



EmpowerK12

Does DC have a teacher retention problem?

October 30, 2018 | DC DATA, RESEARCH

Maybe a better place to start is by asking: Is teacher retention an issue we should care about? In our city's quest to ensure a high quality teacher in every classroom, we should be concerned about teacher retention. There is a plethora of research that demonstrates teacher attrition can be [harmful](#) for students.

Though, in fairness, **DCPS has had a decent run of finding replacement teachers as good as or better than the prior teacher, according to robust research.** (Similar research for our

public charter schools does not exist.)

We applaud the DC State Board for [continuing](#) the conversation about teacher retention and thank Mary Levy, longtime DC education researcher, for her efforts in pulling together years of [teacher attrition data](#) that, in all honesty, probably should be something OSSE is keeping track of anyway. There are a couple of data quality concerns related to information in the report that we note below, but none of them are the fault of the researcher. Mary did well to collect and analyze the limited information available.

However, there is definitely room for improvement when it comes to DC tracking teacher data as a city-state. Many states have comprehensive teacher databases that include unique teacher identifiers, and some even connect them to students so researchers can learn from the best teachers. This is something OSSE, DME, SBOE and DC Council need to work on.

Back to the original question: Does DC have a teacher retention *problem*?

After the release of Levy's report, the State Board and a couple of our media outlets seized upon one specific statistic in the report (see [WTOP](#), [Informer](#), [WAMU](#), and [DC Line](#)): DC's school-level teacher attrition rates (25%) are much higher than the national average (16%) and [higher](#) than other urban areas (19%).

As is typical when it comes to education data and research, there is nuance in understanding whether a data issue portends a real-world problem that requires immediate intervention. Here are two of our primary concerns about the report's key



This matters academically, but teachers play a role in the lives of students far beyond academics- relationships can't be replaced. Students are owed long term relationships with positive adult mentors.

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Far from being robust, this UVA study failed in more than one critical area by looking at effects of effective teachers in a vacuum. The study did not weight against this all of the evidence that experienced teachers lead to better learning- so yr. to yr. turnover of ineffective teachers to more effective has broad side effects.

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data point when determining whether DC teacher retention is an issue that has moved into full-blown problem territory:

- The urban district statistic comes from a report that does not tell us which 16 districts are included, and we know DC's educational system and workforce are atypical of most major US cities
- The data available to the researcher and the methodology utilized have limitations that likely produce higher DC attrition rates than what is seen by comparison districts

yet D.C. students aren't less deserving of teacher retention than students in other cities. If this is accurate, DC might have a unique challenge in addressing the problem, but it makes it no less of a problem. Students and families deserve it being addressed

Ultimately, we believe data suggests our DC teacher attrition rates are in line with expectations given the youthful makeup of the DC labor force and job tenure trends. Before diving into those trends and the DC-specific data, we think it may be useful to briefly discuss some broader historical context around teacher retention and shortages.

Teacher shortages and dwindling job tenure rates

Prior to the Great Recession when the US economy was booming in the late 90s through mid-2000s, our post-secondary institutions were struggling to graduate enough teachers to meet the demand. States developed alternate routes for career changers looking to enter the teaching profession. After the housing market collapsed in 2008, the teacher demand crisis eased as many professionals who lost their jobs went back to school or utilized existing alternate routes to become teachers. Now that the economy has returned to peak form we may soon face another shortage of quality teachers as young professionals opt for higher paying jobs in the private sector.

Another phenomena affecting educator supply and retention is the continual increase in job switching rates among younger professionals. A recent 2016 LinkedIn study found that over the last 20 years the average number of organizations recent college grads worked for in their first 5 years has nearly doubled from 1.6 jobs for people who graduated between 1986 and 1990 to 2.9 jobs for graduates between 2006 and 2010. The National Bureau of Labor Statistics (NBLs) last month released data showing median tenure (in years) of Americans at their current employer between 2008 and 2018 was 4.5 years, and for educators the rate was similar at 4.3 years. This means that, on average, more than half of all teachers leave their school district within 5 years. The rate of job switching is even worse for college graduates earlier in their career. NBLs data finds that the average annual job attrition rate for recent college grads in their first 3 years post-graduation is 50%. Individuals with college degrees ages 25-34 have an annual job attrition rate of 36%. Clearly, switching jobs is common across all industries.

So what does that mean for the DC labor force and what teacher attrition rates might we expect given the age of the DC population?

We shouldn't portray this job-hopping as inevitable- it's not. According to Gallup's May 2016 study "Millennials: The Job-Hopping Generation," millennials are the most likely generation today to switch jobs. However, "it's possible that many millennials actually don't want to switch jobs, but their companies aren't giving them compelling reasons to stay," the report says. "

The data shows that teachers are leaving DC within five years at a much higher rate than other cities- it's not just a national trend.

DC's youthful workforce changes jobs often

DC has among the youngest labor forces of all major urban cities in America, and they change jobs often. Here is the proportional makeup of the DC working age population as of 2016 using American Community Survey [data](#) from the US Census Bureau:

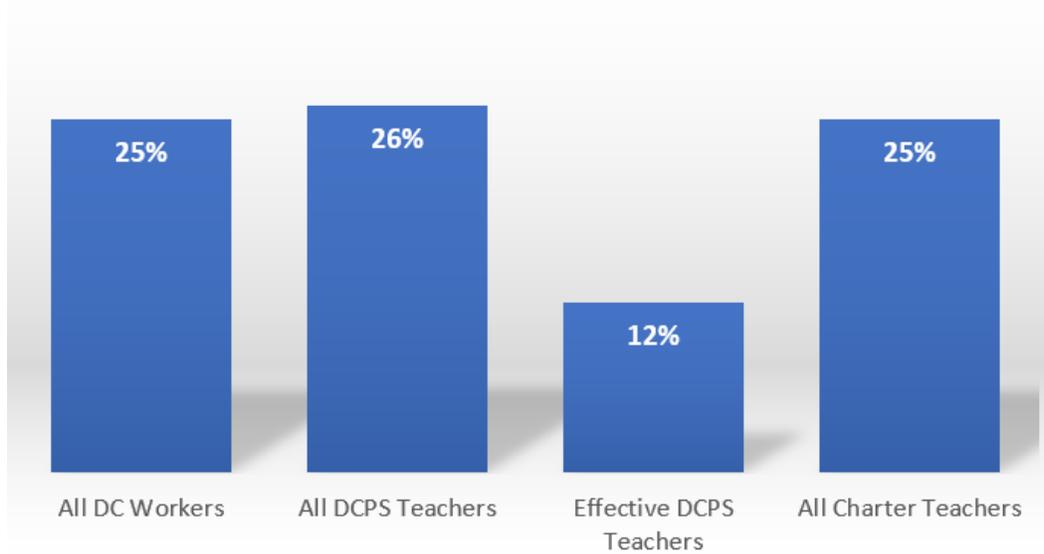
Subject	Washington city, District of Columbia					
	Total		Male		Female	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total population	659,009	*****	312,629	+/-148	346,380	+/-148
AGE						
Under 5 years	6.4%	+/-0.1	6.8%	+/-0.1	5.9%	+/-0.1
5 to 9 years	4.9%	+/-0.1	5.2%	+/-0.2	4.6%	+/-0.2
10 to 14 years	3.8%	+/-0.1	3.9%	+/-0.2	3.6%	+/-0.2
15 to 19 years	5.8%	+/-0.1	5.7%	+/-0.1	5.8%	+/-0.1
20 to 24 years	8.9%	+/-0.1	8.7%	+/-0.1	9.2%	+/-0.1
25 to 29 years	11.9%	+/-0.1	11.5%	+/-0.1	12.2%	+/-0.1
30 to 34 years	10.8%	+/-0.1	10.9%	+/-0.1	10.7%	+/-0.1
35 to 39 years	7.7%	+/-0.2	7.9%	+/-0.3	7.4%	+/-0.2
40 to 44 years	6.4%	+/-0.2	6.9%	+/-0.3	6.0%	+/-0.2
45 to 49 years	5.8%	+/-0.1	6.2%	+/-0.1	5.5%	+/-0.1
50 to 54 years	5.9%	+/-0.1	6.2%	+/-0.1	5.6%	+/-0.1
55 to 59 years	5.5%	+/-0.1	5.6%	+/-0.2	5.3%	+/-0.2
60 to 64 years	5.0%	+/-0.1	4.7%	+/-0.2	5.3%	+/-0.2
65 to 69 years	3.7%	+/-0.1	3.2%	+/-0.1	4.1%	+/-0.1
70 to 74 years	2.8%	+/-0.1	2.7%	+/-0.1	2.9%	+/-0.1
75 to 79 years	1.9%	+/-0.1	1.6%	+/-0.1	2.3%	+/-0.1
80 to 84 years	1.4%	+/-0.1	1.1%	+/-0.1	1.6%	+/-0.1
85 years and over	1.6%	+/-0.1	1.1%	+/-0.1	2.1%	+/-0.1

Almost 55% of our workforce is below the age of 40, the group most frequently changing jobs. Using information in the table above and data about job tenure for each of these age groups, we calculate that 25% of DC professionals are changing jobs each year. Comparatively, in the DC teacher attrition study Levy found the annual job attrition rate for all DCPS teachers was 26%, for effective DCPS teachers it was 12%, and for all public charter teachers it was 25%. **Our DC education sector attrition rates are in line with what we should expect given our labor force makeup and trends.**



Sure- if we're just as okay with teachers leaving their students as we are a data analyst switching jobs with another data analyst. Teaching is a different profession- as noted early in this report, attrition has many negative effects on children. When a non-profit loses a program officer and gains another- it doesn't have the same kind of negative affect on a population that desperately needs those relationships. We should be more concerned about teacher turnover than turnover in other fields- for the sake of our kids. That DC should expect turnover is no solace to children who lose mentors.

Annual Job Attrition Rate

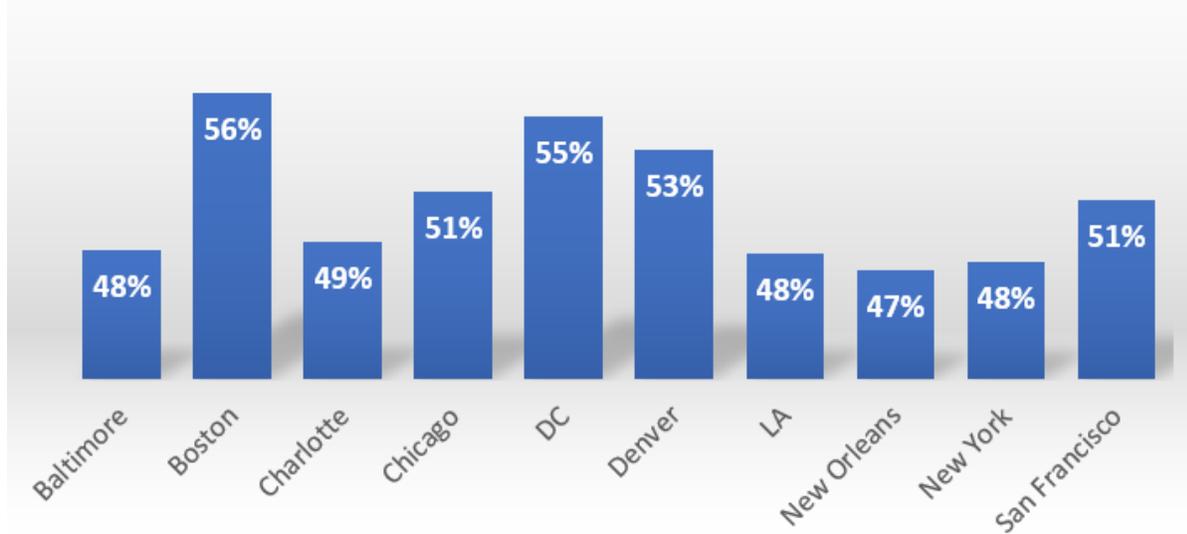


The good news for the city and our students is that the attrition rates for effective and highly effective teachers is much lower than what we should expect.

How does DC teacher attrition compare to similar urban cities?

Recall that the SBOE report referenced a comparison data point comprised of other *unnamed* urban districts. Without knowing which districts were included and whether they are actually similar to DC, we dug into the Census data to find other major US cities where at least 50% of the labor force is below the age of 40. Here is a sample of what we found:

Percent of Labor Force Under the Age of 40

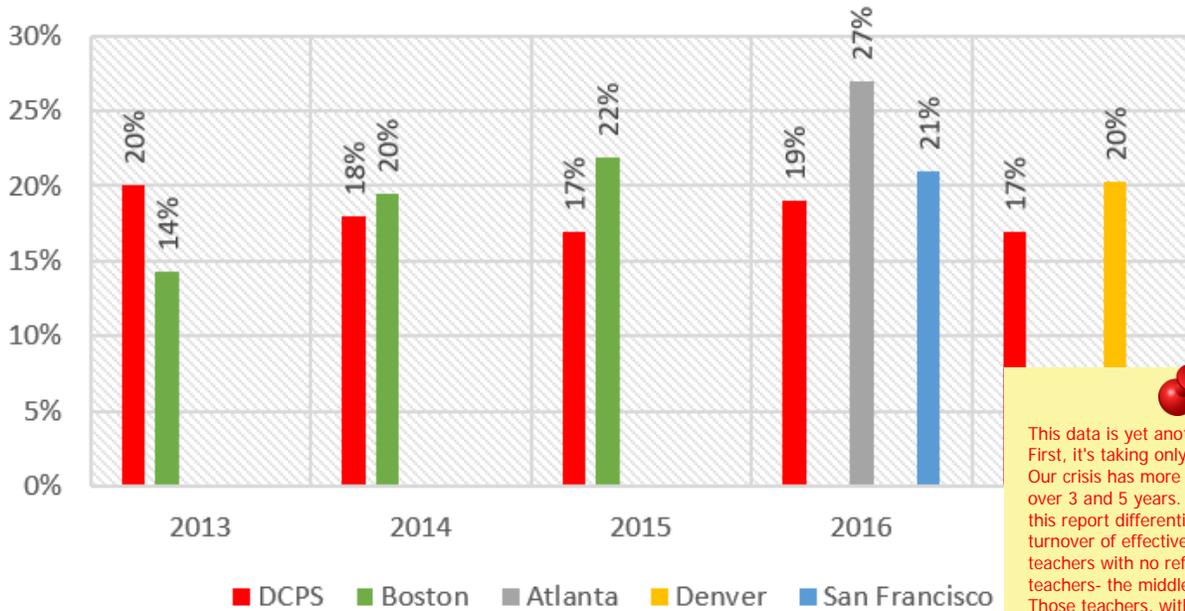


DC and [Boston](#) have among the youngest labor forces in the country. [Denver](#), [Chicago](#), and [San Francisco](#) also have more than 50% of their workers under the age of 40. Given that these jurisdictions have a similarly-aged population makeup, we searched for their teacher attrition data. **We found a couple district-level attrition rates for these comparable cities, which may put DC at a slight disadvantage comparison-wise since these cities only have one school district teachers can move around in.** Meanwhile, DC has 60+ school districts (DCPS and each public charter network is considered its own school district) that teachers can move between within the city. (Data sources for each city's rates are embedded in the links above.)

The results show DCPS's overall district-level teacher attrition rates are similar to or lower than other comparable urban areas.

We shouldn't ignore this point- having two nearly equally sized sectors in DC does mean more mobility among teachers- and can have negative effects for students and families.

District-Level Teacher Attrition Rates



This data is yet another selective look. First, it's taking only annual turnover. Our crisis has more to do with our loss over 3 and 5 years. Second, previously this report differentiated between turnover of effective and "ineffective" teachers with no reference to developing teachers- the middle IMPACT ranking. Those teachers, with support (and if the rating was an accurate reflection) will usually become effective or highly effective. That's critical bc investing in those teachers instead of turning them over for younger teachers would not only save \$, but yield better student results- per research on teacher experience. If the belief is "differential turnover" is what matters- we should look apples to apples at these other districts. Third, we're not looking at turnover at highest at-risk schools, which is MUCH higher than this 20 % number in DC schools- we need to compare that number to similar schools in these other districts.

What does teacher attrition look like at schools serving higher at-risk populations that are beating the odds, our BOLD schools?

Every year, EmpowerK12 honors schools serving high percentages of at-risk students with PARCC math and reading achievement considerably higher than expected for our [Bold Performance](#) award. The principals and teachers at these high-impact schools are great teams that likely have been together for a long time. Well, not so fast. Together, the Bold schools' average annual teacher attrition rates are 28%, slightly higher than the DC average of 25% but similar to the 27% rate for schools serving a higher at-risk population (>40% at-risk), according to the study.

Four of our 2018 Bold Performance high at-risk schools have actually closed the achievement gap. Their at-risk student proficiency rates exceed their higher-income peers across the city. Here are the schools and their annual teacher attrition rates as reported in the Levy study:

- Edgewood MS - 26%
- Heights ES - 21%
- Lead ES - 35%
- Promise ES - 19%

These BOLD schools closing the achievement gap with at-risk students caught up with Laura Maestas, CEO of DC Prep, at the University of PP DC, and asked for their perspective on teacher attrition and closing achievement gaps with a constantly transforming

Correlation, not causation, among a very random sample. Research does not support this pattern. DECADES of research on the topic shows a connection between higher turnover and lower student achievement. Even without the research (below), it's painfully obvious- how can a principal successfully implement a school plan with 1/4 to 1/3 of their staff turning over year to year or over 3 years? We're also dumping millions of PD dollars down the drain when we replace teachers- money that could be used for direct student services, more social workers, MORE teachers, more support.

http://blogs.edweek.org/edweek/teacher-beat/2012/03/when_teachers_leave_schools_ov.html

<http://www.ascd.org/publications/research-brief/v2n19/toc.aspx>

<https://thejournal.com/articles/2013/07/29/teacher-turnover-negatively-impacts-student-achievement-in-math-and-english.aspx>

This is the ultimate report to review- "Researchers and policymakers often assume that teacher turnover harms student achievement, though recent studies suggest this may not be the case. Using a unique identification strategy that employs school-by-grade level turnover and two classes of fixed-effects models, this study estimates the effects of teacher turnover on over 850,000 New York City fourth- and fifth-grade student observations over 8 years. The results indicate that students in grade levels with higher turnover score lower in both English language arts (ELA) and math and that these effects are particularly strong in schools with more low-performing and Black students. Moreover, the results suggest that there is a disruptive effect of turnover beyond changing the distribution in teacher quality."

https://www.jstor.org/stable/23319706?seq=1#page_scan_tab_contents

similar reactions around acknowledging who is in the DC professional talent pool and putting into place strong instructional leadership that stresses the importance of teamwork among teachers.

“We believe great teachers perfect their craft over time, so we’re always working to keep our teachers for a long time,” Maestas said. “But teaching is very intellectually, physically and emotionally demanding, and DC is an expensive city. So we select staff who believe deeply in our students, invest heavily in their professional growth, and work to build a sense of community within our schools. None of us can do this work alone!” Fansler had similar thoughts: "Any teacher who works at a high-performing school can tell you it is exceptionally rewarding, but also very demanding. At KIPP DC, we've made several important investments in recent years to retain our expert teachers and have built a talent management system that is prepared to handle turnover. Recruiting, developing, and retaining extraordinary talent is the key to all top-tier schools' success." We fully recommend our city's educational leadership spend time learning from KIPP and DC Prep's approaches to growing great teacher teams. They are demonstrating how much can be accomplished within the current DC workforce environment.

So does this all mean DC teacher retention is not really an issue or problem at all?

No. While the DC school-level attrition rates are in line with labor force expectations and district-level attrition rates on par/lower than urban school districts with similar labor forces, teacher retention is still an issue. If historical job patterns hold true, then the education sector is likely to face teacher shortages again soon as long as the economy continues to ride high.

It will be imperative for DCPS and the public charter schools to find creative ways to attract and retain an effective teacher corps. This includes growing more teachers in the "Developing" category into "Effective" teachers who are successful on teacher evaluation systems and want to stay longer. We recommend SBOE and the Cross-Sector Task Force continue to keep the issue on the list. Annual surveys of all District educators (see [Illinois](#), [UK](#) and [Tenn.](#) as examples), better citywide educator data tracking, and vigilance on this issue will help ensure the District one day has a great teacher in every classroom.

Quick discussion about limitations in the SBOE's study

The State Board's researcher, Mary Levy, did the best she could with the publicly available data at hand. However, the lack of quality state-level teacher identifiers may contribute to an overstatement of school level teacher attrition rates. The two factors listed below likely have an impact on the report's publicized rates to varying degrees ranging from very small to somewhat small at the district level, but taken altogether, they could add up to a considerable impact on reported rates at the school level.

1) *Enrollment decline* - using enrollment audit data and the report's published attrition rates, we find a statistically significant (p<0.01) correlation between enrollment changes and teacher attrition rates in DCPS. This makes sense, especially for schools with declining enrollment. For example, if a school had 80 2nd graders and 4 teachers last

We're attracting teachers- we need to be creative about retention!
On the recruitment side, we need to study more which pipelines are producing diverse teachers, and those likely to stay for a longer term

year and only 60 2nd graders enroll this year, then the school needs one less teacher. In the researcher's methodology, this would count towards the school's attrition rate. Data suggests enrollment changes may account for about 2% of the 26% annual school-level teacher attrition rates.

2) *Teacher name changes, retirement, health-related absences, and death* - the researcher used teacher rosters to count the teachers who appeared on a school's employed teacher list from one year to the next. This means that any teacher who changes their name, retires from the profession, has a health issue that removes them from the classroom for an extended amount of time, or passes away could count as teacher attrition. We expect each of these scenarios to comprise only a small portion of the overall attrition rate, but it is hard to tell how much it might add up to at the individual school level. Access to a more robust data set could help future research in this area.

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