

**Where Did They Go?  
Examining Teacher Career Pathways in Philadelphia County**

Ed Fuller, PhD  
Xinran Zhang, Research Assistant

**Introduction**

Research consistently shows that teacher turnover has a [negative effect](#) on student outcomes, school climate, and [teacher quality](#). Teacher attrition often results in inexperienced or under-qualified teachers being hired. The churn also disrupts the relationships among adults at the school and between teachers and students. Such relationships are necessary for a well-functioning school. Further, teacher attrition is [financially costly](#) to districts because of the direct costs associated with finding replacement teachers and the indirect costs of lower student outcomes.

This study examines teacher retention, teacher mobility, and teacher attrition in Philadelphia County. The study includes all charter schools in Philadelphia County as well as the Philadelphia School District.

The data analysis underlying this study was supported financially by Elevate 215 located in Philadelphia, Pennsylvania. All conclusions and recommendations reflect the views of authors and do not necessarily reflect the conclusions or recommendations of Elevate 215 or any of their employees. All errors are attributable to Dr. Fuller

**Methodology**

In this analysis, we examine teacher attrition from the teaching profession in Pennsylvania, teacher retention as a teacher in the same district, and teacher mobility to another district.

For our analyses, we started with all individuals employed as a teacher in any public school in Philadelphia County for the 2017-18 through 2021-22 school years. We then tracked employment over time for each group of individuals by sector—charter schools and Philadelphia School District (PSD). Charter schools connected by the same management were treated as one school district. We identified 13 charter organizations with at least two schools connected by the same management. These charter organizations included: American Paradigm, ASPIRA, Belmont, Esperanza, Franklin Towne, Friere, Global Leadership, Independence, KIPP, MAST, Mastery, String Theory, and Universal.

If a teacher was employed in any of the schools within the same organization, they were designated as being employed in that organization—just like teachers in any PSD school are considered to be employed in PSD.

We examine three outcomes—retention as a teacher in the same district, district mobility, and attrition from the teaching profession.

- **Outcome one** is retention in the same district. This is when a teacher is employed in District A in year 1 and is still employed as a teacher in District A in year 2.
- **Outcome two** is district mobility. This is when a teacher is employed in District A in year 1 and is employed as a teacher in District B in year 2. While District A had to be in Philadelphia County, District B could be any public school district or charter school in Pennsylvania.
- **Outcome three** is attrition. This is when an individual is employed as a teacher in any public school district or charter school in Pennsylvania in year 1 and not employed as a teacher in any public school district or charter school in Pennsylvania in year 2.

### **How to Read Graphs and Charts**

In most of the graphs and charts, we use one number to indicate the school year. This usually represents the year of the spring semester for a particular cohort of teachers. So, for example, 2021 identifies the teachers employed in the 2020-21 year. If we are examining attrition, then the number for the 2021 cohort would be the percentage of teachers who were employed in 2020-21 and who left the Pennsylvania teaching profession in the next year (2021-22)

### **Teacher Attrition**

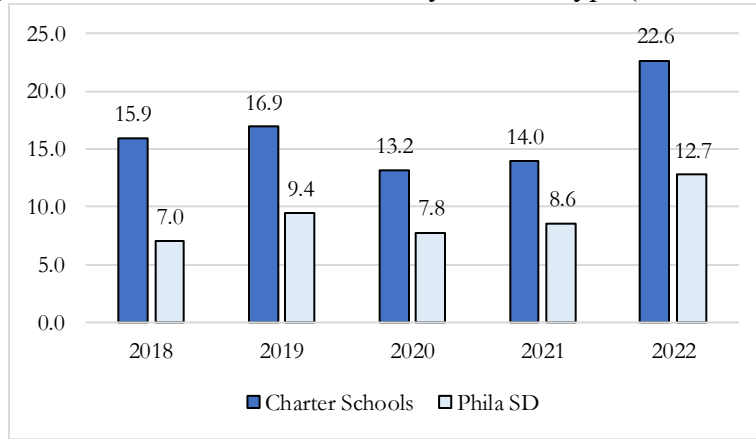
#### **Annual Attrition by Cohort**

Figure 1 below reveals some valuable information. First, both charter schools and PSD had large increases in attrition from the 2021 cohort to the 2022 cohort. In fact, the attrition rate for charter schools increased 8.6 percentage points while the rate for PSD increased 4.1 percentage points. There were the largest increases over the years included in the study.

Annual teacher attrition for charter schools was greater for charter school teachers than for PSD teachers for each year. For charter schools, the lowest attrition rate was 13.2% in 2020 while the greatest attrition rate was 22.6% for 2022. For PSD, the lowest attrition rate was 7.0% in 2018 while the highest attrition rate was

12.7% in 2022. Note that the highest teacher attrition for PDS (12.7%) was lower than the lowest teacher attrition rate (13.2%) for charter schools.

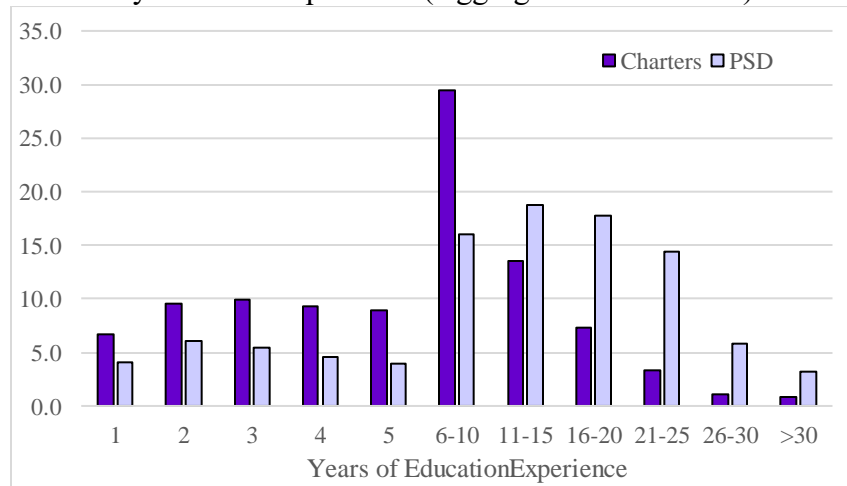
Figure 1: Annual Teacher Attrition by District Type (2018 to 2022)



The comparison between PDS and charter schools, however, is not necessarily an apples-to-apples comparison because of several factors. One factor is that charter schools employ a far greater percentage of less experienced teachers. Such teachers—especially those with three or fewer years of experience, are at much greater risk than their more experienced colleagues of leaving the teaching profession.

Figure 2 displays the distribution of teachers by years of experience for teachers in charter schools and PSD. Charter schools employed a much greater percentage of teachers with 10 or fewer years of experience than PSD. Specifically, the percentage of teachers with 10 or fewer years of experience was 73.8% in charter schools and 40.1% in PSD.

Figure 2: Distribution of All Teachers in Charter Schools and PSD by Years of Experience (Aggregate 2018 to 2022)



A second factor is that a charter organization has far fewer schools than PSD. Thus, a teacher leaving a charter school is far more likely to leave the charter “district” than when a PSD teacher leaves a school. A forthcoming study will examine school-level teacher attrition and turnover for PSD.

### **Annual Attrition by Cohort and Years of Experience**

Table 1 below provides the annual percentage of charter school teachers leaving the teaching profession from 2018 to 2022 based on their years of experience. Table 2 provides the same information for PSD teachers.

Consistent with the overall annual attrition rates shown in Figure 1, teacher attrition increased dramatically between the 2021 and 2022 cohorts for all years of experience and for both groups of teachers.

Across these five cohorts, the overall average attrition rate for charter school teachers was consistently greater than that of PSD teachers, except for those with over 30 years of experience. The differences were substantial for teachers with 2 to 29 years of experience.

For both groups of teachers, the highest attrition rates were for teachers with 1 to 5 years of experience. This is consistent with other research that shows teacher attrition is greater for the least and most experienced teachers. Indeed, retaining early career teachers is particularly challenging, especially in charter schools. This is particularly important because teacher effectiveness rapidly improves over the first five years of teaching experience and then continues to improve more slowly after that point in time. Thus, retaining early careers is an important strategy in improving teacher effectiveness and, hence, student outcomes. Further, teacher attrition is very expensive as teachers must be replaced and new teachers onboarded to a new school.

For charter schools, the greatest attrition rates were 20.1% for teachers with more than 30 years of experience and 19.7% for teachers in their first year of teaching. For PDS, the same was true—the highest rate of 20.4% was for teachers with more than 30 years of experience and the second highest rate of 18.1% was for beginning teachers

Note that the attrition rates for charter schools were fairly constant until teachers had more than 10 years of experience. Indeed, the attrition rate for teachers with between 6 and 10 years of experience was 16.0%—just 3.7 percentage points below beginning teachers. The attrition rate for PDS teachers, however, declined from 18.1% for beginning teachers to just 9.1% for teachers with five years of experience. This was a 50% decline in the attrition rate.

Table 1: Annual Percentage of Charter School Teachers Leaving the Teaching Profession by Years of Experience (2018 to 2022)

Yrs of Experience	Spring of School Year					Average
	2018	2019	2020	2021	2022	
1	19.2	20.8	18.0	15.0	25.7	19.7
2	17.1	19.0	17.7	16.5	29.5	19.5
3	19.1	20.8	11.8	20.1	26.8	19.7
4	17.2	17.6	12.9	17.0	25.6	17.8
5	15.2	16.2	13.7	13.5	26.1	17.0
6 to 10	15.2	16.7	12.0	13.0	22.6	16.0
11 to 15	13.9	14.7	12.2	10.6	18.5	14.1
16 to 20	9.3	11.7	10.5	10.9	18.4	12.4
21 to 25	15.4	11.3	9.0	9.7	12.6	11.4
26 to 30	17.1	10.8	12.8	9.3	18.0	13.7
> 30	21.4	22.2	16.7	17.1	23.3	20.1
Total	15.9	16.9	13.0	13.9	22.8	16.5

Table 1: Annual Percentage of Charter School Teachers Leaving the Teaching Profession by Years of Experience (2018 to 2022)

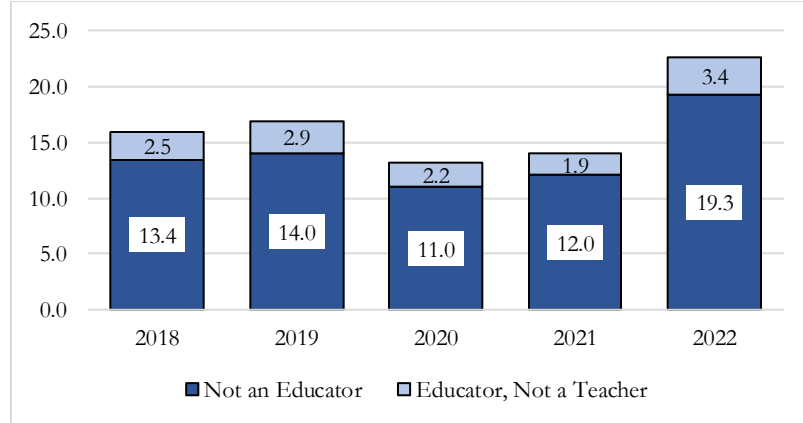
Yrs of Experience	Spring of School Year					Average
	2018	2019	2020	2021	2022	
1	17.5	19.1	15.1	15.1	23.6	18.1
2	12.0	13.6	12.6	13.5	25.3	15.2
3	7.3	13.1	9.7	11.5	21.5	13.2
4	5.4	9.5	6.9	9.9	17.8	10.3
5	5.4	8.4	4.6	9.1	14.9	9.1
6 to 10	6.0	6.6	5.4	6.2	10.8	7.1
11 to 15	4.7	7.1	5.1	5.7	9.0	6.3
16 to 20	5.6	6.2	5.7	7.1	9.4	6.7
21 to 25	6.0	9.2	6.8	7.2	8.0	7.5
26 to 30	9.8	12.8	13.5	9.9	9.1	10.9
> 30	22.5	19.0	18.9	21.1	20.9	20.4
Total	7.0	9.4	7.7	8.6	12.5	11.6

### Decomposition of Teacher Attrition

In this section, we decompose attrition into two forms: leaving the teaching profession in Pennsylvania (the individual was no longer employed as an educator in Pennsylvania) and leaving the teaching profession but remaining employed as an educator in a Pennsylvania school district.

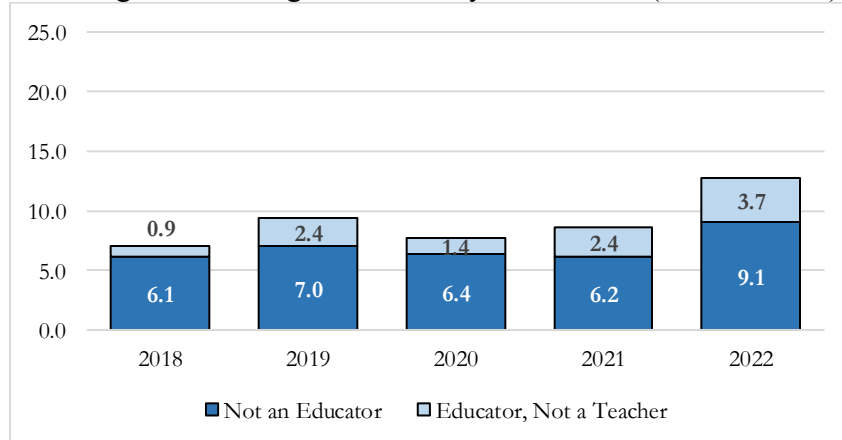
As shown in Figure 3, most charter school teachers leaving the profession were no longer employed in any capacity as an educator in a Pennsylvania school district. For example, for the 2018 cohort, 15.9% (13.4+2.5) of all charter school teachers left the teaching profession. But 13.4% left teaching altogether while only 2.5% left teaching to take a non-teaching job with a school district. The ratio of those completely leaving education to those taking non-teaching job within education remained about the same across cohorts.

Figure 3: Percentage of Charter School Teachers Leaving the Teaching Profession by Destination (2018 to 2022)



As shown in Figure 4, most PSD teachers leaving the teaching profession also left the education field altogether. For example, for the 2018 cohort, 7.0% (6.9 + 0.9) of teachers left teaching and of that 7.0%, 6.1% left teaching altogether. The ratio of those completely leaving education to those taking non-teaching job within education varied across years. For the 2018 cohort, about 14% of those leaving the teaching profession entered a non-teaching education job. For the 2022 cohort, that percentage was slightly more than 40%.

Figure 4: Percentage of Philadelphia School District Teachers Leaving the Teaching Profession by Destination (2018 to 2022)



### Five Year Teacher Attrition

In these analyses, we examine the percentage of individuals employed as teachers who left the teaching profession five years later for both the 2018 cohort (Figure 5) and the 2019 cohort (Figure 6).

For both cohorts, the highest attrition rates were for teachers with more than 30 years of experience. For the remaining teachers, there were higher attrition rates for teachers with fewer years of experience, particularly in the first few years of their careers.

As with all other analyses on attrition in this report, charter school teachers generally had greater attrition rates than their PSD peers. In fact, this was true for 9 of the 11 groups for the 2018 cohort and for 7 of the 11 groups in the 2019 cohort. Less experienced charter school teachers had greater rates of attrition compared to their PSD peers while very experienced PSD teachers had greater rates of attrition than their charter school peers.

Finally, PSD teacher attrition declined more rapidly over the first five years of experience than for charter school teachers. We examine this in greater detail in the next section of the report.

Figure 5: Percentage of Teachers Employed in 2018 No Longer Employed as a Teacher in 2022 by Sector and Years of Education Experience

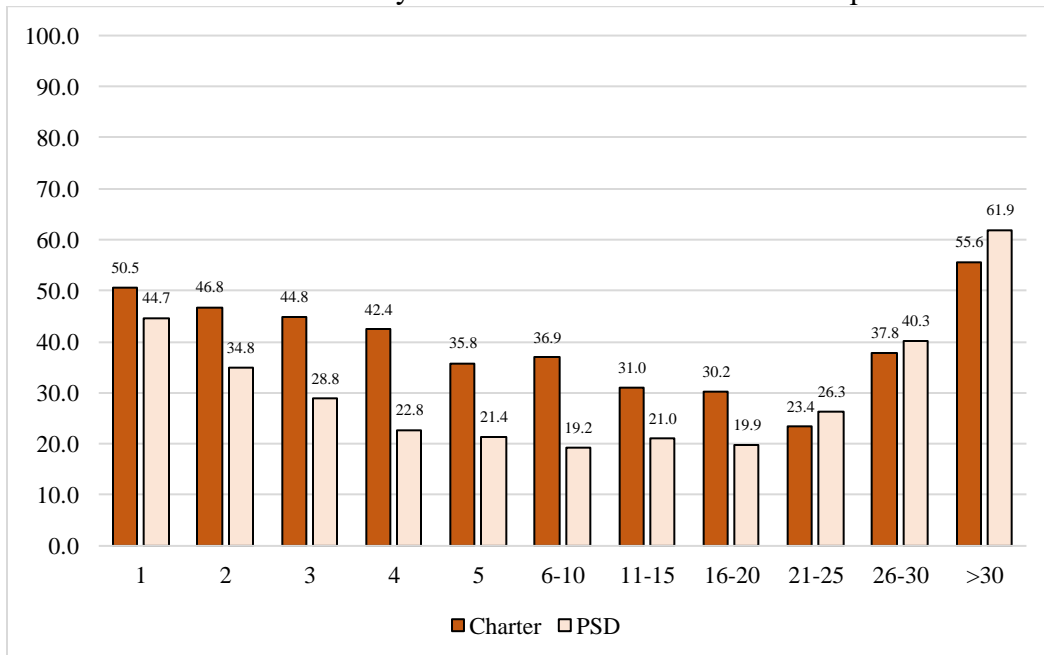
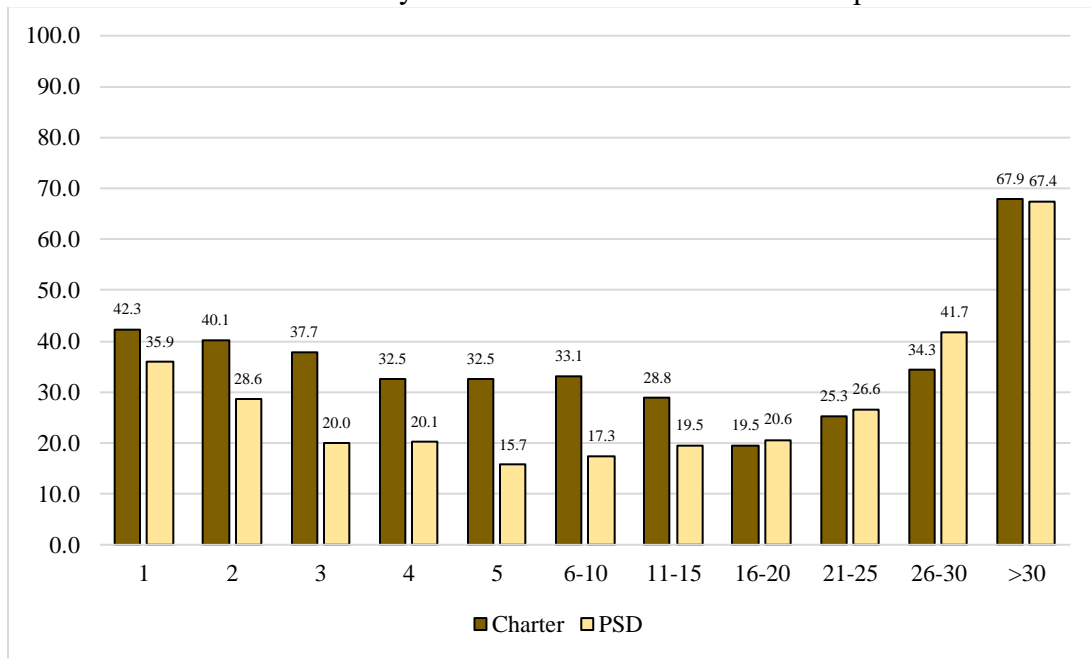


Figure 6: Percentage of Teachers Employed in 2019 No Longer Employed as a Teacher in 2023 by Sector and Years of Education Experience



### Five Year Retention Rates for Teachers for Inexperienced Teachers

In these analyses, we examine the five-year retention rates of inexperienced teacher—those with five or fewer years of experience. For year 1, the retention rate is 100% because this represents the initial year of employment.

Figure 7 displays the five-year retention trend for newly hired teachers in charter schools. There was an initial steep decline in the retention of teachers with nearly 20% of teachers with one or three years of experience leaving the teaching profession and about 15% of teachers with five years of experience left after the first year. For each subsequent year, a lower percentage of teachers left the teaching profession than the year before. For example, the attrition rate from year 2 to year 3 was about 10% for teachers with one and two years of experience and less than 9% for teachers with five years of experience. The attrition rates from Yr 4 (2021) to Yr 5 (2023) were the smallest—less than 7% for teachers with one year of experience and about 3% for teachers with five years of experience.

Overall, just 57.7% of beginning teachers in charter schools remained in the teaching profession after five years. For newly hired teachers with five years of experience, 67.5% remained in the teaching profession after five years. This is a substantial loss of teachers, but consistent with other research on charter school teachers.



Figure 7: Percentage of Charter School Teachers Employed in 2018  
Employed as Teachers through 2022

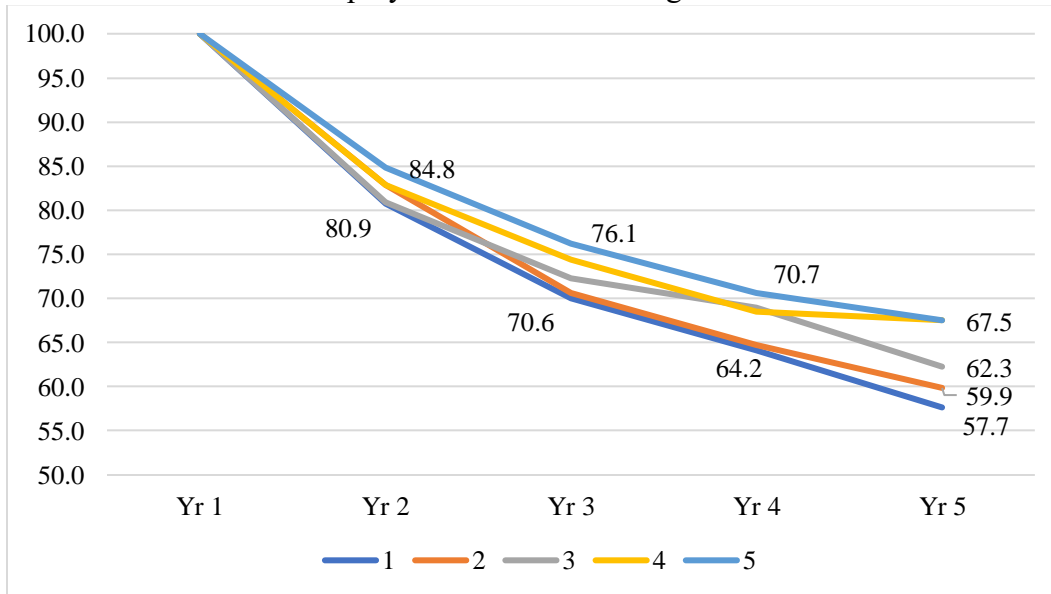


Figure 8 displays the same data for newly hired teachers in 2019 in charter schools. While the graph in Figure 87 looks like a typical analysis of teacher attrition over time, the graph in Figure 8 does not for beginning teachers. Typically, the attrition rate declines for each successive year. In this case, the initial attrition rate was 0.8%. The attrition rate for years 3, 4, and 5 were a constant 10%. This is highly unusual.

For each group of teachers (one through five years of experience), attrition rates accelerated in the last year. This, too, is unusual as attrition has typically declined substantially by this point. In fact, the attrition rates for year 4 to 5 was 10% for beginning teachers and around 12% or 13% for the other teachers.

Overall, less than 50% of beginning teachers in charter schools remained in the teaching profession in year 5. This is substantially lower than the five-year retention rate for all teachers and even for charter school teachers. Only 64.2% of newly hired teachers with five years of experience remained in the teaching profession after five years. Again, this is substantially lower than what we would expect based on research on this topic. Typically, teacher attrition declines with each successive year, but this was not the case from Yr 4 (2022) to Yr 5 (2023). In fact, the retention rate declined/attrition rate increased as shown by the steeper slope of the lines from Yr 4 (2022) to Yr 5 (2023).

Figure 8: Percentage of Charter School Teachers Employed in 2019  
Employed as Teachers through 2023

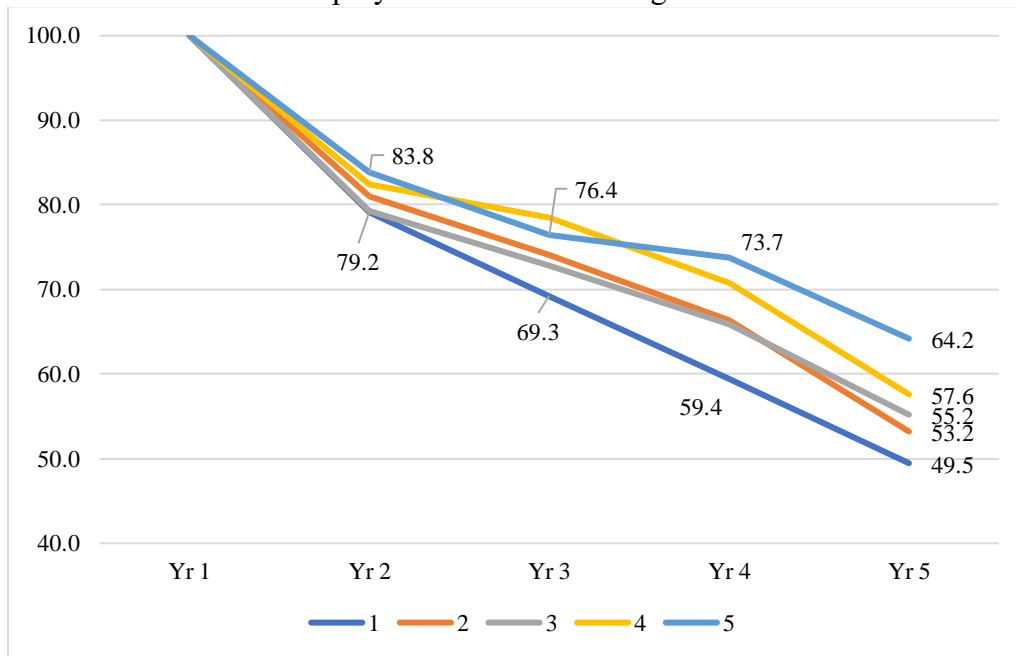


Figure 9 displays the five-year retention trend for newly hired teachers in PSD. The rates of attrition differed much more for PSD teachers than for charter school teachers. Only 82.5% of beginning teachers remained in the profession after one year while 94.6% of teachers with five years of experience remained in the profession after 5 years. As with charter schools, the rates of attrition declined for each year. While the initial attrition rate for beginning teachers was 17.5%, the attrition rate for year 5 was only 2.9%. The attrition rates were even lower for teachers with five years of experience and fairly consistent for each year. Indeed, the attrition rate for each year was between 3% and 5%.

Overall, 64.1% of beginning teachers in PDS remained in the teaching profession after five years. For newly hired teachers with five years of experience, 84.3% remained in the teaching profession after five years. These attrition rates are consistent with other research on urban district teacher attrition.

Figure 9: Percentage of PSD Teachers Employed in 2018  
Employed as Teachers through 2022

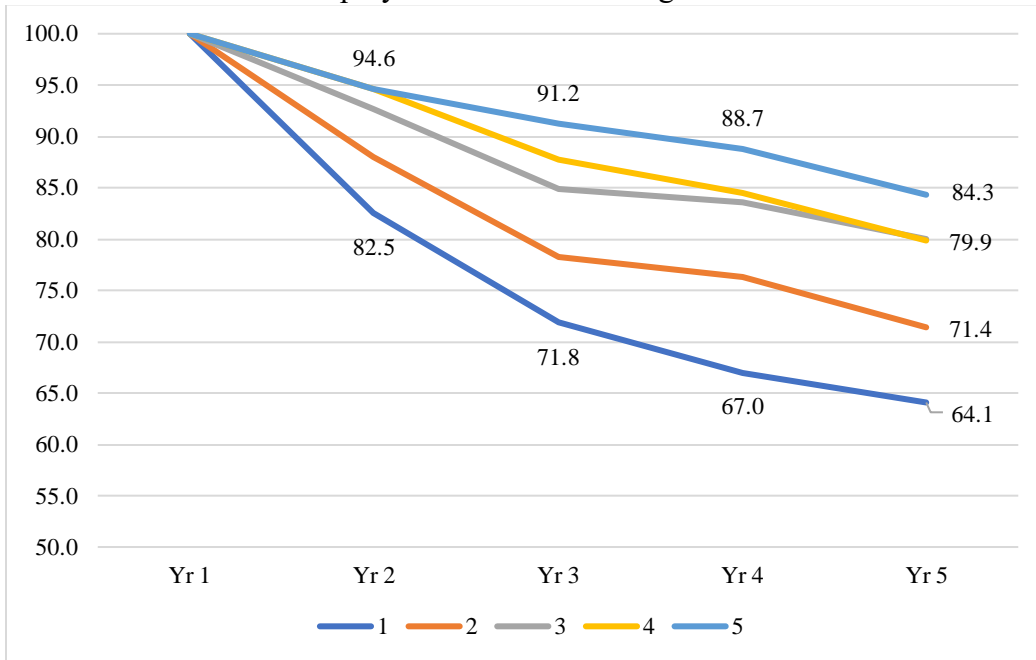
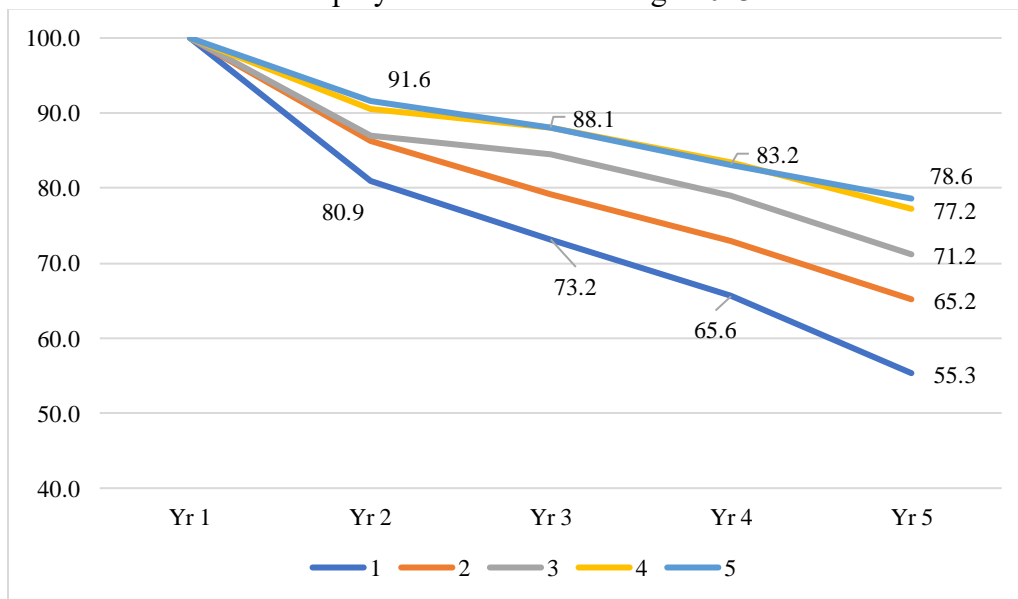


Figure 10 displays the attrition rates over five years for PSD teachers for the cohort of newly hired teachers in 2019. All the retention rates were lower than the corresponding retention rates for the 2018 cohort for all five groups of teachers. Moreover, the declines in retention were much steeper, especially from Yr 3 (2021) to Yr 4 (2022) and Yr 4 (2022) to Yr 5 (2023)

Figure 10: Percentage of PSD Teachers Employed in 2019  
Employed as Teachers through 2023



## Comparison Between Charter Schools and PSD

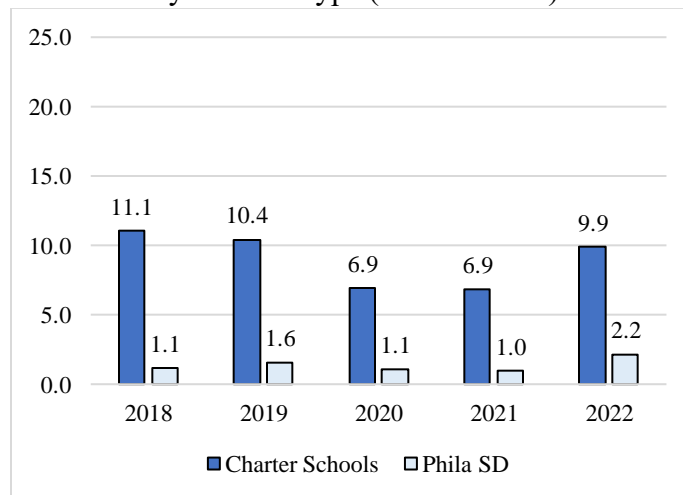
These graphs lay bare the dramatic disparities in retention/attrition rates of newly hired teachers with less than five years of experience between the two sectors. While both PSD and charter schools have low levels of retention / high levels of attrition for these groups of teachers, the attrition rates for charters schools are substantially greater for charter schools than for PSD. Across both the 2018 and 2019 cohorts of teachers with five or fewer years of experience, 40.3% of charter school teachers left the teaching profession compared to 28.6% for PSD teachers. If charter school teachers had the same attrition rate as PSD teachers, about 436 more teachers from these cohorts would have remained in the profession.

### District Mobility

In this section, we examine the district mobility rates for charter schools in Philadelphia County and the Philadelphia School District. A teacher is designated a “mover” if she was employed in District/Charter A in year 1 and was then employed as a teacher in District/Charter B in year 2.

As shown in Figure 11, the percentage of teachers moving to another district was substantially greater for charter schools than for PSD). The percentage of charter school teachers moving to a new district ranged from 6.9% to 11.1% and averaged about 9% across the five years. In contrast, the percentage of PSD teachers moving to another district ranged from 1.0% to 2.2% and averaged about 1.4%.

Figure 11: Percentage of Teachers Moving from Original District to a Teaching Position in Another District in Pennsylvania by District Type (2018 to 2022)



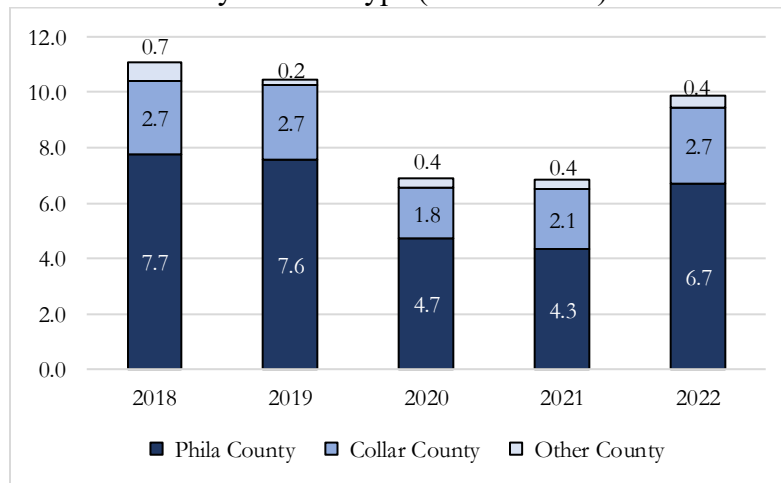
## Decomposition of District Mobility

In this section, we decompose teacher mobility by the destination counties of teachers leaving Philadelphia charter schools or the Philadelphia School District. We decompose the locations of the destinations of teachers into three groups: districts or charters schools located in Philadelphia County, districts or charters schools located in the collar counties adjacent to Philadelphia County, and other counties.

### Charter Schools

As shown in Figure 12, most charter school teachers who moved to another district became employed in another district located in Philadelphia County. A much smaller percentage moved to another district in one of the collar counties while very few teachers moved to a county outside of the Philadelphia metro area.

Figure 12: Destination County of Philadelphia County Charter School Teachers Moving to Another District by District Type (2018 to 2022)

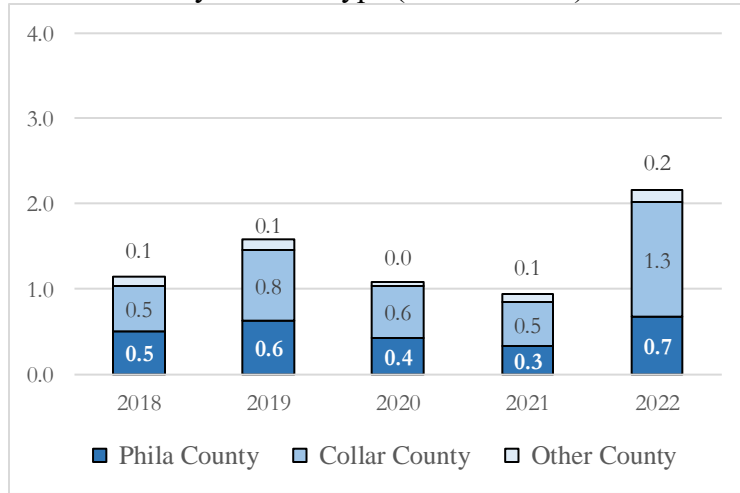


### Philadelphia School District

As shown in Figure 13, few teachers moved from PSD to other districts or charter schools, regardless of the location of the district or charter school. For the 2018 cohort, only 1.1% of all teachers from PSD moved to another teaching positions in any other district or charter school. For the 2022 cohort, 2.2% of all teachers moved to another district or charter. While this was twice the percentage for the 2018 cohort, this is still an extremely small percentage of teachers. Thus, PSD does not lose a substantial number of teachers to employment as a teacher in another district or charter school.

Of those who did move to another district or charter school, a slightly greater percentage of the teachers moved to districts or charter schools in collar counties. However, this represents a very small number and percentage of teachers.

Figure 13: Destination County of Philadelphia School District Teachers Moving to Another District by District Type (2018 to 2022)



### Comparison of Charter Schools to Philadelphia School District

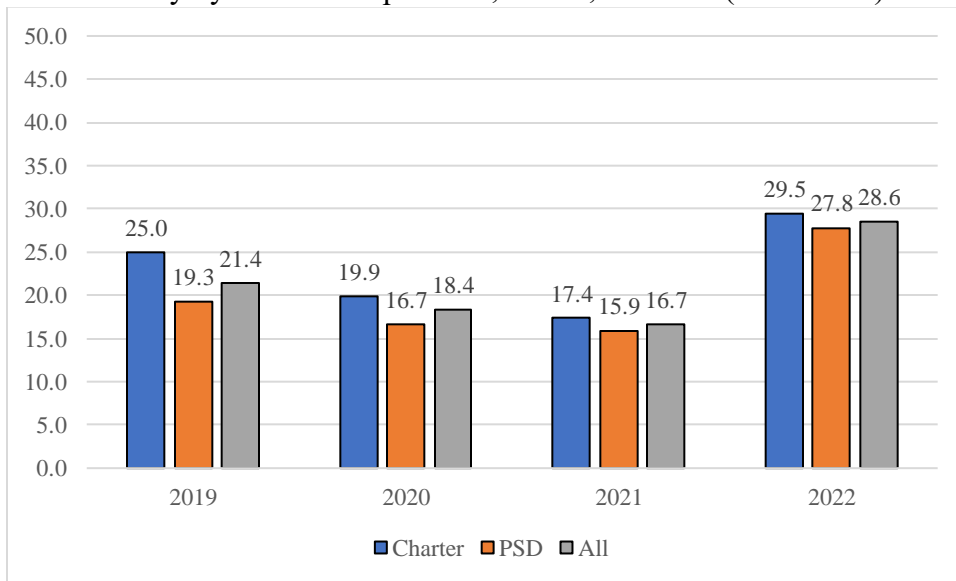
There are obvious differences between charter schools and PSD. First, a substantially greater percentage of charter school teachers moved to another district or charter school, regardless of where the district or charter school was located. In fact, the percentage of charter school teachers who moved to another district or charter school was at least five times greater than the percentage for PSD.

### **Labor Market Effects from Loss of Newly Hired Novice Teachers**

In this analysis, we examine the number and percentage of newly hired novice teachers in Philadelphia County who remain employed as a teacher in Philadelphia. A novice teacher is defined as a teacher in their first-, second-, or third year of teaching. A newly hired teacher is defined as either (a) a teacher who was either not teaching in Year 1 and was then hired by either a charter school in Philadelphia County or the Philadelphia School District in Year 2, or (b) a teacher who was employed in a Philadelphia charter school or Philadelphia School District in Year 2 who was not employed in the same Philadelphia charter school or the Philadelphia School District as a teacher in Year 1.

As shown in Figure 14, the percentage of newly hired novice teachers leaving the teaching profession in Philadelphia County ranged from a low of 16.7% for the 2021 cohort to a high of 28.6% for the 2022 cohort. The rate for the 2019 cohort was very high and the rate for the 2022 cohort was extraordinarily high—nearly 1 in 3 teachers left teaching in Philadelphia County. Across all years, the Philadelphia County newly hired novice teacher attrition was greater for charter school teachers than for PSD teachers. The greatest difference was for the 2019 cohort for which the charter newly hired novice teacher attrition rate was 25.0% and the PSD newly hired novice teacher attrition rate was 19.3%. The smallest difference was for the 2022 cohort for which charter school newly hired novice teachers had an attrition rate of 29.5% and the PSD newly hired novice teachers had an attrition rate of 27.8%.

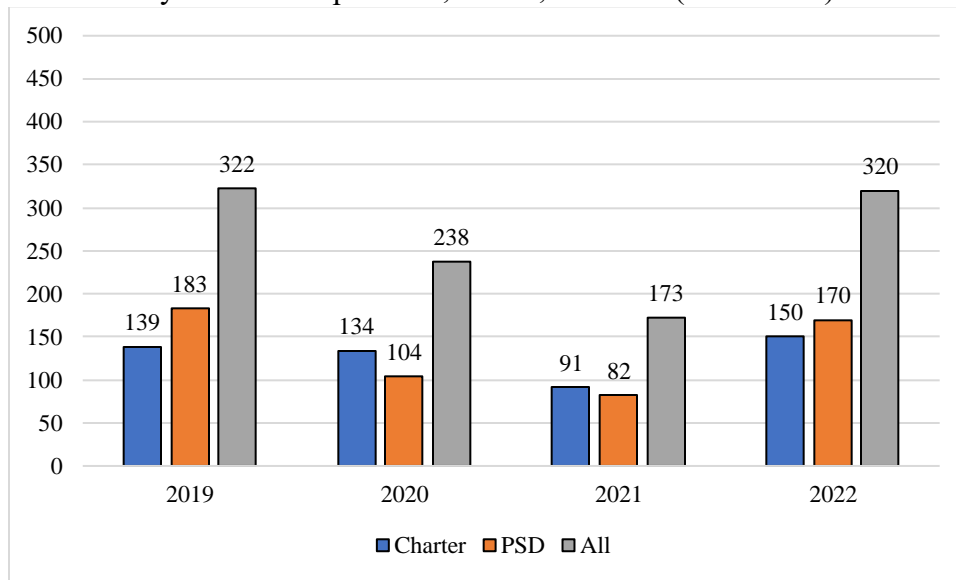
Table 14: Percentage of Novice Teachers Leaving Teaching in Philadelphia County by Years of Experience, Sector, and Year (2019-2022)



As shown in Figure 15, the number of teachers leaving the teaching profession in Philadelphia County ranged from a low of 173 for the 2021 cohort to highs of 322 and 320 for the 2019 and 2022 cohorts. For two of the years, a greater number of charter school teachers left teaching in the county (2021 and 2022) while a greater number of PSD teachers left teaching in the county.

The numbers for each cohort and additional information are included in the appendix.

Table 15: Number of Novice Teachers Leaving Teaching in Philadelphia County by Years of Experience, Sector, and Year (2019-2022)



### Data for Individual Charter Schools

In this section, we review the distribution of charter schools for three outcomes: (1) annual percentage of teachers remaining in the same school, (2) annual percentage of teachers moving to another district, and (3) annual percentage of teachers quitting the teaching profession.

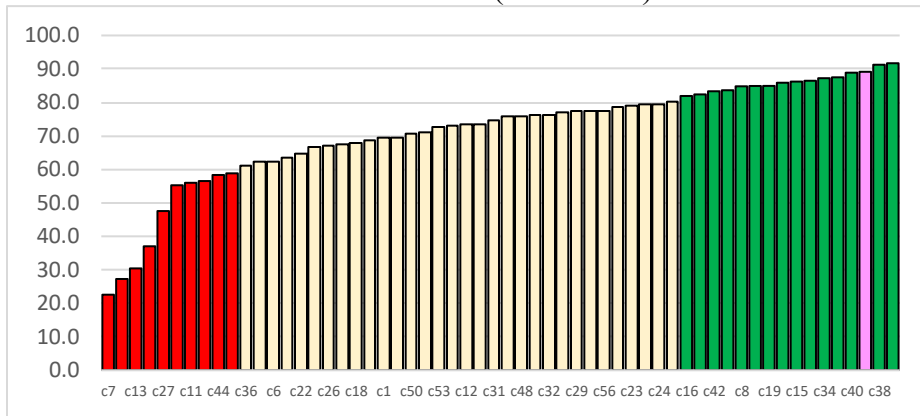
### Teacher Retention in District

Figure 16 displays the annual percentage of teachers remaining in the same district for every charter school and for PSD across the five cohorts (2018-2022). The red shading identifies charter schools that retained less than 60% of their teachers. Green shading identifies charter schools that retained greater than 80% of their teachers. PSD is identified with pink shading.

Eleven charter schools, which was 19.0% of all charter schools in this analysis, retained fewer than 60% of their teachers. This is an extremely low percentage and suggests dysfunction in the organization and leadership of the school as well as a negative effect on student outcomes. Alternatively, 17 of the charter schools—which was 29.3% of charter schools—retained at least 80% of their teachers each year.



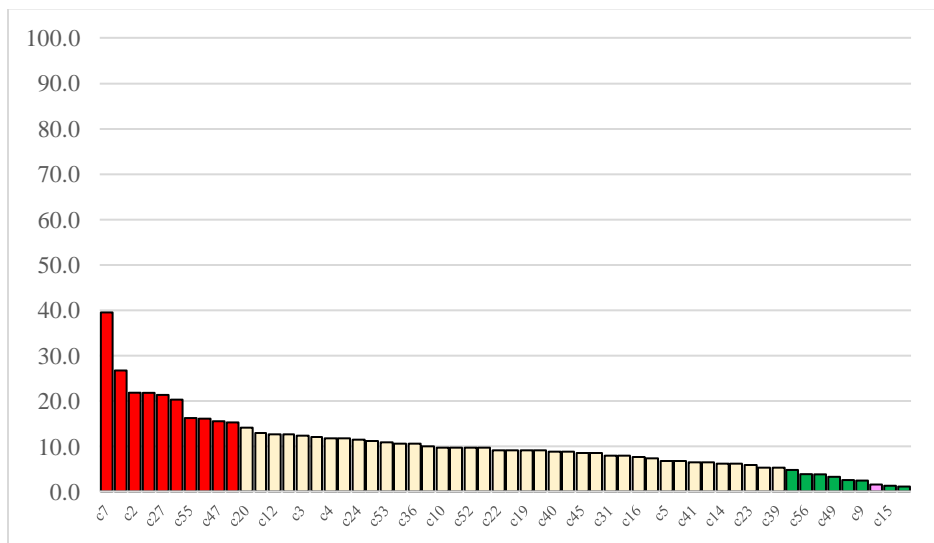
Figure 16: Annual Percentage of Teachers Retained in the Same Charter School/District for all Philadelphia County Charter Schools and Philadelphia School District (2018-2022)



### Teacher Mobility

Figure 17 presents the annual percentage of teachers moving from a charter school or the Philadelphia School District to another charter school or school district from 2018 to 2022. The data shows that 17.2% of charter schools experienced a teacher mobility rate of greater than or equal to 15%. In contrast, 15.5% of charter schools had a lower mobility rate, below or equal to 5%. This indicates a significant level of teacher mobility across Philadelphia County charter schools for a substantial percentage of schools.

Figure 17: Annual Percentage of Teachers Retained in the Same Charter School/District for all Philadelphia County Charter Schools and Philadelphia School District (2018-2022)



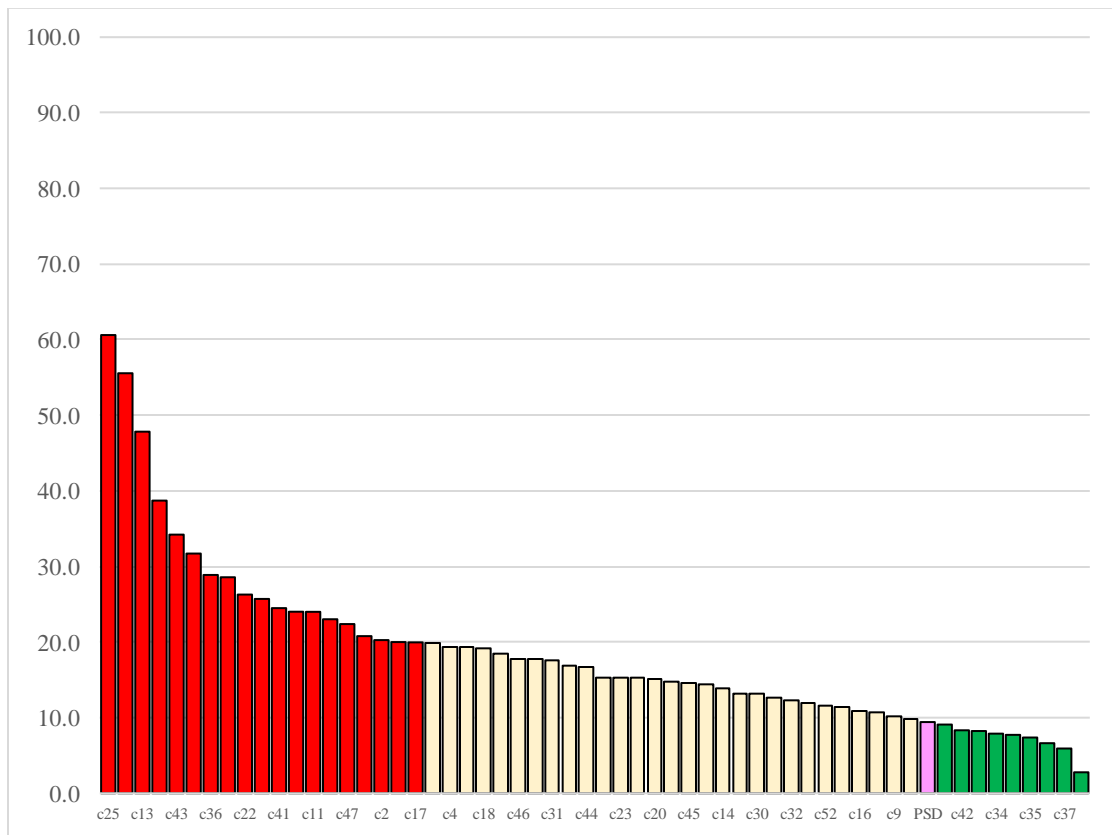
## Teacher Attrition

Figure 18 presents the annual percentage of teachers leaving the teaching profession for all Philadelphia County charter schools and the Philadelphia School District from 2018 to 2022. The figure provides a visual representation of teacher attrition rates across different schools and districts.

Nineteen charter schools, which was 32.8% of all charter schools in this analysis, had an annual percentage of teachers leaving the teaching profession that was greater than or equal to 20.0%. This is an extraordinarily high rate of attrition and typically indicates a school in distress and which is not meeting the needs of students. Organizations losing more than one out of every five employees are almost never successful organizations.

In addition, 15.5% of the schools had an annual percentage of teachers leaving the teaching profession was less than or equal to 10.0%. The data indicates a very wide variation in the percentage of teachers retained in the teaching profession.

Figure 18: Annual Percentage of Teachers Leaving the Teaching Profession for all Philadelphia County Charter Schools and Philadelphia School District (2018-2022)



## Conclusion

Both charter schools and PSD schools have relatively high attrition rates, especially for teachers with five or fewer years of experience. Both sectors lost a substantial percentage of teachers from the profession. This dramatic loss of teachers has some serious consequences for K-12 students, teachers, the charter schools and school district, the local labor market, and the state.

Researchers have consistently found that teacher turnover has a negative effect on achievement and other schooling outcomes. Consistent teacher attrition—such as the attrition we see in Philadelphia County—also has negative effects on the qualifications of teachers left in the profession. Moreover, teacher attrition—especially when teachers leave mid-year—often requires the remaining teachers to cover classes and assist any new teacher that the school finds to replace the teacher who left. High teacher attrition also tends to have a negative effect on teacher collaboration and the overall climate of the school.

From a district or charter school, teacher attrition is costly to the district. For urban schools like those in Philadelphia County, the Learning Policy Institute estimates a cost of nearly \$27,000 to replace *each teacher*.

The high attrition in Philadelphia County also impacts the broader Philadelphia Labor Market. The number of teachers leaving the profession in Philadelphia County exceeds the number of newly prepared teachers by local teacher preparation programs. Thus, PSD and charter schools must recruit from the reserve pool of teachers, recruit teachers from another state, or hire teachers who are not certified.

Finally, the Philadelphia metro area accounts for a disproportionate number of teachers and teacher attrition in Pennsylvania. The number of teachers in the metro area is roughly 20% of all the teachers in the state, but teacher attrition in the area accounts for 30% of all the teacher attrition in the state. Reducing teacher turnover in Philadelphia County could significantly reduce the teacher shortage in Pennsylvania.

### Suggested Citation

Fuller, E.J. & Zhang, X. (2024, January). **Where did They go? Examining Teacher Career Pathways in Philadelphia County**. University Park, PA. Center for Education Evaluation and Policy Analysis, Penn State College of Education.

Dr. Ed Fuller is a Professor in the Department of Education Leadership and Policy in the College of Education at Penn State University. His email address is [ejf20@psu.edu](mailto:ejf20@psu.edu)

Ms. Xinran Zhang is a recent honors graduate of Penn State's undergraduate Education and Public Policy (EPP) Program. She currently serves as a research associate with CEEPA.

### The Center for Evaluation and Education Policy Analysis

This brief is part of the CEEPA Research and Policy Brief Series that provides evidence-based, peer-reviewed analysis of important educational issues in Pennsylvania and across the Commonwealth.