

October 3, 2018

From: Members of the DC State Board of Education

Re: Teacher and Principal Turnover in Public Schools in the District of Columbia

Overview

Teachers are the foundation of a quality education, and they are vital to the success of our students and our schools. The goals of excellence and equity in education in the District of Columbia cannot be achieved without a thriving, highly effective teacher workforce. Great teachers are so important and so sought-after because the job itself is demanding and difficult to master; and it takes years of hard work, robust training, and considerable skill to become effective. But all too often, just as our students are beginning to reap the benefits of professional growth and gains in educator effectiveness, teachers leave – gone to new schools, new cities, or out of teaching altogether. Years of hard-won classroom experience and professional development disappear and schools must bring replacement hires up to speed, rebuild their school culture and expectations, and continue to serve students.

School systems across the country have struggled with the problem of how to attract, train, support, and retain their teachers. Previous testimony heard by the State Board suggests rates of teacher turnover in the District of Columbia are higher than the rates in peer cities and higher than the national average.¹

The DC State Board of Education (SBOE) is seeking to better understand teacher attrition or turnover and its implications for District students and schools. In May 2018, SBOE contracted with local education researcher and data analyst Mary Levy to produce a report on teacher turnover in the District of Columbia. The report is intended to establish a foundation for a deeper investigation of the challenge of retaining highly effective teachers. The report does not provide all the answers, but it helps define the next questions: Which teachers are leaving their schools, when and why do they choose to leave, and where do they typically go?

The Report

The report documents "teacher attrition" rates for both District of Columbia Public Schools (DCPS) and public charter schools using a combination of data sources, including annual performance reports, staff databases, and records acquired through the oversight function of the Council of the District of Columbia and from Freedom of Information Act requests. As part of its review of this issue, the State Board recognized that there was not a common teacher turnover dataset in the District that could be used as a baseline: data were extracted instead from other records and manually assembled and cleaned. Through these data, teachers and principals could be observed leaving their schools over time. The report breaks down this turnover by grade level,

¹ July 2017 SBOE Public Meeting.



* * *

sector, and in the case of DCPS, teacher IMPACT rating.² The report also draws comparisons between the District and national averages, as well as comparisons to selected comparable urban school districts.

The report finds that teacher turnover is higher in the District of Columbia than in other comparable American cities, including New York, Chicago, and Milwaukee, and higher than the national average. The yearly teacher turnover rate, averaged over three years, across both traditional public and public charter schools is about 25 percent, compared to a national average of approximately 16 percent and an average of 19% among a selection of urban districts. In both sectors, schools with the highest percentages of at-risk students tend to suffer from the highest rates of teacher turnover.

Recommendations

This report is a promising first step towards better understanding teacher attrition in the District. In order to continue this work, the State Board makes the following recommendations:

- A state-level oversight body whether SBOE, the Office of the State Superintendent of Education, the DC Council, or the proposed education research collaborative should create and maintain a single comprehensive and publicly available source of teacher and principal turnover data. Teacher data are not standardized across District schools, and the available data offer only an incomplete picture of teacher and principal retention. The limitations of point-intime data mean that some teacher departures are not reflected in the dataset at all. Having a more robust dataset makes more useful analysis possible: for example, understanding when during the year teachers and principals are leaving a school would be useful to understanding the full impact of those departures. Standardized, regular reporting of all teacher turnover data would help promote a common understanding and help state and local education agencies to take action.
- The state should work with LEAs to ensure richer data collection on teacher and principal characteristics. Aside from what we know about the schools they leave behind (and their IMPACT rating in the case of DCPS teachers), we currently know very little about who the departing teachers are (e.g. demographics, credentials and certifications, years of experience, salaries), why they make the decision to leave, and where they go. Knowing more about teachers' and principals' characteristics and their motivations for leaving is crucial to addressing the underlying causes of turnover and retaining more high-quality teachers.
- SBOE should support a new, sustained research project exploring linkages between teacher and principal turnover and student success. On the surface, high rates of teacher attrition may signal trouble at a school. But as in any other profession, some turnover in the teacher workforce is unavoidable. Furthermore, some turnover may be beneficial for schools, as new teachers bring in new approaches, perspectives, and ideas. Understanding more about the

² Established in 2009, <u>IMPACT</u> is a DCPS evaluation tool that gives all school-based personnel ratings and feedback based on measures of their performance.



* * *

impacts of teacher and principal turnover on students, and whether there is an "optimal" rate of turnover, would help District officials provide the right supports to schools to ensure they retain their best teachers. More research, potentially in the form of a survey or other qualitative research project, would be helpful to better understand the mechanisms by which teacher turnover affects students and schools.

Contact

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TEACHER AND PRINCIPAL TURNOVER IN PUBLIC SCHOOLS IN THE DISTRICT OF COLUMBIA

Prepared by Mary Levy September 28, 2018

Report Commissioned by the District of Columbia State Board of Education

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TEACHER AND PRINCIPAL TURNOVER IN PUBLIC SCHOOLS IN THE DISTRICT OF COLUMBIA

EXECUTIVE SUMMARY

This paper was commissioned by the District of Columbia State Board of Education (SBOE), an elected body of nine members – one from each of the city's eight wards and one chosen at large. Noting that the rate at which educators leave their schools each year is a persistent challenge for schools and that there is evidence that higher rates of turnover are associated with lower student achievement, the SBOE seeks to understand current trends in educator turnover and to better understand its relationship to school performance.

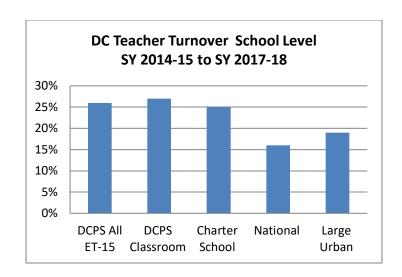
This study is a barebones first step in that direction. It sets forth the levels of teacher and principal turnover and connects them with some school characteristics. A broader and deeper study of many factors both affecting and resulting from educator turnover is needed to understand its relationship to school performance and beyond that, to understand what to do about it.

The study relies on existing public information to determine annual turnover rates and trends, first at the level of our two public school sectors, the District of Columbia Public Schools (DCPS) and the public charter schools, then at the school level. It presents six- and three-year teacher data for DCPS and three-year data for the charter schools, school by school, then schools grouped by ward, grade configuration (elementary, middle, etc.), and percentage of school enrollment by quintiles. Principal data follow, with a four-year scope for charter schools. Comparisons with the nation as a whole and with other cities follow, to the extent that comparable data are available, along with questions for future study and recommendations by SBOE members.

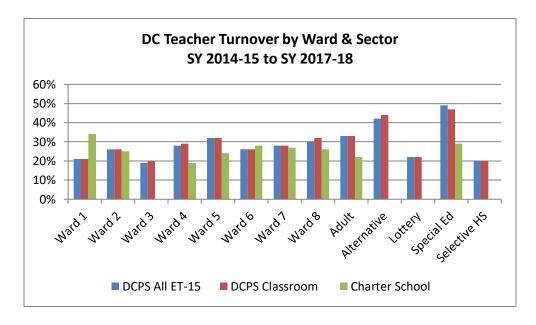
In general, teacher departures occur at similar levels in both DCPS and charter schools and the predominant trends are flat, neither up nor down. Teacher turnover is higher than elsewhere, not just in the nation, but in other cities. Rates of departure vary greatly from school to school, but almost all are in double digits and they are significantly higher in schools serving low-income students. Principal turnover is also generally similar between DCPS and charter schools, and trending flat in most regards, but as is not the case with teachers, turnover is similar to national and other city levels.

The main findings on teacher turnover:

- Teacher turnover at the DCPS system level the numbers leaving the system altogether is 18-19% and has been so for some years. Since the charter sector is composed of autonomous schools, similar figures would not be meaningful and are not tracked here. Across the nation studies have found annual attrition rates of 8-11%, while among 16 urban districts in recent study, the average annual departure rate was 13%. About 55% of DCPS teachers leave DCPS over five years compared to an average in the 16 urban district study of 45%.
- Average teacher turnover at the school level in both sectors is, and has consistently been about 25%. Nationally the rate is about 16%. City rates are higher an average of 16% in one recent study and 19% in another.

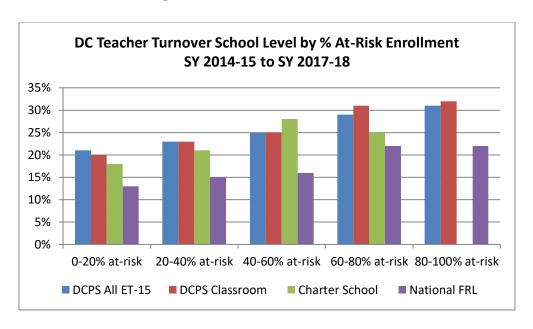


• Teacher turnover in DCPS neighborhood schools is highest in Wards 5 and 8 – a little over 30%, and lowest in Wards 1 and 3 — about 20%. Charter school rates do not match up with wards in any particular way. There are none in Ward 3 and only 2 in Ward 2. The attendance zone for all charter schools is the entire city. Though some draw predominantly from nearby neighborhoods, looking at their models would seem a more promising approach to differentiation.



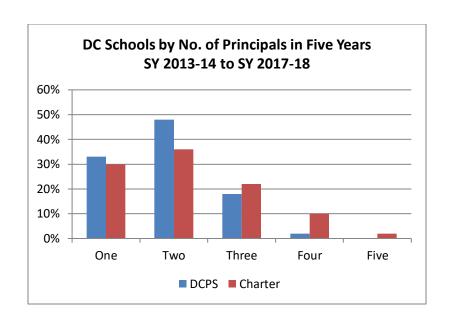
- DCPS middle schools lose a higher percentage of teachers each year 32% than elementary or high schools, which are closer to 25%. The grade structure of charter schools is highly variable and also fluid, as they add grades, so we did not attempt to classify them. Nationally there is little difference by grade structure.
- In both DCPS and charter schools, the rate of annual teacher departure rises with the percentage of students at-risk (homeless, foster care, recipients of welfare and/or food

stamps, and overage for grade level in high school). DC teachers leave schools where fewer than 20% of students are designated at risk at an annual rate of 18-20% while schools with the highest percentages lose almost a third of their teachers each year. Comparisons with schools elsewhere are very approximate because they use free-lunch eligibility — no longer a useful measure in the District where most schools serve free lunch to all students regardless of income level. But at a very rough level, DC schools at all levels of poverty appear to have higher rates than their counterparts elsewhere.

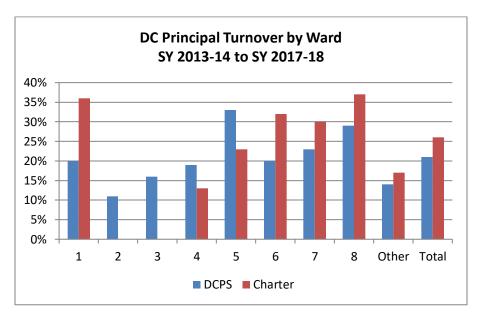


The main findings on principal turnover:

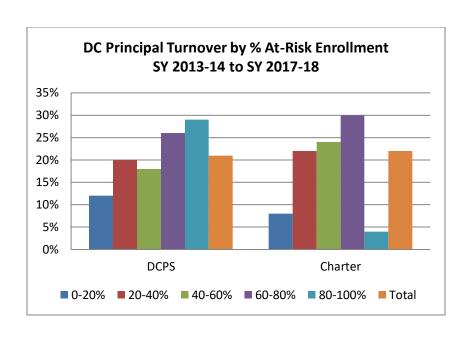
- Annual principal turnover levels in both DCPS and the charter sector are generally similar about 25% per year, though DCPS levels for the last two years are lower than in many previous years. National and urban principal turnover run at similar levels.
- Most DC schools, whether DCPS or charter do not keep the same principal for the five years found in the research literature to be needed for effective school operation and improvement. Only about one third had the same principal for five or more years, while most had two or three.



• As with teacher turnover, DCPS principal turnover was highest in Wards 5, 7 and 8, and least frequent in Ward 3, while charter schools did not follow such a pattern.



- DCPS secondary school principals leave at a little higher rate than those in elementary schools, as do their counterparts elsewhere in the country.
- Rates of principal turnover rise steadily in both DCPS and charter schools as the percentage of at-risk students rises. The annualized rate over five years is roughly 10% in schools with fewer than 20% at-risk students rising to 25% and then 30% in schools with 60-80% and more than 80% at risk students. These levels seem roughly comparable to those reported elsewhere in the country.



INTRODUCTION

This paper was commissioned by the District of Columbia State Board of Education (SBOE), an elected body of nine members — one from each of the city's eight wards and one chosen at large. Noting that the rate at which educators leave their schools each year is a persistent challenge for schools and that there is evidence that higher rates of turnover are associated with lower student achievement, the SBOE seeks to understand current trends in educator turnover and to better understand its relationship to school performance.

The scope is limited to numbers and trends, making it a barebones first step in that direction. It sets forth the levels of teacher and principal turnover and connects them with some school characteristics. A broader and deeper study of many factors both affecting and resulting from educator turnover is needed to understand its relationship to school performance and beyond that, to what to do about it.

The study relies on existing public information to determine annual turnover rates and trends, first at the level of our two public school sectors, the District of Columbia Public Schools (DCPS) and the public charter schools, then at the individual school level. It presents six- and three-year teacher data for DCPS and three-year data for the charter schools, school by school, then schools grouped by ward, grade configuration (elementary, middle, etc.), and percentage of school enrollment at-risk, by quintiles (0-20%, 20-40%, etc.). Principal data follow this temple, with a five-year scope for charter school principals. Comparisons with the nation as a whole and with other cities follow, along with questions for future study and recommendations by SBOE members.

TEACHER TURNOVER DATA, TRENDS AND PATTERNS

Teacher turnover — beyond a natural, minimal level to be expected — is widely regarded as a serious problem for students, schools, and school systems. The research literature describes it as a "crisis" (National Commission on Teaching and America's Future 2003), a "critical challenge," (Papay et al. 2015). The reasons cited for why this matters are reduced student achievement, particularly for low-income students, rising teacher shortages, high costs of teacher recruitment and induction, and negative effects on coherent program implementation, particularly with on-going reform initiatives. ¹ Though the extent to which these concerns apply in District of Columbia public education is beyond the scope of this paper, the reader is encouraged to think about them in pondering the data here presented and in considering next steps.

TEACHER TURNOVER IN DCPS

General parlance in the District uses the term "teacher" in several ways. In DCPS it can refer to all staff with the pay grade and plan ET-15, all of whom are in the Washington Teachers Union bargaining unit. ET-15s include counselors, librarians, instructional coaches, speech, occupational and physical therapists, and most social workers and school psychologists, as well as classroom teachers. Some of these are listed in central offices, though almost all work with students, usually in

¹ E.g., Carver-Thomas & Darling-Hammond (2017), Ronfeldt et al. (2011), Boyd et al. (2008), Barnes et al. (2007), Ingersoll (2012).

multiple schools. The term "teacher" is also used for classroom teachers, to the exclusion of librarians, counselors, and others. Virtually all, no matter their job title, work with students. In fact, those who are not classroom teachers may have longer relationships with individual students over multiple years.

The first section below reports statistics for all ET-15s. The second reports statistics for classroom teachers, defined as those whose job title includes the word "teacher" and who are listed at local schools rather than central office accounts. The data source for both groups is mid-year staff lists; i.e., point-in-time data, generated by the DCPS PeopleSoft personnel system. Classroom teachers constitute a little over 85% of all ET-15s. As the results turn out, there is no significant difference between the rates found for all ET-15s versus those for classroom teachers at any level of analysis – not even at the level of the 113 individual schools. Because there are differences in the total numbers, however, we have kept the groups separate, while repeating most of the context information, so as to be clear about which group is under discussion.

It is important to understand that teacher turnover can be measured, among other ways, at the system level or at the school level. The first section below reports the rates of ET-15 staff *leaving the DCPS system altogether*, while the next sections reports rates of ET-15 staff *leaving their schools* — whether they transfer to another DCPS school or leave the system entirely. Likewise in the sections reporting attrition rates for classroom teachers, the first section reports only those leaving the DCPS system, while the rest report on classroom teachers leaving their schools. From the point of view of the students, of course, the numbers leaving their schools are the figures that count.

Turnover of ET-15 Staff in DCPS

Turnover of ET-15 Staff in the DCPS Sector as a Whole

Table 1: Number of DCPS ET-15 Staff and Number Leaving DCPS SY 2011-12 to SY 2017-18

School Year	Total ET-	1 year	2 years	3 years	4 years	5 years	6 years
	15 staff	or less					
SY 2007-08	4325	931	1565	1845	2254	2573	2745
SY 2008-09	4047	819	1220	1738	2098	2288	2486
SY 2009-10	4288	626	1418	1951	2189	2437	2633
SY 2010-11	4230	886	1587	1371	1754	2036	2269
SY 2011-12	4148	642	1371	1754	2036	2269	2451
SY 2012-13	3982	793	1213	1597	1859	2086	
SY 2013-14	4275	775	1311	1711	1997		
SY 2014-15	4278	748	1285	1666			
SY 2015-16	4700	889	1439				
SY 2016-17	4754	813					
SY 2017-18	4815						

Table 2: Percentage of DCPS ET-15 Staff Leaving DCPS SY 2011-12 to SY 2017-18

Calcal Wass	1 year	2 years	3 years	4 years	5 years	6 years
School Year	or less					
SY 2007-08	22%	36%	43%	52%	59%	63%
SY 2008-09	20%	30%	43%	52%	57%	61%
SY 2009-10	15%	33%	45%	51%	57%	61%
SY 2010-11	21%	38%	32%	41%	48%	54%
SY 2011-12	15%	33%	42%	49%	55%	59%
SY 2012-13	20%	30%	40%	47%	52%	
SY 2013-14	18%	31%	40%	47%		
SY 2014-15	17%	30%	39%			
SY 2015-16	19%	31%				
SY 2016-17	17%					
10 year average	18%	32%	41%	48%	55%	60%
6 year average	18%	31%	40%	47%	54%	59%
3 year average	18%	30%	39%			

Annual ET-15 attrition system-wide over the last ten years has ranged from 15-22%, with an overall average of 18%. Over six years it has ranged from 15 to 20%, with the overall average still at 18%. The average has been likewise 18% over the last three years. The table also shows the percentage of each cohort that have left over multiple year periods. For example, of all ET-15s on board in the middle of SY 2012, 49% left in four years or less and 59% in six years or less. Percentages for each cohort are quite similar as far out in years as they go — about one-third in two years or less, rising to 40% over three years, almost half in four years or less, and about 55% over 5 years.

Turnover of DCPS ET-15 Staff at each School

Of the total ET-15 staff, 97% are in local schools, a percentage that has risen since SY 2011-12, when it was 91%, as DCPS moved most of its special education social workers and psychologists into local school budgets. Numbers for ET-15s in this section therefore differ in two regards from those for the system as a whole. First, total numbers of staff differ slightly:

Table 3: DCPS ET-15 Staff Reported as in Local Schools SY 2011-12 to SY 2017-18

	SY 2012	SY 2013	SY 2014	SY 2015	SY 2016	SY 2017
Local schools ET-15	3788	3766	4108	4159	4571	4618
Total DCPS ET-15	4148	3982	4275	4278	4700	4754
Local school as % of						
total DCPS	91%	95%	96%	97%	97%	97%

Much more important, this section reports rates of staff leaving *schools*, whereas the previous section reports on staff leaving the *DCPS system* altogether. Rates in this section reflect teachers who leave one DCPS school for another, as well as those leaving the system.

Table 4: Percentage of DCPS ET-15 Staff Leaving Each School SY 2011-12 to SY 2017-18

			At-	- a	T 0:	T 0	T 0.	- a	T 0:		
School	Ward	Level	risk 2018	Left 2012	Left 2013	Left 2014	Left 2015	Left 2016	Left 2017	6 yr aver	3 yr aver
Aiton ES	7	ES	79%	70%	40%	28%	35%	50%	48%	45%	44%
Amidon-Bowen ES	6	ES	65%	52%	39%	15%	29%	38%	24%	32%	30%
Anacostia HS	8	HS	84%	37%	27%	23%	26%	29%	15%	26%	24%
Ballou HS	8	HS	80%	29%	48%	28%	52%	33%	36%	38%	39%
Ballou STAY HS	AD	AD	N/A	50%	29%	16%	33%	19%	17%	26%	22%
Bancroft ES	1	ES	30%	37%	35%	35%	25%	9%	11%	23%	15%
Barnard ES	4	ES	48%	7%	31%	31%	20%	17%	19%	20%	19%
Beers ES	7	ES	53%	24%	15%	15%	12%	7%	5%	11%	8%
Benjamin Banneker HS	SEL	HS	19%	27%	13%	15%	16%	20%	20%	18%	18%
Brent ES	6	ES	4%	7%	11%	15%	17%	25%	21%	16%	21%
Brightwood EC	4	EC	42%	30%	25%	25%	17%	15%	10%	18%	14%
Brookland MS	5	MS	51%	N/A	N/A	N/A	N/A	48%	50%	49%	49%
Browne EC	5	EC	73%	32%	46%	29%	27%	27%	34%	31%	29%
Bruce-Monroe ES	1	ES	41%	16%	27%	27%	15%	20%	19%	18%	18%
Bunker Hill ES	5	ES	45%	34%	67%	67%	65%	29%	14%	39%	38%
Burroughs ES	5	ES	41%	21%	28%	28%	24%	26%	10%	20%	20%
Burrville ES	7	ES	69%	47%	60%	60%	36%	45%	29%	43%	37%
C.W. Harris ES	7	ES	82%	6%	50%	13%	34%	50%	16%	29%	33%
Capitol Hill Montessori EC	LOT	EC	18%	27%	20%	17%	20%	28%	26%	23%	25%
Cardozo EC	1	EC2	68%	38%	56%	28%	16%	24%	27%	30%	23%
CHOICE Academy	ALT	ALT	N/A	56%	75%	75%	17%	38%	13%	41%	23%
Cleveland ES	1	ES	49%	18%	7%	7%	15%	10%	22%	14%	16%
Columbia Heights EC	1	EC2	53%	33%	38%	28%	20%	18%	23%	26%	21%
Coolidge HS	4	HS	72%	20%	37%	29%	11%	17%	24%	23%	18%
Deal MS	3	MS	7%	21%	27%	19%	29%	26%	23%	24%	26%
Dorothy I. Height ES	4	ES	36%	N/A	N/A	N/A	N/A	90%	88%	11%	11%
Drew ES	7	ES	75%	38%	24%	24%	20%	26%	19%	24%	22%
Duke Ellington HS of the Arts	SEL	HS	29%	13%	14%	14%	25%	38%	0%	19%	19%
Dunbar HS	2	HS	65%	23%	24%	19%	27%	54%	38%	32%	41%
Eastern HS	6	HS	60%	17%	9%	9%	17%	18%	30%	19%	22%
Eaton ES	3	ES	6%	17%	9%	14%	8%	19%	8%	12%	12%
Eliot-Hine MS	6	MS	62%	31%	41%	34%	32%	29%	36%	34%	32%
Garfield ES	8	ES	82%	38%	35%	15%	19%	29%	23%	26%	24%
Garrison ES	2	ES	38%	20%	54%	54%	30%	38%	26%	34%	31%
H.D. Cooke ES	1	ES	43%	38%	31%	14%	43%	30%	18%	29%	30%
H.D. Woodson HS	7	HS	71%	28%	22%	17%	17%	32%	25%	24%	25%
Hardy MS	2	MS	20%	27%	37%	37%	14%	22%	22%	22%	19%
Hart MS	8	MS	78%	21%	43%	32%	25%	25%	31%	29%	27%

			At-							_	
School	Ward	Level	risk 2018	Left 2012	Left 2013	Left 2014	Left 2015	Left 2016	Left 2017	6 yr aver	3 yr aver
Hearst ES	3	ES	6%	25%	25%	21%	23%	19%	24%	23%	22%
Hendley ES	8	ES	93%	33%	44%	44%	42%	59%	25%	38%	42%
Houston ES	7	ES	71%	17%	15%	15%	20%	26%	22%	18%	23%
Hyde-Addison ES	2	ES	12%	20%	24%	15%	33%	10%	19%	20%	20%
Inspiring Youth Program	ALT	ALT	N/A	56%	50%	50%	22%	73%	36%	44%	45%
J.O. Wilson ES	6	ES	46%	9%	29%	29%	22%	32%	28%	22%	27%
Janney ES	3	ES	1%	10%	9%	14%	18%	9%	17%	13%	15%
Jefferson MS	6	MS	58%	50%	69%	69%	32%	18%	25%	36%	25%
Johnson MS	8	MS	81%	35%	33%	19%	50%	36%	37%	35%	41%
Kelly Miller MS	7	MS	68%	41%	63%	18%	47%	22%	37%	39%	35%
Ketcham ES	8	ES	82%	36%	35%	27%	35%	39%	43%	36%	39%
Key ES	3	ES	2%	17%	14%	19%	20%	21%	21%	19%	21%
Kimball ES	7	ES	79%	25%	42%	24%	32%	30%	25%	29%	29%
King ES	8	ES	84%	43%	55%	26%	33%	39%	39%	40%	37%
Kramer MS	8	MS	86%	50%	48%	28%	48%	42%	50%	44%	47%
Lafayette ES	4	ES	3%	8%	11%	18%	13%	18%	9%	13%	13%
Langdon ES	5	ES	53%	24%	57%	57%	39%	27%	26%	33%	31%
Langley ES	5	ES	55%	48%	57%	57%	14%	44%	44%	40%	35%
LaSalle-Backus EC	4	EC	53%	31%	48%	10%	33%	32%	18%	28%	27%
Leckie EC	8	EC	47%	14%	29%	29%	6%	28%	13%	17%	16%
Ludlow-Taylor ES	6	ES	23%	16%	17%	17%	16%	21%	8%	16%	14%
Luke C. Moore HS	AD	AD	N/A	27%	32%	9%	33%	27%	26%	26%	29%
MacFarland MS	4	MS	42%	N/A	N/A	N/A	N/A	N/A	33%	33%	33%
Malcolm X ES	8	ES	85%	63%	62%	7%	28%	30%	28%	36%	29%
Mann ES	3	ES	2%	28%	15%	15%	7%	16%	21%	17%	15%
Marie Reed ES	1	ES	31%	26%	30%	30%	35%	10%	10%	21%	18%
Maury ES	6	ES	7%	12%	33%	23%	29%	19%	13%	21%	20%
McKinley Tech HS/MS	SEL	EC2	43%	27%	22%	22%	26%	18%	22%	21%	22%
Miner ES	6	ES	61%	13%	29%	29%	24%	18%	25%	20%	22%
Moten ES	8	ES	85%	41%	48%	30%	24%	19%	53%	35%	32%
Murch ES	3	ES	4%	15%	10%	16%	15%	20%	20%	16%	18%
Nalle ES	7	ES	73%	21%	35%	15%	29%	26%	30%	26%	28%
Noyes ES	5	ES	73%	47%	37%	27%	55%	24%	23%	37%	35%
Orr ES	8	ES	77%	24%	31%	25%	33%	31%	17%	27%	27%
Oyster-Adams Bilingual EC	3	EC	10%	14%	21%	13%	20%	18%	17%	17%	18%
Patterson ES	8	ES	87%	37%	64%	8%	22%	8%	18%	24%	16%
Payne ES	6	ES	46%	29%	6%	6%	17%	24%	30%	20%	24%
Peabody ES	6	ES	5%	29%	6%	15%	17%	39%	17%	20%	24%
Phelps ACE HS	SEL	HS	49%	30%	34%	16%	10%	32%	25%	24%	22%

			At- risk	Left	Left	Left	Left	Left	Left	6 yr	3 yr
School	Ward	Level	2018	2012	2013	2014	2015	2016	2017	aver	aver
Plummer/Davis ES	7	ES	78%	25%	56%	56%	18%	23%	19%	28%	20%
Powell ES	4	ES	36%	30%	33%	33%	32%	20%	29%	25%	27%
Randle Highlands ES	7	ES	54%	27%	16%	16%	33%	24%	21%	22%	26%
Raymond EC	4	EC	45%	21%	17%	17%	34%	31%	32%	25%	32%
River Terrace EC	SE	SE	49%	17%	30%	30%	67%	27%	52%	34%	49%
Ron Brown College Prep HS	LOT	HS	56%	N/A	N/A	N/A	N/A	N/A	33%	33%	33%
Roosevelt HS	4	HS	68%	37%	38%	15%	29%	32%	43%	33%	35%
Roosevelt STAY HS	AD	AD	N/A	13%	33%	33%	29%	38%	78%	38%	48%
Ross ES	2	ES	6%	17%	29%	17%	38%	25%	31%	26%	31%
Savoy ES	8	ES	78%	12%	7%	29%	37%	52%	28%	28%	39%
School Without Walls EC (PK-12)	SEL	EC2	13%	15%	31%	8%	16%	17%	17%	17%	17%
School-Within-School ES	LOT	ES	3%	20%	25%	4%	12%	13%	23%	15%	16%
Seaton ES	2	ES	40%	4%	37%	37%	15%	11%	22%	18%	16%
Shepherd ES	4	ES	14%	34%	25%	7%	25%	28%	13%	22%	22%
Simon ES	8	ES	71%	32%	30%	9%	29%	19%	25%	24%	24%
Smothers ES	7	ES	68%	14%	35%	13%	44%	59%	25%	32%	43%
Sousa MS	7	MS	73%	44%	54%	54%	50%	43%	31%	40%	41%
Stanton ES	8	ES	89%	35%	15%	17%	36%	20%	16%	23%	24%
Stoddert ES	3	ES	3%	4%	10%	6%	14%	11%	11%	10%	12%
Stuart-Hobson MS	6	MS	28%	30%	35%	35%	28%	31%	25%	30%	28%
Takoma EC	4	EC	45%	33%	25%	25%	26%	20%	17%	22%	21%
Thomas ES	7	ES	76%	5%	16%	11%	24%	26%	26%	19%	25%
Thomson ES	2	ES	40%	18%	18%	18%	8%	26%	24%	18%	19%
Truesdell EC	4	EC	55%	43%	55%	55%	46%	32%	35%	37%	37%
Tubman ES	1	ES	54%	14%	33%	33%	37%	19%	21%	24%	25%
Turner ES	8	ES	83%	41%	46%	10%	26%	11%	27%	26%	21%
Tyler ES	6	ES	35%	31%	37%	25%	29%	24%	35%	30%	30%
Van Ness ES	6	ES	26%	N/A	N/A	N/A	N/A	25%	32%	35%	29%
Walker-Jones EC	6	EC	77%	32%	63%	10%	37%	43%	35%	37%	38%
Washington Metropolitan HS	ALT	ALT	N/A	50%	50%	23%	46%	52%	50%	45%	49%
Watkins ES	6	ES	19%	11%	47%	21%	18%	49%	18%	27%	28%
West EC	4	EC	38%	58%	43%	43%	54%	38%	18%	40%	35%
Wheatley EC	5	EC	79%	19%	40%	12%	51%	20%	24%	28%	32%
Whittier EC	4	EC	49%	26%	32%	32%	16%	25%	17%	20%	19%
Woodrow Wilson HS	3	HS	26%	19%	23%	23%	14%	18%	29%	20%	20%
Youth Services Center	ALT	ALT	N/A	53%	42%	42%	57%	24%	31%	36%	36%
Average DCPS Local Schools				27%	33%	18%	27%	26%	25%	26%	26%

In DCPS local schools on average, about a quarter of ET-15 staff leave their schools annually, but the percentages at individual schools vary greatly from one school to another and from one year to another within the same school. For almost all schools in all years, however, the percentages are in double digits. The remaining tables explore differences among schools by ward, by level (grade configuration), and by their percentage of at-risk students.

Turnover of DCPS ET-15s at the School Level by Ward

In addition to schools that are zoned for neighborhoods, DCPS has a variety of schools that serve students citywide (these are marked by abbreviation in the table above):

- Adult (AD): Ballou and Roosevelt STAY, Luke C. Moore
- Alternative (ALT): CHOICE, Inspiring Youth (DC Jail), Washington Metropolitan, Youth Services Center (juvenile detention)
- Lottery (LOT): Capitol Hill Montessori, Ron Brown College Prep, School-Within-A School
- Special Education (SE): River Terrace (consolidation of Mamie D. Lee and Sharpe Health)
- Selective high schools (SEL): Banneker, Ellington, McKinley, Phelps, School Without Walls

We have separated these from the neighborhood schools because though located physically in a ward, they have no ward-based community, and because the particulars of their missions seem to correlate with their teacher turnover.

Table 5: Percent of DCPS ET-15 Staff Leaving Their Schools by Ward SY 2011-12 to SY 2017-18

	# schs	left	left	left	left	left	left	6 yr	3 yr
	2018	2012	2013	2014	2015	2016	2017	aver	aver
Ward 1	8	29%	35%	20%	25%	19%	20%	24%	21%
Ward 2	7	19%	31%	17%	22%	30%	27%	24%	26%
Ward 3	10	17%	18%	16%	18%	18%	21%	18%	19%
Ward 4	15	28%	32%	17%	27%	29%	28%	27%	28%
Ward 5	8	32%	47%	19%	39%	30%	28%	33%	32%
Ward 6	16	24%	33%	19%	24%	28%	26%	26%	26%
Ward 7	15	30%	36%	18%	29%	31%	25%	28%	28%
Ward 8	18	33%	40%	22%	32%	30%	29%	31%	30%
Adult	3	33%	31%	14%	31%	29%	39%	29%	33%
Alternative	4	53%	52%	20%	42%	46%	38%	42%	42%
Lottery	3	24%	22%	11%	16%	20%	26%	20%	22%
Special Education	1	17%	30%	24%	67%	27%	52%	34%	49%
Selective HS	5	23%	26%	12%	19%	20%	20%	20%	20%
Non-ward school									
total	16	29%	30%	14%	26%	25%	27%	25%	26%
City-wide average	113	27%	33%	18%	27%	26%	25%	26%	26%

Among neighborhood schools, turnover rates by ward generally correspond with median household income and other measures that differentiate the District's wards by their residents' prosperity. Turnover is consistently lowest in Ward 3, and highest in Wards 5, 7 and 8. Among citywide schools, turnover is lowest in the selective high schools and three assignment-by-lottery schools considered highly desirable. It is highest in alternative schools and the one special education school, with adult schools in between.

Turnover of DCPS ET-15s at the School Level by School Grade Configuration

Most DCPS schools have one of four standard grade configurations: elementary (grades PK3-5), education campus (grades PK3-8), middle (grades 6-8), and high school (grades 9-12). Setting aside the alternative and adult schools, there are four schools with exceptional grade structures where the data cannot be separated. Cardozo, Columbia Heights (CHEC), and McKinley serve grades 6-12, and School Without Walls serves grades PK3-12. Although the lower schools of the latter two are separated in some DCPS datasets, they are not separated in all years of the personnel data files that are the source for this analysis, and the first two are not separated at all. All four have the same principal for all grade levels.

Table 6: Percentage of DCPS ET-15 Staff Leaving Their Schools by School Grade Configuration SY 2011-12 to SY 2017-18

	# schs 2018	left 2012	left 2013	left 2014	left 2015	left 2016	left 2017	6 yr	3 yr
	2010	2012	2013	2014	2015	2010	2017	aver	aver
Elementary PK-5	64	25%	31%	17%	26%	26%	24%	25%	25%
Education Campus PK-8	13	28%	35%	15%	30%	27%	23%	26%	26%
Education Campus Other									
PK-12 or 6-12	4	30%	37%	20%	20%	19%	22%	24%	21%
Middle School	12	32%	43%	23%	34%	29%	31%	32%	31%
High School (excludes									
alternative)	12	26%	29%	20%	22%	28%	29%	26%	27%
Citywide average	105	27%	33%	18%	27%	26%	25%	26%	26%

ET-15 turnover is highest in DCPS middle schools — almost one-third of the staff leaving annually, compared to about one-quarter of the staff at the other levels. The rate of departure at the education campuses with exceptional grade structures, though shown for completeness' sake, is not meaningful because two of them (McKinley and School Without Walls) combine selective high schools with neighborhood lower schools. All four are large schools with relatively lower turnover rates, suggesting that if they were separated into their grade level components, the total high school turnover rates would be a little lower.

Turnover of DCPS ET-15s at the School Level by Percentage of Students At-Risk

Since SY 2014, the metric for identifying students needing high levels of support is "at-risk" status, defined as students who are homeless, in foster care, whose families qualify for Temporary Assistance for Needy Families (TANF) or the Supplemental Nutrition Assistance Program (SNAP), plus high school students that are one year or more older than the expected age for the grade in which they are enrolled. The percentage of at-risk students at each school, DCPS and charter, is determined

from DC government databases. The metric is used for school funding and for free lunch eligibility; it is not applied to alternative and adult schools. Schools with 40% or more students at risk – about three-quarters of the schools in each sector — serve free lunch to all students, regardless of family income, and no longer collect family income forms. Since at-risk numbers have been calculated only since 2013-14, free/reduced price lunch eligibility is used here in the two earliest school years. The number of eligible students was higher under that metric, but the distribution of schools by quintiles likely differs little.

Table 7: Percentage of DCPS ET-15 Staff Leaving Their Schools by Percentage of Students At-Risk SY 2011-12 to SY 2017-18

	# schs 2018	left 2012	left 2013	left 2014	left 2015	left 2016	left 2017	6 yr aver	3 yr aver
0-20% at-risk	22	13%	12%	15%	22%	21%	20%	19%	21%
20-40% at-risk	13	18%	25%	18%	20%	20%	26%	22%	23%
40-60% at-risk	29	28%	31%	18%	26%	26%	24%	24%	25%
60-80% at-risk	29	29%	39%	20%	30%	30%	29%	30%	29%
80-100% at-risk	13	29%	36%	22%	32%	32%	30%	31%	31%
DCPS average	106	27%	33%	18%	26%	26%	25%	26%	26%

As the percentage of at-risk students increases, so does the rate at which ET-15 staff leave their schools. At the 22 schools with the fewest at-risk students, the rate is about 20%, while at the 42 schools with the highest percentages, 30% of the ET-15 staff leave annually.

Turnover of Classroom Teachers in DCPS

The next sections provide the same kinds of data as the above, but for *classroom teachers listed in local schools only*. These include grade-level teachers, subject teachers, both elementary and secondary, special education teachers, ELL and bilingual education teachers.

Turnover of Classroom Teachers in DCPS as a Whole

Table 8: Number of DCPS Classroom Teachers and Number Leaving DCPS SY 2011-12 to SY 2017-18

School Year	Total classroom teachers	1 year or less	2 years or less	3 years or less	4 years or less	5 years or less	6 years or less
SY 2011-12	3553	766	1199	1534	1770	1965	2132
SY 2012-13	3408	714	1080	1409	1627	1828	
SY 2013-14	3648	658	1171	1472	1727		
SY 2014-15	3664	650	1112	1449			
SY 2015-16	4012	769	1255				
SY 2016-17	4009	713					
SY 2017-18	4045						

Table 9: Percent of DCPS Classroom Teachers Leaving DCPS SY 2011-12 to SY 2017-18

School	1 year	2 years	3 years	4 years	5 years	6 years
Year	or less					
SY 2011-12	22%	34%	43%	50%	55%	60%
SY 2012-13	21%	32%	41%	48%	54%	
SY 2013-14	18%	32%	40%	47%		
SY 2014-15	18%	30%	40%			
SY 2015-16	19%	31%				
SY 2016-17	18%					

Annual classroom teacher attrition system-wide over the last six years is a little higher than that of all ET-15s, and has ranged from 18 to 22%, with the overall average at 19%. The average has been 18% over the last three years. The table also shows the percentage of each cohort that have left over multiple year periods. For example, of all classroom teachers on board in the middle of SY 2012, 50% left in four years or less and 60% in six years or less. Percentages for each cohort, as far as they go in years, are about one-third in two years or less, rising to almost half in four years or less. The numbers have lessened slightly more recently.

Turnover of DCPS Classroom Teachers by Evaluation Rating

The evaluation ("IMPACT") ratings of DCPS teachers are confidential, hence not available to external researchers other than those with the permission and the capacity to enter confidentiality agreements with DCPS. However, in responding to questions from the DC Council in connection with annual performance oversight hearings, DCPS reported the retention of classroom teachers by their IMPACT ratings starting in SY 2012-13. Figures are not available for 2011-12, so averages are only calculated over five years, not six.

Overall, the figures in the reports to the Council are a little lower than those from the database on which the other DCPS figures in this study are based — 17% as opposed to 18-19% turnover. The total number of teachers in the IMPACT-based reports is lower by 100 to 250, depending on the year. For various reasons, including mid-year departures and incomplete evaluations, some teachers do not receive final ratings and are not included in the IMPACT-based reports. The difference also may reflect a difference of exactly which teachers are counted.

Table 10: Numbers and Percentages of DCPS Classroom Teachers Leaving DCPS by Final IMPACT Rating SY 2012-13 to SY 2016-17

Final IMPACT	Left	Left	Left	Left	Left	5 year	% of 5
Rating	2013	2014	2015	2016	2017	total	year total
Ineffective	38	52	46	50	79	265	9%
Minimally Effective	85	86	77	81	107	436	14%
Developing	137	108	182	148	133	708	23%
Effective	217	223	236	205	218	1,099	35%
Highly Effective	94	123	130	137	123	607	19%
Total	571	592	671	621	660	3,115	100%

Final IMPACT Rating	Left 2013	Left 2014	Left 2015	Left 2016	Left 2017	5 year average
Ineffective	100.0%	96.3%	100.0%	98.0%	98.8%	98.6%
Minimally Effective	48.9%	53.1%	56.6%	51.3%	59.4%	53.9%
Developing	21.6%	18.4%	32.0%	26.0%	22.9%	24.2%
Effective	14.9%	14.9%	14.8%	12.7%	13.3%	14.1%
Highly Effective	9.5%	11.6%	10.4%	9.7%	9.0%	10.1%
Total	17.3%	17.6%	18.7%	16.3%	17.1%	17.4%

Unsurprisingly, given the relationship of ratings to job security, the departure rate of teachers largely correlates with their ratings. Almost all with Ineffective and a little over half with Minimally Effective ratings leave DCPS, compared to 10% for teachers rated Highly Effective. The two lowest categories combined account for 23% of all teacher departures over the last five years. Half the teachers leaving are rated Highly Effective or Effective.

Turnover of DCPS Classroom Teachers by School

Of the total ET-15 staff in local schools, about 88% are classroom teachers.

Table 11: DCPS Classroom Teachers Reported as in Local Schools SY 2011-12 to SY 2017-18

	SY 2012	SY 2013	SY 2014	SY 2015	SY 2016	SY 2017
Local schools classroom						
teachers	3332	3295	3579	3614	3970	3972
Local schools ET-15	3700	3711	3981	4132	4531	4618
Classroom teachers as % of						
total ET-15	90%	89%	90%	87%	88%	86%

As with the total ET-15 group, numbers in this section differ from those for the system as a whole. Total numbers of staff differ slightly, and this section reports rates of staff leaving *schools*, not those leaving the *DCPS system* altogether. Rates in this section reflect teachers who leave one DCPS school for another, as well as those leaving the system.

Table 12: Percentage of DCPS Classroom Teachers Leaving Each School SY 2011-12 to SY 2017-18

School Name	Ward	Level	At-risk 2018	left 2012	left 2013	left 2014	left 2015	left 2016	left 2017	6 yr aver	3 yr aver
Aiton ES	7	ES	79%	75%	31%	30%	35%	45%	53%	45%	44%
Amidon-Bowen ES	6	ES	65%	53%	37%	17%	33%	32%	23%	32%	29%
Anacostia HS	8	HS	84%	43%	28%	22%	24%	32%	23%	29%	27%
Ballou HS	8	HS	80%	33%	52%	30%	58%	35%	40%	41%	43%
Ballou STAY HS	AD	AD	N/A	55%	27%	7%	29%	25%	0%	23%	18%
Bancroft ES	1	ES	30%	31%	33%	19%	24%	8%	12%	21%	15%

School Name	Ward	Level	At-risk 2018	left 2012	left 2013	left 2014	left 2015	left 2016	left 2017	6 yr aver	3 yr aver
Barnard ES	4	ES	48%	8%	32%	25%	21%	15%	20%	21%	19%
Beers ES	7	ES	53%	26%	10%	9%	14%	8%	3%	12%	8%
Benjamin Banneker HS	SEL	HS	19%	25%	19%	17%	8%	17%	26%	19%	17%
Brent ES	6	ES	4%	8%	12%	13%	14%	27%	17%	15%	20%
Brightwood EC	4	EC	42%	30%	25%	9%	17%	18%	10%	17%	15%
Brookland MS	5	MS	51%	N/A	N/A	N/A	N/A	48%	50%	49%	49%
Browne EC	5	EC	73%	34%	45%	23%	32%	30%	35%	33%	32%
Bruce-Monroe ES	1	ES	41%	18%	24%	8%	4%	23%	19%	16%	16%
Bunker Hill ES	5	ES	45%	31%	32%	18%	58%	21%	12%	30%	32%
Burroughs ES	5	ES	41%	21%	16%	11%	30%	19%	8%	18%	19%
Burrville ES	7	ES	69%	46%	55%	36%	33%	44%	32%	41%	37%
C.W. Harris ES	7	ES	82%	6%	50%	14%	31%	50%	19%	29%	33%
Capitol Hill Montessori EC	LOT	EC	18%	33%	17%	17%	19%	20%	30%	23%	23%
Cardozo EC	1	EC2	68%	30%	54%	29%	19%	29%	29%	31%	26%
CHOICE Academy	ALT	ALT	N/A	54%	86%	25%	20%	50%	0%	44%	24%
Cleveland ES	1	ES	49%	20%	9%	4%	21%	12%	21%	15%	18%
Columbia Heights EC	1	EC2	53%	35%	42%	26%	19%	18%	22%	27%	20%
Coolidge HS	4	HS	72%	17%	33%	30%	9%	20%	26%	23%	19%
Deal MS	3	MS	7%	24%	31%	16%	27%	26%	23%	24%	25%
Dorothy I. Height ES	4	ES	36%	N/A	N/A	N/A	N/A	91%	89%	10%	10%
Drew ES	7	ES	75%	29%	27%	28%	24%	21%	13%	22%	18%
Duke Ellington HS of the Arts	SEL	HS	29%	14%	0%	33%	25%	40%	0%	18%	21%
Dunbar HS	2	HS	65%	27%	25%	18%	26%	54%	44%	33%	43%
Eastern HS	6	HS	60%	18%	10%	19%	20%	18%	32%	21%	23%
Eaton ES	3	ES	6%	21%	9%	17%	11%	21%	12%	15%	15%
Eliot-Hine MS	6	MS	62%	42%	42%	36%	36%	29%	38%	37%	34%
Garfield ES	8	ES	82%	33%	40%	18%	23%	26%	32%	28%	27%
Garrison ES	2	ES	38%	23%	48%	35%	28%	41%	29%	34%	33%
H.D. Cooke ES	1	ES	43%	36%	35%	14%	43%	34%	8%	28%	28%
H.D. Woodson HS	7	HS	71%	33%	24%	15%	2%	38%	25%	23%	22%
Hardy MS	2	MS	20%	27%	35%	6%	13%	21%	18%	20%	17%
Hart MS	8	MS	78%	28%	50%	33%	26%	29%	37%	33%	30%
Hearst ES	3	ES	6%	24%	29%	24%	22%	19%	22%	23%	21%
Hendley ES	8	ES	93%	33%	41%	22%	45%	53%	29%	37%	42%
Houston ES	7	ES	71%	14%	6%	32%	19%	23%	26%	21%	23%
Hyde-Addison ES	2	ES	12%	18%	27%	12%	32%	4%	18%	18%	18%
Inspiring Youth Program	ALT	ALT	N/A	56%	50%	13%	13%	67%	44%	41%	42%
J.O. Wilson ES	6	ES	46%	9%	25%	6%	25%	28%	28%	21%	27%

C.L. IN	***	T 1	At-risk	left	left	left	left	left	left	6 yr	3 yr
School Name	Ward	Level	2018	2012	2013	2014	2015	2016	2017	aver	aver
Janney ES	3	ES	1%	11%	10%	16%	16%	10%	16%	13%	14%
Jefferson MS	6 8	MS	58%	48%	71%	32%	35%	11%	23%	35%	23%
Johnson MS		MS	81%	45%	41%	24%	55%	41%	43%	41%	46%
Kelly Miller MS	7	MS	68%	40%	64%	21%	43%	23%	41%	40%	35%
Ketcham ES	8	ES	82%	40%	33%	24%	39%	42%	44%	38%	42%
Key ES	3	ES	2%	18%	15%	14%	14%	22%	17%	17%	18%
Kimball ES	7	ES	79%	25%	37%	32%	39%	30%	22%	31%	30%
King ES	8	ES	84%	39%	46%	28%	33%	41%	41%	39%	39%
Kramer MS	8	MS	86%	55%	50%	32%	46%	46%	52%	47%	48%
Lafayette ES	4	ES	3%	9%	12%	19%	12%	17%	12%	14%	14%
Langdon ES	5	ES	53%	20%	55%	19%	38%	23%	20%	31%	28%
Langley ES	5	ES	55%	44%	60%	24%	12%	43%	52%	41%	37%
LaSalle-Backus EC	4	EC	53%	31%	50%	12%	33%	28%	17%	28%	26%
Leckie EC	8	EC	47%	15%	29%	8%	3%	22%	14%	16%	14%
Ludlow-Taylor ES	6	ES	23%	22%	14%	22%	18%	19%	6%	17%	14%
Luke C. Moore HS	AD	AD	N/A	35%	41%	6%	47%	31%	27%	31%	35%
MacFarland MS	4	MS	42%	N/A	N/A	N/A	N/A	N/A	17%	17%	17%
Malcolm X ES	8	ES	85%	57%	56%	7%	25%	35%	25%	34%	29%
Mann ES	3	ES	2%	33%	13%	17%	8%	15%	24%	18%	16%
Marie Reed ES	1	ES	31%	18%	28%	15%	32%	5%	8%	17%	15%
Maury ES	6	ES	7%	9%	18%	21%	24%	19%	11%	17%	18%
McKinley Tech HS/MS	SEL	EC2	43%	27%	21%	10%	27%	18%	25%	21%	23%
Miner ES	6	ES	61%	14%	29%	17%	24%	21%	32%	23%	26%
Moten ES	8	ES	85%	46%	40%	31%	28%	22%	55%	37%	35%
Murch ES	3	ES	4%	14%	8%	20%	13%	27%	21%	18%	20%
Nalle ES	7	ES	73%	22%	39%	13%	28%	27%	32%	27%	29%
Noyes ES	5	ES	73%	50%	39%	26%	61%	25%	23%	39%	39%
Orr ES	8	ES	77%	27%	35%	21%	26%	35%	23%	28%	29%
Oyster-Adams Bilingual EC	3	EC	10%	16%	25%	14%	23%	19%	19%	19%	20%
Patterson ES	8	ES	87%	35%	60%	9%	22%	9%	18%	24%	16%
Payne ES	6	ES	46%	21%	6%	12%	15%	17%	36%	19%	23%
Peabody ES	6	ES	5%	25%	7%	16%	18%	38%	19%	20%	24%
Phelps ACE HS	SEL	HS	49%	35%	33%	18%	10%	35%	29%	27%	25%
Plummer/Davis ES	7	ES	78%	23%	53%	28%	18%	20%	18%	26%	19%
Powell ES	4	ES	36%	31%	35%	8%	36%	22%	24%	26%	27%
Randle Highlands ES	7	ES	54%	20%	14%	10%	38%	27%	19%	22%	28%
Raymond EC	4	EC	45%	17%	16%	14%	39%	34%	37%	27%	36%
River Terrace EC	SE	SE	49%	14%	29%	24%	65%	23%	52%	33%	47%

			At-risk	left	left	left	left	left	left	6 yr	3 yr
School Name	Ward	Level	2018	2012	2013	2014	2015	2016	2017	aver	aver
Ron Brown College Prep	LOT	HC	5.00	NT/A	NT/A	NT/A	NT/A	NT/A	420/	420/	420/
HS	LOT	HS	56%	N/A	N/A	N/A	N/A	N/A	42%	42%	42%
Roosevelt HS	4	HS	68%	41%	40%	16%	30%	36%	43%	36%	37%
Roosevelt STAY HS	AD	AD	N/A	14%	33%	23%	21%	44%	71%	37%	46%
Ross ES	2	ES	6%	0%	20%	13%	43%	23%	38%	24%	35%
Savoy ES	8	ES	78%	14%	9%	32%	36%	48%	28%	29%	37%
School Without Walls EC (PK-12)	SEL	EC2	13%	14%	32%	7%	17%	19%	20%	18%	18%
School-Within-School ES	LOT	ES	3%	13%	30%	5%	19%	15%	20%	17%	18%
Seaton ES	2	ES	40%	4%	31%	18%	16%	12%	24%	18%	17%
Shepherd ES	4	ES	14%	36%	21%	4%	29%	25%	15%	22%	23%
Simon ES	8	ES	71%	26%	29%	10%	26%	19%	17%	21%	21%
Smothers ES	7	ES	68%	18%	39%	13%	50%	57%	29%	34%	45%
Sousa MS	7	MS	73%	45%	57%	24%	52%	35%	26%	40%	38%
Stanton ES	8	ES	89%	32%	20%	18%	38%	23%	22%	26%	28%
Stoddert ES	3	ES	3%	8%	8%	7%	13%	16%	10%	11%	13%
Stuart-Hobson MS	6	MS	28%	35%	37%	23%	26%	31%	23%	29%	27%
Takoma EC	4	EC	45%	34%	24%	19%	22%	17%	21%	22%	20%
Thomas ES	7	ES	76%	11%	20%	10%	29%	21%	24%	20%	25%
Thomson ES	2	ES	40%	18%	10%	17%	10%	14%	25%	16%	16%
Truesdell EC	4	EC	55%	44%	60%	18%	50%	32%	38%	39%	40%
Tubman ES	1	ES	54%	16%	31%	15%	38%	20%	22%	24%	26%
Turner ES	8	ES	83%	41%	41%	12%	32%	6%	26%	25%	21%
Tyler ES	6	ES	35%	31%	50%	27%	28%	24%	37%	32%	30%
Van Ness ES	6	ES	26%	N/A	N/A	N/A	N/A	22%	36%	38%	30%
Walker-Jones EC	6	EC	77%	33%	65%	14%	40%	44%	40%	40%	41%
Washington Metropolitan	ALT	ALT	N/A	58%	47%	29%	50%	53%	55%	49%	52%
Watkins ES	6	ES	19%	21%	45%	20%	18%	52%	19%	29%	30%
West EC	4	EC	38%	57%	45%	39%	57%	38%	18%	41%	36%
Wheatley EC	5	EC	79%	22%	42%	14%	53%	26%	18%	29%	33%
Whittier EC	4	EC	49%	23%	31%	9%	18%	23%	17%	19%	19%
Woodrow Wilson HS	3	HS	26%	21%	22%	18%	15%	19%	30%	21%	21%
Youth Services Center	ALT	ALT	N/A	47%	36%	15%	58%	27%	38%	37%	40%
Total				28%	33%	18%	27%	27%	26%	26%	27%

In DCPS local schools as a whole, as with ET-15 staff, about one-fourth of classroom teachers leave their schools annually, but the percentages at individual schools vary widely from one school to another and from one year to another within the same school. For almost all schools in all years, however, the percentages are in double digits. The remaining tables explore differences among schools by ward and their percentage of at-risk students.

Turnover of DCPS Classroom Teachers at the School Level by Ward

In addition to schools that are zoned for neighborhood, DCPS has a variety of schools that serve students citywide (these are marked by abbreviation in the table above):

- Adult (AD): Ballou and Roosevelt STAY, Luke C. Moore
- Alternative (ALT): CHOICE, Inspiring Youth (DC Jail), Washington Metropolitan, Youth Services Center
- Lottery (LOTT): Capitol Hill Montessori, Ron Brown College Prep, School-Within-A School
- Special Education (SE): River Terrace (formerly Mamie D. Lee and Sharpe Health)
- Selective high schools (SEL): Banneker, Ellington, McKinley, Phelps, School Without Walls

We have separated these from the neighborhood schools because though located physically in a ward, they have no ward-based community, and because the special characteristics of their missions may well correlate with their teacher turnover.

Table 13: Percentage of DCPS Classroom Teachers Leaving Their Schools by Ward SY 2011-12 to SY 2017-18

	# schs	left	left	left	left	left	left	6 yr	3 yr
	2018	2012	2013	2014	2015	2016	2017	aver	aver
Ward 1	8	27%	35%	19%	24%	20%	19%	24%	21%
Ward 2	7	20%	28%	17%	22%	28%	29%	24%	26%
Ward 3	10	19%	19%	16%	17%	20%	21%	19%	20%
Ward 4	15	27%	32%	17%	28%	30%	28%	27%	29%
Ward 5	8	32%	43%	19%	40%	30%	28%	32%	32%
Ward 6	16	25%	33%	20%	25%	27%	27%	26%	26%
Ward 7	15	31%	36%	20%	28%	30%	25%	28%	28%
Ward 8	18	35%	40%	22%	33%	31%	32%	32%	32%
Adult	3	37%	35%	11%	33%	35%	33%	31%	34%
Alternative	4	54%	51%	21%	43%	47%	42%	43%	44%
Lottery	3	25%	23%	11%	19%	17%	28%	21%	22%
Special Education	1	14%	29%	24%	65%	23%	52%	33%	47%
Selective HS	5	23%	26%	12%	18%	21%	23%	20%	21%
Non-ward total	16	29%	31%	14%	26%	26%	29%	26%	27%
DCPS average	113	28%	33%	18%	27%	27%	26%	26%	27%

Among the neighborhood schools turnover rates generally correspond with median household income and similar measures that differentiate the District's wards. Turnover is consistently lowest in Ward 3, and highest in Wards 5, 7 and 8. Among citywide schools, turnover is lowest in the selective high schools and three popular citywide assignment-by-lottery schools. It is highest in alternative schools and the one special education school, with adult schools in between.

Turnover of DCPS Classroom Teachers at the School Level by School Grade Configuration

Most DCPS schools have one of four standard configurations: elementary (grades PK3-5), education campus (grades PK3-8), middle (grades 6-8), and high school (grades 9-12). Setting aside the alternative and adult schools, there are four schools with exceptional grade structures where the data cannot be separated. Cardozo, Columbia Heights (CHEC), and McKinley serve grades 6-12, and School Without Walls serves grades PK3-12. Although the lower schools of the latter two are separated in some DCPS datasets, they are not separated in all years of the personnel data files that are the source for this analysis, and the first two are not separated at all. All four have the same principal for all grade levels.

Table 14: Percentage of DCPS Classroom Teachers Leaving Their Schools by School Grade Configuration SY 2011-12 to SY 2017-18

	# schs 2018	left 2012	left 2013	left 2014	left 2015	left 2016	left 2017	6 yr aver	3 yr aver
Elementary	64	25%	29%	18%	26%	26%	24%	24%	25%
Education Campus PK-8	13	28%	36%	15%	31%	27%	24%	27%	27%
Education Campus Other									
PK- or 6-12	4	28%	38%	19%	20%	21%	24%	24%	22%
Middle School	12	36%	46%	23%	33%	29%	31%	33%	31%
High School (excludes									
alternative)	12	29%	30%	20%	21%	30%	32%	27%	28%
DCPS average	105	28%	33%	18%	27%	27%	26%	26%	26%

Classroom teacher turnover is highest in DCPS middle schools – almost one-third of the staff leaving annually, compared to a little over one-quarter of the staff at the other levels. The rate of departure at the education campuses with exceptional structures, though shown for completeness' sake, are not meaningful because two of them (McKinley and School Without Walls) combine selective high schools with neighborhood lower schools. All four are large schools with relatively lower turnover rates, suggesting that if they were separated into their grade level components, the total high school turnover rates would be a little lower.

Turnover of DCPS Classroom Teachers at the School Level by Percentage of Students At-Risk

Since SY 2014, the metric for identifying students needing high levels of support is "at-risk" status, defined as students who are homeless, in foster care, welfare and food stamp recipients plus high school students who are overage for their grade, as determined from DC government databases. It is not applied to alternative and adult schools, and is replaced here by free/reduced price lunch eligibility in the two earliest school years.

Table 15: Percentage of DCPS Classroom Teachers Leaving Their Schools by Percentage of Students At-Risk SY 2011-12 to SY 2017-18

	# schs 2018	Left 2012	Left 2013	Left 2014	Left 2015	Left 2016	Left 2017	6 yr aver	3 yr aver
0-20% at risk	22	14%	12%	15%	19%	21%	19%	18%	20%
20-40% at risk	13	19%	25%	18%	19%	20%	28%	22%	23%
40-60% at risk	29	29%	30%	17%	26%	26%	23%	24%	25%
60-80% at risk	29	29%	39%	21%	30%	31%	31%	31%	31%
80-100% at risk	13	30%	36%	23%	33%	33%	32%	32%	33%
DCPS average	106	27%	33%	18%	26%	27%	26%	26%	26%

As the percentage of at-risk students increases, so does the rate at which classroom teachers leave their schools. At the 22 schools with the fewest at-risk students, the rate is about 20%, while at the 42 schools with the highest percentages, almost one-third of the classroom teachers leave annually.

TEACHER TURNOVER IN PUBLIC CHARTER SCHOOLS

The statistics below are derived from charter school annual reports to the DC Public Charter School Board (PCSB) from SY 2014-15 to SY 2016-17, the latest year for which the reports have been submitted. In measuring teacher turnover, charter school data consist of two figures included in the "data sections" of the annual reports: percentage of "teacher attrition" and the total number of teachers. Since we were unable to track individual teachers year by year, we did not track cohorts across years, but we were able to calculate teacher attrition for each school in each of the three years, and to calculate three-year averages, including those for the attrition rates by ward and by percentage of at-risk students. Charter schools have many different grade configurations, and these change from year to year as many of them add grades; we did not attempt to label them as elementary, middle, etc. schools.

The PCSB standard format defines "teacher" as "any adult responsible for the instruction of students at least 50% of the time, including, but not limited to, lead teachers, teacher residents, special education teachers, and teacher fellows." Schools interpret this definition variably. Each charter school has its own set of job titles, not all of which are obvious as to what constitutes "instruction" and "at least 50% of the time." A count of titles from staff rosters in a random sample of 14 charter school 2015-16 reports showed that overall, charter school turnover figures are not fully comparable with either DCPS classroom teacher or DCPS ET-15 figures. Five counted only staff with job titles cited in the PCSB definition, while nine counted others as well.

Average Teacher Turnover in DC Charter Schools

Table 16: Number of Charter School Teachers and Number and Percent Leaving Their Schools SY 2014-15 to SY 2017-18

School Year	Total teachers	# leaving	% leaving
SY 2014-15	2,525	562	22%
SY 2015-16	3,086	833	27%
SY 2016-17	3,471	859	25%
3 year average			25%

Annual teacher attrition in the charter school sector has ranged from 22-25% in the last three years, the overall average being 25%. Since we cannot track movement of teachers from one charter school to another, these figures reflect only departures from individual schools, not from the charter sector as a whole. We do not know whether and how many teachers move from one charter school to another.

Turnover of DC Charter School Teachers at each School

Table 17: Percent\ of Charter School Teachers Leaving Each School SY 2014-15 to SY 2017-18

School/Campus	Ward	Grades 2018	At-risk 2018	Left 2015	Left 2016	Left 2017	3 yr aver
Academy of Hope	AD	Adult	N/A	12%	32%	21%	21%
Achievement Preparatory Academy	8	PK3-8	53%	N/R	58%	20%	40%
Appletree Early Learning Columbia Hts	1	PK3-PK4	33%	50%	18%	18%	26%
Appletree Early Learning Lincoln Park	6	PK3-PK4	10%	0%	28%	17%	19%
Appletree Early Learning Oklahoma Ave	7	PK3-PK4	53%	54%	29%	7%	27%
Appletree Early Learning Southeast	8	PK3-PK4	69%	12%	12%	22%	17%
Appletree Early Learning Southwest	6	PK3-PK4	48%	75%	27%	27%	34%
BASIS	2	5-12	8%	43%	15%	19%	24%
Breakthrough Montessori	4	РК3-К	9%	N/A	N/A	0%	0%
Bridges	5	PK3-5	32%	6%	36%	39%	28%
Briya	5	PK3-PK4	2%	16%	4%	11%	10%
Capital City Lower School	4	PK3-4	28%	6%	27%	25%	20%
Capital City Middle School	4	5-8	30%	28%	25%	18%	24%
Capital City Upper School	4	9-12	43%	21%	16%	14%	17%
Carlos Rosario	AD	Adult	N/A	11%	12%	11%	11%
Cedar Tree Academy	8	PK3-K	71%	5%	14%	10%	10%
Center City Brightwood	4	PK3-8	39%	30%	31%	22%	28%
Center City Capitol Hill	6	PK3-8	50%	50%	43%	27%	39%

School/Campus	Ward	Grades 2018	At-risk 2018	Left 2015	Left 2016	Left 2017	3 yr aver
Center City Congress Heights	8	PK3-8	54%	24%	32%	24%	26%
Center City Petworth	4	PK3-8	35%	30%	14%	18%	20%
Center City Shaw	6	PK4-8	51%	43%	13%	31%	29%
Center City Trinidad	5	PK4-8	64%	39%	44%	43%	42%
Chavez Prep	1	6-9	51%	42%	37%	30%	37%
Chavez Parkside Middle School	7	6-8	72%	31%	37%	24%	31%
Chavez Capitol Hill	6	9-12	64%	53%	37%	44%	44%
Chavez Parkside High School	7	9-12	63%	31%	37%	37%	35%
Children's Guild	5	K-8	80%	N/A	N/R	24%	24%
City Arts-Doar	5	PK3-8	55%	63%	43%	64%	56%
Community College Prep	AD	Adult	N/A	0%	0%	0%	0%
Creative Minds	5	PK3-7	9%	45%	24%	28%	31%
DC Bilingual	5	PK3-5	37%	0%	13%	13%	9%
DC International	4	6-10	18%	33%	27%	27%	28%
DC Prep Benning Elementary	8	PK3-3	56%	25%	34%	34%	31%
DC Prep Benning Middle	7	4-8	45%	27%	26%	26%	26%
DC Prep Edgewood Elementary	7	PK3-3	41%	16%	23%	23%	21%
DC Prep Edgewood Middle	5	4-8	34%	21%	29%	29%	26%
DC Prep Anacostia Elementary	8	PK3-1	60%	N/A	26%	26%	26%
DC Scholars	7	PK3-8	56%	35%	48%	54%	46%
Democracy Prep Congress Heights	8	PK3-8	74%	28%	34%	23%	29%
Eagle Academy Congress Heights	8	PK3-3	66%	17%	17%	41%	25%
Eagle Academy Capitol Riverfront	6	PK3-3	53%	29%	36%	30%	31%
Early Childhood Academy	8	PK3-3	71%	16%	47%	33%	32%
EL Haynes Elementary	4	PK3-4	31%	28%	26%	20%	25%
EL Haynes Middle	1	5-8	41%	41%	39%	52%	43%
EL Haynes High School	4	9-12	52%	17%	32%	35%	28%
Elsie Whitlow Stokes	5	PK3-5	13%	3%	21%	15%	12%
Excel Academy	8	PK3-8	64%	N/R	2%	28%	15%
Friendship Armstrong	5	PK3-5	53%	N/A	44%	35%	39%
Friendship Blow-Pierce Elementary	7	PK3-3	74%	N/R	7%	17%	13%
Friendship Blow-Pierce Middle	7	4-8	66%	N/R	14%	15%	15%
Friendship Chamberlain Elementary	6	PK3-3	57%	N/R	34%	19%	28%
Friendship Chamberlain Middle	6	4-8	56%	N/R	11%	20%	16%
Friendship Collegiate	7	9-12	56%	N/R	37%	9%	21%
Friendship Online	4	K-8	46%	N/A	N/R	0%	0%
Friendship Southeast	8	PK3-5	71%	N/R	43%	20%	32%
Friendship Technology Prep HS	8	9-12	70%	N/R	48%	37%	44%

School/Campus	Ward	Grades 2018	At-risk 2018	Left 2015	Left 2016	Left 2017	3 yr aver
Friendship Technology Prep MS	8	6-8	68%	0%	63%	30%	48%
Friendship Woodridge Elementary	5	PK3-3	33%	N/R	5%	20%	12%
Friendship Woodridge Middle	5	4-8	30%	N/R	23%	30%	28%
Goodwill	2	9,12	98%	N/A	N/A	30%	30%
Harmony	5	K-5	47%	N/R	44%	44%	44%
Hope Community Lamond	4	PK3-5	41%	6%	6%	5%	6%
Hope Community Tolson	5	PK3-8	54%	6%	6%	6%	6%
Howard	1	6-8	45%	14%	38%	48%	32%
IDEA	7	9-12	65%	N/R	38%	50%	45%
Ideal Academy	4	PK3-8	41%	10%	10%	10%	10%
Ingenuity Prep	8	PK3-4	69%	9%	25%	18%	18%
Inspired Teaching	5	PK3-8	14%	14%	30%	18%	21%
Kingsman Academy	6	6-12	90%	N/A	35%	35%	35%
KIPP DC AIM	8	5-8	54%	28%	37%	41%	36%
KIPP DC Arts & Technology	7	PK3-K	53%	17%	15%	6%	12%
KIPP College Prep	5	9-12	53%	18%	18%	27%	21%
KIPP DC Connect	5	PK3-K	55%	29%	17%	21%	22%
KIPP Discover	8	PK3-K	62%	14%	45%	30%	30%
KIPP DC Grow	6	PK3-K	48%	16%	26%	16%	19%
KIPP DC Heights	8	1-4	58%	30%	17%	16%	21%
KIPP DC Key	7	5-8	44%	25%	33%	20%	26%
KIPP DC Lead	6	1-4	41%	29%	42%	33%	35%
KIPP DC LEAP	7	PK3-PK4	59%	22%	25%	58%	33%
KIPP DC Northeast	5	5-8	54%	0%	18%	21%	16%
KIPP DC Promise	7	K-4	55%	38%	9%	12%	19%
KIPP DC Quest	7	1-4	55%	20%	26%	21%	22%
KIPP DC Spring	5	1-4	55%	50%	27%	32%	33%
KIPP DC Valor	7	5-8	52%	N/A	20%	41%	33%
KIPP DC WILL	6	5-8	38%	23%	38%	52%	37%
LAMB	4	PK3-5	10%	5%	15%	14%	10%
LAYC	AD	Adult	N/A	36%	20%	36%	30%
Lee Montessori	4	PK3-4	12%	0%	25%	17%	14%
Mary McLeod Bethune	4	PK3-8	57%	24%	28%	17%	23%
Maya Angelou High School	AD	Adult	N/A	1%	43%	39%	29%
Maya Angelou Young Adult LC	AD	Adult	N/A	25%	0%	25%	15%
Meridian	1	PK3-8	44%	22%	34%	31%	28%
Monument Academy	6	5-7	86%	N/A	20%	64%	52%
Mundo Verde	5	PK3-5	9%	15%	18%	15%	16%

School/Campus	Ward	Grades 2018	At-risk 2018	Left 2015	Left 2016	Left 2017	3 yr aver
National Collegiate Prep	8	9-12	66%	N/R	26%	17%	21%
Paul	4	6-12	47%	33%	29%	39%	33%
Perry Street Prep	5	PK3-8	51%	66%	63%	63%	64%
Richard Wright	6	8-12	68%	20%	3%	31%	16%
Rocketship	8	PK3-3	76%	N/A	N/A	33%	33%
Roots	4	PK3-5	42%	13%	0%	0%	4%
SEED	7	6-12	64%	27%	53%	18%	32%
Sela	4	PK3-4	21%	25%	0%	0%	7%
Shining Stars	5	PK3-6	19%	50%	22%	3%	20%
Somerset Prep	8	6-12	79%	9%	8%	9%	8%
St. Coletta	SE	Spec Ed	46%	17%	39%	29%	29%
The Next Step	AD	Adult	N/A	38%	27%	15%	27%
Thurgood Marshall	8	9-12	57%	18%	42%	29%	30%
Two Rivers	6	PK3-8	22%	4%	15%	15%	12%
Washington Global	6	6-8	57%	N/A	60%	21%	37%
Washington Latin Middle School	4	6-9	57%	18%	42%	29%	30%
Washington Latin Upper School	4	9-12	22%	4%	15%	15%	12%
Washington Mathematics	5	9-12	69%	1%	24%	5%	7%
Washington Yu Ying	5	PK3-5	4%	22%	N/R	31%	27%
YouthBuild	AD	Adult	N/A	63%	43%	20%	39%
Total				22%	27%	25%	25%

In charter schools as a sector about 25% of teachers leave their schools annually, but the percentages at individual schools vary greatly from one school to another and from one year to another within the same school. The remaining tables explore differences among schools by ward, by grade configuration, and by their percentage of at-risk students.

Turnover of Charter School Teachers at the School Level by Ward

All charter schools in the District, by law, are citywide, open to all District resident students at the grade levels they offer. (When there are more applicants than slots for their grade, admissions are decided by lottery.) Thus there are no neighborhood zones. Some charter schools serve mostly students who live nearby, while others draw widely. There are no charter schools in Ward 3 and only two in Ward 2. Below, charter schools are designated by the ward of their physical location; the exceptions, designated to match categories used for DCPS, are adult and special education schools:

- Adult (AD): Academy of Hope, Carlos Rosario, Community College Prep, Latin American Youth Center, Maya Angelou High School, Maya Angelou Young Adult Learning Center, The Next Step, and YouthBuild.
- Special Education (SE): St. Coletta

Table 18: Percentage of Charter School Teachers Leaving Their Schools by Ward SY 2014-15 to SY 2017-18

	# schs 2018	Left 2015	Left 2016	Left 2017	3 yr aver
Ward 1	5	31%	35%	36%	34%
Ward 2	2	43%	15%	22%	25%
Ward 3	0	N/A	N/A	N/A	N/A
Ward 4	20	19%	21%	18%	19%
Ward 5	24	20%	24%	26%	24%
Ward 6	16	28%	27%	29%	28%
Ward 7	17	27%	30%	24%	27%
Ward 8	21	19%	31%	26%	26%
Adult/Alternative	8	18%	27%	20%	22%
Special Education	1	17%	39%	29%	29%
Charter school average		22%	27%	25%	25%

Generally teacher turnover for charter schools differs little by ward and does not correspond to ward characteristics such as median household income. For example, Wards 5, 7 and 8 are about the same as the citywide charter school average.

Turnover of Charter School Teachers at the School Level by School Grade Configuration

Unlike DCPS schools, grade configurations at charter schools vary widely; some match DCPS grades for elementary, PK-8, middle and high schools, but others differ. A number of schools serve only early childhood grades, and others only grades 1-4, while middle schools often start with grade 5, the end grade for DCPS elementary schools. The bigger problem, however is that as charter schools expand, they add grades year by year, while several charter schools have eliminated some grade levels. Thus the grade configurations of three years ago often differ from those today. Therefore we have not attempted to analyze their teacher turnover by grade configuration.

Turnover of Charter School Teachers at the School Level by Percentage of Students At-Risk

The at-risk metrics described above for DCPS schools are the same as for charter schools. They are determined from DC government databases for homelessness, foster care, welfare (TANF), and food stamps (SNAP) plus high school student overage for their grade level. The at-risk designation is not applicable to adult schools.

Table 19: Percentage of Charter School Teachers Leaving Their Schools by Percentage of Students At-Risk SY 2014-15 to SY 2017-18

	# schs 2018	Left 2015	Left 2016	Left 2017	3 yr aver
0-20% at risk	13	17%	19%	19%	18%
20-40% at risk	15	16%	23%	23%	21%
40-60% at risk	49	28%	29%	26%	28%
60-80% at risk	26	21%	27%	26%	25%
80-100% at risk	3	N/A	32%	0%	38%
Charter school average		19%	27%	26%	25%

As with DCPS schools the rate of teachers leaving charter schools increases with the percentage of at-risk students in the schools. At the 13 schools with the fewest at-risk students the three-year rate is 18%, while those with higher concentrations lose more. The number for schools with 80-100% at-risk students, however, is probably not meaningful. None were open in SY 2014-15, and only two in SY 2015-16, and the number of teachers they employ is small.

CROSS-SECTOR COMPARISONS OF TEACHER TURNOVER RATES

Comparative numbers for the two sectors are limited to the three year period available for the charter schools. As noted above, the charter school numbers do not correspond exactly to those for either DCPS ET-15 staff, which include personnel such as librarians and social workers, nor to DCPS classroom teachers, since individual charter schools interpret the scope of the reporting instructions differently. We therefore present all three sets of numbers.

Table 20: Percentage of DC Teachers Leaving Their Schools SY 2014-15 to SY 2017-18

School Year	DCPS All ET-15	DCPS Classroom Teachers	Charter School Teachers
SY 2014-15	27%	27%	22%
SY 2015-16	26%	27%	27%
SY 2016-17	25%	26%	25%
3 year average	26%	27%	25%

Cross-sector comparisons only work at the school level, since departures are tracked only from individual schools. The rates at which teachers leave their schools in the two sectors are virtually the same.

Table 21: Percentage of DC Teachers Leaving Their Schools by Ward SY 2014-15 to SY 2017-18: Three Year Average

	No. of		DCPS	No. of	Charter
	DCPS	DCPS All	Classroom	Charter	School
	Schools	ET-15	Teachers	Schools	Teachers
Ward 1	8	21%	21%	5	34%
Ward 2	7	26%	26%	2	25%
Ward 3	10	19%	20%	0	N/A
Ward 4	15	28%	29%	20	19%
Ward 5	8	32%	32%	24	24%
Ward 6	16	26%	26%	16	28%
Ward 7	15	28%	28%	17	27%
Ward 8	18	30%	32%	21	26%
Adult	3	33%	33%	8	22%
Alternative	4	42%	44%		
Lottery	3	22%	22%		
Special Education	1	49%	47%	1	29%
Selective HS	5	20%	20%		

Turnover rates within each ward are often though not always similar; given that charter schools have no attendance zones and that the numbers of schools in some wards are small, differences do not appear to be meaningful.

Table 22: Percentage of DC Teachers Leaving Their Schools by Percentage of Students at Risk SY 2014-15 to SY 2017-18: Three Year Average

	No. of DCPS Schools	DCPS All ET-15	DCPS Classroom Teachers	No. of Charter Schools	Charter School Teachers
0-20% at-risk	22	21%	20%	13	18%
20-40% at-risk	13	23%	23%	15	21%
40-60% at-risk	29	25%	25%	49	28%
60-80% at-risk	29	29%	31%	26	25%
80-100% at-risk	13	31%	32%	3	38%

Rates of teacher turnover rise in both sectors with the percentage of students at risk and are similar across sectors.

DC TEACHER TURNOVER RATES COMPARED TO RATES ELSEWHERE

The research on teacher turnover measures turnover on various dimensions, combinations and permutations. Some studies look at rates of teachers leaving individual schools, others at the rates of leaving school districts, others at leaving states or the profession. Some look at attrition among new

teachers, others at attrition among all teachers. Some calculate annual rates only, others rates over a period of years. Some that consider leavers at the individual school level differentiate schools by poverty rates or grade configuration; others do not. The variety in the research means that comparisons with available DC figures are limited.

Comparisons with Teacher Turnover Rates at the School System Level

On average, DCPS teachers leave DCPS at an annual rate of 18-19%, a rate that has been relatively stable for a long time. Across the nation studies find an annual attrition rate of 8-11%, e.g., Alliance for Excellent Education (2004); Ingersoll (2003); Goldring et al. (2014a). Judging by the dates of the studies, nationally the rate may be rising. Among 16 urban districts in the most recent study, the average annual departure rate was 13%. Papay et al. (2015). The DCPS annual turnover rate was higher than those in any of the districts studied. About 55% of DCPS teachers leave over five years, compared to an average in the 16 urban district study of 45%.

Comparisons with Teacher Turnover at the Individual School Level

National and Urban Rates

About 25% of both DCPS and charter school teachers have left their schools every year for the last three years, and the rate has been unchanged for DCPS over six years. In comparison:

- The two most recent studies found the national average at the individual school level to be 16%. Goldring et al. (2014a); Ingersoll (2012)
- The average rate in the study of 16 large urban districts was 19%, with a range of 15-24%. Papay et al. (2015)
- The rate for cities in Goldring et al. (2014a) was 15.5%.
- Individual cities: A 2011 study of New York City Public Schools found a rate of 20%. Ronfeldt (2011). Earlier studies: 20% in Chicago Public Schools, Allensworth et al. (2009), and 17% in Milwaukee with a range in five districts studied of 16-30%, Barnes et al. (2007).

Rates by Grade Configuration

For reasons cited above, particularly the fluidity of and differences among their grade configurations, we have not calculated charter school turnover rates there. DCPS numbers vary so slightly between ET-15 and classroom teachers and by three- vs. six years averages, that differences are not significant. Studies of turnover elsewhere by grade level are limited. Compared with the one national study available, DCPS rates are more than 50 percent higher than national rates except at the middle school level where they are twice the national rate. In the single study of another large city, DCPS rates are higher by 50 percent. Specifically:

DCPS teachers in elementary schools (grades PK3-5) have left their schools at a rate of about 25% annually, and those in education campuses (grades PK3-8) at the rate of 27%. Elsewhere:

• Nationally, the elementary turnover rate is 16%. Goldring et al. (2014a).

• Turnover rates in Chicago elementary schools (through grade 8) ranged from 17-20% depending on the years studied. Allensworth et al. (2009).

At the middle school level, DCPS teacher turnover has run about 32%. Elsewhere:

• Nationally the middle school turnover rate is 15.9%. Goldring et al. (2014a).

At the high school level, DCPS teacher turnover has been about 27%. Elsewhere:

- Nationally the high school turnover rate is 18.6%. Goldring et al. (2014a).
- Turnover rates in Chicago high schools ranged from 18-21% during the years studied. Allensworth et al. (2009).

Rates by school level of poverty

As explained above, the only poverty-related metric now available for either DCPS or charter schools is the percentage of students "at risk," measured by homelessness, foster care, family receipt of welfare (TANF) or food stamps (SNAP) plus for high schools only, students' being overage for their grade level. Free and reduced price lunch eligibility has not been meaningful since 2013, when most schools in both sectors began to offer free lunch to all students and ceased to collect family income forms. The numbers and percentages of DC students designated as at-risk are much lower than the free lunch eligibility statistics that they replaced. In 2013-14 75% of DCPS students and 82% of charter school students were eligible for free lunch; in the following year 51% of DCPS students and 49% of charter school students were designated as at-risk. I.e., the ratio of free lunch to at-risk is about 3 to 2. Studies of teacher turnover define poverty by free lunch eligibility, so consideration of comparisons needs to recognize that the DC at-risk percentages exclude a substantial number of students who would have been designated as free lunch eligible before 2013.

DC teachers leave schools where fewer than 20% of students are designated at risk at an annual rate of 18-20% and where 20-40% of students are in that category, the leave rate is 21-23%. Charter school rates are a little lower than DCPS rates. Elsewhere:

- The most recent national study found that where fewer than 34% of students were eligible for free lunch, the teacher departure rate was 12.8%. Goldring et al. (2014a). The same study found a departure rate of 14.5% where 35-49% of the students were eligible for free lunch. The student groups under this definition are probably very roughly comparable to the DC atrisk enrollment in the two lower quintiles.
- An earlier national study found the rate of turnover at low poverty schools to be 12.8% Ingersoll (2004), as did another, NCTAF (2003), adapted from Ingersoll (2001). Low poverty was defined as fewer than 10% of students' being eligible for free lunch.
- Chicago Public Schools with fewer than 50% low-income students had a teacher turnover rate of 13-17% across four years studied. Allensworth et al. (2009). "Low-income" is not defined in the study.

Where 60-80% of students are at risk in DC schools, the annual teacher departure rate is 25-31%, and where 80% or more are at risk, the rate is about 32%.² Elsewhere:

- The first study cited above found a turnover rate of 15.7% in schools where 50 to 74% of students were eligible for free lunch and a rate of 22.0% where 75% or more students were free-lunch eligible.
- An earlier national study found rates of turnover at urban high poverty schools to be 22%, high poverty being defined as more than 80% of students' being free lunch eligible, Ingersoll (2004), while another cited a level of 20% under the same definition, NCTAF (2003, adapted from Ingersoll 2001)
- Chicago Public Schools with 50-80% low-income students had a teacher turnover rate of 15-19% across four years studied, and a rate of 21% in schools with more than 80% low-income students. Allensworth et al. (2009)

Thus, both DCPS and charter school rates of teacher turnover at all levels of student poverty are considerably higher not only than national levels but than those in Chicago, another high poverty urban district.

PRINCIPAL TURNOVER

The principal is the single most important person within a school, especially in the District, where more than in most other places, both DCPS and charter school principals (and/or executive directors in charter schools) largely control who teaches there and for how long. The DCPS evaluation system gives principals great freedom in making and under the teachers union contract principals accept or reject teachers new to the school, and choose teachers to excess in cases of enrollment decline or program change. Charter school teachers are at-will employees.

Frequent principal turnover, according to consistent research findings, results in lower teacher retention and lower student achievement, particularly at high poverty and low-achieving schools.³ "[R]esearch on school reform suggests that organizational stability is an important component of a well running school and that frequent changes to staff undermine efforts to effectively implement a school's instructional program." Beteille et al. (2011). In regard to school improvement, "any school reform effort is reliant on the efforts of a principal to create a common school vision that focuses on implementing the reform effort over multiple years. Creating such visions and thoroughly integrating reform efforts into the culture of a school takes a sustained effort," one "clearly derailed with the turnover of a principal." Young & Fuller (2009). The research, in fact, suggests that principals must be in place five years for the full implementation of a largescale change effort.

² The figure for charter schools is much lower, but of questionable significance since the schools are so recently operating.

³ Studies include Beteille et al. (2011), Branch et al. (2012), Seashore Louis et al. (2010), Fuller (2012), Weinstein et al. (2009).

PRINCIPAL TURNOVER IN DCPS

The source of data for DCPS is a database of principal names derived over many years from DCPS annual directories listing the principals at all schools.

Table 23: Principal Turnover in DCPS Schools SY 2012-13 to SY 2017-18

	2013→ 2014	2014→ 2015	2015→ 2016	2016→ 2017	2017→ 2018	5 yr average
# of schools	111	111	113	115	115	
# with a new principal	28	24	29	21	18	
% with a new principal	25%	22%	26%	18%	16%	21%
Of 113 schools open over five years		No.	Percent			
# with 1 principal		37	33%			
# with 2 principals		54	48%			
# with 3 principals		20	18%			
# with 4 principals		2	2%			
# with 5 principals		0	0%			

Every year for many years about 25 percent of DCPS schools opened with a new principal, as well as new teachers, as set forth above, because of terminations, voluntary departures, and some intrasystem transfers. The number has decreased, however, in the last two years. But most schools do not keep their principals for five years. Only 37 of the 113 DCPS schools in SY 2017-18 had principals who had served five years or more. Eight of these principals had served the same schools for more than 10 years and 28 for 5-10 years, most of them 5 or 6; however, nine of them have so far left their schools at the end of the 2017-18 school year. Two-thirds of DCPS schools have had two or three principals in the past five years.

Table 24: DCPS Principal Turnover by Ward SY 2012-13 to SY 2017-18

	2013→	2014→	2015→	2016→	2017→	Total	# schs		
	2014	2015	2016	2017	2018	changes	2018	Average	Rank
Ward 1	3	2	2	0	1	8	8	20%	4th
Ward 2	1	1	0	0	2	4	7	11%	9th
Ward 3	1	2	2	1	2	8	10	16%	7th
Ward 4	3	1	6	2	2	14	15	19%	6th
Ward 5	3	1	2	2	5	13	8	33%	high
Ward 6	3	1	3	7	2	16	16	20%	4th
Ward 7	6	2	4	5	0	17	15	23%	3rd
Ward 8	5	10	6	2	3	26	18	29%	2nd
Non-ward	1	4	3	2	1	11	16	14%	8th
Total	26	24	28	21	18	117	113	21%	

Ranks in the table above represent the highest to lowest number of principal changes in relation to the number of neighborhood schools in each ward over the last six years, schools defined as in the analysis of teacher turnover above. Principal turnover is most frequent in Wards 5, 8 and 7, in that order, and least frequent in Wards 2 and 3. The correlation of turnover to the least and most affluent wards is similar to the pattern for teachers.

Table 25: DCPS Principal Turnover by Grade Configuration SY 2012-13 to SY 2017-18

	2013→ 2014	2014→ 2015	2015→ 2016	2016→ 2017	2017→ 2018	Total changes	# schs 2018	5 yr Aver
Elementary PK-5	17	15	16	9	7	64	64	20%
Education Campus PK-8	6	1	2	4	3	16	13	25%
Education Campus Other PK-12 or 6-12	1	0	0	0	0	1	4	5%
Middle School	1	2	3	3	6	15	12	25%
High School (excludes alternative)	2	3	5	3	1	14	12	23%
Adult	0	1	1	0	1	3	3	20%
Total	27	22	27	19	18	113	108	21%

Principal turnover is highest at the middle school (including education campuses) levels, lowest at the elementary level.

Table 26: DCPS Principal Turnover by Percentage of Students at Risk SY 2012-13 to SY 2017-18

	2013→ 2014	2014→ 2015	2015→ 2016	2016→ 2017	2017→ 2018	Total changes	# schs 2018	Aver
0-20% at risk	2	4	4	0	3	13	22	12%
20-40% at risk	2	3	5	1	2	13	13	20%
40-60% at risk	9	2	4	7	4	26	29	18%
60-80% at risk	9	5	8	10	6	38	29	26%
80-100% at risk	4	7	5	1	2	19	13	29%
DCPS Total	26	21	26	19	17	109	106	21%

Except for the small difference within the 20-60% range of at-risk enrollment percentage, the frequency of principal turnover correlates with the at-risk percentage: the frequency is greatest among schools with 80-100% of their students at-risk, next highest in schools from 60-80% at risk, and less than half those rates in schools with the fewest students at risk.

PRINCIPAL TURNOVER IN CHARTER SCHOOLS

The content of the charter school principal database is derived from a combination of the names listed in charter school annual reports, PCSB website profiles, directories, and individual school websites.

Table 27: Principal Turnover in Charter Schools SY 2013-14 to SY 2017-18

	2014→ 2015	2015→ 2016	2016→ 2017	2017→ 2018	4 year average
# of schools/campuses	135	135	134	135	
# with a new principal	34	35	40	34	
% with a new principal	25%	26%	30%	25%	24%
Of 112 schools open over five years	No.	Percent			
# with 1 principal	33	30%			
# with 2 principals	40	36%			
# with 3 principals	24	22%			
# with 4 principals	11	10%			
# with 5 principals	2	2%			

Principal turnover in charter schools is generally similar to that DCPS – about 25% annually, as is the pattern of principal longevity – about one-third keeping their principals for five years or more, somewhere around 60% having two or three principals over five years, and relatively few having principal turnover almost every year.

Table 28: Principal Turnover in Charter Schools by Ward SY 2013-14 to SY 2017-18

	2014→ 2015	2015→ 2016	2016→ 2017	2017→ 2018	Total changes	# schs 2018	Average	Rank
Ward 1	2	4	3	1	10	7	36%	3rd
Ward 2	1	1	0	1	3	1	75%	high
Ward 3	0	0	0	0	0	0	N/A	N/A
Ward 4	5	3	2	1	11	22	13%	low
Ward 5	7	4	8	9	28	31	23%	6th
Ward 6	4	7	6	5	22	17	32%	4th
Ward 7	5	5	7	6	23	19	30%	5th
Ward 8	6	9	13	9	37	25	37%	2nd
Adult/Spec Ed	4	2	1	2	10	13	17%	7th
Charter Total	34	35	40	34	143	135	26%	

As was the case with teachers, principal turnover by ward does not much correlate with the ranking of wards by median household income or other measures of ward resident prosperity. For example, unlike analysis by percentage of at-risk students, Wards 5 and 7 have lower turnover than Wards 1 and 6. (The Ward 2 numbers are too small to be significant.) All charter schools are citywide in enrollment by law, and while some draw mostly from their surrounding neighborhood, others draw students from all over the city. At this level of granularity with a small sample, the absence of pattern is unsurprising.

Table 29: Principal Turnover in Charter Schools by Percentage of Students at Risk SY 2013-14 to SY 2017-18

	2014→ 2015	2015→ 2016	2016→ 2017	2017→ 2018	Total changes	# schs 2018	Rate
0-20% at risk	3	2	1	2	8	19	8%
20-40% at risk	5	3	9	3	20	18	22%
40-60% at risk	13	14	17	15	59	49	24%
60-80% at risk	9	13	11	10	43	29	30%
80-100% at risk	0	0	0	1	1	5	4%
Charter total	30	32	38	31	131	120	22%

As with DCPS schools, charter schools rates of principal turnover rise with the percentage of students at risk. The number of schools at the 80-100% level is too small and their opening dates too recent to be meaningful.

COMPARISONS WITH PRINCIPAL TURNOVER ELSEWHERE

Principal turnover is a national problem that is getting worse in recent years. DC rates -- about 25% annually -- are generally similar to those elsewhere, particularly in cities.

- The most recent NCES study reported the national average for principals' leaving their school as 23%. Goldring et al. (2014b). The previous NCES study found the national average as 20%. Battle (2010).
- The same studies found the city average for principal turnover to be 26% most recently and 22% before.
- Studies of four individual big city districts reported principal turnover ranging from 19%-26%. Beteille et al. (2011)
- As in DCPS, both NCES studies found secondary school principal turnover rates to be slightly higher than elementary school rates.

In the District, schools with 60-80% of their students at risk lose 26% (DCPS) and 30% (charter) of their principals annually. DCPS schools with over 80% at risk students lose 29% of their principals each year. As set forth in the sections on teacher turnover DC at-risk metrics can be compared only roughly with the free lunch eligibility statistics used elsewhere. The NCES studies found principal departure rates for schools with 50-74% of their students free lunch eligible to be 20-21%, and rates for schools with 75% or more free lunch eligibility at 26-27%. The rates here seem comparable to those elsewhere.

QUESTIONS NOT ANSWERED AND FURTHER RESEARCH NEEDED

This study is limited to reporting levels of teacher and principal turnover on the basis of data publicly available. There are a few unanswered questions about the accuracy and the scope of the data. Refining the data and analysis, however, would still leave the big questions that need further research: Why do DC teachers and principals leave their schools or leave their charter LEAs altogether? What can and should the schools and the District's leadership do about it?

Apart from teachers and principals who fail to renew their licenses, are terminated or die, ascertaining the reasons they leave is a complex business. For example, those who say they are leaving due to relocation or retirement might not do so if they were happier with their working conditions; on the other hand, they may be leaving for personal reasons reluctantly but of necessity. How many leave in anticipation of a problematic evaluation? How many teachers leave due to a poor relationship with their principal or their fellow staff members? They leave for many reasons, often in combination. Where do they go and why? And what can those who leave tell us that would enable us to improve retention rates? Ideally everyone who leaves would be interviewed carefully by independent researchers in whose keeping of confidentiality they would have full trust and who would then do a full-scale analysis.

Short of this somewhat costly approach, we could adopt the approach of the 2009 study by the Consortium on Chicago School Research (CCSR), which analyzed teacher personnel records, including teacher background and demographic data, over a four year period and linked them to teachers' schools and to student and school administrative and exam records.⁴ Factors considered were:

- Teacher gender, race/ethnicity, age, college degrees, undergraduate college, and first-year status in the Chicago schools
- Economic status of students in the school
- School racial and ethnic composition
- School size
- Average test scores of school students
- Student mobility rates
- Concentration of poverty in the school neighborhood
- Whether the school had a first-year principal
- School's "probation" status
- Crime data in the Census block group of the school

⁴ Allensworth, Ponisciak & Mazzeo, The Schools Teachers Leave: Teacher Mobility in Chicago Public Schools, Consortium on Chicago School Research at the University of Chicago, June 2009. Another useful list of factors, based on multiple studies, appears in Carver-Thomas (2017).

• Neighborhood conditions from Census files, including the percentage of unemployed males over age 25, the percentage of families below the poverty line, the mean level of education, and average income in the census block group

Data not available that the Chicago researchers believed would be useful:

- Measures of teaching quality
- Data about teacher pre-service preparation
- Teacher salary
- Data on teaching-out-of-field
- Data on where teachers who leave the school system end up

Other data:

- Correlation with school enrollment decline; when schools lose students, they usually have to excess teachers
- Teacher subject area, particularly areas that are harder to staff, e.g., special education, English as a Second Language, math, science, and technology.
- Measures of school climate

This kind of study could only be carried out by researchers with the technical capacity to handle multiple complex databases and to satisfy the protocols to maintain student and employee privacy. Realistically, not all the above factors need be included; an analysis of research findings elsewhere could identify the most promising areas for exploration. For example, the Chicago study found that teacher turnover is highest in schools that are majority low-income and mostly African-American and Latino, and found particular significance within these schools in teacher-parent relationships, teacher perception of students' behavior, teacher sense of collaboration with colleagues and principal and teachers' control over their work environment, including conditions "that limit their ability to do their job". But this is only one study, and the District is not like Chicago in various respects, including demographic makeup and school policies of various kinds. What are the similarities with and differences among schools and population in other cities with robust research on teacher and principal turnover?

Questions not answered in this study include:

Data

• The data source for DCPS teachers is mid-year point in time staff lists and for principals annual DCPS directories. How many teachers and principals are not included in these one-year point-in-time rosters because they enter as the school year begins and leave before mid-year? What are the rates when mid-year departures and short-term leaves of absence are taken into account with precision?

⁵ Summarized in Allensworth, Ponisciak & Mazzeo (2009), pp. 2 and 30-31.

- Mid-year departures are extremely disruptive for students and schools. How many teachers and principals leave their schools at any point mid-year?
- The source for charter schools is a self-reported teacher "attrition" rate, which in a number of cases turned out actually to be the teacher retention rate. (See the discussion in Appendix I.) How accurate are these rates?
- What is the multi-year rate of teacher turnover at the school level? For example, what percent of school staff remain for five years or more? (This study does provide this information for principals.)

Why Do Teachers and Principals Leave?

- What is the relationship of teacher turnover to the school factors used, for example, in the Chicago study *and* to enrollment decrease and increase, principal change, salary levels, student discipline policies and practices, and measures of school security and school climate?
- What are the characteristics of the teachers and principals who leave apart from IMPACT rating (for DCPS only), and the ward, grade configuration, and percentage of at-risk students of the schools they leave? What is their certification status? In addition to the data used in the Chicago study, what are their levels of experience? Have they worked in other school systems, and if so, similar to or different from DC?
- Are there patterns of transfers within DCPS? What are the salient characteristics of sending vs. receiving schools?

What Can and Should We Do to Limit Teacher and Principal Turnover?

- To what extent are the conditions linked with turnover under school control and to what extent is mobility inevitable due to teacher and principal life circumstances? To what extent is it desirable, to maintain school quality and bring in fresh knowledge and perspectives?
- What are the implications of research findings for recruitment, induction, professional development, mentoring, professional incentives, and teacher and principal placement?
- How does teacher and principal turnover affect the District's students, schools and school systems specifically?

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APPENDICES

APPENDIX I: NOTES ON DATA AND METHODOLOGY

Throughout the report, school grade configuration and at-risk percentage are as of SY 2017-18. Differences in the total numbers of schools as to teachers vs. principals and by ward, by grade configuration, and by percentage of at-risk students are due to differences in data sources. For example, in some years DCPS staff lists do not differentiate between middle school and high school components of some education campuses, while in others they are identified separately. Because they share principals and often some staff members they are treated in combination in this study. A number of charter schools have multiple campuses, which are treated separately in some data sources and combined in others. For example, some charter school annual reports separate their campuses in reporting teacher numbers and attrition and others do not, while the PCSB website listings separate most.

In the case of percentages of at-risk students, adult and alternative schools in both sectors are not eligible to receive at-risk funding, and are therefore not shown in any publicly available data sources. Because many of their students would fall within the at-risk definition (homeless, foster care, welfare, food stamps and overage for their grade level) for other purposes, those schools are omitted from the at-risk analyses, since to include them as having no at-risk students would be highly misleading.

The sources of data for DCPS, unless otherwise identified are

• For teacher data: database assembled from annual mid-year DCPS staff lists, variously called Schedule A, PeopleSoft Report, Agency FTE Listing, and Position Listing. These were obtained from DCPS document submissions to the DC Council in connection with annual performance oversight hearings and from FOIA requests. They include teacher name, employee ID number, and school or department. The Council submissions in various years can be found at http://dccouncil.us/budget/2019.

Teachers were tracked individually from year to year at each school separately, by employee ID look-ups supplemented by manual checks and comparisons.

The numbers for SY 2012-13 are surprisingly high and those for SY 2013-14 are surprisingly low. There may be a problem with the SY 2013-14 lists; perhaps some prior year teachers who remained in the system were not included in any of several lists obtained, but checks and comparisons among several different lists for SY 2013-14 failed to resolve the issue. However, in view of the consistency of all other numbers, including longer-term averages, the two years may balance each other out.

 For school level and percentage of students at-risk: annual enrollment audits commissioned by the Office of the State Superintendent of Schools (OSSE), available at https://osse.dc.gov/node/604172

- For school free lunch eligibility in years before the at-risk designation is available, spreadsheets downloaded from DC Council website contemporaneously (no longer available there).
- For DCPS principals: database assembled from annual school directories posted on the DCPS website, and downloaded contemporaneously with the school years in question.

The sources of data for public charter schools are:

• For total teacher numbers and attrition rates, annual reports submitted to the D.C. Public Charter School Board. These reports were obtained by FOIA from the PCSB. They are all in .pdf files, differing in format from one school to another, so that the figures had to be copied manually into spreadsheets. Because of this and because charter schools change significantly in size and grade levels from year to year, we limited this exercise to the last three years. Annual reports for the most recent year only are on the PCSB website at https://www.dcpcsb.org/report/evaluating/charter-school-annual-reports

The PCSB standard format defines "teacher" as "any adult responsible for the instruction of students at least 50% of the time, including, but not limited to, lead teachers, teacher residents, special education teachers, and teacher fellows." Schools interpret this definition differently. Each charter school has its own set of job titles, not all of which are obvious as to what constitutes "instruction" and "at least 50% of the time." A count of likely titles from staff rosters in a random sample of 14 charter school 2015-16 reports indicated that overall, charter school turnover figures are not fully comparable with either DCPS classroom teacher or DCPS ET-15 figures but are somewhere in between. Five of the 14 counted only staff with the job titles cited in the definition, while nine counted others as well.

Note also that in each year a few schools failed to include these figures in their annual reports; this occurs with different schools in different years. In the tables here, N/A is used in years where schools are not yet open; N/R is used for instances where schools are open but have not reported the particular figure in question.

Also, in a small number of cases the schools appear to have confused teacher *attrition* with teacher *retention*. To check this, wherever the reported percentage was higher than 50%, we compared annual report staff rosters in successive years. In most cases, the attrition rate actually appeared to be less than 50%, so we inverted the percentage to lower it.

- For percentage of students at-risk: annual enrollment audits commissioned by the Office of the State Superintendent of Schools (OSSE), available at https://osse.dc.gov/node/604172
- For charter school principals: database derived from a combination of the names listed in charter school annual reports, PCSB website profiles, directories, and individual school websites. The most recent annual reports are at https://www.dcpcsb.org/report/evaluating/charter-school-annual-reports and most recent PCSB website profiles are at https://www.dcpcsb.org/find-a-school.

APPENDIX II: SUPPLEMENTAL TABLES

DCPS ET-15 Attrition: FY 2001-FY 2018

Base year	Total teachers	1 year or less	2 years or less	3 years or less	4 years or less	5 years or less	6 years or less	7 years or less
SY 2001	5870	952	1628	2047	2516	2810	3175	3379
SY 2002	5711	821	1411	2005	2370	2839	3086	3472
SY 2003	5460	726	1462	1910	2450	2726	3151	3504
SY 2004	5211	836	1395	2009	2301	2762	3130	3308
SY 2005	4835	680	1436	1786	2287	2673	2863	3159
SY 2006	4754	914	1377	1984	2422	2629	2954	3221
SY 2007	4298	578	1327	1819	2052	2406	2680	2843
SY 2008	4325	931	1565	1845	2254	2573	2745	2930
SY 2009	4047	819	1220	1738	2098	2288	2486	2649
SY 2010	4288	626	1418	1951	2189	2437	2633	2806
SY 2011	4230	886	1587	1371	1754	2036	2269	2451
SY 2012	4148	642	1371	1754	2036	2269	2451	
SY 2013	3982	793	1213	1597	1859	2086		
SY 2014	4275	775	1311	1711	1997			
SY 2015	4278	748	1285	1666				
SY 2016	4700	889	1439					
SY 2017	4754	813						
SY 2018	4815							

Attrition rate of teachers employed as of:

SY 2001	16%	28%	35%	43%	48%	54%	58%
SY 2002	14%	25%	35%	41%	50%	54%	61%
SY 2003	13%	27%	35%	45%	50%	58%	64%
SY 2004	16%	27%	39%	44%	53%	60%	63%
SY 2005	14%	30%	37%	47%	55%	59%	65%
SY 2006	19%	29%	42%	51%	55%	62%	68%
SY 2007	13%	31%	42%	48%	56%	62%	66%
SY 2008	22%	36%	43%	52%	59%	63%	68%
SY 2009	20%	30%	43%	52%	57%	61%	65%
SY 2010	15%	33%	45%	51%	57%	61%	65%
SY 2011	21%	38%	32%	41%	48%	54%	58%
SY 2012	15%	33%	42%	49%	55%	59%	
SY 2013	20%	30%	40%	47%	52%		
SY 2014	18%	31%	40%	47%			
SY 2015	17%	30%	39%				
SY 2016	19%	31%					
SY 2017	17%						
SY 2018							

Base year	Total	8 years or	9 years	10 years	11 years	12 years
	teachers	less	or less	or less	or less	or less
SY 2001	5870	3746	4077	4246	4493	4722
SY 2002	5711	3812	3978	4240	4470	4615
SY 2003	5460	3674	3946	4176	4325	4476
SY 2004	5211	3594	3834	3987	4147	4275
SY 2005	4835	3409	3564	3731	3859	3964
SY 2006	4754	3374	3548	3679	3787	3892
SY 2007	4298	3022	3152	3266	3379	
SY 2008	4325	3074	3195	3314		
SY 2009	4047	2784	2915			
SY 2010	4288	2960				
SY 2011	4230					
SY 2012	4148					
SY 2013	3982					
SY 2014	4275					
SY 2015	4278					
SY 2016	4700					
SY 2017	4754					
SY 2018	4815					

Attrition rate of teachers employed as of:

SY 2001	64%	69%	72%	77%	80%
SY 2002	67%	70%	74%	78%	81%
SY 2003	67%	72%	76%	79%	82%
SY 2004	69%	74%	77%	80%	82%
SY 2005	71%	74%	77%	80%	82%
SY 2006	71%	75%	77%	80%	82%
SY 2007	70%	73%	76%	79%	
SY 2008	71%	74%	77%		
SY 2009	69%	72%			
SY 2010	69%				
SY 2011					
SY 2012					
SY 2013					
SY 2014					
SY 2015					
SY 2016					
SY 2017					
SY 2018					