A+
Colorado
SHARPENING
PUBLIC
EDUCATION

DENVER PUBLIC SCHOOLS PROGRESS REPORT

APRIL 2016

BIG GAINS, BIG GAPS, BIG IDEAS.

Introduction

Welcome to Denver Public Schools' annual checkup, where A+ Colorado (formerly A+ Denver) takes an in-depth look at student achievement in our state's largest district.

Now that the Denver 2020 Strategic Plan is in place, DPS has a clear set of achievement targets against which it can be measured. This report reviews progress toward each of the five overarching goals, and explores the strategies the district has employed to reach these goals.

A note of caution: The 2014-2015 school year was a time of transition. The state of Colorado used new tests (PARCC) to assess student learning, replacing the TCAP and CSAP assessments of the past.[1] PARCC, in an attempt to better measure and communicate students' progress toward meeting Colorado's Academic Standards, sets a higher academic bar for proficiency than previous assessments. This means that comparing proficiency levels from previous school years to this year poses challenges. Also, having only one year of data from the new assessments means neither the district nor state can issue school quality performance ratings this year. Still, there remains much to be gleaned by comparing relative changes in school and district performance, along with comparisons between districts and schools with similar student demographics.

Despite this year's unique challenges, we now know more than we ever have about the state of Denver's schools, and about what is working well, and not so well. We believe it is critical that the district engage more urgently and thoughtfully if it hopes to make meaningful progress toward its own ambitious goals.

Let's be clear: There has been progress in DPS, particularly in comparison to other Colorado districts. But some student learning outcomes are stalled, or improving far too slowly for the district to be successful. We cannot emphasize that point strongly enough.

Significantly increasing student performance. Creating strong schools, where most students perform at grade level or stand a realistic chance of getting to grade level. Eliminating the persistent opportunity gap. These are the challenges DPS needs to be confronting every day.

We hope this analysis can shed light on the positive developments that have resulted from the hard work of DPS educators, while also illuminating those places where the district needs to dig in, reflect on what is not working, and set a course with a higher probability of success.

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1 The Partnership for Assessment of Readiness for College and Careers (PARCC) is a group of states that together developed an assessment that replaces previous state standardized tests including Colorado's Transitional Colorado Assessment Program (TCAP) and Colorado Student Assessment Program (CSAP). The PARCC assessment, unlike TCAP and CSAP, is aligned to new academic standards adopted by the Colorado State Board of Education in December 2009 and August 2011. For more information see: http://www.cde.state.co.us/assessment/generalinfo

Let's start with the facts:

First things first.
Whom does the district serve?

DPS enrollment is up. But student enrollment growth is slowing. While student enrollment grew by 3 percent from 2012 to 2013 and 2013 to 2014, it grew by only 1.5 percent from 2014 to 2015. The makeup of the student body is also becoming slightly more white (increasing from 21 percent in 2012 to 23 percent in 2015), and slightly less black and Latino. The enrollment of black students dropped from 14 percent to 13 percent from 2012 to 2015; Latino enrollment dropped from 58 percent to 56 percent in the same timeframe.

There has been a decrease in the proportion of students receiving free or reduced lunch (FRL), dropping from a peak of 72 percent in 2013 to 69 percent in 2015, and in students designated as English language learners, dropping from 37 percent in 2012 to 32 percent in 2015. The district projects that students receiving free or reduced lunch will drop to 63 percent by the end of the decade.

Denver is gentrifying and becoming a wealthier city. The biggest demographic changes are occurring in Near Northeast Denver and Northwest Denver where FRL rates have decreased five percentage points in the last five years.

	2012	2013	2014	2015
Number Of Students	83,377	86,043	88,839	90,234
Students Receiving Free Or Reduced Lunch	59,535 (71%)	61,999 (72%)	61,982 (70%)	61,778 (68%)
White	17,148 (21%)	18,258 (21%)	19,593 (22%)	20,511 (23%)
Black	11,737 (14%)	11,902 (14%)	12,235 (14%)	12,158 (13%)
Latino	48,490 (58%)	49,604 (58%)	50,467 (57%)	50,725 (56%)
English Language Learners	30,759 (37%)	31,307 (36%)	29,603 (33%)	28,472 (32%)

How is Denver Public Schools doing on reaching its own goals?

Goal 1: Great Schools in Every Neighborhood

Students Attending High-Performing Schools by School Board District
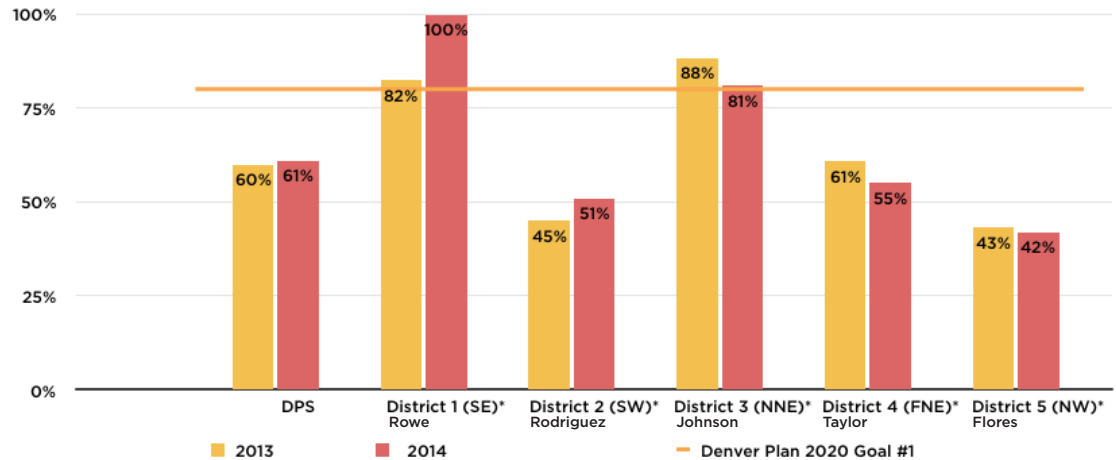
*Categories reported reflect Board districts, not planning regions.

GOAL 1:
By 2020,
80%
of DPS students will attend a high-performing school, measured by region using the district's school performance framework.

In 2014, 61 percent of DPS students attended a high-performing school (rated as Blue or Green, the two top categories) as measured by the district's School Performance Framework. To reach the 2020 goal of 80 percent, an additional 15,354 DPS students will have to attend a blue or green school four years from now.

High-performing schools are not evenly distributed across the city. DPS is divided into five geographical districts, each represented by a different elected board member.[2] For the purposes of this report, we look at progress toward the Denver Plan goal #1 based on school board districts, rather than planning regions which is how DPS measures this goal.

Denver's districts 2 (Southwest), 4 (Far Northeast), and 5 (Northwest) are furthest from the goal of 80 percent of students in Blue or Green schools:

In Southwest Denver, an additional 5,558 students must be in Blue or Green schools by 2020 to meet the goal.

In Far Northeast, an additional 6,380 students.

In Northwest, another 5,752 students.[3]

Because of the aforementioned switch to the PARCC assessment, DPS will not be releasing a School Performance Framework (SPF) for the 2014-2015 school year. As a result, the district won't be able to track schools' progress toward green and blue status until 2016. This presents both a challenge and opportunity for the district.

It is critical that DPS continue to communicate school quality and student achievement outcomes to families. The district must also continue to make decisions about how to support schools based on student performance. In next year's SPF the district will give greater weight to proficiency relative to student growth than it has in the past. A+ has been a strong advocate for this update to the SPF. We believe it better measures the extent to which schools are preparing most students for college and careers.

2 DPS often reports enrollment and school performance by planning regions (which is a way the district often groups schools by location and is used in the Enrollment Guides for example) rather than Board districts. We have aligned our analysis with Board districts, another way of grouping schools by location, because we think it important that Denver families and voters have a sense of how schools governed by their elected board member perform.

3 Note, this analysis is based on 2013-2014 enrollment and school ratings given that this is the most recent year DPS or the Colorado Department of Education released a school performance framework.
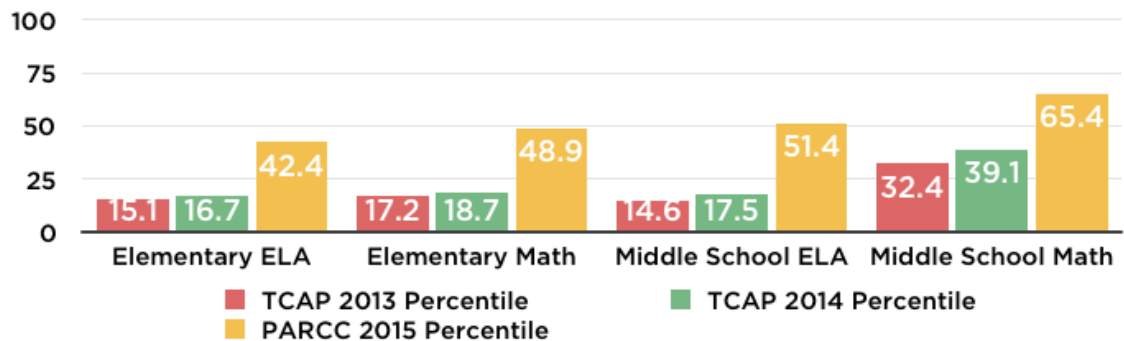
Can PARCC scores help us understand whether schools are improving?

As mentioned earlier, differences in content and benchmarks between PARCC and earlier state tests mean that results cannot be directly compared to previous years. We can, however, broadly examine whether schools and districts improved relative to other schools and districts in the state. By comparing percentile performance of schools and districts on previous and current tests, we can determine whether they are making forward progress.[4] For example, if a school performs in the 40th percentile, it means it performed better than 40 percent of all schools included in the analysis.

Relative to the rest of the state, Denver has made big gains. DPS has jumped from the 16th percentile statewide to the 42nd percentile in elementary English Language Arts (ELA), from the 19th to 49th percentile in elementary math; from the 18th to the 51st percentile in middle school ELA; and from the 39th to the 65th percentile in middle school math. This means DPS is outperforming districts with similar free and reduced lunch populations (see Appendix B for PARCC performance relative to FRL population).

Denver's Percentile Ranking on Standardized Testing

We congratulate DPS for these gains. But PARCC results still beg the question: what does this mean about student achievement in schools?

DPS' School Performance Framework uses multiple measures to assess school quality. One measure is student performance on state tests. Elementary schools that have been rated Green (the second highest rating) in Denver on previous SPFs have generally been in at least the 20th percentile on test performance compared to the rest of the state.[5] Again, test scores are just one measurement used on the SPF, but they are the best proxy we have this year for estimating which schools might be rated Green or Blue. The number of DPS schools to hit the 20th percentile benchmark increased last year.

4 A+ conducted a percentile analysis ranking all districts in the state of Colorado who reported data for more than 16 students (reporting minimum) in each subject and grade groupings on 2013 TCAP, 2014 TCAP, and 2015 PARCC tests based on the percent of students at the proficiency benchmark in each district. For a complete explanation of methodology, please see Appendix A. The Colorado Department of Education also produced a percentile analysis which was based on PARCC mean scale scores (i.e. based on the average score for a group of students). Because the A+ and CDE percentile analyses are based on different metrics (percent at benchmark in the A+ analysis and mean scale score in the CDE analysis), the school ranks may be slightly different (by a few percentiles), but they are directionally similar. For more information about CDE's methodology and for district and school results, see http://www.cde.state.co.us/accountability/achievement_percentile_rank_report_guidance_document

5 For example, in 2014 there were 47 Green and 15 Blue elementary schools in Denver. Of these 62 schools, 53 were in at least the 20th percentile in terms of percent of students at the TCAP proficiency benchmark (compared to all other schools across the state with publicly available data). Though there were 9 Green schools ranked below the 20th percentile, we use this to approximate a cutoff score for Denver's SPF.

Number Of Schools In 20th Percentile Or Better Statewide For Percentage Of Students Scoring Proficient (Compared To Rest Of The State)[6]

	ES ELA	ES MATH	MS ELA	MS MATH
2013	44 of 98 schools (45%)	47 of 98 schools (48%)	25 of 55 schools (45%)	33 of 55 schools (60%)
2014	53 of 102 schools (52%)	54 of 102 schools (53%)	26 of 59 schools (44%)	31 of 59 schools (53%)
2015	60 of 106 schools (57%)	56 of 106 schools (53%)	41 of 62 schools (66%)	39 of 62 schools (63%)

Assuming most Green schools in the past have been in the 20th percentile or above in student achievement, there are likely more schools that would have been rated Green or Blue after the 2015 test.

Let's be clear: the 20th percentile is a low bar. It raises some serious questions about whether the district's definition of a high-quality school is sufficiently rigorous. It's heartening that DPS is taking steps to address this by moving toward weighting achievement more heavily compared to growth in the next round of SPFs. For now, however, it's accurate to use that low, 20th percentile bar as a proxy for Green and Blue schools. Using that measure we see there is improvement, and that more schools— though certainly not enough— are clearing this bar.
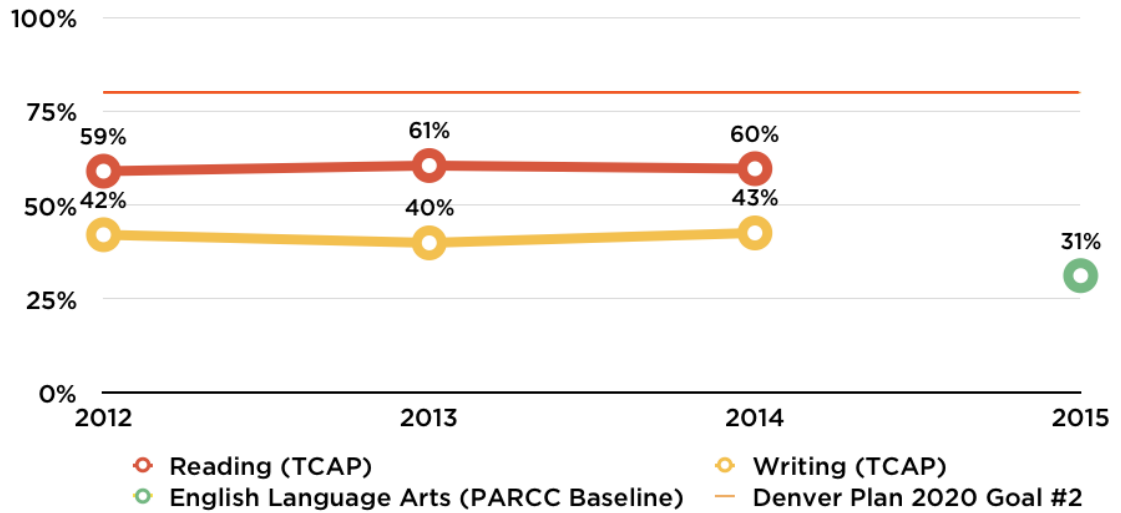
The Takeaway:

Denver schools are driving change and improving outcomes for students. We saw big jumps in school-level performance relative to overall school performance across the state. Still, DPS has a lot of work to do to ensure that 80 percent of its students attend high performing schools, and to ensure that schools defined as high performing do in fact measure up to that label.

6 A+ conducted a percentile analysis ranking all schools in Colorado who reported data for more than 16 students in each grade level grouping and test on 2013 TCAP, 2014 TCAP, and 2015 PARCC assessments. Percentiles are based on percent of students meeting the proficiency benchmark at each school. For a complete explanation of methodology, see Appendix A. For example, in 2014 there were 47 Green and 15 Blue elementary schools in Denver. Of these 62 schools, 53 were in at least the 20th percentile in terms of percent of students at the TCAP proficiency benchmark (compared to all other schools across the state with publicly available data). Though there were 9 Green schools ranked below the 20th percentile, we use this to approximate a cutoff score for Denver's SPF.

Goal 2: A Foundation for Success in School

Percent Of Students At Benchmark In Reading And Writing

Legend:
- Reading (TCAP)
- English Language Arts (PARCC Baseline)
- Writing (TCAP)
- Denver Plan 2020 Goal #2

GOAL 2:
By 2020,
80%
of DPS third-graders will be at or above grade-level in reading and writing.

Since 2012 the district has made little headway in raising third grade achievement levels. Because PARCC assessments test different standards, and have a different and more rigorous definition of proficiency, the percent of students at or above grade level decreased last year. In 2015, just 31.2 percent of third-grade students met the English Language Arts PARCC proficiency benchmark. Though this cannot be directly compared to performance on TCAP, it sets a new baseline for the district.

Similar to the way we measured the district's progress toward meeting Goal #1, we can glean some important information by comparing DPS' third-grade PARCC results to the rest of the state. Denver's third-grade reading and writing TCAP results fell in the bottom 20th percentile in the state (meaning that Denver third-graders performed better than under 20 percent of other Colorado third-graders).

Denver's Percentile Rank:
3rd Grade Reading and Writing / English Language Arts Tests
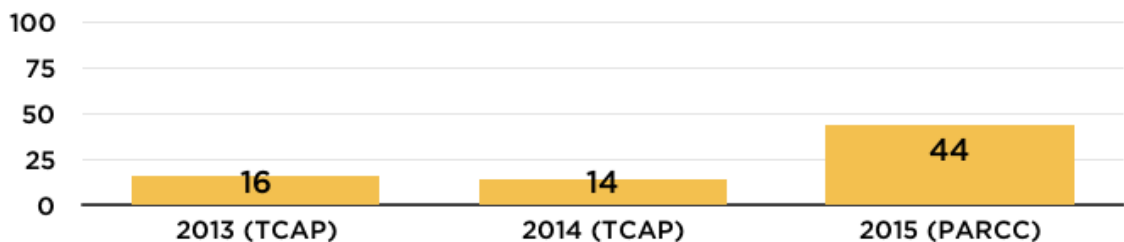
The district showed big gains in 2015: on PARCC, Denver third-grade English Language Arts results reached the 44th percentile (meaning Denver 3rd graders performed better than 44 percent of other Colorado districts' third-graders). This is a remarkable jump, and very few other districts showed such gains.

While DPS should be congratulated, it is critical that we have a better understanding of what led to the improvement.

7   **Newark data:** http://www.njspotlight.com/stories/15/12/16/poor-scores-on-parcc-reflect-stiff-challenges-facing-schools-in-newark/; Jersey City data: http://www.nj.com/education/2016/02/parcc_2015_test_results_see_how_your_nj_school_sco.html; **Orleans Parish and Recovery School District data:** http://thelensnola.org/2015/10/22/state-releases-school-level-information-on-student-performance-on-parcc-tests/; **Chicago data:** http://www.illinoisreportcard.com/District.aspx?source=Trends&source2=PerformanceLevelsPARCC&DistrictID=15016299025; **Boston data:** http://www.doe.mass.edu/parcc/results.html; Providence data: http://www.ride.ri.gov/InstructionAssessment/Assessment/AssessmentResults.aspx; Baltimore data: http://www.baltimorecity-schools.org/Page/24385; **District of Columbia data:** http://results.osse.dc.gov/state/DC; **Cleveland and Cincinnati data** (note, though Ohio includes level 3 on PARCC as proficient, for consistency with PARCC guidelines and other states' cut scores, we report only students scoring level 4 or 5. Additionally, Ohio begins PARCC testing in 4th grade.): http://education.ohio.gov/Topics/Testing/Testing-Results/Results-for-Ohios-State-Tests#ELA

8   The National Assessment of Educational Progress (NAEP) is the largest nationally representative and continuing assessment of what America's students know and can do in various subject areas. NAEP assessments test mathematics, reading, science, writing, the arts, civics, economics, geography, and U.S. history. Each subject is assessed at grades 4, 8, and 12, although not all grades are assessed each time. The Trial Urban District Assessment (TUDA) is a multiyear study of the feasibility of a trial district-level NAEP in selected urban districts that is supported by federal appropriations authorized under the No Child Left Behind Act. The first TUDA took place in conjunction with the 2002 state NAEP reading and writing assessments. TUDA again took place in 2003, 2005, 2007, 2009, 2011, 2013, and is scheduled for 2015. Denver does not administer TUDA. For more information see: http://nces.ed.gov/nationsreportcard/about/

9   DPS Early Literacy Plan 2020: https://drive.google.com/file/d/0BxX-cdsFEp-WrYzZ4Y25JMTlQck0/view

Another helpful comparison is looking at other urban districts across the country that also participated in PARCC.[7] Denver performed significantly better than several inner-city districts, and similar to Boston Public Schools, Chicago Public Schools, and Cincinnati Public Schools.

This shows that Denver is comparable to some large school systems and outperforming others. But it is equally important to understand that these comparison districts still only fall near or below the average of large district performance as measured by the Trial Urban District Assessment (TUDA), and below the national average as measured by the National Assessment of Educational Progress (NAEP), meaning Denver still underperforms many education systems across the country.[8]

The Takeaway:

Reaching 80 percent proficiency in third-grade reading is a tall order with our new, higher expectations. Some may ask if this is still the right goal and whether the district 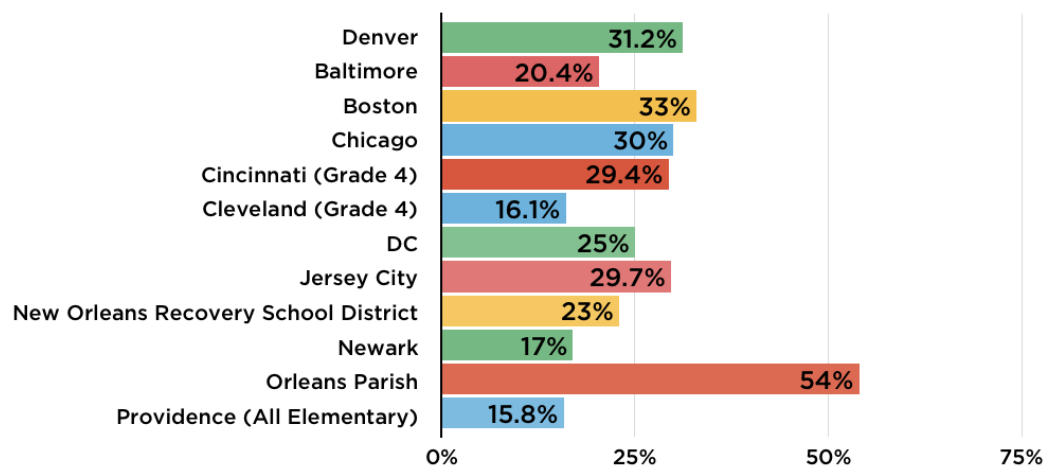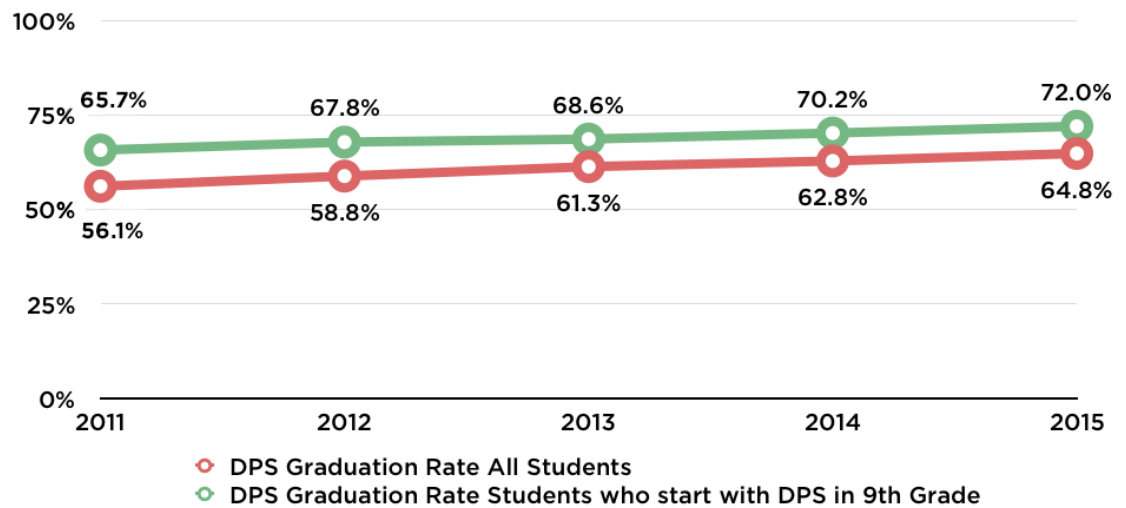should readjust it. No school or district has ever come close to making the gains that will be required for DPS to reach this goal by 2020.

Yet we must continue to set a high bar for ourselves. Eighty percent of our third-graders should be reading on grade level, particularly if that benchmark is more accurately measured by PARCC than by previous assessments. To make significant progress toward the goal, DPS must have a clear understanding of the early literacy instructional strategies that are having the biggest impact, and make sure schools are focusing efforts on the right tactics.

The district outlined what these supports might look like in its recent Early Literacy Plan 2020.[9] Supports should include stressing to school leaders that early literacy must be a top priority; improving early literacy professional development; providing effective early literacy curriculum and meaningful assessments; and encouraging more focused interventions for struggling early readers. Whether these interventions will succeed remains to be seen, but it is clear there must be urgency around this work.

Percent of 3rd Grade Students Meeting or Exceeding the PARCC Benchmark (English Language Arts)

District	Percent
Denver	31.2%
Baltimore	20.4%
Boston	33%
Chicago	30%
Cincinnati (Grade 4)	29.4%
Cleveland (Grade 4)	16.1%
DC	25%
Jersey City	29.7%
New Orleans Recovery School District	23%
Newark	17%
Orleans Parish	54%
Providence (All Elementary)	15.8%

Goal 3: Ready for College and Career

Denver Graduation Rate

Legend:
- ○ DPS Graduation Rate All Students
- ○ DPS Graduation Rate Students who start with DPS in 9th Grade

Green line (Students who start with DPS in 9th Grade): 2011: 65.7%, 2012: 67.8%, 2013: 68.6%, 2014: 70.2%, 2015: 72.0%

Red line (All Students): 2011: 56.1%, 2012: 58.8%, 2013: 61.3%, 2014: 62.8%, 2015: 64.8%

GOAL 3:
By 2020, the four-year graduation rate for students who start with DPS in ninth grade will increase to

90%

GOAL 3:
By 2020, we will have

2x

the number of students who graduate college- and career-ready, as measured by the increasing rigor of the state standard.

The Denver Plan 2020 graduation goal specifically tracks the cohort of students who attend a DPS school in ninth grade to see how many of them graduate in four years. It is also critical to track how DPS is serving students who transfer into the district after ninth grade. On both measures, graduation rates for the class of 2015 trended upwards once again.[10]

To be on track to reach the goal of a 90 percent four-year graduation rate for students that start with DPS in ninth grade, that rate will need to increase 3.6 percentage points annually. Since 2010, the average annual increase has been 1.6 percentage points. For DPS to reach this ambitious goal with all students (which

should also be part of the conversation), the district would need to drive significantly faster annual growth of 5 percentage points annually. To illustrate the magnitude of the challenge, the graduation rate for all students has increased by an average 2.2 percentage points per year since 2010.

There are several indicators of college and career readiness that DPS can track to measure progress toward this goal. We know this is critical: within the next five years, three of every four jobs in the state will require some sort of postsecondary education.[11] DPS students need to graduate in a strong position to enter postsecondary education programs, be they traditional colleges or vocational training programs.

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10 Graduation rates (all students) reflect data from the Colorado Department of Education. DPS Graduation Rate of Students who start with DPS in 9th Grade is tracked internally by DPS.

11 Colorado Department of Higher Education. "2014 LEGISLATIVE REPORT ON THE SKILLS FOR JOBS ACT." January 2014. http://highered.colorado.gov/ Publications/Reports/Legislative/ Workforce/2014_SkillsforJob.pdf

DPS: Average Composite ACT Scores
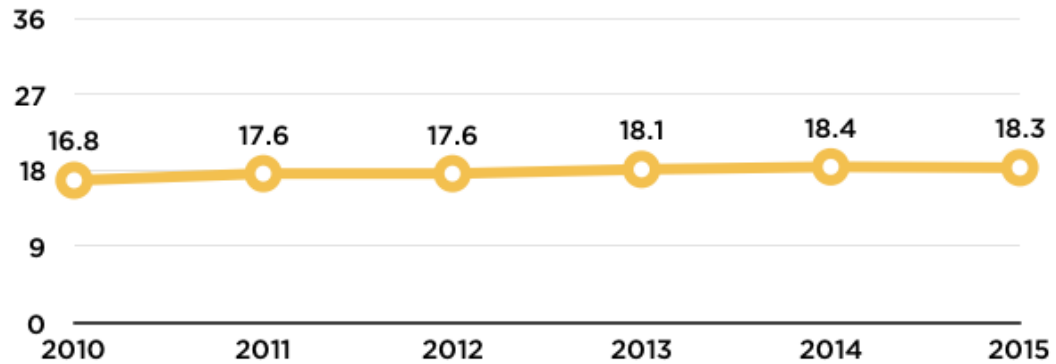
Denver's scores on the clearest college and career-ready litmus test, the ACT, show relative stagnation.[12] The ACT, used in college admissions, is arguably the highest stakes test that a student takes, because his or her score determines access to higher education options.[13] Denver's scores sit at or below large urban districts with similar populations of students receiving free or reduced lunch, and that also require students to take the ACT.[14]

12 Scores accessed through Colorado Department of Education.

13 25th percentile ACT scores of admitted class at universities accessed through National Education Center Statistics' College Navigator: http://nces.ed.gov/collegenavigator/

14 **Fiscal data available through Common Core of Data, National Center for Education Statistics:** http://nces.ed.gov/ccd/districtsearch/index.asp; Chicago ACT scores: http://cps.edu/News/Press_releases/Pages/PR1_10_02_2015.aspx; Chicago district demographics: http://cps.edu/About_CPS/At-a-glance/Pages/Stats_and_facts.aspx; **Orleans Parish and Recovery School District ACT scores:** http://www.louisianabelieves.com/docs/default-source/data-management/state-district-comparison-stu-dents-scoring-18-(2012-2015).pdf?sfvrsn=2; **Orleans Parish and Recovery School district demographics:** http://www.louisianabelieves.com/resources/about-us/10-years-af-ter-hurricane-katrina (see enrollment counts); **Minneapolis and St. Paul ACT data:** http://sleds.mn.gov/#high-SchoolAcademics/orgId--062501000__groupType--district__COHORTID--2014__p--5; **Minneapolis demographics:** http://www.mpls.k12.mn.us/by_the_numbers; St. Paul district demographics: http://www.spps.org/Page/2965;

ACT SCORE	College Access in Colorado
29	75% of Admitted Students at Air Force Academy score at or above
24	75% of Admitted Students at University of Colorado-Boulder score at or above
20	75% of Admitted Students at University of Colorado- Denver score at or above
18	75% of Admitted Students at Metro State University of Denver score at or above

	2015 ACT Score	Students receiving Free or Reduced Lunch	Per Pupil Revenue (FY 11-12)
Denver	18.3	70%	$11,958
Chicago	18.2	86%	$14,294
Orleans Parish	20.9	66%	$35,219
Recovery School District	16.6	92%	$33,942
Minneapolis (2014)	20.9	65%	$17,648
St. Paul (2014)	19.5	72%	$16,354

Another measure of post-secondary readiness is the extent to which high school students enroll in and pass rigorous classes. It is critical that all students take classes with high standards that prepare them for college and career. Advanced Placement (AP) courses are one of the best examples of classes that will provide this level of rigor. DPS must ensure that more students — particularly low-income students— have access to and are able to successfully complete AP classes.[15]

Progress on Advanced Placement Courses
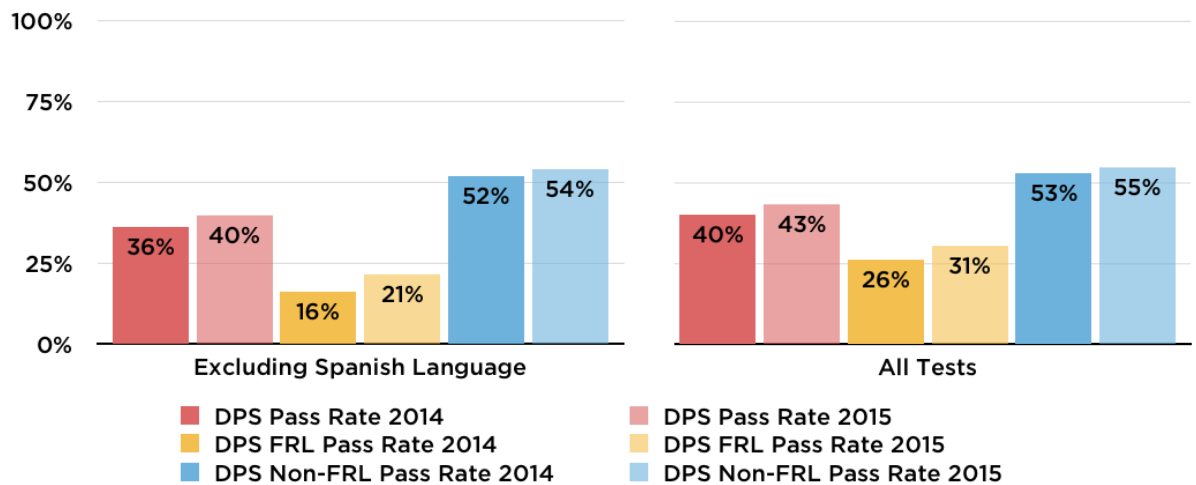
DPS has also been working to expand access to career and college pathways. DPS created CareerConnect, which provides workforce-relevant courses and connects students to partner companies and higher education institutions for hands-on experiences.[16] Over 5,000 students participate in CareerConnect. DPS plans to expand offerings and enrollment in the 2016-17 school year.

Additionally DPS has been expanding concurrent enrollment, under which a student attending high school can take one or more postsecondary courses at a higher education institution and simultaneously receive credit toward high school graduation and college credit.[17] Concurrent enrollment can provide students a clearer pathway to postsecondary options, create a college-going culture in a school, and, because they are free, remove cost barriers to college-level courses.

Concurrent enrollment in DPS generally takes one of two forms: 1) developmental courses, which would be remedial classes at the college-level, for credit recovery or catch-up, or 2) college-level (100+ level) courses for which students can earn college credit while still in high school.[18] DPS has indeed expanded both developmental and college-level concurrent enrollment opportunities. Nineteen percent of DPS students took at least one concurrent enrollment course in 2014-2015.[19] Pass rates decreased last year as enrollment increased.

15 AP participation and pass rates provided by DPS.

16 DPS CareerConnect: http://www.dpscareerconnect.org/

17 For more information, see the Colorado Department of Education: https://www.cde.state.co.us/postsecondary/concurrentenrollment

18 College-level concurrent enrollment classes may be offered online, at a higher education institution, or at a student's high school taught by qualified teachers (through the CU Succeeds program).

19 For DPS' presentation on college and career readiness, including concurrent enrollment data included in this report, see: http://www.boarddocs.com/co/dpsk12/Board.nsf/files/9ZGTL677D7A2/$file/College%20and%20Career%20Readiness_BOE%20Work%20Session_8%2017%2015.pdf

## DPS Concurrent Enrollment Participation and Pass Rate

- ■ Remedial Level Concurrent Enrollment Courses Taken
- ○ Remedial Level Concurrent Enrollment Pass Rate
- ■ College-Level Concurrent Enrollment (100+ Level and CU Succeeds) Courses Taken
- ○ College-Level Concurrent Enrollment (100+ Level and CU Succeeds) Pass Rate
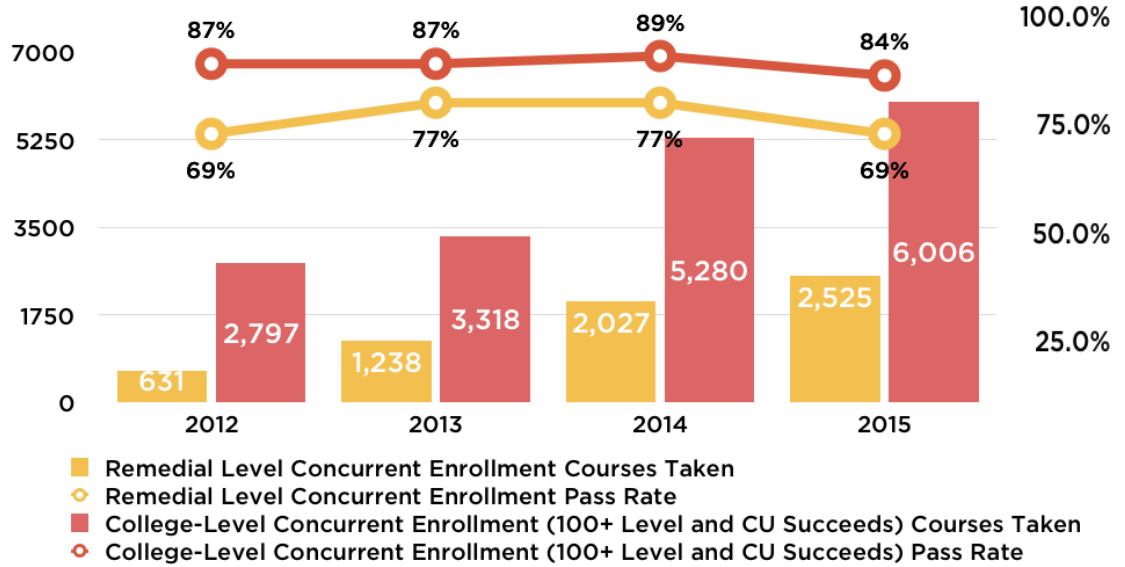
DPS must ensure that concurrent enrollment classes not only provide a pathway to postsecondary options, but that college-level courses feature college-level coursework. Concurrent enrollment courses are not normed to the same extent as other college-level classes (e.g. Advanced Placement or International Baccalaureate). College-level concurrent enrollment course pass rates have ranged from 84 percent to 89 percent over the past four years. AP pass rates have been less than half that. Clearly, this raises questions about the rigor of concurrent enrollment courses.

Students must also be academically prepared to enroll in two- or four-year colleges after graduating from high school. Though the information we have on college enrollment is a bit dated (most recent data from the Colorado Department of Higher Education is for the high school class of 2013), there was a small dip in the proportion of students who chose to enroll in college: 47.4 percent of high school graduates enrolled in a postsecondary institution in 2009, and 45 percent enrolled in 2013. DPS can also access more recent data about its graduates from the National Student Clearinghouse which shows a rebound in college enrollment by the class of 2014 (47.5 percent).[20]

20 National Student Clearinghouse data is not publicly accessible, and was provided from DPS. Data included in the chart on college enrollment is publicly available from the Colorado Department of Higher Education: http://highered.colorado.gov/Data/HSGradsDetail.aspx

Percent of Graduates Enrolling in College (2 or 4 year, In State and Out-of-State)

- ○ Colorado Department of Higher Education College Enrollment Rate
- ○ National Student Clearinghouse College Enrollment Rate
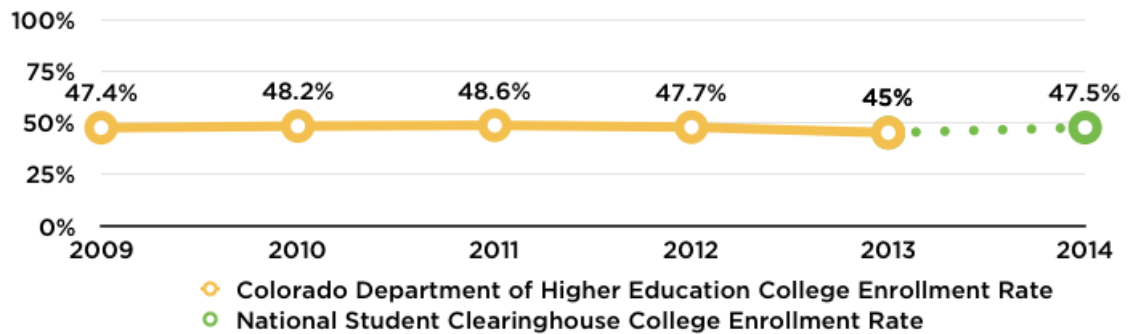
If students choose a post-secondary pathway other than college it must not be because a subpar K-12 education left them unprepared for college. Across the past five to six years DPS has not made substantial gains in increasing the proportion of its graduates enrolling in college.

Yes, DPS is graduating more students, but the district should also question if there is an opportunity to replicate practices that provide pathways and help students navigate the college application and enrollment process. This may include

investing more resources in college counseling and partnerships with community organizations.

A bright spot in the college readiness discussion is a declining remediation rate.[21] The remediation rate measures the percentage of students who must take (and pay for) non-credit remedial courses once they've enrolled in college in order to be ready for college-level work. The remediation rate has been improving, dipping below 50 percent for the first time, even as more students are graduating. But 49 percent is still far too high.

DPS Remediation Rate
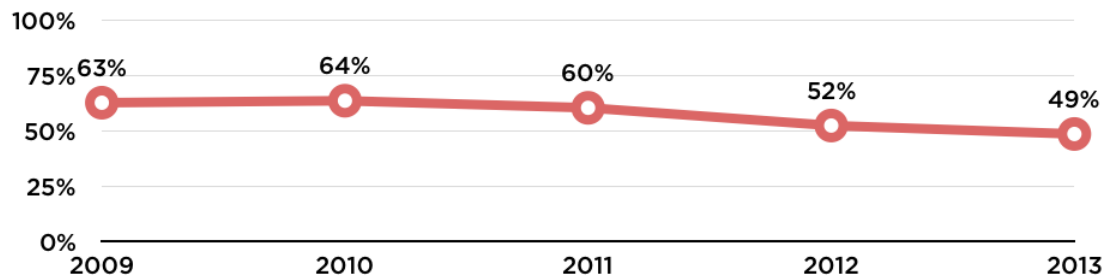
The Takeaway

It's a bit of a mixed bag. DPS is graduating more students, but too many of those students are still underprepared for college-level work, and may not see college as a viable pathway. DPS has worked hard to ensure students have access to alternative pathways, but there needs to be more information about the quality of these pathways and outcomes for students choosing not to go to college.

21   The remediation ration is the percent of DPS students enrolling in college who need to take non-credit bearing courses that review information and skills they should have learned in high school. The Colorado Department of Higher Education collects and reports this data.

Goal 4: Support for the Whole Child

GOAL 4:
By 2015, a task force, including DPS staff, community partners and city agencies providing services to DPS students, will recommend to the Board of Education a plan to measure this goal and track progress.

The Whole Child Task Force developed a definition for educating the whole child:

"In Denver Public Schools we are committed to providing equitable and inclusive environments where we ensure students are Healthy, Supported, Engaged, Challenged, Safe, Socially and Emotionally Intelligent."

Additionally, the task force provided a standard to ensure all schools are addressing the whole child. It states that schools must set an annual goal in their Uniform Improvement Plan that addresses at least one component of whole child education, and use "valid and reliable" ways to measure progress toward that goal.

In late 2015, 55 principals at district-run schools reported in a survey that they have begun the work of setting whole child goals. The district plans to support school leaders across the district in implementing this process during the 2016-2017 school year.

Over the past year, the district has been working toward developing a way to measure school-level support for the whole child, as the district strategic plan requires. During the spring of 2016 DPS plans to collect data through the first district-wide whole child survey. By summer 2016, using survey results, the district will establish a baseline for this goal.

DPS is also supporting schools in the whole child arena by designing a set of objectives and measures to address attendance, behavior, physical activity, nutrition, social and emotional health, school culture, substance use, oral health, vision, asthma, and teen pregnancy.[22]

The Takeaway

While developing a working understanding of the whole child constitutes progress, and the plans to distribute the whole child survey to collect information about how students experience school is promising, this goal still lacks tangible metrics.

Our recent report on arts education in Denver points out a number of significant challenges the district must meet if it is serious about addressing aspects of the whole child that go beyond reading, writing, and math.

Additionally, DPS should track and publicly report on physical and mental health data, behavioral indicators including discipline rates, and access to quality arts programming. Current practice is neither systematic nor transparent. In fact, it is unclear if standards exist for access to non-core academic programming.

This is unfortunate because it does not communicate the importance of a more holistic understanding of students' needs. Kids need a variety of supports and opportunities outside of academics to excel both in and outside the classroom.

22 Update: Support for the Whole Child. Presentation to DPS Board of Education. February 16, 2016: http://www.boarddocs.com/co/dpsk12/Board.nsf/files/A782LY02C513/$file/Whole%20Child%20Update%20to%20BoE%202-18-16%20v6%20correction.pdf

Goal 5: Close the Opportunity Gap

The graduation rate for African American students dipped after its peak in 2013 to 62.4 percent in 2014 and rebounded to 64 percent in 2015. The Latino graduation rate inched upward to 60.7 percent in 2015. These are still well below the graduation rate of their white peers (74.3 percent).
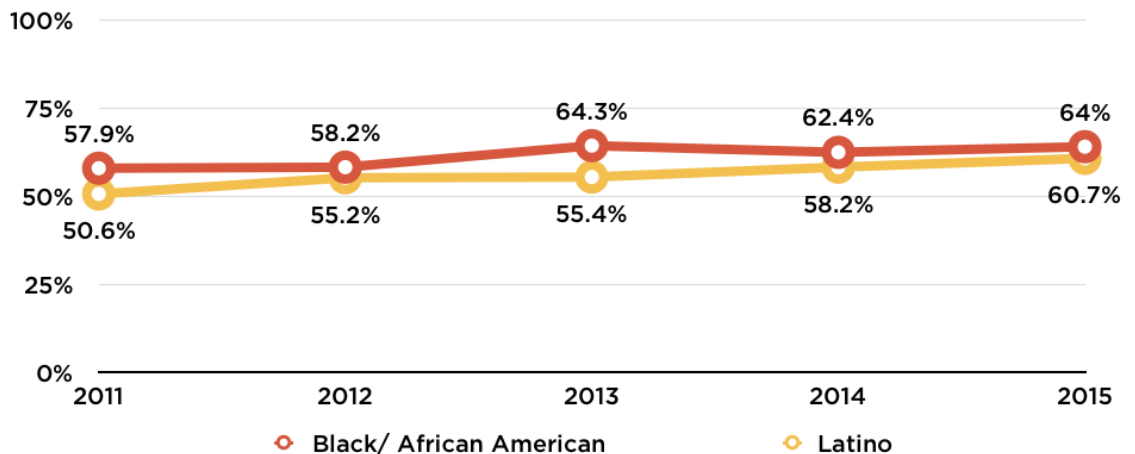
If the graduation rate of African American students is to grow 25 percentage points by 2020 (using the class of 2012 as a baseline, the African American graduation rate in 2020 needs to be 83.2%), graduation rates would need to increase by 3.8 percentage points each year until 2020. If graduation rates for Latino students are to increase 25 percentage points (using the class of 2012 as a baseline means the

Latino graduation rate in 2020 needs to be 80.2%), the graduation rate needs to increase by 3.9 percentage points every year for the next five years.

DPS' focus on improving college and career readiness for African American and Latino students must also focus on postsecondary success. There is a significant racial/ethnic gap in college enrollment: 69 percent of Asian graduates and 57 percent of white graduates enroll in college, while 50 percent of African American graduates, 36 percent of Latino graduates, and 35 percent of American Indian graduates enroll in college.[23]

Graduation Rate

Percent of Graduates Enrolling in College (2 or 4 year, In State and Out-of-State)
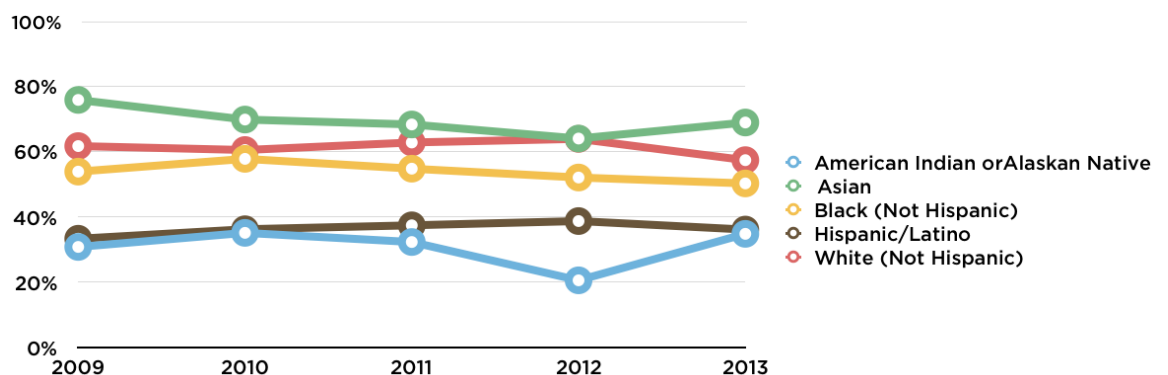
23 Colorado Department of Higher Education provided disaggregated enrollment data to A+.

Students of color and other high-needs groups of students are also significantly more likely to need remediation than their more educationally advantaged peers.[24] Although African American graduates are more likely to enroll in college than Latino graduates, they are also more likely to need remediation once they get there.
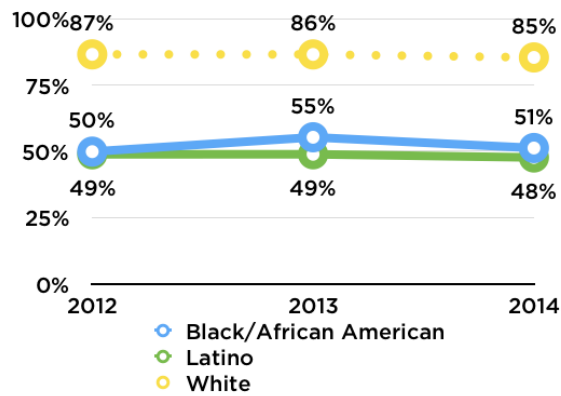
African American students are also underperforming their peers at the secondary level: only a quarter of the AP tests taken by African American students earned a passing score, compared to 32 percent for Latino students and 60 percent for white students.
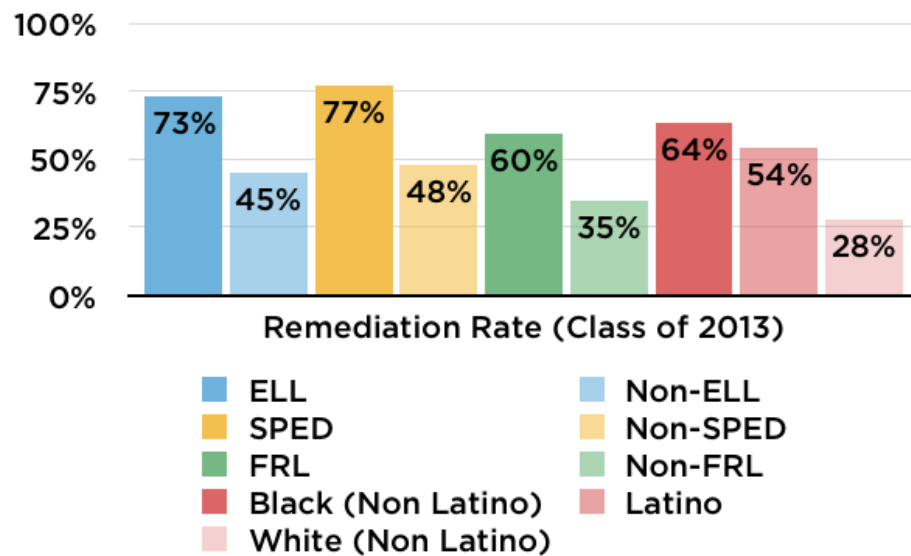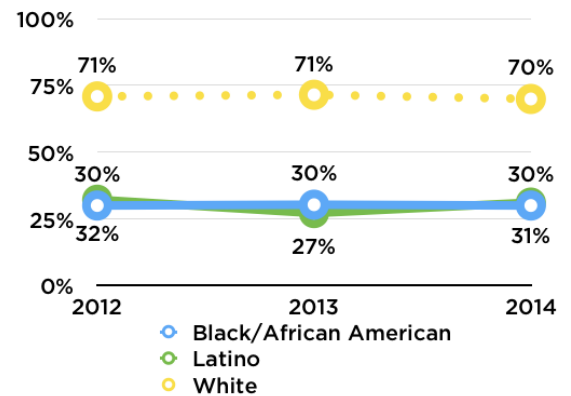

	AP Pass Rate (class of 2015)	Average Composite ACT (class of 2015)
Black or African American	25.2%	16.6
Latino	32.3%	16.7
White	60.5%	23.6

Reading Proficiency

Legend:
- Black/African American
- Latino
- White

Data points:
- White: 87% (2012), 86% (2013), 85% (2014)
- Black/African American: 50% (2012), 55% (2013), 51% (2014)
- Latino: 49% (2012), 49% (2013), 48% (2014)

Writing Proficiency

Legend:
- Black/African American
- Latino
- White

Data points:
- White: 71% (2012), 71% (2013), 70% (2014)
- Black/African American: 30% (2012), 30% (2013), 30% (2014)
- Latino: 32% (2012), 27% (2013), 31% (2014)

GOAL 5:
Reading and writing proficiency for third-grade African American and Latino students will increase by

25

Percentage points.

The district is rightfully paying close attention to how students of color are performing relative to their white peers, and the focus on improving literacy early in students' careers is an important strategy. But it is clear from previous years' data that there has been little progress made in closing the early literacy gap.

The state has not yet released results from PARCC that show how students of different races, ethnicities, socioeconomic statuses, or English proficiency levels performed relative to benchmarks on these assessments.[25] With the shift to PARCC assessments, the district needs to reevaluate the opportunity gap students of color are facing.

The Takeaway

There is no greater challenge in DPS than ensuring educational equity. In the absence of state data this year, the district has a responsibility to track its own information and to make it public, so that families and communities can understand the significant gains schools and the district need to make to turn the promise of equity into reality.

25 The state has released some disaggregated PARCC data for different groups of students but this data has been released as mean scale score, rather than percent at benchmark, which makes is very difficult to understand what the distribution of student achievement looks like. Additionally, mean scale score is not aligned with the way Denver has laid out its strategic goals.

DPS Strategies

To achieve the goals of the Denver Plan, the school board outlined five strategic priorities members believe will have a positive impact on the outcomes they are tracking, if implemented faithfully. These strategic priorities should guide resource allocation and focus district efforts.

We would expect to see significant investments of both time and money in initiatives related to these strategic areas. Below is an analysis of the district's work within these areas.

Leadership:

• Attract, develop and retain strong, values-based leaders across DPS.

• Advance distributed leadership structures in schools through developing and empowering teacher leaders.

• Develop strong pipelines for leadership, including internal cultivation, school leader preparation programs and focused mentorship.

• Ensure school leaders are prepared, supported and held accountable for the success of their students and for meeting the unique needs of their school communities.

School leadership is a critical lever for improving student achievement. A school leader establishes culture and expectations for students and teachers alike.

Long-term retention of principals should continue to be a core focus for DPS. And recently, numbers have been trending in the right direction. Principal turnover is down to 15 percent going into the 2014-15 school year from 20 percent in 2010-11. The district's current three-year retention rate is 61 percent for principals who are new to DPS, and 73 percent for DPS-developed principals.

It's also promising that, going into the 2015-2016 school year, the district retained a higher proportion of effective and distinguished principals (retained 94 percent) than principals rated as not meeting or approaching expectations (retained 82 percent) on the LEAD performance framework.[26]

DPS has embarked on an analysis and redesign of school leadership processes, and is continuing to invest in leadership initiatives. The district has committed to investing an additional $5 million-plus in leadership:

• $4.5 million towards the distributed leadership pilot expansion

• $500,000 towards principal compensation

• $500,000 in the Relay Graduate School of Education Program to build leadership skills based on best practices from schools around the country.[27]

The district is also reexamining its current processes and systems for selecting and supporting leaders. Specifically, DPS reports that it is revising its leadership competency framework, which guides leader development practices and movement along career pathways; school leader selection and evaluation; targeted supports DPS offers to leaders; and the embedding of more leadership opportunities into teacher career trajectories.

The revised framework will also increase hands-on leadership opportunities in schools, improve planning for filling principal vacancies by building a more robust principal pipeline, and encourage district leadership to think longer-term about leadership development.

These plans should show greater success as they are formalized. Potential principal identification and preparation — including hands-on leadership opportunities — succession planning, leader support, and evaluation are all interconnected.

26 Data about principal retention provided by DPS. LEAD is the performance evaluation and growth system for school leaders in DPS. See careers. dpsk12.org/school-leaders/ lead-growth-and-performance

27 Presentation to DPS Board of Education. April 20, 2015. http://www.boarddocs.com/co/ dpsk12/Board.nsf/files/9VRVBF- 678D18/$file/Denver%20Plan%20 Progress%20Monitoring%20 Leadership%20at%20April%20 20%20Work%20Session%20v7.pdf

To track the effectiveness of these efforts DPS should define outcomes and metrics that would indicate success. For example, DPS should understand and communicate its expectations around leader tenure, turnover, and effectiveness.

Defining outcomes would also help DPS understand the effectiveness of its various leadership preparation pathways, and its roll-out of differentiated roles (teacher leadership positions within schools aimed at improving both the supports teachers receive and the career trajectory available to them). These represent large investments, but their impacts on school leadership outcomes and student achievement remain unclear.

Teaching:

- **Significantly increase the quality and rigor of classroom instruction through a deep implementation of grade-level content standards and best practice instructional strategies targeting the needs of English language learners.**

- **Improve support systems— including feedback and coaching loops, curriculum and professional development—and refine progress monitoring tools and assessments.**

- **Enhance our efforts to recruit, develop and retain effective teachers for every DPS school with incentives and supports for teaching in our highest needs schools.**

- **Implement intentional strategies to focus on culturally responsive education in every classroom.**

Teaching is clearly the most direct lever DPS has to improve student learning. To this end DPS has a number of initiatives aimed at ensuring quality instruction takes place in every classroom.

While the district has adopted the Colorado Academic Standards, it has also recently taken the step of releasing an Academic Strategic Plan. This plan outlines the priority order and timeline for implementing the standards; the adoption of curricular resources to support the standards; and the implementation of standards-aligned, culturally and linguistically appropriate assessments to improve data-driven instruction.

The district outlines metrics it will use to monitor and evaluate progress against the Academic Strategic Plan.[28] These metrics include the number of schools implementing standards-aligned curriculum, and the extent to which teachers understand the standards and how to implement them.

DPS should also define how it plans to collect data and communicate progress in as consistent and transparent a manner as it reports on other metrics, such as student achievement data.

The district has also made progress aligning support systems to improve both feedback and development pathways for teachers. The primary mechanisms the district uses are the LEAP educator evaluation system, and the creation of differentiated roles for educators.

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28 DPS Academic Strategic Plan: http://standardstoolkit.dpsk12.org/wp-content/uploads/2015/06/Academic-Strategic-Plan.pdf

Expansion of Differentiated Roles
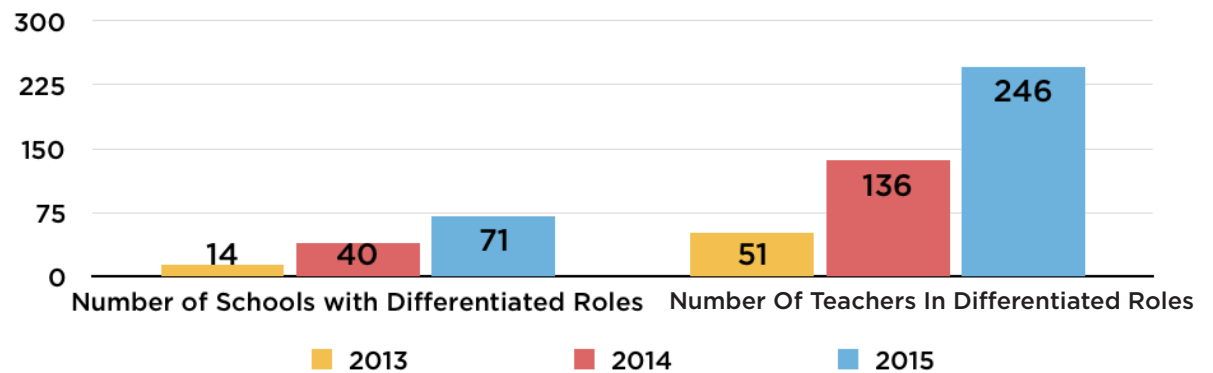
LEAP has continued to evolve since the initial educator evaluation pilot in 2010. Differentiated roles have been rolled out quickly across schools across the past three years.

These systems should be reinforced by a compensation system that ensures the best teachers are hired, supported financially, and retained, particularly in the hardest-to-serve schools. DPS is in negotiations with Denver Classroom Teachers Association (DCTA) about how to redesign ProComp, the current incentive pay system. Currently the system is complicated— with 10 separate incentives, some affecting base pay and some not, with additional variance by teaching experience.

In the fall of 2014, the district and DCTA convened a design team to brainstorm ways to make ProComp more impactful. Recommendations from the design team's final report include a framework for how compensation can better support career progression based on differentiated roles, teacher experience, and evaluation.

DPS and DCTA recently announced they would not renegotiate a redesign of ProComp until the 2016-2017 school year. A+ underscores the importance of this conversation, and the need for a compensation system that truly incentivizes and rewards the best teachers for working in, and staying in, the district's high needs schools.

DPS must better understand which support systems are most helpful to teachers, so that investments in teacher evaluation and differentiated roles lead to better support systems, professional development opportunities, and sensible compensation.

Currently, DPS does not track its spending on professional development. Because it is so critical that teachers receive the supports they need to hone their practice, DPS must better monitor its investment in professional development and its effectiveness.

Flexibility:

- Empower schools through flexible, school-based decision-making, including the use of resources.

- Expand high-quality school choices in all communities through differentiated supports for existing schools, new school strategies, turnaround efforts and strong accountability systems.

- Provide schools with opportunities to innovate and create environments that best meet the academic and social/emotional needs of their students, including expansion of personalized learning environments.

In a landmark decision last spring, DPS decentralized significant decision-making responsibilities, handing them over to schools. School leaders now have the freedom to determine their instructional models including curriculum, professional development, and assessments. This creates a system that allows schools to opt into district provided resources.

This year, DPS has allowed schools to choose their curriculum. The district is supporting a specific curriculum in language arts for fourth through eighth grade and another curriculum for middle school math. School leaders can choose to either use the district curriculum, or receive additional funds to purchase a different curriculum in these subjects.

A similar situation exists for assessments and professional development. School leaders can opt into the district-provided professional development aligned to the new curriculum, or choose a different school-based professional development program.

This decision should have a positive impact on operations at both the school and district levels. Schools should become increasingly diverse in their programming, offering Denver students more educational choices and models.

The next logical step is for more resources to be controlled at the school rather than district level, and district staffing patterns should reflect this shift. Programs offered by the district that schools can choose to opt into will have to compete with external offerings. This will require the district to continuously evaluate and respond to school needs.

This model will only succeed if the district regularly evaluates its use of resources and its organizational structure, to ensure that schools have the appropriate amount of funding. Equally important, school leaders must have control over how they allocate those funds, so they can make and implement the right decisions for their buildings.

Invest Early:

- Prioritize resources in the early grades (preschool-3rd grade) to set up our youngest students for later success.

- Partner with community organizations to expand high-quality supports and services for families with young children to build the foundation for academic success.

The district has increasingly invested in early grades. For the past three years DPS has shifted additional funding to preschools and kindergarten. In 2013-14 the district started using the 2003 and 2012 mill levy money, additional general fund dollars, and parental tuition to fund kindergarten students at the same level as students in grades one through 12. These students benefited from an increase in the student-based budget (SBB) base in 2014-15. DPS also started receiving funds from the Colorado Preschool program in 2013-14 to support full-day kindergarten and preschools.

Strong PARCC elementary literacy results give hope that these investments are paying off. The first class to receive the additional mill levy resources and have access to preschool through the state preschool program will be in third grade in the 2017-2018 school year. If investments in early grades do in fact boost student learning, we should see improved results in third grade PARCC results that year.

DPS should build out systems to better identify high-quality programs in the earliest school years. This might include an SPF-like rating for pre-kindergarten programs, so that the district can hold programs accountable in line with its strategy for K-12 schools and replicate programming that works.

Culture:

- **Live, celebrate and hold ourselves accountable to our Shared Core Values.**

- **Build positive, empowering cultures at all of our schools that embrace families and communities.**

- **Promote a culture of service to schools across DPS support functions and DPS partners.**

"Culture eats strategy for breakfast." Though it has become a cliché, experience across sectors shows Peter Drucker's aphorism to be as true today as it ever has been. For DPS to be successful at meeting its strategic goals, the organization— from district leadership to school leadership to teachers to administrators to support staff— has to believe in the district's mission, vision, and strategy.

DPS' annual engagement survey, CollaboRATE, helps ascertain the attitudes of staff, which can have an impact, either positive or negative, on the district's ability to push its current strategy to achieve its goals. So, will culture eat DPS' strategy?

There are some red flags. During the 2014-15 school year, 61 percent of all DPS staff reported being aware of the Denver Plan 2020 top priorities.[29] In winter 2015 this increased slightly, to 65 percent. But there is a disconnect between school-based and central district staff: 61 percent of school-based staff reported being aware of the 2020 priorities, compared to 71 percent of central staff.

Fifty-four percent of all survey respondents said district leadership has communicated a vision that motivates them. Though this is up six points from 2013-2014, it hardly signals a ringing endorsement of the district's direction. This is particularly true in school buildings, where just 48 percent of staff said that the DPS vision motivates them.

Perhaps most striking is that there is a large difference in the extent to which school-based and central staff believe the priorities will improve student achievement: 54 percent of school based staff believe so, while 71 percent of district staff believe so.

Employee engagement surveys are but a snapshot of what is going on in the organization. Still, DPS should be aware that the survey data points to a disconnect between strategy and execution, and between central district and schools.

This is not to say the district should stop what it is doing. Rather, it is an opportunity to identify the schools or groups of employees who are less bought into the vision and strategic plan, and to listen to their ideas. In a time of significant change, the district's success hinges on its ability to bridge the divide between strategy and implementation.

29 CollaboRATE survey results were included in a presentation to the Denver Board of Education. January 19, 2016. http://www.boarddocs.com/co/dpsk12/Board.nsf/files/A6B3SV0852C3/$file/BOE%20Culture%20Update%20and%20Discussion%20incl%20Collaborate%20Jan%2019%20Final.pdf

Conclusion

This year's numbers are promising. Relative performance on PARCC, AP pass rates, concurrent enrollment participation, and graduation rates are all moving in the right direction. It is strong evidence that the hard work of educators in the district is making a real difference for kids.

PARCC data in particular should provide encouragement to DPS administrators and teachers. To make such significant gains compared to other systems in the state, particularly on such a rigorous set of assessments, strongly suggests that the district is setting high expectations and helping students meet them.

As promising as some of these findings are, however, there are other data points that are troubling, particularly in college and career readiness. Stagnant average composite ACT scores, fewer than half of graduates enrolling in a two- or four-year college, and persistent opportunity gaps show that too many DPS students are underprepared for the world in which they will have to compete.

So yes, DPS is making progress. But it's neither fast enough nor broad enough. Ultimately, this year's data leave us with more questions than answers.

» **DPS outperformed the state by a much wider margin than any time in the recent past. What drove those gains?**

» **Does DPS have a clear idea about which schools are making meaningful gains? Which specific strategies are driving positive change? Which may be doing little more than heaping more work for teachers, school leaders, and administrators? The district needs to rigorously evaluate the programs and initiatives it is pursuing to answer these questions, so that it can scale the most promising efforts, share best practices, and make a positive difference for all schools and students.**

» **To what extent are gains equitably distributed across the district? We know there are schools composed mostly of low-income students of color that have better results than similar schools across the state. But we have a limited sense of whether these gains are happening for all students in those schools.**

» **What are the best interim outcomes to monitor to understand how DPS' strategies are helping the district reach its 2020 goals? For example, how will we know if flexibility is working and if leaders have the capacity and support needed to succeed with heightened autonomy?**

What is clear is that the district has its work cut out for it. The Denver 2020 goals are appropriately ambitious. But in order to meet these goals, schools need to accelerate improvement to make a difference for kids who are in the system now.

These students deserve to learn to read, write and do math at a level that prepares them for a changing and increasingly competitive world.

These students deserve to have the option to pursue a college degree.

These students deserve our highest expectations, best ideas, and our hardest work.

We will continue to monitor DPS' progress, and to push the district to provide a world-class education for all its students

APPENDIX A: Percentile Analysis Methodology

District-level percentile analysis methodology:

District percentile ranks are based on the percent of students at benchmark (calculation below) in a particular test and grade range on the 2013 TCAP, 2014 TCAP, and 2015 PARCC assessments.

$$\text{\% of students at benchmark} = \frac{\text{N students at benchmark}}{\text{N valid scores}}$$

This analysis relied on publicly available data. Districts are only included in the percentile analysis when the number of valid scores on the given test and within a given age range is greater than 16. Districts without sufficient data are excluded from the analysis.

TCAP data was accessed through Colorado Department of Education's Data Lab tool:

http://bit.ly/1twS4Vw

PARCC data was accessed through the Colorado Department of Education' Assessment unit:

http://www.cde.state.co.us/assessment/newassess-parcc.

Given new data protection rules, CDE suppressed additional data in the publicly available PARCC data set. For all CDE approximations of number of students at benchmark, A+ used the approximated number (for example, if CDE reported >130 students were at benchmark on a test, A+ used 130 as the best approximation of the students at benchmark). CDE has verified that these numbers are rounded within 5-10 students of the actual observed data.

This overestimates some district data, and underestimates others. CDE has verified that, even with these approximations, the percentile analysis is directionally valid and closely aligned with the full non-publicly available data set.

Though administered separately, 2013 and 2014 TCAP Reading and Writing assessments were combined to provide a better comparison to 2015 PARCC English Language Arts exams:

$$\text{TCAP Reading and Writing \% at benchmark} = \frac{\text{(N students at benchmark in Reading + N students at benchmark in Writing)}}{\text{(N Valid scores Reading + N Valid Scores Writing)}}$$

Grade levels were grouped as follows. Separate percentiles were calculated for each grade level grouping for each subject area (Math, and Reading and Writing/ English Language Arts):

3-5 (Elementary students)

6-8 (Middle School students)

9-11 (High School students)

Middle School Math PARCC results include only 6th, 7th, and 8th grade math. However, 7th graders could take 7th Grade Math, Algebra I, or Integrated Math I, and 8th graders could take 8th Grade Math, Algebra I, Integrated Math I or II, or Geometry.

School-level percentile analysis methodology:

The methodology of the school percentile ranking is similar to the district-level analysis, but is based on the relative performance of all schools (rather than districts) in the state.

School-level percentile ranks are based on the percent of students at benchmark (calculation below) in a particular test and grade range on the 2013 TCAP, 2014 TCAP, and 2015 PARCC assessments. Schools are only included in the percentile analysis when the number of valid scores on the given test and within a given age range is greater than 16. Schools without sufficient data are excluded from the analysis.

$$\text{\% of students at benchmark} = \frac{\text{N students at benchmark}}{\text{N valid scores}}$$

This analysis relied on publicly available data. Schools are only included in the percentile analysis when the number of valid scores on the given test and within a given age range is greater than 16. Schools without sufficient data are excluded from the analysis.

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Though administered separately, 2013 and 2014 TCAP Reading and Writing assessments were combined to provide a better comparison to 2015 PARCC English Language Arts exams.

$$\text{TCAP Reading and Writing \% at benchmark} = \frac{(\text{N students at benchmark in Reading} + \text{N students at benchmark in Writing})}{(\text{N Valid scores Reading} + \text{N Valid Scores Writing})}$$

Grades were grouped as follows:

3-5 (Elementary students)

6-8 (Middle School students)

9-11 (High School students)

Middle School Math PARCC results include only 6th, 7th, and 8th grade math. However, 7th graders could take 7th Grade Math, Algebra I, or Integrated Math I, and 8th graders could take 8th Grade Math, Algebra I, Integrated Math I or II, or Geometry.   Because publicly available data does not indicate grade level of test-takers these tests have been excluded from A+'s percentile analysis.

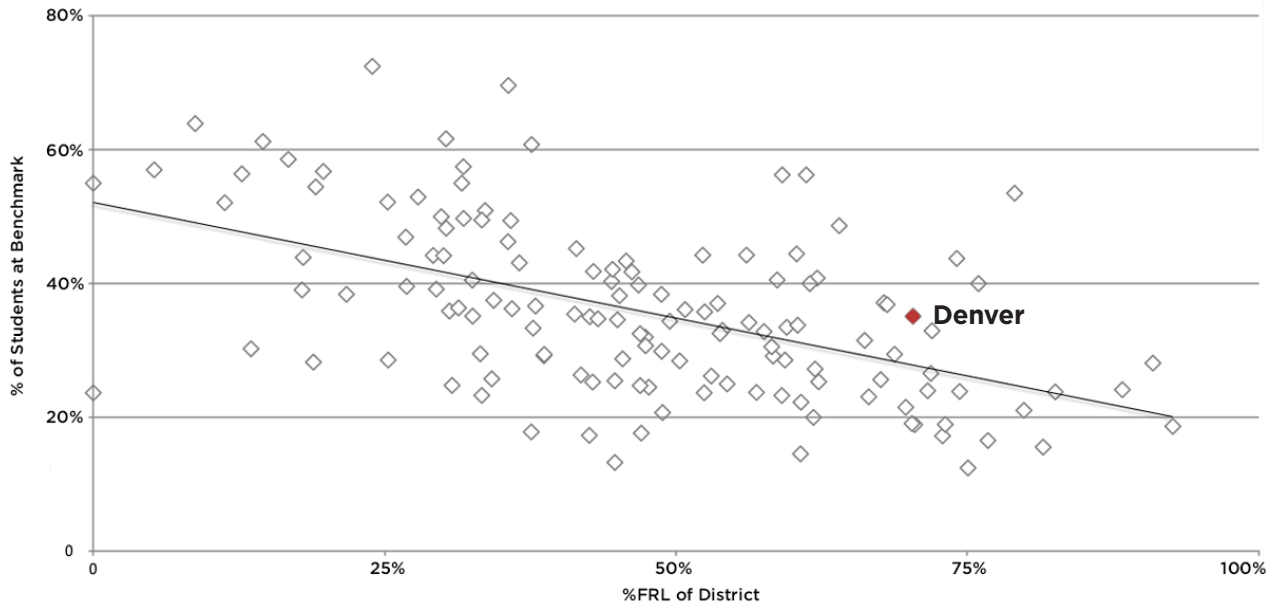# APPENDIX B: Colorado School District PARCC results by Percent of Student Body Receiving Free or Reduced Lunch

2015 PARCC 3-5 Colorado School Districts English Language Arts: Percent at Benchmark v. % FRL of District
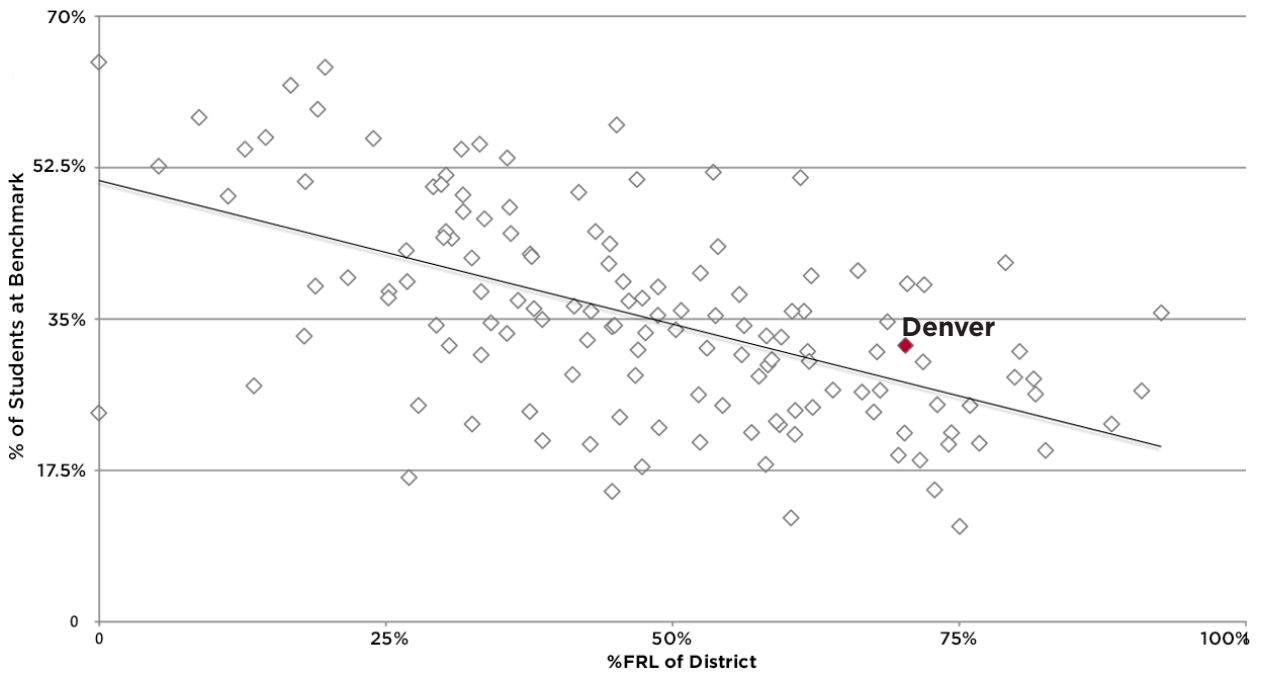
2015 PARCC 3-5 Colorado School Districts Math Results: Percent at Benchmark v. % FRL of District
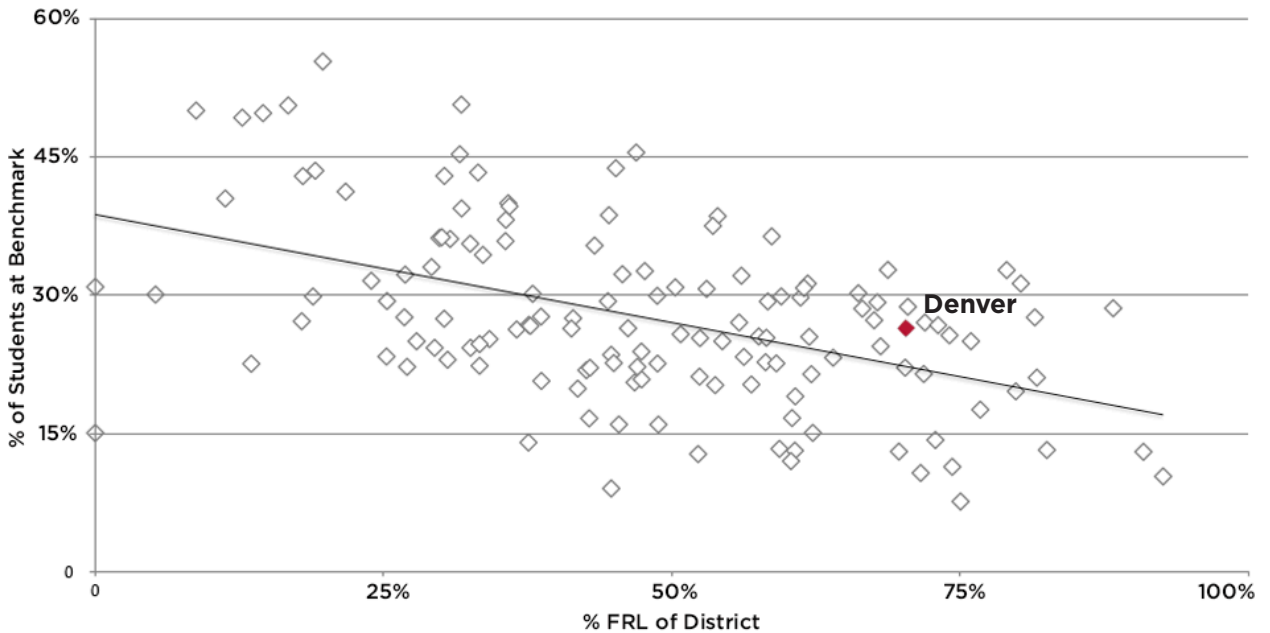
2015 PARCC 6-8 Colorado School Districts English Language Arts Results: Percent at Benchmark v. % FRL of District

2015 PARCC 6-8 Colorado School Districts Math Results: Percent at Benchmark v. % FRL of District