



BOLD

IMPROVEMENT SCHOOLS

A Look Behind the Curtain at Schools
Closing the Achievement Gap



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Introduction

Over the last decade, the District of Columbia invested in a set of education reforms designed to accelerate school improvement. These reforms include expansion of quality public charter schools, closure of low-performing charter schools, and new teacher evaluation, curriculum, and professional development systems in traditional District of Columbia Public Schools (DCPS). Although schools in both sectors have improved over this time, the results of the annual Partnership for Assessment of College and Career Readiness (PARCC) exam show a persistent and significant gap in outcomes among students of different races and income levels. The gap is particularly wide for students who are at-risk, meaning that they qualify for SNAP, TANF, are experiencing homelessness, or have touched the foster care system. On the 2017 PARCC exam, 16% of at-risk students across grade levels were proficient in English Language Arts (ELA) and 14% proficient in math. For non-at-risk students, 45% were proficient in ELA and 39% proficient in math.¹ White students across grade levels were 84.2% proficient in ELA and 77.3% proficient in math, while 22.2% of black students were proficient in ELA and 19.0% in math.² Closing this gap remains one of the greatest challenges facing DC public education today. But progress is possible: despite this gap in outcomes, our analysis shows that some of the highest-poverty schools in the city are also among the fastest improving academically. This issue brief identifies these fast-improving schools and outlines the strategies they use to close the achievement gap and meet the needs of a high-poverty student body.

**THESE SCHOOLS
ARE PROVING THE
POSSIBLE: THAT
POVERTY NEED NOT
BE A PERMANENT
OBSTACLE FOR
STUDENT SUCCESS.**

Education Reform Now DC and EmpowerK12 analyzed school-level student growth data over the last two years to identify the top ten high-poverty, rapidly improving schools in the District of Columbia based on their scores against a “Growth Index.”³ This measure weights progress a school has made with the school’s percent of at-risk students.⁴ While PARCC scores are a point-in-time measurement, Median Growth Percentile (MGP) scores shows how students have progressed from one year to the next.⁵ Our analysis finds that 10 of the District’s public schools serve a high percentage of at-risk students and achieve some of the most significant

¹ “District of Columbia,” Office of the State Superintendent of Education, 2017, March 2018, <http://results.osse.dc.gov/state/DC>

² EmpowerK12, “DC PARCC Results by Demographic,” <http://www.empowerk12.org/parcc-demographics.html>

³ Median Growth Percentile (MGP) is a measure of a student’s growth on standardized assessments from one year to the next, as compared to other students with a similar achievement history.

⁴ The District of Columbia State Board of Education defines at-risk students as those who are defined as economically disadvantaged based on their SNAP or TANF eligibility or their status as homeless or in foster care.

⁵ See appendix for details on Growth Index methodology.

academic growth in the city. We call these schools — five DCPS-run schools and five public charter schools — “Bold Improvement Schools.”⁶ They share several traits.

EmpowerK12 and Education Reform Now DC examined the quantitative data and dug deeper carrying out a qualitative study of DC’s Bold Improvement Schools. We interviewed teachers, school leaders, parents, staff, and students themselves. We toured the schools, observed classrooms, and uncovered common practices capable of being scaled across the District:

1 A PERVASIVE CULTURE OF AND COMMITMENT TO HIGH ACADEMIC EXPECTATIONS FOR EVERY SINGLE STUDENT

Every element of the school — from curriculum to staff, to facility design and presentation — is designed to advance the belief that every student can and will achieve high levels of academic success.

2 DEEP INVESTMENT IN TEACHER QUALITY

These schools trust and respect their teachers as the professionals responsible for student growth. Accordingly, they provide teachers with robust on-the-job coaching, time for collaboration, and professional development aligned to the school’s top priorities for teaching and learning.

3 SUPPORT FOR THE WHOLE CHILD AND FOR FAMILIES

Bold Improvement Schools know that parents are a key piece of a child’s success, so teachers and school leaders work intentionally to forge deep, authentic relationships with families. These schools serve the whole child, and go above and beyond to help families access healthy food, laundry, housing assistance, mental health services, support groups, or literacy classes. When a school cannot provide a parent with a service they need on campus, they make sure to connect them with an organization that can, and they follow up to check on the parents.

⁶ In 2017, EmpowerK12 identified 14 “Bold Performance Schools” achieving results statistically significantly above the trendline correlating poverty and proficiency. That analysis is available online at: <http://www.empowerk12.org/2017-dc-bold-performance-schools.html>

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DRIVE TO ACCESS ADDITIONAL RESOURCES AND AUTONOMY

School leaders know what's working in their schools and either make use of existing autonomy or carve out greater autonomy when needed. These leaders aren't afraid to advocate for policy changes to accelerate their students' growth and enable similar success in other schools. Bold Improvement school leaders consistently advocate for funding for student mental health support, greater budgetary autonomy, and flexibility in staffing. They lobby for public aid, apply for private grants, and fundraise in multiple, creative ways.

Top Ten Bold Improvement Schools

SCHOOL ⁷	WARD	AVERAGE MEDIAN GROWTH PERCENTILE, 2016-17 ⁸	PERCENT AT-RISK	GROWTH INDEX SCORE
Aiton Elementary School	7	55.5%	79.3%	61.3
Center City Public Charter School — Shaw Campus	6	62.0%	50.9%	59.7
DC Bilingual Public Charter School	5	71.5%	37.1%	61.3
Friendship Blow Pierce Middle Public Charter School	7	59.6%	65.7%	61.9
Ketcham Elementary School	8	60.1%	85.4%	67.0
Kimball Elementary School	7	54.0%	80.9%	61.0
KIPP DC Northeast Academy Public Charter School	5	63.8%	53.7%	61.4
KIPP DC Promise Academy Public Charter School	7	63.8%	55.0%	62.2
Nalle Elementary School	7	61.0%	72.4%	64.1
Thomson Elementary School	2	76.9%	41.9%	67.4

⁷ We visited Ketcham ES, Nalle ES, Friendship Blow Pierce MS, KIPP DC Northeast, DC Bilingual, Kimball ES, and Center City Shaw. KIPP DC Promise Academy declined a request for an interview and tour. Thomson ES and Aiton ES leaders did not respond to a request.

⁸ Averaged across 3rd-8th grade math and English Language Arts.

Achievement Gap Closure Rates

Bold Improvement Schools are accelerating the academic achievement of their students, narrowing the achievement gap between at-risk students across the city and non-at-risk students in Ward 3, the city's most affluent ward. On the 2017 PARCC exam, 69.8% of Ward 3 students were proficient in ELA, and 58.4% in math.⁹ The citywide average for the 2017 PARCC was 31% proficient in ELA and 27% in math.¹⁰

The chart at right shows every Bold Performance School's "Gap Closure Rate" in number of years.¹¹ The Gap Closure Rate is an estimate of the number of years before the same students at the school would achieve proficiency at or above the average Ward 3 school based on their Median Growth Percentile at current PARCC performance levels. If each Bold Improvement School continued to teach the students who tested with them in 2017, those students' proficiency rates would match the Ward 3 average math and ELA proficiency rate in a little over 2 years, on average.

SCHOOL	YEARS	ROUNDED YEARS
Aiton Elementary School	7.6	8
Center City PCS — Shaw Campus	1.7	2
DC Bilingual	1.2	2
Friendship Blow Pierce Middle School	2.9	3
Ketcham Elementary School	2.9	3
Kimball Elementary School	12.9	13
KIPP DC Northeast Academy MS	2.3	3
KIPP DC Promise Academy ES	0.7	1
Nalle Elementary School	3.2	4
Thomson Elementary School	0.9	1
BOLD IMPROVEMENT AVERAGE	3.6	4

⁹ EmpowerK12, "DC PARCC Results by Ward and ANC," <http://www.empowerk12.org/parcc-ward-anc.html>

¹⁰ District of Columbia, "Office of the State Superintendent of Education, 2017, March 2018, <http://results.osse.dc.gov/state/DC>

¹¹ Please see Appendix for further information on methodology for determining Gap Closure Rates.

1 A PERVASIVE CULTURE OF AND COMMITMENT TO HIGH ACADEMIC EXPECTATIONS FOR EVERY SINGLE STUDENT

Existing research suggests that high expectations for all students, regardless of race or income level, help them achieve academically.¹² In Bold Improvement Schools, we observe a number of policies and practices that demonstrate a culture of high expectations at all levels.

Curriculum and Culture

Bold Improvement School leaders selected some of the most rigorous curricula available for both math and English Language Arts (ELA).¹³ Although these schools sometimes use direct instruction, in which a teacher stands at the front of the room and presents information to the class, all schools primarily use inquiry-based learning, where teachers ask a series of questions to trigger student curiosity and help children absorb content. Research shows that inquiry-based learning can be significantly more effective than direct instruction in helping children master the rigorous Common Core standards.¹⁴

All of the top ten schools adapt existing rigorous curricula to better serve the needs of their particular students. For example, Eureka Math is designed for full class instruction, but both **Kimball Elementary** and **Ketcham Elementary** adapted or added on to the program, using blended learning, or the combination of traditional instruction with online and digital educational tools, to allow small group and personalized instruction. These approaches enable teachers to differentiate instruction for students at different achievement levels or who might require more hands-on engagement. When we visited, we saw small group or personalized learning in almost every classroom.

Bold Improvement Schools also take advantage of opportunities to partner with local nonprofits for academic enrichment. Kimball Elementary, for example, partners with Carnegie Science to integrate STEAM approaches in their classes as well as Freshfarm to run Food Prints, a program that integrates cooking, gardening, and nutrition into the elementary school curriculum. Students have the opportunity to grow fresh fruits and vegetables, prepare healthy meals, and practice math skills through this hands-on cooking program.

At every Bold Improvement School, leaders shared how they paired high expectations for student learning and behavior with supports and interventions for families, so that every single student was held to high academic expectations. At one school, for example, the school leader learned that a student with multiple absences was

¹⁴ Brigid Barron and Linda Darling-Hammond, *Teaching for Meaningful Learning: A Review of Research on Inquiry-Based and Cooperative Learning*, (Stanford University, Edutopia, 2008), <https://files.eric.ed.gov/fulltext/ED539399.pdf>

living in a homeless shelter far from the school building — the mother needed to take multiple buses early in the morning to bring the children to school. The school leader personally worked with the family and a social worker to find a way to ensure that the student could arrive at school each day, ultimately arranging for the student to stay with a relative who lived closer to school.

2 DEEP INVESTMENT IN TEACHER QUALITY

Bold Improvement School leaders make the quality of teaching in every classroom their top priority. Each school we toured benefited from selection of great teachers, strong staff culture, personalized and frequent professional development, and ample planning time to ensure teachers have the support and resources to succeed.

Human Capital

Five schools we toured — DC Bilingual PCS, Center City PCS, Ketcham Elementary, Kimball Elementary, and Nalle Elementary — have at least two adults in every classroom, typically a lead teacher and assistant teacher. These “co-teaching” models are an expensive investment, but create opportunities for small group, differentiated instruction and for teachers to share the responsibilities of planning and classroom management.¹⁵

School leader Alicia McCloud at **Center City Public Charter School (Shaw Campus)** prioritizes staffing each classroom with at least two teachers and providing extensive teacher coaching to retain her most effective teachers. At this school, the average teacher retention rate was 77.2% from 2015 to 2017. The average retention rate of effective teachers from 2015 to 2017 was much higher, reaching 86.5%. Center City Shaw’s focus on keeping the most effective teachers in the classroom is crucial to their students’ immediate academic growth and long-term standard of living. Award-winning research from Stanford University’s Raj Chetty suggests that replacing a low-performing teacher with a highly effective teacher for even one year can boost a child’s lifetime income by more than \$250,000.¹⁶

Culture of Feedback and Continuous Learning

All school leaders at Bold Improvement Schools work to create and sustain a culture of feedback and continuous learning amongst their staff. These leaders spend their days walking the halls of their buildings and visiting classes, instead of sitting behind an office desk. Visitors in a classroom are a regular occurrence for all teachers in Bold

¹⁵ Chelsea Miller and Kevin Oh, “The Effects of Professional Development on Co-Teaching for Special and General Education Teachers and Students,” *Journal of Special Education Apprenticeship* 2, no. 1 (2013), <http://josea.info/archives/vol2no1/vol2no1-2-FT.pdf>

¹⁶ Raj Chetty, John Friedman, and Jonah Rockoff, “The Long-Term Impact of Teachers: Teacher Value Added on Student Outcomes in Adulthood,” National Bureau of Economic Research, Working Paper 17699, (2011), <http://www.nber.org/papers/w17699.pdf>

Improvement Schools. Through normalizing class observation, school leaders ensure that observation is not stressful or high stakes, but rather the cornerstone of a close, collaborative relationship between teacher and leader. In interviews, school leaders remarked that their regular presence in the classroom ensures they stay in touch with the realities their students and staff face and are prepared to respond to problems as they arise.

Attention to Both Content and Practice

Relevant, high-quality professional development is a top priority at **Ketcham Elementary**.

School leader Maisha Riddlesprigger and her content expert coaches integrate professional development into classes on a daily basis.

Based on existing gaps, Principal Riddlesprigger chooses an instructional technique for the entire school to practice on a weekly basis. When we visited Ketcham, the tactic was “naming the lap,” a method where a teacher circulates the room during independent student work time, and calls out one or two key behaviors that he is looking for students to model. When we entered a 3rd grade math classroom, for example, we saw

a teacher circulate around the students’ desks, checking work and calling out, “I’m looking for students with clear explanations of how they used fractions to find their answers.”

Professional development at **DC Bilingual Public Charter School** also focuses on relevant, individualized, and frequent training for both new and veteran teachers. The school offers personalized development plans to every staff member, which include observations, videos, self-reflection, student data, and tailored coaching. As a result, DC Bilingual ranks in the top quartile of all DC charter schools on the TNTP Insight Survey for instructional culture. 90% of DC Bilingual teachers agree that the professional development opportunities at their school are well-planned and facilitated; 88% believe that DC Bilingual is a good place to teach and learn; and 86% of teachers agree that DC Bilingual commits to improving their instructional practice.

**“THE COACHING
HERE IS FABULOUS.
SUPPORT IS
STRENGTH- AND
GROWTH-ORIENTED.
CLIMATE IS VERY
POSITIVE.”**

DC Bilingual teacher on
TNTP’s Instructional Culture
Insight Survey

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SUPPORT FOR THE WHOLE CHILD AND FOR FAMILIES

Bold Improvement Schools know that parents and families are a crucial piece of a child's success, and they have intentional structures in place to foster community between parents and the school.

Community Schools

At Bold Improvement Schools, staff recognize they must deeply understand the families in their community before they can effectively serve them. Principal Grant goes out of his way to get to know his students' families and communities. He appointed himself school crossing guard, so that he is out front of the school building every morning and afternoon during pick up and drop off, guaranteeing face time with parents every day. His students are so delighted by seeing their school leader at the crosswalk that they bought him a crossing guard's hat and vest. When a child is chronically absent, Principal Grant goes to the students' home and knocks on the door. If nobody answers, he makes phone calls and drives around the neighborhood until he finds the child and figures out why she was not in school. From there, he works directly with the family to overcome any barriers keeping the student from class. With this level of commitment, Principal Grant works to minimize the distance between himself and the families he serves.

Bold Improvement Schools also provide parents with the resources they need, whether it is food, laundry, housing assistance, mental health services, support groups, or literacy classes. At **Nalle Elementary**, Principal Kim Adutwum and The National Center for Children and Families Executive Director Dr. Sheryl Brissett-Chapman piloted a new program called Parent University, which is now run by Community School Director La'Mont Geddis. Every Saturday, students and families are invited to the school for hot breakfast, followed by an instructional period when

parents accompany their children to class. Not only does this provide students with extra instructional time, it also helps inform parents about what students are working on in school, and how to reinforce those skills at home. Next, children continue with their lessons while parents break out for adult learning periods or support groups, promoting community and adult literacy. The program has been so successful that several Nalle graduates return to volunteer Saturday mornings for Parent University.

**“WHEN YOU KNOW
WHERE YOU ARE, YOU
CAN ACTUALLY SERVE
YOUR KIDS.”**

Jeffrey Grant, school leader
of Friendship Blow Pierce
Public Charter School

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DRIVE TO ACCESS ADDITIONAL RESOURCES AND AUTONOMY.

Bold Improvement School leaders seek the autonomy to adopt innovative approaches to best serve their students. For example, at **Nalle Elementary**, school leader Adutwum broke with her and DCPS' typical policy of departmentalizing teachers for 3rd to 5th grade. Typically, students learn math and English Language Arts from separate teachers, who are each subject matter experts in their respective topics. But for a particular cohort of current 4th graders, Principal Adutwum decided to forgo departmentalization and keep the students with a single high-performing teacher who taught all subject areas. The previous year, this group of students had a low-performing teacher who was frequently absent, leaving the class with a series of substitutes who failed to connect with them during their short stints at Nalle. This high teacher turnover left the students with a long list of behavioral challenges, including bullying and an inability to focus in class. Knowing that for this cohort of students, instruction with a single high-performing teacher was likely to be more successful than with a series of subject-matter experts, Principal Adutwum adapted traditional policy to respond directly to the needs to the specific students in her 4th grade. She has observed that since placing the students with a single teacher, student behavior has improved, bullying has decreased, and academic achievement has accelerated.

Conclusion

The ten 2017 Bold Improvement Schools are dispelling the myth that poor students cannot make rapid academic progress. With the right opportunities — including high expectations, emphasis on outstanding instruction, prioritization of the whole child and families, and additional autonomy and resources — our most vulnerable students can thrive.

The District is at a critical moment when it comes to collaboration between traditional DCPS schools and public charter schools; most proposals for collaboration have focused on matters of policy, but the shared practices we observe across Bold Improvement Schools indicate that collaboration can and should focus on practice as well as policy. Both charter schools and DCPS schools serving a high concentration of at-risk students can learn from each other, and can emulate the schools profiled in this paper. We recommend that either government agencies — like OSSE — or nonprofit entities create opt-in communities of practice, with a stipend or grant funding for participating schools, for high-poverty schools in both the DCPS and charter sectors.

Policymakers also have an opportunity to learn from the District's highest-performing school leaders about what policy changes and resources schools need. DCPS school leaders with a track record of success, such as the leaders at Nalle, Ketcham, and Kimball, are eager for greater autonomy over their budgets, and stress the importance of their existing ability to evaluate and hire teachers based on their performance. And all school leaders, DCPS and charter, believe schools need significantly greater resources for on-site physical and mental health services, such as nurses, psychologists, and counselors.

Within a few months of publication of this case study, the Mayor and the Council will choose a new chancellor for DC Public Schools. The selection of the new chancellor follows a school year marred by scandals around how the District sets and follows policies for attendance and graduation and around how city officials have been able to bypass the school lottery for their own benefit. As we develop a roadmap for solving the serious problems revealed by these scandals and for making faster progress to close the achievement gap, we urge policymakers to look to Bold Improvement Schools as models. We urge the Mayor to select a chancellor who will implement the recommendations of her best DCPS principals, and grant greater school-level budget and staffing autonomy. And we urge all education leaders to visit Bold Improvement Schools to learn from their approaches, so that public and public charter schools across DC can help all children reach their limitless potential.



Ketcham Elementary School

Cover photo: Center City Public Charter School — Shaw Campus

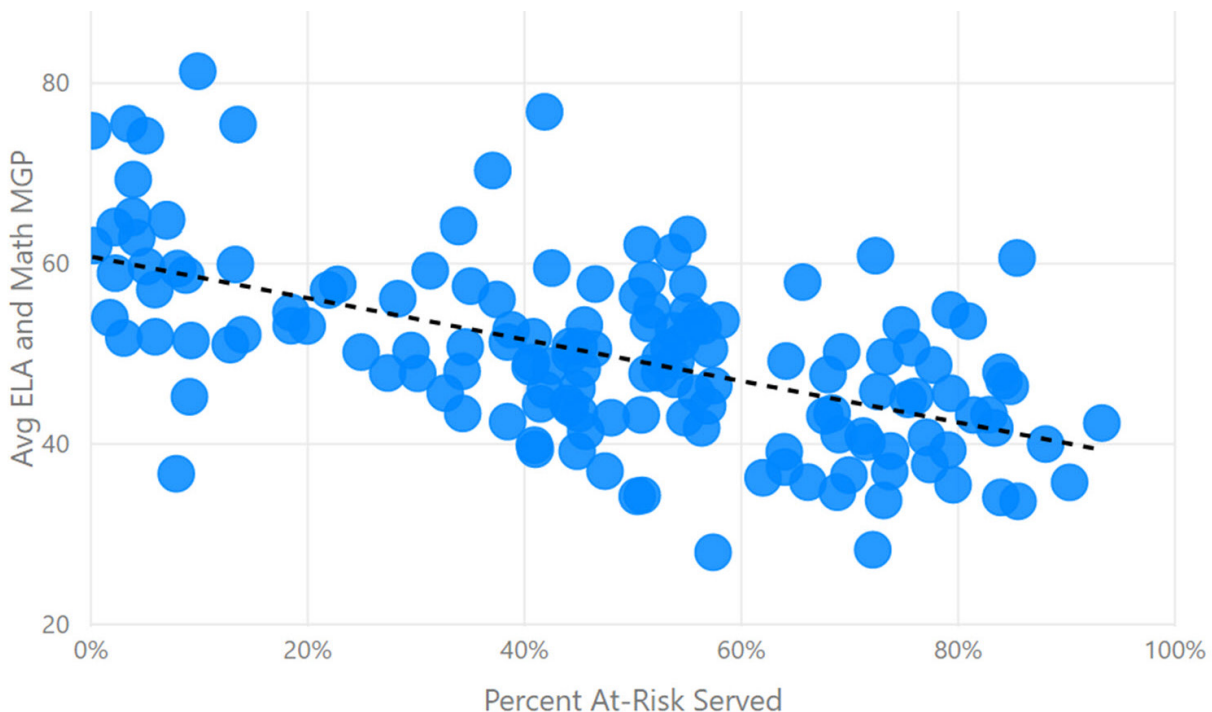
Appendix

METHODOLOGY

Every spring, 3rd through 8th graders across the District complete the PARCC assessment in math and reading, receiving a scale score between 650 and 850. Students who also took the test last year receive a student growth percentile (SGP) that shows where their growth ranked compared to students with similar prior scores. For example, a 4th grader who scored 680 last year and a 720 this year might earn a SGP of 74, which means compared to all 4th graders who scored 680 last year as 3rd graders this student outperformed 74 percent of his/her peers this year.

OSSE aggregates the SGPs at every school and reports the average Median Growth Percentile (MGP) each fall on the DC school Equity Reports. Data from the Equity Report shows a statistically significant correlation between the percent of at-risk students a school serves and their Median Growth Percentile ($p < 0.01$).

Figure 1: Average MGP vs. Percent At-Risk Served



The percent of the variation in school-level MGPs attributable to socioeconomic demographics in SY2016–17 was 32.2% (r-squared=0.322) with a standard error in measurement of +/- 1.7%, making 27.1% a conservative estimate of the impact of serving higher percentages of at-risk students on MGP. We used this data to create a Growth Index score, where a school's combined two-year average MGP accounts for 72.9% of the Index value and percent at-risk served accounts for 27.1%.

EmpowerK12 Growth Index = ([2-yr Avg MGP]*0.729+([Avg MGP])*0.271)*100

Figure 2: EmpowerK12 Bold Improvement School List: MGP Growth Index

SCHOOL (WARD-ANC)	2-YEAR AVERAGE MGP	PERCENT AT-RISK	GROWTH INDEX SCORE
Thomson Elementary School (2-2F)	76.9%	41.9%	67.4
Ketcham Elementary School (8-8A)	60.1%	85.4%	67.0
Nalle Elementary (7-7E)	61.0%	72.4%	64.1
DC Bilingual (1-1A)	71.5%	37.1%	62.2
Aiton Elementary School (7-7C)	55.5%	79.3%	61.9%
KIPP DC Promise (7-7F)	63.8%	55.0%	61.4
Kimball Elementary School (7-7F)	54.0%	80.9%	61.3
Friendship Blow Pierce Middle School (7-7D)	59.6%	65.7%	61.3
KIPP DC Northeast (5-5D)	63.8%	53.7%	61.0
Center City Shaw (6-6E)	62.0%	50.9%	59.0

GAP CLOSURE RATES

To calculate each school's Gap Closure Rate, EmpowerK12 used their 2017 Median Growth Percentile and percentages of students by PARCC performance level. Accessing student-level PARCC data available to EmpowerK12, we found the average number of PARCC scale score points gained for students at every Growth Percentile within each performance level. For example, Ketcham Elementary's average growth percentile the last two years was 60.1. Students who previously were Level 1 on PARCC Math and have a growth percentile of 60 gained an average of 19 scale score points. At that rate, the average PARCC Level 1 student at Ketcham will be on Level 2 within 1.3 years. We found those rates for students at every performance level in both math and ELA and calculated the average number of years required to achieve Level 4, based on the school MGP.

Figure 3: Curriculum Table

CURRICULUM	SCHOOLS
Eureka Math	Aiton ES, Center City Shaw PCS, Ketcham ES, Kimball ES, Nalle ES, Thomson ES
Lexia	Center City Shaw PCS, Ketcham ES, Kimball ES, KIPP Northeast PCS, Nalle ES
Wit & Wisdom	Center City Shaw PCS, Friendship Blow Pierce PCS
ST Math	Ketcham ES, KIPP Northeast PCS, Nalle ES
Core Knowledge Language Arts	Center City (K-3)
Every Child Ready (ECR)	Center City (Pre-K)
iReady	Kimball ES
MyOn	Nalle ES
Readers and Writers Workshop	DC Bilingual PCS
TERC 3.0	DC Bilingual PCS