-0.4%
PSD Overall Rate	92.6%		

Attendance Percentage by Math Level of Support 2018/19

Attendance Percentage by ELA/Reading Level of Support 2018/19

		Attendance Change	Attendance Change
		from General PSD	from Same Subroup
Level of Support	Attendance %	Population Same Year	Prior Year
Additional Support	89.0%	-3.6%	-0.7%
Team Awareness	92.3%	-0.3%	-0.5%
Met Targets	93.5%	0.9%	-0.3%
Exceptional Outcomes	94.7%	2.1%	-0.1%
PSD Overall Rate	92.6%		

In general, a student is considered mobile any time he or she enters or exits a school or district in a manner that is not part of the normal educational progression. The state's mobility calculation timeframe was modified in the 2017-2018 school year so that only entries and exits that occur from the October Count date to the end of the school year are included in the calculation. Students must have a gap in attendance of more than 10 days for a move to be considered mobile. This change lowers mobility rates relative to prior years. The PSD student mobility rate for all students considered collectively has been below the state's rate and decreasing over the past several years. The drops we see in both the state's rate and PSD's rate in 2017/18 are dramatic due to the changes in calculation method described above. Decreases in the State's rate and PSD's rate in 2018/19 reflect a real decrease, not due to calculation method changes.

For more information on the mobility rate calculation see the following link. <u>http://www.cde.state.co.us/cdereval/mobility-stabilitycurrent</u>

To get a longer longitudinal view of state, district, and school mobility rate trends, PSD created a data visualization tool that allows one to compare outcomes over time within a setting as well as across different settings statewide. To interact with the PSD developed mobility data visualization tool for districts and schools statewide please click <u>MOBILITY</u>. A few highlights are provided below.



Students eligible for free or reduced meal prices and Latinx students had a lower mobility rate in 2018/19 than in 2017/18, but still have higher mobility rates than the general PSD population. The "gap" in mobility rate between a subgroup and the overall population of students is termed "Mobility Rate Disparity" in the graphs below. It is important to note that groups with a positive mobility rate disparity are associated with lower achievement, academic growth, and graduation rate outcomes. Mobility is not a favorable trait if one is interested in optimal academic outcomes and PSD is very happy to see these disparities decreasing for our students eligible for free or reduced meal prices in 2018/19.



Students that are identified as English language learners (ELL) have higher levels of mobility than the general PSD population, have a higher level of mobility in 2018/19 when compared to the prior year, and have a mobility disparity rate that has increased.

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Looking at mobility differences across comprehensive high schools, we see that there are substantial differences and these differences roughly align with several other educational outcome indicators of high interest. Recall that to interact with the PSD mobility data visualization tool for districts and schools statewide, all one needs to do is click <u>MOBILITY</u>, and then explore the data most relevant to your own questions of interest.



Appendix 2: Early Literacy

Early Literacy Target: ≥ 85% of PSD K-3 students will meet End-of-Year DIBELS Next benchmarks.

DIBELS Next is an assessment that is used in meeting READ Act requirements. In 2018/19 approximately 76% of kindergarten through 3rd grade students met the end-of-year benchmark. The following view is pulled from System Insight and shows the overall performance level outcomes across the most recent two years.

Spring 2018	Performance	Levels - ALL	Students 7987	Spring 2019	Performance	Level - ALL	Students 8014
1) Above Benchmark			54%	1) Above Benchmark			54%
2) Benchmark		23%		2) Benchmark		22%	
3) Below Benchmark	10%			3) Below Benchmark	10%		
4) Well Below Bench	12%			4) Well Below Benc	14%)	
c	 196 20	96 40	0%		96 20	96 41	D96

DIBELS Next Criterion Refernced Outcomes - 2018/19

		Well Below	Below	At or Above	
Test Session	Grade	Benchmark	Benchmark	Benchmark	
	К	16.7%	13.9%	69.3%	
	1	24.0%	13.7%	62.4%	
Beginning of Year	2	17.8%	7.9%	74.3%	At or Above
	3	18.6%	8.3%	73.1%	Benchmark
	Total	19.3%	10.9%	69.8%	Change
	К	8.0%	11.4%	80.6%	11.3%
End of Year	1	17.2%	11.5%	71.3%	8.9%
	2	14.3%	8.6%	77.1%	2.8%
	3	12.1%	7.7%	80.1%	7.0%
	Total	13.0%	9.8%	77.2%	7.5%

DIBELS Next Criterion Refernced Outcomes - 2017/18

		Well Below	Below	At or Above	
Test Session	Grade	Benchmark	Benchmark	Benchmark	
	К	15.9%	14.1%	70.0%	
	1	24.5%	15.5%	59.9%	
Beginning of Year	2	15.7%	9.3%	75.0%	At or Above
	3	15.9%	7.9%	76.2%	Benchmark
	Total	18.0%	11.7%	70.4%	Change
	К	7.9%	12.1%	80.0%	10.0%
	1	16.1%	11.0%	72.8%	12.9%
End of Year	2	10.6%	9.9%	79.5%	4.4%
	3	11.2%	7.8%	81.0%	4.8%
	Total	11.4%	10.2%	78.4%	8.0%

DIBELS Next Criterion Refernced Outcomes - 2018/19

		Well Below	Below	At or Above	
Test Session	Grade	Benchmark	Benchmark	Benchmark	Total
	К	311	259	1289	1859
	1	463	264	1204	1931
Beginning of Year	2	340	151	1420	1911
	3	356	158	1396	1910
	Total	1,470	832	5,309	7,611
	K	149	211	1499	1859
	1	333	222	1376	1931
End of Year	2	273	165	1473	1911
	3	232	148	1530	1910
	Total	987	746	5,878	7,611

Dibles Next Chieffon Kelefficed Outcomes - 2017/10							
		Well Below	Below	At or Above			
Test Session	Grade	Benchmark	Benchmark	Benchmark	Total		
	K	303	269	1332	1904		
	1	458	290	1119	1867		
Beginning of Year	2	293	174	1404	1871		
	3	319	158	1524	2001		
	Total	1,373	891	5,379	7,643		
	K	151	230	1523	1904		
	1	301	206	1360	1867		
End of Year	2	198	186	1487	1871		
	3	225	156	1620	2001		
	Total	875	778	5,990	7,643		

DIRELS Next Criterian Referenced Outcomer - 2017/19

The "Beginning-of-Year" to "End-of-Year" comparisons displayed above are true cohorts. Notice that the totals in the lower right-hand corner of the frequency tables (right side) for the 2018/19 cohort match exactly for the "Beginning of Year" and "End of Year" sections (7,611 students). This matched cohort type of design is used so that we are comparing post outcomes (End of Year) to the same exact student group's pre-scores (Beginning of Year) and observed gains in the percent of students "At or Above Benchmark" is not due to differences in groups of students being compared.

In each of the past two school years, the percentage of K-3 students that have moved from "Below Benchmark" at the beginning of the year to "At or Above Benchmark" by the end of the year is substantial (8.0 percentage points in 2017/18 and 7.5 percentage units in 2018/19). In both school years, the increase in the percentage of students "At Benchmark" is most dramatic for Kindergarten and 1st grade students as opposed to 2nd and 3rd grade. Larger gains at earlier grades are also evident for subgroups of students.

Free/Reduced Lunch Eligible Early Reading - DIBELS Next 2018/	19
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	Beginning	of Year (BOY)	End of Year (EOY)			
	At or Above Total Grade		At or Above	Total Grade		
	Benchmark	Free/Reduced	Benchmark	Free/Reduced		
Grade	Percent BOY	N Count	Percent EOY	N Count	Change in %	
К	48.6%	673	65.8%	673	17.2%	
1	42.5%	661	48.6%	661	6.1%	
2	59.0%	648	59.6%	648	0.6%	
3	51.5%	649	61.0%	649	9.6%	
Total	50.3%	2,631	58.8%	2,631	8.4%	

Students with Disabilities Early Reading - DIBELS Next 2018/19

	Beginning of	Year (BOY)	End of Year (EOY)				
	At or Above	Total	Total At or Above				
	Benchmark	Grade IEP	Benchmark	Grade IEP			
Grade	Percent BOY	N Count	Percent EOY	N Count	Change in %		
К	34.2%	155	34.8%	155	0.6%		
1	16.0%	156	23.7%	156	7.7%		
2	20.8%	192	24.0%	192	3.1%		
3	14.8%	183	18.0%	183	3.3%		
Total	21.1%	686	24.8%	686	3.6%		

Free/Reduced Lunch Eligible Early Reading - DIBELS Next 2017/18

	Beginning	of Year (BOY)	End of Year (EOY)			
	At or Above	Total Grade	At or Above	Total Grade		
	Benchmark Free/Reduced		Benchmark	Free/Reduced		
Grade	Percent BOY N Count		Percent EOY	ercent EOY N Count		
к	49.3%	661	63.5%	661	14.2%	
1	42.4%	655	57.4%	655	15.0%	
2	56.2%	678	61.2%	678	5.0%	
3	59.3%	760	62.8%	760	3.4%	
Total	52.1%	2,754	61.3%	2,754	9.2%	

Students with Disabilities Early Reading - DIBELS Next 2017/18

	Beginning of	Year (BOY)	End of Year (EOY)				
	At or Above	Total	At or Above	Total			
	Benchmark	Grade IEP	Benchmark	Grade IEP			
Grade	Percent BOY	N Count	Percent EOY	N Count	Change in %		
К	33.6%	149	38.9%	149	5.4%		
1	15.0%	153	26.8%	153	11.8%		
2	22.4%	147	25.9%	147	3.4%		
3	18.3%	169	21.3%	169	3.0%		
Total	22.2%	618	28.0%	618	5.8%		

Latino/Latina Students Early Reading - DIBELS Next 2018/19

			,			
	Beginning	of Year (BOY)	End of Year (EOY)			
	At or Above Total Grade		At or Above Total Grade			
	Benchmark	Underserved	Benchmark	Underserved		
Grade	Percent BOY N Count		Percent EOY N Count		Change in %	
К	47.1%	308	62.0%	308	14.9%	
1	37.2%	376	45.7%	376	8.5%	
2	57.6%	344	57.6%	344	0.0%	
3	52.9%	333	59.2%	333	6.3%	
Total	48.4%	1,361	55.7%	1,361	7.3%	

Latino/Latina Students Early Reading - DIBELS Next 2017/18

	Beginning	of Year (BOY)	End of Year (EOY)			
	At or Above Total Grade		At or Above	Total Grade		
	Benchmark	Underserved	Benchmark	Underserved		
Grade	Percent BOY	N Count	Percent EOY	N Count	Change in %	
К	39.9%	353	59.8%	353	19.8%	
1	39.8%	334	55.7%	334	15.9%	
2	53.7%	324	59.9%	324	6.2%	
3	52.5%	360	53.3%	360	0.8%	
Total	46.5%	1,371	57.1%	1,371	10.6%	

Recall that Poudre School District uses standardized scores (or z-scores) to display and aid interpretation of achievement outcomes for individual students. Z-scores answer the fundamental question of how far to the right or left of the national-norm a student's DIBELS Next score is. In other words, z-scores help us understand "how unusual an outcome is" relative to nationwide peers. Positive z-scores indicate an outcome that is greater than average. Negative z-scores indicate an outcome that is less than average. Looking at z-scores provides a more nuanced/sensitive view of achievement when compared to analyzing a broad achievement "bucket" such as "At or Above Benchmark" represents.

Taking the average for a set of z-scores results in an "effect size." So, where z-scores are useful in understanding the meaning of individual scores, effect sizes help us understand the meaning of a group of scores. As with z-scores, positive effect sizes indicate a mean outcome for the group being described that exceeds the mean outcome for nationwide grade level peers. The larger the effect size, the more unusually high the achievement outcome. As a visual guide, effect sizes that are small and positive (0.25 to 0.49) are shaded green, medium to large and positive (0.5 up) are shaded blue, small and negative (down to -0.25) are shaded yellow, and larger negative effect sizes (-0.25 down) are shaded red. This shading convention is used throughout the achievement effect size displays in this Monitoring Report.



Although PSD DIBELS Next achievement outcomes remain high relative to nationwide peers, we see that our achievement effect size for DIBELS Next has declined over the past three years in 1st through 3rd grades. students eligible for free/reduced lunch prices and Hispanic students have DIBELS Next scores that are far below the general PSD student population and scores for these subgroups have decreased over the past three years.

Year by	2016/17		201	7/18	2018/19	
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
0	0.11	1907	0.05	1988	0.10	1971
1	0.47	1887	0.39	1953	0.36	2037
2	0.40	2017	0.32	1943	0.23	1999
3	0.32	2053	0.31	2103	0.26	2007
Total	0.32	7864	0.27	7987	0.24	8014

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.26	2109	-0.32	2115	-0.37	2294	
2) Reduced (R)	0.03	573	-0.04	863	-0.12	608	
3) Not FR	0.59	5182	0.57	5009	0.55	5112	

Year by	2016/17		2017/18		2018/19	
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
American Indian or Alaska N	0.20	40	-0.02	42	-0.32	48
Asian	0.61	229	0.69	219	0.71	222
Black or African American	-0.06	82	0.08	98	0.17	95
Hispanic	-0.28	1450	-0.35	1523	-0.40	1527
Native Hawaiian or other Pa	-0.01	15	-0.07	12	-0.27	7
Two or More	0.41	275	0.42	294	0.40	304
White	0.47	5773	0.42	5799	0.39	5811

Appendix 3: Achievement

<u>Achievement Target:</u> PSD effect size \geq 0.25 for State assessment subject by grade combinations.

The following visual, pulled from the <u>CDE District Dashboards</u>, displays CMAS PARCC mean scale scores for math, English Language Arts, and science by level (elementary, middle, high) and student group for the past four school years. The state mean scale score is presented as a black horizontal line. Wherever the colored bar exceeds the horizontal black line, PSD outcomes exceeded the state's outcomes. These views provide a quick high-level and publicly available snapshot of how PSD performs relative to the overall state on the state assessment system. We can see that PSD students perform at higher levels than the Colorado student population. Higher performance is evident overall and by student subgroups at each level (elementary, middle school, and high school). Exceptions are evident for PSD students supported with an IEP; this important group also has multiple grade level by subject area combinations with achievement that exceeds state outcomes in 2018/19. After reviewing these high-level state displays that indicate PSD has a level of performance that exceeds the overall state outcomes, we will use z-scores and effect sizes to provide insight regarding how much higher PSD results are.



PSD Elementary Results vs. Statewide Results



PSD Middle School Results vs. Statewide Results
PSD High School Results vs. Statewide Results

The following visuals, pulled from the <u>CDE District Dashboards</u>, display **PSAT and SAT** mean scale scores for multiple years by grade and student group. As above, the state mean scale score is presented as a black horizontal line. How unusually high are these results?





Use of "z-scores" and "effect size" to measure how unusual PSD results are

Regarding accountability uses of state assessment results, the state of Colorado has shifted the focus from the "percent of students at specific performance levels" to the mean (or average) assessment scale score. This change in focus is something that PSD can leverage as we have been using "standardized scores" (i.e., z-scores) within both our "<u>Levels of Support</u>" data visualization tool (provides support to teachers and teams of teachers at the individual-student and groups-of-students levels) and our statistical methodology for finding <u>evidence of effectiveness within our teacher evaluation system</u>.

As mentioned earlier in this report, PSD uses standardized scores (or z-scores) to display and aid interpretation of achievement outcomes for individual students. Z-scores answer the fundamental question of how far to the right or left of a statewide-norm the outcome of a single student is. This indicates how unusually high or low a student outcome is in a probabilistic sense. In other words, z-scores help us understand "how unusual an outcome is" relative to statewide, nationwide, or international peers. Z-scores can be translated into percentile ranks under the assumption of a known probability distribution (most often normal in educational settings) of the underlying scores. One advantage of using z-scores is that taking averages leads to a meaningful and defensible interpretation for groups of students.

Taking the average for a set of z-scores results in what is traditionally called an "effect size." So, where zscores are useful in understanding the meaning of individual scores, effect sizes help us understand the meaning of a group of scores. The effect size we are calculating, and interpreting, is a measure of how far the PSD student mean has moved up or down relative to a norming group. This normative approach to understanding both achievement and growth has many advantages when the goal is to identify real strengths and real areas of concern. The many different standard setting practices that assessment vendors use to set performance level expectations can lead to confusion among educators regarding an apparent lack of alignment between assessment programs. The use of z-scores and effect sizes eliminates this issue as all measures are converted to a single "unit of unusualness" which can be consistently interpreted across different assessment systems.

The use of z-scores and, related effect sizes, within the context of the Monitoring Report, Levels of Support, and the system we use to identify "Evidence of Effectiveness" as part of the PSD educator evaluation system provides an opportunity to connect uses of these informative metrics across different components of the accountability and support systems we rely on. Uniformity in the metrics being used and making connections between the different support systems PSD uses will inform our efforts to develop the potential of all students.

For the Monitor Report, a primary goal of analyzing achievement data is to identify true relative strengths and weaknesses across different groupings of students, academic subjects, professional practices. Providing these insights in the presence of changes in the assessments being used locally and statewide over time can be challenging. Recall that standard scores, or z-scores, tell us how far a student's score falls to the right (+) or the left (-) of the average outcome of the reference group. The distance right or left of average is given in terms of the "unusualness" metric called a standard deviation unit. There are various ways to interpret z-scores, but for our purpose of highlighting real outcomes that are unusually low, unusually high, or changing over time; the two methods we will focus on include a visual inspection via histograms representing the full distribution of scores from all PSD students, and the average z-score which results in the Glass' Delta Effect Size. The effect size being referenced here is widely used and interpreted in educational research settings.

As a visual guide, effect sizes that are small and positive (0.25 to 0.49) are shaded green, medium to large and positive (0.5 up) are shaded blue, small and negative (down to -0.25) are shaded yellow, and larger negative effect sizes (-0.25 down) are shaded red. This shading convention is used throughout the achievement effect size displays in this Monitoring Report. This convention is based on widely accepted interpretation guidelines put forth by Jacob Cohen (Statistical Power Analysis for the Behavioral Sciences, 2nd Edition) and an investigation of PSD's typical effect sizes that are evident across multiple years, assessments, and groups of students.

Finally, PSD is focusing on the outcomes of our students who are not enrolled in charter schools. The displays below reflect outcomes of non-charter PSD students. This decision is made as PSD administration does not exercise the same level of oversight for charter school outcomes (Ridgeview Classical, Liberty Common, Fort Collins Montessori, and Mountain Sage, Compass) as it does for the many non-charter schools in PSD. N-counts that fall far below 2,00 for a PSD grade level indicate caution when interpreting results. N-counts can drop due to participation rates (a student choice), testing design (a state decision as with Social Studies sampling design), or technical issues (such as excluding twice accelerated math students in 7th grade Algebra I, 8th grade Geometry, 9th grade Algebra 2). As N-count diminishes, so does interpretability of results.

English Language Arts and Reading Achievement (State Assessment System)

Collectively, PSD students attained the PSD achievement target related to the 2018/19 English language arts state assessment. The average effect size across grades three through eight is 0.30. This means that on average, PSD students outperformed their statewide peers by approximately 1/3 of a standard deviation unit. This is a small to medium positive effect size and meets the PSD effect size target of 0.25. PSD students also met the 0.25 effect size achievement target in grades 9-11 for Evidence Based Reading and Writing based on the PSAT/SAT assessment program.

Each grade level, except 7th (for three years in a row) and 8th grade in2018/19, met or exceeded an effect size of 0.25. The 7th grade outcome of 0.20 indicates that PSD outperformed the state by approximately 1/5 of a standard deviation unit but did not meet the PSD target of \geq 0.25 effect size. Likewise, the 8th grade outcome of 0.24 indicates that PSD outperformed the state by approximately 1/4 of a standard deviation unit but did not hit 0.25. It is interesting to note that the 7th grade class of 2017/18 that fell short of the target is largely the same group of students that fell short of the 8th grade 2018/19 target with an identical 0.24 effect size each year.

We can see that performance outcomes vary dramatically by free/reduced lunch status and ethnicity. There are many other subgroup differences that could be displayed below. The consistency of these outcomes over multiple cohorts is as eye-catching and as meaningful as the magnitude of the differences themselves.



Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
3	0.34	1989	0.36	2032	0.29	1995	
4	0.36	2042	0.37	2047	0.40	2129	
5	0.33	2117	0.34	2074	0.38	2140	
6	0.25	1869	0.29	2027	0.28	2090	
7	0.20	1808	0.24	1841	0.20	2010	
8	0.27	1589	0.25	1738	0.24	1734	

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.36	2822	-0.34	2742	-0.33	3190	
2) Reduced (R)	-0.07	937	-0.06	1714	-0.01	835	
3) Not FR	0.58	7655	0.64	7303	0.59	8073	

Year by	2016/17		2017	/18	2018/19	
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
American Indian or Alaska N	-0.10	49	-0.11	59	-0.03	61
Asian	0.67	344	0.71	341	0.72	335
Black or African American	-0.22	142	-0.34	132	-0.31	145
Hispanic	-0.32	2115	-0.31	2172	-0.30	2196
Native Hawaiian or other Pa	0.00	19	0.06	15	-0.01	14
Two or More	0.38	423	0.39	452	0.39	461
White	0.44	8322	0.46	8588	0.44	8886

Below is a comparative view of **English Language Arts grades 3-8 CMAS** performance levels for Latinx and White students. The views below illustrate the impact of removing student scores associated with English language learners and those students eligible for reduced or free meals. One can see the dramatic impact of academic risk factors and the high relative achievement of Latino students once the risk factors are controlled for by exclusion. These types of interactions between student characteristics and educational outcomes can be more fully explored by the reader of this report via the PSD developed data visualization tool available by clicking the following link; <u>ACHIEVEMENT and GROWTH</u>.



Hispanic NOT Free/Reduced Lunch Eligible:





Hispanic Free/Reduced Lunch Eligible:

Year by	2016	2016/17		7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
3	-0.55	256	-0.55	300	-0.60	261	
4	-0.48	317	-0.47	299		299	
5	-0.49	296	-0.41	329	-0.42	295	
6	-0.52	248	-0.64	281	-0.54	289	
7	-0.68	251	-0.57	255	-0.61	263	
8	-0.61	224	-0.63	232	-0.56	207	
Total	-0.55	1592	-0.54	1696	-0.54	1614	

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect	Data	Effect	Data	Effect	Data	
	Size	Points	Size	Points	Size	Points	
1) Free (F)	-0.60	1320	-0.61	1196	-0.58	1373	
2) Reduced (R)	-0.32	272	-0.37	500	-0.33	241	
Total	-0.55	1592	-0.54	1696	-0.54	1614	



White NOT Free/Reduced Lunch Eligible:

Vear by	ov 2016/17 2017/18					2018/	10
Grade	Effect Size	Data Points	Effect Size	Data Point	Eff s Si	ect ze	Data Points
3	0.64	1134	0.68	10	81 0.	60	1107
4	0.72	1120	0.71	10	62 0.	74	1196
5	0.64	1156	0.66	10	69 0.	67	1176
6	0.54	1073	0.65	10	58 0.	58	1198
7	0.47	1056	0.57	10	07 0,	46	1138
8	0.55	927	0.55	9	53 0/	49	1034
Total	0.60	6466	0.64	62	30 0.	59	6849
Year by	201	6/17	201	7/18	20	18/19	
FRMcod	e Effect	Data	Effect	Data	Effect	Data	
	Size	Points	Size	Points	Size	Points	
3) Not FF	R 0.60	6466	0.64	6230	0.59	684	9
Total	0.60	6466	0.64	6230	0.59	684	9



White Free/Reduced Lunch Eligible:

Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
3	-0.11	339	0.09	420	-0.11	360	
4	-0.04	355	-0.01	429	0.00	381	
5	0.01	382	0.05	426	0.01	385	
6	-0.12	298	-0.03	428	-0.11	331	
7	-0.21	265	-0.11	344	-0.08	331	
8	-0.16	217	-0.14	311	-0.07	249	
Total	-0.09	1856	-0.02	2358	-0.06	2037	

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.15	1286	-0.09	1301	-0.12	1515	
2) Reduced (R)	0.02	570	0.08	1057	0.11	522	
Total	-0.09	1856	-0.02	2358	-0.06	2037	



9th Grade PSAT8/9 Evidence Based Reading and Writing Achievement Effect Size



Year by	201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	
9	0.43	1825	0.48	1847	

Year by	201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.32	326	-0.20	372	
2) Reduced (R)	0.06	263	0.12	111	
3) Not FR	0.70	1236	0.69	1364	

Year by	2017	/18	2018/19		
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	
American Indian or Alaska N	-0.46	6	-0.09	8	
Asian	0.51	64	0.70	64	
Black or African American	-0.18	27	-0.12	17	
Hispanic	-0.31	278	-0.11	308	
Two or More	0.70	67	0.69	73	
White	0.57	1377	0.60	1377	

10th Grade PSAT Evidence Based Reading and Writing Achievement Effect Size



Year by	2016	/17	201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
10	0.44	1681	0,43	1725	0.37	1774	

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.19	290	-0.14	304	-0.36	358	
2) Reduced (R)	0.13	131	-0.02	258	-0.07	111	
3) Not FR	0.62	1260	0.68	1163	0.61	1305	

Year by	2016/17		2017	/18	2018/19	
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
American Indian or Alaska N	0.19	9	-0.27	6	-0.05	7
Asian	1.17	53	0.83	66	0.50	62
Black or African American	-0.14	27	0.11	24	0.07	20
Hispanic	-0,24	234	-0.17	260	-0.34	281
Native Hawaiian or other Pa	0.61	1	-0.43	6	0.01	8
Two or More	0.49	75	0.39	67	0.54	65
White	0.55	1282	0.55	1296	0.52	1331



11th Grade SAT Evidence Based Reading and Writing Achievement Z-Score Distribution

Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
11	0.39	1717	0.35	1756	0.27	1726	

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.28	295	-0.32	304	-0.37	354	
2) Reduced (R)	-0.11	118	-0.06	260	-0.27	98	
3) Not FR	0.58	1304	0.62	1192	0.49	1274	

Year by	2016/17		2017	7/18	2018/19		
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
American Indian or Alaska N	0.30	12	-0.08	8	-0.45	5	
Asian	0.71	65	1.01	57	0.89	66	
Black or African American	0.15	17	-0.39	30	-0.02	27	
Hispanic	-0.33	261	-0.35	270	-0.36	286	
Native Hawaiian or other Pa	-0.08	4	0.39	1	-0.31	7	
Two or More	0.39	58	0.31	77	0.22	65	
White	0.52	1300	0.49	1313	0.40	1270	

Below is a comparative view of **English Language Arts grade 11 SAT** performance levels for Latinx and White students. The views below illustrate the impact of removing student scores associated with English language learners and those students eligible for reduced or free meals. One can see the dramatic impact of academic risk factors and the high relative achievement of Latino students once the risk factors are controlled for by exclusion. These types of interactions between student characteristics and educational outcomes can be more fully explored by the reader of this report via the PSD developed data visualization tool available by clicking the following link; <u>ACHIEVEMENT and GROWTH</u>.



Hispanic NOT Free/Reduced Lunch Eligible:



Year by	2016/17		201	7/18	2018/19	
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
3) Not FR	0.15	98	0.18	61	0.08	105

Hispanic Free/Reduced Lunch Eligible:



White NOT Free/Reduced Lunch Eligible:



White Free/Reduced Lunch Eligible:



Math Achievement (State Assessment System)

Collectively, PSD students attained the achievement target on the 2018/19 state math assessment. The average effect size across grades three through eight is 0.39 (up from 0.29 in 2017/18). This means that on average, PSD students outperformed their statewide peers by approximately 2/5 of a standard deviation unit. This would be correctly classified as a small to medium positive effect size and meets the PSD target. Furthermore, grades 3-8, individually also met the PSD target and exceeded an effect size of 0.25. PSD students met the 0.25 effect size achievement target in grades 9 and 10 for math based on the PSAT assessment program. The 11th grade SAT outcome of 0.22 indicates that the PSD population of students outperformed the



state population of 11^{th} grade students in math by approximately 1/5 of a standard deviation unit but did not meet the PSD target of a ≥ 0.25 effect size.

Recall that in 2017/18 PSD had the very unusual outcome where 8th grade students did not outperform the state population of 8th grade students in math. This negative effect size outcome is very unusual for a grade-level group of PSD students. It is nice to see that what we classified as a one-time anomaly that PSD did not over-react to has in fact self-corrected to a level that is in alignment with our traditional experience of high achievement. The 8th grade class of 2017/18 is largely made up of the same students in the 9th grade class of 2018/19 that attained an effect size of 0.40 on their PSAT8/9 assessment; further evidence that the 8th grade class of 2017/18 result of -0.08 was not a reason to panic. Along

those same lines of reasoning, following cohorts into the next year to see how indicators of concern developed, it is largely the 7th grade class of 2017/18 (effect size 0.22) that went on to attain a 0.40 effect size in 2018/19. Math instruction and math achievement in PSD are strong. The math effect size of 0.39 for grades three through eight is higher than the 2018/19 effect size outcome of .30 for English language arts.

Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
3	0.40	2015	0.36	2066	0.32	2022	
4	0.43	2051	0.43	2048	0.42	2135	
5	0.44	2114	0.44	2079	0.42	2142	
6	0.31	1883	0.32	2044	0.43	2094	
7	0.33	1815	0.22	1858	0.36	2011	
8	0.29	1598	-0.08	1750	0.40	1744	

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.27	2852	-0.30	2797	-0.25	3225	
2) Reduced (R)	0.03	945	-0.01	1726	0.06	842	
3) Not FR	0.65	7679	0.59	7322	0.68	8081	

Year by	2016/17		2017	7/18	2018/19		
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
American Indian or Alaska N	-0.02	48	-0.15	59	-0.16	60	
Asian	0.84	354	0.77	350	0.98	341	
Black or African American	-0.29	142	-0.29	132	-0.30	144	
Hispanic	-0.26	2140	-0.26	2240	-0.21	2233	
Native Hawaiian or other Pa	0.24	19	0.47	15	0.59	14	
Two or More	0.48	423	0.34	451	0.43	463	
White	0.52	8350	0.43	8598	0.53	8893	

Below is a comparative view of **Math grades 3-8 CMAS** performance levels for Latinx and White students. The views below illustrate the impact of removing student scores associated with English language learners and those students eligible for reduced or free meals. One can see the dramatic impact of academic risk factors and the high relative achievement of Latino students once the risk factors are controlled for by exclusion. These types of interactions between student characteristics and educational outcomes can be more fully explored by the reader of this report via the PSD developed data visualization tool available by clicking the following link; <u>ACHIEVEMENT and GROWTH</u>.



Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
3	0.50	96	0.61	70	0.51	88	
4	0.36	98	0.65	84	0.58	94	
5	0.42	94	0.50	86	0.52	105	
6	0.22	99	0.37	79	0.43	103	
7	0.42	71	0.29	89	0.27	97	
8	0.01	68	0.07	73	0.39	96	
Total	0.33	526	0.42	481	0.45	583	

Hispanic NOT Free/Reduced Lunch Eligible:

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
3) Not FR	0.33	526	0.42	481	0.45	583	
Total	0.33	526	0.42	481	0.45	583	



Hispanic Free/Reduced Lunch Eligible:

Year by	2016/17		201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
3	-0.56	278	-0.54	328	-0.51	284	
4	-0.36	320		302		303	
5	-0.35	298	-0.34	332	-0.37	299	
6		252	-0.55	289	-0.43	291	
7	-0.47	249	-0.50	265	-0.47	264	
8	-0.47	217	-0.44	243	-0.44	209	
Total	-0.45	1614	-0.45	1759	-0.45	1650	

Year by	2010	2016/17		7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.49	1339	-0.53	1251	-0.49	1407	
2) Reduced (R)	-0.23	275	-0.24	508	-0.21	243	
Total	-0.45	1614	-0.45	1759	-0.45	1650	



White NOT Free/Reduced Lunch Eligible:







White Free/Reduced Lunch Eligible:

Year by	2016	5/17	201	7/18	20	18/19
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
3	-0.04	338	0.03	420	-0.03	362
4	0.07	355	0.09	429	0.02	381
5	0.08	381	0.09	425	0.04	383
6	-0.10	303	-0.01	432	0.05	331
7	-0.06	269	-0.07	343	0.02	330
8	0.01	219	-0.24	312	-0.03	252
Total	0.00	1865	0.00	2361	0.01	2039

Year by	2016/17		201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.06	1291	-0.07	1301	-0.05	1514	
2) Reduced (R)	0.13	574	0.08	1060	0.19	525	
Total	0.00	1865	0.00	2361	0.01	2039	







Year by	201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	
9	0.39	1825	0.40	1847	

Year by	201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.34	326	-0.32	372	
2) Reduced (R)	-0.01	263	-0.02	111	
3) Not FR	0.67	1236	0.64	1364	

Year by	2017	/18	2018/19		
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	
American Indian or Alaska N	-0.34	6	-0.13	8	
Asian	0.60	64	0.80	64	
Black or African American	-0.28	27	-0.26	17	
Hispanic	-0.35	278	-0.23	308	
Two or More	0.63	67	0.68	73	
White	0.54	1377	0.53	1377	

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10th Grade PSAT Math Achievement (Effect Size)

Year by	2016	5/17	2017	/18	2018/19	
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
American Indian or Alaska N	-0.04	9	-0.66	6	-0.64	7
Asian	1.28	53	1.07	66	0.62	62
Black or African American	-0.34	27	-0.11	24	-0.21	20
Hispanic	-0.30	234	-0.30	260	-0.41	281
Native Hawaiian or other Pa	0.92	1	-0.22	6	-0.10	8
Two or More	0.39	75	0.21	67	0.48	65
White	0.48	1282	0.46	1296	0.39	1331



11th Grade SAT Math Achievement (Effect Size)

Year by	2016	/17 2		7/18	2018/19	
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
11	0.29	1717	0.22	1756	0.22	1726

Year by	2016	5/17	201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.39	295	-0.49	304	-0.51	354	
2) Reduced (R)	-0.30	118	-0.22	260	-0.37	98	
3) Not FR	0.49	1304	0.50	1192	0.46	1274	

Year by	2016	6/17 2017/		/18 201		8/19	
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
American Indian or Alaska N	0.22	12	-0.12	8	-1.23	5	
Asian	0.81	65	1.23	57	1.03	66	
Black or African American	-0.03	17	-0.39	30	-0.25	27	
Hispanic	-0.43	261	-0.51	270	-0.44	286	
Native Hawaiian or other Pa	0.12	4	0.55	1	-0.31	7	
Two or More	0.22	58	0.21	77	0.22	65	
White	0.42	1300	0.34	1313	0.34	1270	

Below is a comparative view of **Math grade 11 SAT** performance levels for Latinx and White students. The views below illustrate the impact of removing student scores associated with English language learners and those students eligible for reduced or free meals. One can see the dramatic impact of academic risk factors and the high relative achievement of Latino students once the risk factors are controlled for by exclusion. These types of interactions between student characteristics and educational outcomes can be more fully explored by the reader of this report via the PSD developed data visualization tool available by clicking the following link; <u>ACHIEVEMENT and GROWTH</u>.



Hispanic NOT Free/Reduced Lunch Eligible:



Hispanic Free/Reduced Lunch Eligible:



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White NOT Free/Reduced Lunch Eligible:



White Free/Reduced Lunch Eligible:



Science Achievement (State Assessment System)

Collectively, PSD students attained the achievement target on the 2018/19 state science assessment. The average effect size across grades three through eight is 0.34 (up from 0.31 in 2018). This means that on average, PSD students outperformed their statewide peers by approximately 1/3 of a standard deviation unit. This would be correctly classified as a small to medium positive effect size and meets the PSD target.



Year by	2016/17		2017/18		2018/19	
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points
American Indian or Alaska N	-0.28	16	-0.34	16	0.05	26
Asian	0.53	136	0.75	136	0.62	118
Black or African American	-0.26	55	-0.41	50	-0.24	49
Hispanic	-0.41	742	-0.37	775	-0.27	765
Native Hawaiian or other Pa	0.10	10	-0.25	5	1.13	4
Two or More	0.57	163	0.47	156	0.23	163
White	0.50	3018	0.47	2976	0.49	3129

Reading Achievement (MAPS) - Spring

To provide some level of validation for the high achievement outcomes on the state assessment system, we can inspect outcomes from the nationally normed MAP assessment. The following graphs and tables reflect achievement results from the same testing season – spring. As part of the work involved in developing defensible growth metrics for use in the PSD teacher evaluation system, and to support the closing of gaps in PSD via data tools such as "Levels of Support", PSD calculates z-scores for the NWEA MAP assessment scores. These z-scores are translated into percentile ranks and effect size outcomes for groups of students.

The following tables are provided as a means of validating the high levels of achievement PSD students consistently demonstrate - dubbed "the PSD advantage." Note that a positive effect size indicates an average PSD outcome that exceeds the national group of students taking part in NWEA assessments. NWEA MAP assessments are widely used grades 2-8 in PSD, note the drop to about 1,000 for high school grades. Also, the number of students per grade level taking the science MAP test is much lower than the approximately 2,000 per grade level. This reduced student count in high school reading/math and in science indicates that the outcomes are representative of the test takers as opposed to representing the general student population at a given grade level. Results are only displayed below where student test takers are 1,000 or higher (50% of the class size).



Year by	201	16/17	201	7/18	2018/19		
Level	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) ES	0.37	8270	0.36	8189	0.30	8182	
2) MS	0.43	6045	0.38	6117	0.36	6077	
3) HS	0.57	2294	0.66	2408	0.57	2243	
Total	0.42	16609	0.41	16714	0.36	16502	

Spring Achievement Effect Size

Year by	2016	5/17	201	7/18	2018/19			
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points		
2	0.31	2007	0.26	1937	0.21	1981		
3	0.39	2046	0.36	2086	0.29	1997		
4	0.38	2074	0.40	2079	0.36	2112		
5	0.39	2143	0,40	2087	0.33	2092		
6	0.38	1992	0.31	2144	0.30	2079		
7	0.43	2065	0.39	1986	0.34	2083		
8	0.50	1988	0.44	1987	0.44	1915		
9	0.45	1100	0.55	1165	0.44	1201		
10	0.68	1194	0.75	1243	0.73	1042		
Total	0.42	16609	0.41	16714	0.36	16502		

Year by	2010	5/17	201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.26	4064	-0.25	3836	-0.28	4321	
2) Reduced (R)	0.12	1366	0.10	2317	0.04	1139	
3) Not FR	0.70	11179	0.71	10560	0.64	11042	
Total	0.42	16609	0.41	16713	0.36	16502	

Year by	2016	5/17	2017	7/18	2018/19		
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
American Indian or Alaska N	0.17	67	-0.05	79	-0.09	85	
Asian	0.70	478	0.64	515	0.63	494	
Black or African American	-0.07	208	-0.07	198	-0.12	190	
Hispanic	-0.26	3038	-0.25	3033		3034	
Native Hawaiian or other Pa	0.14	27	0.14	26	0.02	24	
Two or More	0.55	615	0.50	638	0.43	647	
White	0.58	12176	0.57	12225	0.52	12028	

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Math Achievement (MAPS) - Spring

Year by	2016	/17	201	7/18	2018/19		
Grade	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
2	0.18	2013	0.13	1935	0.08	1990	
3	0.28	2052	0.24	2092	0.18	2004	
4	0.29	2085	0.37	2079	0.25	2122	
5	0.34	2169	0.35	2097	0.29	2100	
6	0.27	2000	0.25	2116	0.24	2093	
7	0.42	2080	0.45	1996	0.35	2102	
8	0.53	1994	0.54	2002	0.50	1912	
Total	0.33	14393	0.33	14317	0.27	14323	

Year by	2010	5/17	201	7/18	2018/19		
FRMcode	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
1) Free (F)	-0.36	3609	-0.35	3437	-0.40	3927	
2) Reduced (R)	0.01	1176	0.01	2019	-0.04	1009	
3) Not FR	0.63	9608	0.67	8860	0.58	9387	
Total	0.33	14393	0.33	14316	0.27	14323	



Year by	2016	5/17	2017	/18	2018/19			
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points		
American Indian or Alaska N	-0.05	56	-0.18	73	-0.19	74		
Asian	0.80	418	0.86	415	0.85	401		
Black or African American	-0.38	172	-0.43	160	-0.41	168		
Hispanic	-0.37	2657	-0.33	2681	-0.37	2719		
Native Hawaiian or other Pa	0.31	23	0.04	18	0.29	19		
Two or More	0.46	528	0.37	537	0.30	556		
White	0.49	10539	0.50	10433	0.43	10386		

Science Achievement (MAPS)



Year by	2016	5/17	2017	/18	2018/19		
Ethnicity	Effect Size	Data Points	Effect Size	Data Points	Effect Size	Data Points	
Asian	0.80	40	1.05	42	0.95	46	
Black or African American	0.40	12	0.24	9	-0.40	13	
Hispanic	0.08	134	0.00	137	0.11	134	
Two or More	0.77	36	0.12	33	0.67	51	
White	0.70	863	0.72	863	0.69	954	

Appendix 4: Academic Growth

Academic Growth Target: PSD student growth will exceed that of academic peers statewide.

This growth target is evidenced by PSD Median Growth Percentiles exceeding 50 and growth effect sizes that exceed zero. The state's aggregate growth metric for accountability is the Median Growth Percentile (MGP) so it is appropriate to display the MGP outcomes prior to displaying student growth outcomes and targets based on growth effect size (easily calculated for all assessment programs used by PSD).

In English Language Arts, the overall 2018/19 PSD median growth percentile went down approximately 1 unit (52 to 51); in math the overall MGP increased by 2 units (54 to 56). The following tabled results, as reported by the CDE, include PSD charter and non-charter schools.



COLORADO DISTRICT CMAS GROWTH REPORT Department of Education 1550: POUDRE R-1

Growth metrics are intended to provide a more complete picture of academic performance by helping to contextualize more traditional achievement metrics. While achievement metrics represent performance at specific points in time when students are assessed, growth metrics show what happens in the time in between assessments. Under the Colorado Growth Model, growth percentiles are calculated by analyzing English Language Arts and Math scores over consecutive years of the Colorado Measures of Academic Success (CMAS) assessments. A student's growth percentile (ranging from 1 to 99) indicates how his or her performance changed over time relative to students with similar score histories. Growth percentiles are independent of achievement levels, so all students have an equal chance of achieving high growth.

Median Growth Percentiles (MGPs) are used to represent growth outcomes for schools and districts. An MGP represents the mid-point of the distribution of all of the individual growth percentiles obtained by students within a particular group. This report shows MGPs for entire schools and districts, as well as for distinct grade levels and for different student groups. In general, higher MGPs indicate higher growth rates for the students in the designated group. State-level MGPs are presented along this school and district results as a point of reference. Typically, the state MGP for any group will be 50, though it may sometimes vary. Blank cells in the data table reflect cases where fewer than 20 student growth percentiles were available for the group; the MGPs are not shown in order to ensure privacy and to discourage inappropriate inferences about group performance. For additional resources, including PSAT/SAT growth reports, go to: www.cde.state.co.us/schoolview/coloradogrowthmodel

Median Growt	ENGLISH LANGUAGE ARTS					MATH							
1.0	99.0		District			State			District			State	
50.0)	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
ALL STUDENTS	All Students	49.0	52.0	51.0	50.0	50.0	50.0	55.0	54.0	56.0	50.0	50.0	50.0
GRADE LEVEL	04	59.0	59.0	61.0	50.0	50.0	50.0	66.0	58.0	61.0	50.0	50.0	50.0
	05	53.0	53.0	55.0	50.0	50.0	50.0	61.0	57.0	55.0	50.0	50.0	50.0
	06	42.5	48.0	46.0	50.0	50.0	50.0	48.0	45.0	54.0	50.0	50.0	50.0
	07	41.0	48.0	45.0	50.0	50.0	50.0	49.0	54.0	54.0	50.0	50.0	50.0
	08	45.0	50.0	47.0	50.0	50.0	50.0	52.0	54.0	57.0	51.0	50.0	50.0
	09	52.0			50.0			43.0			50.0		
ENGLISH LEARNERS	English Learners	49.0	49.0	50.0	51.0	50.0	50.0	51.0	51.0	55.0	49.0	48.0	50.0
	Non-English Learners	49.0	52.0	51.0	50.0	50.0	50.0	56.0	54.0	56.0	50.0	50.0	50.0
FREE AND REDUCED	FRL Eligible	44.0	44.0	46.0	48.0	47.0	47.0	49.0	49.0	51.0	46.0	46.0	47.0
LUNCH (FRL)	Non-FRL	51.0	55.0	53.0	52.0	52.0	52.0	58.0	56.0	58.0	53.0	53.0	52.0
GENDER	Female	54.0	56.0	55.0	55.0	54.0	53.0	55.0	53.0	57.0	50.0	50.0	51.0
	Male	45.0	49.0	47.0	46.0	46.0	47.0	56.0	54.0	56.0	50.0	50.0	49.0
GIFTED	Gifted and Talented	58.0	63.0	57.0	58.0	59.0	58.0	64.0	61.0	62.0	58.0	59.0	58.0
	Non-Gifted and Talented	47.0	49.0	49.0	49.0	49.0	49.0	54.0	52.0	55.0	49.0	49.0	49.0
INDIVIDUALIZED	On IEP	37.0	40.0	42.0	41.0	42.0	43.0	45.0	45.0	45.0	43.0	43.0	44.0
EDUCATION PLAN (IEP)	Non-IEP	50.0	53.0	52.0	51.0	51.0	51.0	56.0	54.0	57.0	51.0	51.0	51.0
MIGRANT	Migrant				49.0	47.0	45.0				47.0	43.0	46.0
	Non-Migrant	49.0	52.0	51.0	50.0	50.0	50.0	55.0	54.0	56.0	50.0	50.0	50.0
MINORITY	Minority	46.0	49.0	48.0	49.0	48.0	48.0	51.0	51.0	54.0	48.0	48.0	48.0
	Non-Minority	50.0	53.0	52.0	51.0	51.0	52.0	57.0	55.0	57.0	52.0	52.0	52.0
PERFORMANCE LEVEL	At or Above Benchmark	50.0	54.0	51.0	50.0	50.0	50.0	57.0	53.0	56.0	50.0	50.0	50.0
	Below Benchmark	48.0	50.0	51.0	50.0	50.0	50.0	54.0	54.0	57.0	50.0	50.0	50.0
RACE/ETHNICITY	American Indian or Alaska Native	45.0	41.5	63.0	46.0	46.0	48.0	42.0	54.0	53.5	45.0	48.0	48.0
	Asian	62.0	63.0	61.0	58.0	58.0	59.0	65.0	58.0	68.5	58.0	59.0	60.0
	Black	37.0	53.5	44.5	48.0	46.0	46.0	45.0	50.0	40.5	45.0	46.0	47.0
	Hispanic	44.0	46.0	45.0	48.0	48.0	47.0	49.0	49.0	50.0	47.0	47.0	47.0
	White	50.0	53.0	52.0	51.0	51.0	52.0	57.0	55.0	57.0	52.0	52.0	52.0
	Hawaiian/Pacific Islander				53.5	50.0	47.0				50.0	51.0	45.0
	Two or More Races	47.0	54.0	54.5	51.0	50.0	51.0	56.0	54.0	60.0	51.0	51.0	51.0







COLORADO DISTRICT PSAT/SAT GROWTH REPORT Department of Education 1550: POUDRE R-1

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Median Growth Percentiles (MGPs) are used to represent growth outcomes for schools and districts. An MGP represents the mid-point of the distribution of all of the individual growth percentiles obtained by students within a particular group. This report shows MGPs for entire schools and districts, as well as for distinct grade levels and for different student groups. In general, higher MGPs indicate higher growth rates for the students in the designated group. State-level MGPs are presented along with school and district results as a point of reference. Typically, the state MGP for any group will be 50, though it may sometimes vary. Blank cells in the data table reflect cases where fewer than 20 student growth percentiles were available for the group; the MGPs are not shown in order to ensure privacy and to discourage inappropriate inferences about group performance. For additional resources, including CMAS growth reports, go to: <u>www.cde.state.co.us/schoolview/coloradogrowthmodel</u>

Median Growt	th Percentile	EVIDENCE-BASED READING AND WRITING				MATH							
1.0	99.0		District			State			District			State	
50.0	D	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
ALL STUDENTS	All Students	54.0	57.0	54.0	49.0	50.0	50.0	54.0	47.0	54.0	50.0	50.0	51.0
GRADE LEVEL	09								44.0	47.0		50.0	51.0
	10		58.0	52.0		51.0	50.0		50.0	60.0		50.0	52.0
	11	54.0	57.0	57.0	49.0	50.0	49.0	54.0	49.0	52.0	50.0	50.0	51.0
ENGLISH LEARNERS	English Learners	47.0	50.0	49.0	44.0	40.0	40.0	42.0	41.0	52.0	41.0	43.0	47.0
	Non-English Learners	54.0	57.5	55.0	51.0	52.0	51.0	54.0	48.0	54.0	52.0	52.0	52.0
FREE AND REDUCED	FRL Eligible	41.0	49.0	47.0	43.0	42.0	43.0	39.0	44.0	46.0	41.0	45.0	47.0
LUNCH (FRL)	Non-FRL	55.0	59.0	56.0	53.0	55.0	52.0	56.0	48.0	55.0	54.0	53.0	54.0
GENDER	Female	53.0	48.0	54.0	48.0	45.0	51.0	52.0	44.0	51.0	48.0	48.0	50.0
	Male	55.0	66.0	55.0	51.0	56.0	47.0	56.0	50.0	57.0	50.0	53.0	52.0
GIFTED	Gifted and Talented	62.0	67.0	60.0	60.0	63.0	58.0	58.0	49.0	56.0	58.0	55.0	56.0
	Non-Gifted and Talented	53.0	54.0	53.0	48.0	49.0	48.0	53.0	47.0	53.0	48.0	50.0	51.0
INDIVIDUALIZED	On IEP	29.0	41.0	36.0	32.0	42.0	36.0	23.5	37.5	40.0	28.0	38.0	45.0
EDUCATION PLAN (IEP)	Non-IEP	55.0	58.0	55.0	51.0	51.0	51.0	54.0	48.0	54.0	51.0	51.0	52.0
MIGRANT	Migrant				39.0	43.0	32.5				32.0	43.0	39.0
	Non-Migrant	54.0	57.0	54.0	49.0	50.0	50.0	54.0	47.0	54.0	50.0	50.0	51.0
MINORITY	Minority	47.0	52.0	52.0	46.0	44.0	46.0	45.0	47.0	53.0	45.0	47.0	49.0
	Non-Minority	55.0	59.0	55.0	53.0	56.0	52.0	55.0	48.0	54.0	54.0	54.0	54.0
RACE/ETHNICITY	American Indian or Alaska Native				44.5	42.0	49.0				41.0	46.0	45.0
	Asian	56.5	59.0	61.5	54.0	51.0	58.0	66.0	60.0	63.5	56.0	56.0	61.0
	Black		56.0	55.5	47.0	40.0	46.0		53.5	54.5	43.0	44.0	50.0
	Hispanic	45.0	49.0	50.0	44.0	43.0	44.0	40.0	44.0	51.0	43.0	46.0	47.0
	White	55.0	59.0	55.0	53.0	56.0	52.0	55.0	48.0	54.0	54.0	54.0	54.0
	Hawaiian/Pacific Islander				45.0	45.0	50.0				45.0	49.0	51.0
	Two or More Races	49.0	53.0	48.0	48.0	52.0	51.0	53.0	39.0	55.0	51.0	50.0	52.0









ACCESS for ELLs growth is outstanding in PSD for each of the past three years, overall and by all major subgroups including students supported with IEPs.

Median Growth Percentile for PSD – English Language Arts

PSD did not meet our growth targets by all grade-level and academic-subject combinations. The target is to exceed growth of academic peers statewide. For median growth percentiles (MGP) displayed below, yellow and red cells indicate areas where PSD growth was below that of academic peers statewide. Green and blue cells indicate areas where PSD growth was greater than that of academic peers statewide. Green shading indicates MGPs greater than or equal to 50. Blue indicates MGPs greater than or equal to 65. MGPs below 50 are shaded yellow. MGPs below 35 are shaded red.

The following results do not include PSD charter schools. There are many indications of overall high levels of academic growth, the elementary level of PSD continues to show the strongest evidence of this sustained positive outcome. Middle school English language arts is lagging other subjects and grade levels in academic growth. There are subgroups of students that are not attaining the PSD growth target. Please click <u>ACHIEVEMENT and GROWTH</u> to explore the related data visualization.

Asses	i s		Subject							
Multi	ole sel	~	E	English_Readi 🗡						
Year by 2016/17 2017/18 2018/19										
Level	MGP	Data Points	MGP	Data Points	MGP	Data Points				
1) ES	57	3820	55	3770	58	3821				
2) MS	43	4790	49	5024	45	5148				
3) HS	53	2347	54	3742	54	3026				
Total	50	10957	53	12536	51	11995				
Year by	20	16/17	201	17/18	20	18/19				
Grade	MGP	Data Points	MGP	Data Points	MGP	Data Points				
4	59	1874	58	1865	61	1901				
5	54	1946	52	1905	55	1920				
6	42	1724	49	1867	44	1864				
7	41	1651	47	1628	44	1776				
8	45	1415	51	1529	47	1508				
9	50	848	53	1347						
10			56	902	52	1505				
11	54	1499	55	1493	56	1521				

Median Growth Percentiles (MGP) Level ● 1) ES ● 2) MS ● 3) HS 65 High Growth for Individual Student (>65)



Year by	201	6/17	201	7/18	201	8/19
Ethnicity	MGP	Data Points	MGP	Data Points	MGP	Data Points
Asian	62	352	58	398	60	356
Black or African American	42	126	52	151	50	132
Hispanic	44	1921	47	2121	46	2052
White	51	8090	54	9319	52	8932

Year by	201	6/17	20	17/18	2018/19		
Free Reduced Lunch	MGP	Data Points	MGP	Data Points	MGP	Data Points	
1) Free (F)	44	2422	44	2456	46	2767	
2) Reduced (R)	45	900	48	1846	48	820	
3) Not FR	52	7635	57	8234	53	8408	

Student Growth Effect Size for PSD – English Language Arts

For the Zgain (average across all students of z post-score – z pre-score) metrics displayed below, yellow and red cells indicate areas where PSD growth was below that of academic peers statewide. Green and blue cells indicate areas where PSD growth was greater than that of academic peers statewide. The Zgain metric is also referred to as a growth effect size. A growth effect size greater than or equal to zero is shaded green. Blue indicates a growth effect size greater than or equal to 0.20. A growth effect size at or below zero is shaded yellow. A growth effect size at or below -0.20 is shaded red.

Year by	201	6/17	20	17/18		2018/1		19		
Level	Zgain	Data Points	Zgain	Data Points	z	gain	P	Data oint:	5	
1) ES	0.04	3749	0.01	3685		0.05	377		5	
2) MS	-0.14	4690	-0.02	4947		0.08		509	5090	
3) HS	-0.04	2300	0.02	3682		0.02		447	4472	
Year by	201	6/17	201	17/18		2018/19				
Grade	Zgain	Data Points	Zgain	Data Points	Z	gain	F	Data Point	s	
4	0.06	1836	0.04	1816		0.07		187	4	
5	0.01	1913	-0.03	1869		0.02		1902		
6	-0.17	1650	-0.08	1810	•	0.09		1819		
7	-0.16	1636	-0.02	1615		0.10		1763		
8	-0.10	1404	0.04	1522		0.04	.04		1508	
9	0.00	836	0.10	1300		0.16		1421		
10			0.04	879	-	0.07 15		151	6	
11	-0.05	1464	-0.06	1503		-0.14		153	5	
Year by	20	016/17	2	2017/18		2018/19		9		
Ethnicity	/ Zgaii	n Data Point	a Zgair ts	n Dat Poin	a ts	Zga	in	Data Points		
Asian	-0.0	<mark>3</mark> 34	7 0.0	23	87	0.0	03	405		
Black	-0.0	4 12	2 -0.0	5 1	46	0.01		140		
Hispanic	-0.0	5 190	1 -0.0	2 21	03	-0.03		2258		
White	-0.0	<mark>6</mark> 791	1 0.0	0 91	36	6 -0.02		9959		
Year by		201	6/17	201	2017/18			201	8/19	
FR Lu	nch	Zgain	Data Points	Zgain	D. Po	Data Zgain Points		jain	Da Poir	
1) Free (F)	-0.04	2419	-0.04	2	417	-(0.01	30	
2) Reduc	ed (R)	-0.08	876	-0.04	1	1830 -0.0		0.01	8	

-0.06

3) Not FR

7444

0.02

8067 -0.03

Growth Effect Size Over Time



Median Growth Percentiles for PSD – Math

Math MGP results in 2018/19 are high in elementary as well as middle school.

Assess	Subject			
Multiple sel \searrow	Math \sim			

Year by	2016/17		2017/	18	2018/19		
Level	MGP	Data Points	MGP	Data Points	MGP	Data Points	
1) ES	65	3845	58	3793	58	3849	
2) MS	50	4819	49	4456	55	4915	
3) HS	51	1975	46	3456	52	4146	
Total	56	10639	52	11705	55	12910	

Year by	2016/17		2017/18		2018/19		
Grade	MGP	Data Points	MGP	Data Points	MGP	Data Points	
4	67	1898	58	1880	60	1928	
5	62	1947	59	1913	56	1921	
6	47	1732	44	1874	54	1867	
7	50	1666	54	1367	53	1787	
8	52	1421	55	1215	59	1261	
9	41	476	43	1355	45	1120	
10			49	608	60	1505	
11	54	1499	48	1493	51	1521	





Year by	201	6/17	201	7/18	2018/19		
Ethnicity	MGP	Data Points	MGP	Data Points	MGP	Data Points	
Asian	66	336	59	347	67	386	
Black or African American	46	120	51	145	46	142	
Hispanic	48	1917	49	2112	50	2289	
White	57	7817	52	8591	56	9538	

Year by	2016/17		20	17/18	2018/19		
Free Reduced Lunch	MGP	Data Points	MGP	Data Points	MGP	Data Points	
1) Free (F)	49	2423	48	2444	50	3050	
2) Reduced (R)	50	888	49	1809	52	885	
3) Not FR	59	7328	53	7452	57	8975	

2018/19
Student Growth Effect Size for PSD – Math

Middle school math growth, specifically for the 6th grade students, is flagged by the growth effect size calculation in 2018/19 as well as the prior two years.

Year by	201	16/17	201	7/18		20	18/	19	
Level	Zgain	Data	Zgain	Data	Z	gain		Data	
		Points		Points			P	Points	5
1) ES	0.11	3771	0.01	3709		0.05	Г	3804	4
2) MS	-0.07	4721	-0.10	4385		0.06		5127	7
3) HS	-0.29	2290	0.06	3396		0.07		4479	9
Vear by	201	6/17	201	7/18		20	19/	10	
Crada	70010	Data	70010	Data	-	20		Data	
Grade	Zgain	Points	Zgain	Points	4	gain	F	Point	s
4	0.18	1860	0.03	1833		0.08		190	3
5	0.05	1911	0.00	1876		0.01		190	1
6	-0.06	1656	-0.15	1816	-	0.03		182	3
7	-0.05	1648	0.06	1351		0.04		177	3
8	-0.09	1417	-0.20	1218		0.18		153	1
9	-0.71	826	0.10	1306		0.50		142	8
10			0.48	587		0.15		151	6
11	-0.05	1464	-0.13	1503		0.10		153	5
Year by	20	016/17	2	017/18			20	18/19	9
Ethnicity	/ Zgai	n Data	Zgair	Dat	а	Zga	in	Di	ata
		Point	s	Poin	ts			Po	ints
Asian	-0.0	<mark>6</mark> 35	2 0.04	3	36	0.	18		410
Black	-0.1	0 11	9 0.09	1	40	-0.	05		140
Hispanic	-0.0	1 193	5 -0.02	2 20	94	0.	01	2	2312
White	-0.0	<mark>6</mark> 792	8 -0.02	84	14	0.	07	9	9972
Year	by	201	5/17	2017	7/18	8		201	8/19
FR Lu	nch	Zgain	Data	Zgain	Da	ata	Zg	jain	Da
•			Points		Po	ints			Poir
1) Free (F)	0.00	2451	-0.04	2	406	(0.01	30
2) Reduc	ed (R)	-0.07	881	-0.03	1	790	(0.03	9
3) Not F	R	-0.07	7450	0.00	7	294	(0.08	94



NWEA Measures of Academic Progress (MAP)

Although no targets are set based on Northwest Evaluation Association (NWEA) growth metrics, student growth is displayed for reading, math, and science based on MAP scores from the fall to the spring of a given academic year. PSD reviews NWEA data to validate the growth being reflected in state assessment scores.

Growth data are expressed using the same growth effect size utilized above for the state assessment system. MAP tests for reading and math are widely taken in the fall and spring by grades 2 through 8. It is reasonable that PSD has utilized the fall to spring tests to provide meaningful measures of academic growth over a single academic year. The analysis of fall to spring scores is more consistent with measuring academic gains attributable to classroom experiences since changes incurred during the summer months are not reflected. Furthermore, the growth of 2nd grade students can be included in the analysis of fall to spring scores since both a pre and post measure are available, which is not the case with fall-to-fall or spring-to-spring analyses. The only down-side to this approach is that the time span being measured is not consistent with the spring-to-spring approach being used in the generation of state assessment growth data.

For Zgain (average across all students of z post-score – z pre-score) metrics displayed below, yellow and red cells indicate areas where PSD growth was below that of academic peers statewide. Green and blue cells indicate areas where PSD growth was greater than that of academic peers statewide. The Zgain metric is also referred to as a growth effect size. A growth effect size greater than or equal to zero is shaded green. Blue indicates a growth effect size greater than or equal to 0.20. A growth effect size at or below zero is shaded yellow. A growth effect size at or below -0.20 is shaded red.



MAP Student Growth Effect Size for PSD – Reading

The 0.25 average z-score gain for 2nd grade PSD students in reading during 2018/19, means that the PSD spring test outcomes were shifted to the right an additional 0.25 standard deviation units beyond the gains of national peers. One standard deviation unit for nationwide 2nd grade reading for the spring MAP test is 15.21 RIT units (a RIT unit is just NWEA's name for their scale score unit). Multiplying 0.25 times 15.21 gives us the number of additional RIT units gained by the average PSD 2nd grade student in reading, or 3.8 RIT units. Given that the average gain in RIT units from the fall to the spring test occasions is 14 RIT units (188.7-174.7), we can see that 3.8 additional RIT units of gain, is equal to an additional 0.27 (3.8/14) of the expected gain in RIT units from fall to spring. Assuming a linear relationship between days of instruction and units of RIT score gain and using a rough estimate of 180 days of instruction as a national average for a school year, **PSD 2nd grade readers are gaining approximately the same effect as 49 additional days of instruction.** This is just an estimate, and converting the other tabled effect size values into average additional days of instruction equivalents requires similar calculations based on the <u>2015 NWEA Measures of Academic Progress Normative Data</u>, page 3 tabled values.

MAP Student Growth Effect Size for PSD – Math

Year by	201	6/17	20	17/18	20	18/19	
Level	Zgain	Data Points	Zgain	Data Points	Zgain	Data Point:	5
1) ES	0.09	7959	0.13	7869	0.07	788	в
2) MS	0.07	5843	0.12	5895	0.09	586	в
Year by	201	6/17	201	17/18	20	18/19	
Grade	Zgain	Data Points	Zgain	Data Points	Zgain	Data Point	s
2	0.11	1933	0.13	1853	0.07	190)7
3	0.11	1959	0.11	1999	0.10	190)4
4	0.11	1985	0.16	1992	0.08	204	5
5	0.04	2082	0.12	2025	0.04	203	32
6	0.04	1910	0.12	2045	0.10	202	23
7	0.08	2006	0.15	1913	0.08	202	26
8	0.08	1927	0.11	1937	0.10	181	9
	_						_
Year by	20	016/17	2	017/18		2018/19	9
Ethnicity	/ Zgaii	n Data Point	s Zgair	n Dat Poin	a ∠ga ts	ain D Po	ata ints
Asian	0.0	5 37	8 0.1	8 3	94 0.	13	381
Black	0.0	4 14	8 0.0	6 1	43 0.	02	151
Hispanic	0.0	4 252	2 0.0	9 25	59 0.	04	2584
White	0.1	0 1017	8 0.1	4 100	81 0.	09 1	0026
Year	by	201	6/17	2017	7/18	201	8/19
FR Lu	nch	Zgain	Data	Zgain	Data	Zgain	Data
•			Points		Points		Points
	F)	0.07	3440	0.10	3184	0.03	3642
2) Reduc	ed (R)	0.10	1135	0.13	1953	0.08	965
3) Not Fl	R	0.09	9227	0.14	8627	0.10	9149



Growth Effect Size Over Time

MAP Student Growth Effect Size for PSD – Science

Note the reduced N-counts, therefore data represents the outcomes of those students that tested, and this may or may not represent the district grade level student outcomes had all possible students tested.



Appendix 5: Credit Accumulation

<u>Credit Accumulation Target</u>: \geq 85% of 9th-12th grade students will be on track to graduate within 4 years of transition into 9th grade.

The number of students that accrue a year's worth of credits in a year's time is an important marker for student success and eventual graduation from high school. Research shows that 9th grade students that earn the needed credits to stay on track with a 4-year graduation plan, are much more likely to successfully complete their PreK-12 experience.



Student Insight – Off Track to Graduate





Note: As of 2/12/19

Academic Subject	Credits 9th	Credits 10th	Credits 11th	Credits 12th (Subject Total)
Language Arts	10	20	30	40
U.S. History	0	0	5	10
Civics/Government	0	0	0	5
Social Studies	0	0	5	10
Humanities	0	0	0	5
Fine & Applied Arts	0	0	5	10
World Language/Culture	0	0	5	10
Mathematics	10	20	30	30
Science	0	10	20	30
Health Education	0	0	0	2.5
Wellness	0	0	5	12.5
Personal Finance	0	0	0	5
Economics	0	0	0	5
Elective	0	0	0	65
Total Credits "On-Track"	20	50	105	240

On Track to Graduate Credit Accumulation Requirements by Grade Level



Note: As of 2/11/20





Note: As of 2/12/19

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Student Characteristic	Levels	Off Track	On Track	% Off Track	% On Track	Total N
	Total	1,881	6,557	22.3%	77.7%	8,438
	9	319	1,873	14.6%	85.4%	2,192
Grade	10	449	1,715	20.7%	79.3%	2,164
	11	708	1,369	34.1%	65.9%	2,077
	12	405	1,600	20.2%	79.8%	2,005
Gender	Male	825	3,299	20.0%	80.0%	4,124
Gender	Female	1,056	3,258	24.5%	75.5%	4,314
	American Indian or Alaska					
	Native	21	21	50.0%	50.0%	42
	Asian	29	239	10.8%	89.2%	268
	Black or African American	35	73	32.4%	67.6%	108
Ethnicity	Hispanic	645	947	40.5%	59.5%	1,592
	Native Hawaiian or other					
	Pacific Islander	6	9	40.0%	60.0%	15
	Two or More	69	246	21.9%	78.1%	315
	White	1,076	5,022	17.6%	82.4%	6,098
	Free	817	971	45.7%	54.3%	1,788
Lunch Program Status	Reduced	141	287	32.9%	67.1%	428
	Neither	923	5,299	14.8%	85.2%	6,222
	NEP	37	36	50.7%	49.3%	73
ELL Lang. Proficiency	LEP	40	30	57.1%	42.9%	70
	FEP (E1,E2,M1,M2)	118	161	42.3%	57.7%	279
	Not ELL	1,686	6,330	21.0%	79.0%	8,016
IEP Support	IEP	324	351	48.0%	52.0%	675
ier support	None	1,557	6,206	20.1%	79.9%	7,763

2019/20 On Track to Graduate Credit Accumulation Grades 9-12 (Pulled Febuary)

Student Characteristic	Levels	Off Track	On Track	% Off Track	% On Track	Total N
	Total	1,658	6,459	20.4%	79.6%	8,117
	9	218	1,923	10.2%	89.8%	2,141
Grade	10	458	1,616	22.1%	77.9%	2,074
	11	633	1,265	33.4%	66.6%	1,898
	12	349	1,655	17.4%	82.6%	2,004
Gender	Male	933	3,212	22.5%	77.5%	4,145
Gender	Female	725	3,247	18.3%	81.7%	3,972
	American Indian or					
	Alaska Native	21	20	51.2%	48.8%	41
	Asian	25	237	9.5%	90.5%	262
	Black or African					
	American	41	69	37.3%	62.7%	110
Ethnicity	Hispanic	557	931	37.4%	62.6%	1,488
	Native Hawaiian or					
	other Pacific					
	Islander	4	15	21.1%	78.9%	19
	Two or More	57	251	18.5%	81.5%	308
	White	953	4,936	16.2%	83.8%	5,889
	Free	837	1,300	39.2%	60.8%	2,137
Lunch Program Status	Reduced	207	594	25.8%	74.2%	801
	Neither	614	4,565	11.9%	88.1%	5,179
	NEP	26	22	54.2%	45.8%	48
ELL Lang. Proficiency	LEP	52	43	54.7%	45.3%	95
	FEP (E1,E2,M1,M2)	95	181	34.4%	65.6%	276
	Not ELL	1,485	6,213	19.3%	80.7%	7,698
IED Support	IEP	309	336	47.9%	52.1%	645
ice support	None	1,349	6,123	18.1%	81.9%	7,472

2018/19 On Track to Graduate Credit Accumulation Grades 9-12 (Pulled Febuary)

Appendix 6: Postsecondary Outcomes

For this section of the Monitoring Report, we will be reporting numbers as they appear in reports produced by the <u>Colorado Department of Higher Education</u>.

Post-Secondary Outcomes - Remediation Rates

<u>Remedial education</u>, also called developmental education, refers to classes intended to bolster the basic skills of new college students, so they are adequately prepared for college-level work. These classes may be non-credit courses and may not be covered by a student's financial aid. These courses are usually offered by a community college. They may be offered by four-year institutions on a cash funded basis.

The remediation rate for PSD students entering Colorado Public Higher Education institutions ranged between 19% and 32% over the last nine years (graduating classes from 2009 to 2017). Remediation rate calculation methods were revised by the state, effective as of the graduating class of 2012. The rates reported below are retroactively based on the revised methodology. The Department of Higher Education indicated that the new methods produce numbers that are not comparable to those in previous reports. Rates went up dramatically under the new methodology.

The new method starts with a graduating class and tracks them forward into college. The new method incorporates both students assessed as needing remediation and those enrolled in remedial courses.



The assessments used and the cut scores that determine remediation are as follows.

College-Readiness Assessment Cut Score Table

SKILL AREA	ACT Subscore	SAT Subscore	ACCUPLACER Score
Mathematics	Math: 19	Math 460	Elementary Algebra: 85
Writing	English: 18	Verbal 440	Sentence Skills: 95
Reading	Reading: 17	Verbal 430	Reading Comprehension: 80

The tables below display the PSD and Colorado remediation rate data for past graduating classes. These rates include two and four-year Colorado Public Higher Education institutions.

I	Poudre School District - Postsecondary Remediation						
HS Grad Year	Remediation %	Math Count	Math %	Eng Count	Engl %		
2009	32.1%	260	26.6%	157	16.1%		
2010	28.9%	207	24.2%	112	13.1%		
2011	29.6%	199	23.9%	127	15.3%		
2012	27.7%	189	22.5%	135	16.1%		
2013	24.0%	154	19.1%	92	11.4%		
2014	19.3%	120	16.0%	63	8.4%		
2015	24.7%	146	20.2%	81	11.2%		
2016	20.4%	135	17.5%	57	7.4%		
2017	22.2%	121	17.5%	72	10.4%		
2018	NA	NA	NA	NA	NA		

Post-Secondary Outcomes – Remediation

	Colorado - Postsecondary Remediation						
HS Grad Year	Remediation %	Math Count	Math %	Eng Count	Engl %		
2009	36.9%	7013	31.0%	5016	22.2%		
2010	39.5%	7483	33.6%	5301	23.8%		
2011	38.2%	7109	32.6%	4903	22.5%		
2012	35.6%	5988	29.6%	4205	20.8%		
2013	33.2%	5581	27.6%	3796	18.8%		
2014	33.8%	5576	29.1%	3444	18.0%		
2015	35.0%	6088	30.5%	3926	19.7%		
2016	35.9%	6564	30.6%	4297	20.0%		
2017	34.8%	6272	29.5%	4116	19.4%		
2018	NA	NA	NA	NA	NA		

Other post-secondary outcomes that are available via Colorado <u>Department of Higher Education (CDHE)</u> reports include: (1) post-secondary enrollment levels, (2) type of post-secondary enrollment (in-state, out-of-state, 2-year, 4-year), (3) first year GPA, (4) credits earned freshman year, and (5) persistence to enroll in a second year of college. PSD students have more favorable outcomes on all 5 of these measures for all nine cohorts represented in the following data tables. We are focusing on postsecondary outcomes that are associated with a PSD student's first year of college as opposed to degrees earned, as these first-year outcomes seem most strongly associated with the quality of a PreK-12 experience. PSD does exceed the overall state population in percentage of students that are college enrolled while in high school and the percentage that complete a degree within 4 years of graduating.

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Considering the SAT outcomes in conjunction with these post-secondary access and success indicators, it appears that PSD graduates are prepared for and successful in their pursuit of post-secondary opportunities. There is also a trend from 2009 through 2017 that indicates more PSD students are enrolling in out-of-state post-secondary options and fewer are enrolling in-state.

The data contained in tables below include in-state and out-of-state college enrollment outcomes gathered by the CDHE from its partnership with the Clearinghouse. Where the acronym <u>SURDS</u> is used, it stands for Student Unit Record Data System. SURDS files are the official source of data for public postsecondary education in Colorado. Where designated in a column heading, SURDS indicate that the data are limited to Colorado postsecondary institutions as opposed to the nation-wide university system.

	Poudre School District - Postsecondary Enrollment						
HS Grad Year	% Total Enrollment	% In-State	% Out-of-State	% 2-Year	% 4-Year		
2009	67 .1%	53.2%	13 .9 %	20.5%	46.7%		
2010	63.5%	47.1%	16.3%	17.0%	46.5%		
2011	63.6%	47.1%	16.5%	1 7.9 %	45.7%		
2012	63.2%	45.6%	17.5%	18.2%	45.0%		
2013	62.4%	44.5%	18.0%	15.7%	46.8%		
2014	60.4%	43.2%	17.2%	15 .6 %	44.8%		
2015	62.8%	44.5%	18.3%	16.5%	46.3%		
2016	61.3%	44.2%	17.2%	15.7%	45.6%		
2017	60.0%	40.8%	19.2%	15.1%	44.8%		
2018	NA	NA	NA	NA	NA		

Post-Secondary Outcomes – Enrollment

	Colorado - Postsecondary Enrollment					
HS Grad Year	% Total Enrollment	% In-State	% Out-of-State	% 2-Year	% 4-Year	
2009	58.8%	47.4%	11.4%	16.5%	42.3%	
2010	57.9%	45.9%	12.0%	16.8%	41.1%	
2011	57.4%	45.2%	12.2%	16.5%	40.9 %	
2012	57.0%	44.5%	12.5%	16.0%	41.0%	
2013	55.3%	42.9%	12.4%	15.5%	39.7%	
2014	55.9%	42.5%	13.4%	14.4%	41.6%	
2015	56.5%	43.1%	13.4%	14.2%	42.4%	
2016	55.8%	42.8%	13.0%	15.0%	40.9%	
2017	56.4%	42.8%	13.6%	15.1%	41.2%	
2018	NA	NA	NA	NA	NA	

PSD - First Year Postsecondary Outcomes			Colorado - F	irst Year Posts	econdary Outcomes
HS Grad Year	Avg. Cum. GPA	Avg. Cum. Credit Hrs	HS Grad Year	Avg. Cum. GPA	Avg. Cum. Credit Hrs
2009	2.79	29.8	2009	2.66	28.1
2010	2.8	30.9	2010	2.66	27.9
2011	2.78	31.2	2011	2.67	28.3
2012	2.87	31.7	2012	2.72	28.8
2013	2.94	34.4	2013	2.76	29.1
2014	2.87	33.8	2014	2.78	30
2015	2.88	32.9	2015	2.79	29.5
2016	2.95	34.2	2016	2.78	30.6
2017	2.86	31.8	2017	2.7	28.7
2018	NA	NA	2018	NA	NA

<u>Post-Secondary Outcomes – First Year GPA and Credit Hours</u>

Post-Secondary Outcomes – Persistence into 2nd Year of College

PSD - Pe	PSD - Persisits Into Year 2			
HS Grad Year	Overall			
2009	83.6%			
2010	83.0%			
2011	82.7%			
2012	82.3%			
2013	84.6%			
2014	85.0%			
2015	85.1%			
2016	85.7%			
2017	N/A			
2018	N/A			

Colorado - Persisits Into Year 2				
HS Grad Year	Overall			
2009	80.3%			
2010	79.4%			
2011	78.7%			
2012	80.4%			
2013	80.0%			
2014	81.9%			
2015	80.1%			
2016	79.5%			
2017	N/A			
2018	N/A			

Poudre School District - Postsecondary Completion							
HS Grad Year	Credential or College Enrolled while in High School	Completed within 2 Years	Completed within 4 Years	Completed within 5 Years			
2009	67.1%	4.8%	31.8%	52.6%			
2010	63.6%	5.1%	35.3%	56.4%			
2011	63.7%	4.6%	35.8%	55.1%			
2012	63.3%	8.1%	37.2%	56.7%			
2013	62.8%	5.8%	39.9%	60.3%			
2014	61.2%	4.6%	41.9%	NA			
2015	63.8%	6.8%	NA	NA			
2016	62.5%	5.1%	NA	NA			
2017	61.5%	NA	NA	NA			
2018	NA	NA	NA	NA			

Post-Secondary Outcomes – Degree Completion

Colorado - Postsecondary Completion						
HS Grad Year	Credential or College Enrolled while in High School	Completed within 2 Years	Completed within 4 Years	Completed within 5 Years		
2009	58.9%	4.5%	28.3%	45.4%		
2010	58.0%	4.5%	29.4%	46.5%		
2011	57.5%	4.8%	30.2%	47.2%		
2012	57.2%	5.4%	32.6%	50.2%		
2013	55.7%	5.9%	33.7%	51.6%		
2014	56.6%	5.8%	36.1%	NA		
2015	57.4%	6.8%	NA	NA		
2016	56.7%	7.2%	NA	NA		
2017	57.4%	NA	NA	NA		
2018	NA	NA	NA	NA		