

Teachers in the School District of Philadelphia:
Tables on Teacher Retention and the Distribution of Teachers’
Certification Levels and Experience in the District by School
Type, Poverty Level, and
School Racial Composition

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Teachers in the School District of Philadelphia: Tables on Teacher Retention and the Distribution of Teachers' Certification Levels and Years of Experience in Philadelphia by School Type, Poverty Level, and School Racial Composition

Summary of Findings

Analysis of a complete data set of teachers employed in the School District of Philadelphia over a three-year period (1999-00 to October 2002) revealed high levels of teacher turnover and inequities in the distribution of teachers' experience and certification levels across types of schools. Key findings include:

Retention:

- 76 percent of the teachers who were employed in Philadelphia public schools in 1999-00 were still teaching in the District three years later.
- 60 percent of the teachers in this same three-year period were still teaching in the same school. Retention rates were lowest at middle schools (55 percent).
- New teachers had lower retention rates than teachers as a whole: only 52 percent of teachers who were new to the system in 1999-00 were still in the District three years later. Even fewer, 37 percent, remained in the same school.
- Teacher retention is lowest at high-poverty schools. Just over two-fifths of the teachers in the highest-poverty K-8 and middle schools (more than 90 percent poverty), for example, remain in those schools over a three-year period.
- Schools assigned to for-profit Education Management Organizations had the highest one-year turnover rates (between 2001-02 and 2002-03) among the schools 70 low-performing "takeover" schools.

Years of Experience in Philadelphia:

- Teachers average about 14 years of experience in the District. High-poverty schools have teachers with the lowest number of years of experience in Philadelphia. Almost half of all teachers in the highest-poverty schools have between zero and five years of experience.

Certification:

- The percentage of fully certified teachers dropped from 92 percent in 1999-00 to 84 percent in 2002-03.
- The percentage of certified teachers was lowest in schools with high rates of poverty and a high percentage of minority students. A quarter of the teachers in middle schools where more than 90 percent of the students are minorities were not certified in 2002-03.

Teacher Retention at the School Level, 1999-00 to 2002-03

Table 1. Across the School District of Philadelphia, 60 percent of the teachers who were employed in schools in 1999-00 were still teaching in those schools three years later. Middle schools had the highest turnover while K-8 and high schools had the lowest. Note that these figures are school retention rates and not rates of teacher retention in the system.

Table 1. One, Two, and Three-Year Teacher Retention Rates by School Type

School Type	N	1999-00	99-00 to 00-01	99-00 to 01-02	99-00 to 02-03
K to 8	1813	100%	84%	76%	64%
Elementary	5094	100%	82%	72%	60%
Middle	2288	100%	79%	71%	55%
High School	3183	100%	85%	77%	64%
Other	447	100%	81%	72%	60%
Missing	350	100%	84%	71%	46%
Total*	13175	100%	83%	74%	60%

*The total includes 853 Literacy interns in 2002-03. Literacy Interns are emergency-certified teachers who share a classroom with a veteran teacher and who are enrolled in an alternative certification program. They are included in the tables on retention (Tables 1-7) because a primary goal of the program is to keep the interns in the same schools for multiple years.

Table 2. Schools that were identified as “low performing” that became subject to the management of outside organizations or “restructured” by the District itself experienced larger-than-normal turnover rates during the Fall of 2002. Schools assigned to for-profit Education Management Organizations (EMOs)--Victory, Universal, and Edison--experienced the highest rates of teacher turnover.

Table 2. One-Year Teacher Retention Rates of Current “Takeover” Schools, 99-00 to 02-03

Manager/Partner	N	1999-00	99-00 to 00-01	00-01 to 01-02	01-02 to 02-03	change from previous year
Edison	914	100%	84%	81%	60%	-21%
Charter	211	100%	83%	83%	53%	-30%
Chancellor Beacon	304	100%	77%	83%	69%	-14%
Victory	233	100%	73%	83%	60%	-23%
Temple	187	100%	79%	83%	72%	-11%
Universal	68	100%	69%	86%	64%	-22%
Penn	124	100%	81%	85%	77%	-8%
Restructured	915	100%	81%	84%	73%	-11%
Foundations	177	100%	74%	88%	73%	-15%
Total	3133	100%	79%	83%	66%	-17%

Table 3. Teacher retention is lowest at high-poverty schools. Nearly half of all teachers located at the highest-poverty schools during the 1999-00 school year left the school by the fall of 2002.

Table 3: One, Two, and Three-Year Teacher Retention Rates by School Poverty Level

Poverty Level of School	N	1999-00	99-00 to 00-01	99-00 to 01-02	99-00 to 02-03
0% to 80% poverty	6315	100%	85%	77%	66%
80% to 90% poverty	4570	100%	81%	71%	57%
90% + poverty	1996	100%	78%	67%	51%
Missing	294	100%	83%	71%	50%
Total	13175	100%	83%	74%	60%

Teacher Retention at the District Level, 1999-00 to 2002-03

Across the School District of Philadelphia, 76 percent of the teachers who were employed in schools in 1999-00 were still teaching in the District three years later. Differences among school types were not large when looking at retention in the system (versus retention in a school). This figure is a good bit higher than the overall school retention rate of 60 percent reported in Table 1.

Retention rates among new teachers are lower than among teachers as a whole: only 52 percent were still in the District after three years and only 37 percent remained in the school to which they were originally assigned.

Table 4. One, Two, and Three-Year Teacher Retention Rates in the District by School Type

School Type	N	1999-00	99-00 to 00-01	99-00 to 01-02	99-00 to 02-03
K to 8	1813	100%	91%	85%	78%
Elementary	5094	100%	91%	83%	76%
Middle	2288	100%	89%	83%	75%
High School	3183	100%	91%	84%	75%
Other	447	100%	93%	86%	78%
Missing	350	100%	94%	88%	73%
New Teachers	1264	100%	75%	62%	52%
New Teachers (same school)	1264	100%	64%	50%	37%
Total*	13175	100%	91%	84%	76%

*includes Literacy Interns since retention is a key goal of the program.

Teacher Retention by School Type and Poverty Level

Tables 5-8. Among highest-poverty schools, high schools had the highest teacher retention rates. K-8 and middle schools had the lowest rates: only 42-43 percent of teachers stayed for three years in those schools. K-8 and middle schools also had the biggest gaps in retention between the lowest and highest-poverty schools.

Table 5: K-8 Schools: One, Two, and Three-Year Teacher Retention Rates by School Poverty Level

K to 8 schools	N	1999-00	99-00 to 00-01	99-00 to 01-02	99-00 to 02-03
0% to 80% poverty	1302	100%	85%	78%	69%
80% to 90% poverty	465	100%	80%	71%	55%
90% + poverty	46	100%	74%	59%	43%
Total	1813	100%	84%	76%	64%

Table 6. Elementary Schools: One, Two, and Three-Year Teacher Retention Rates by School Poverty Level

Elementary Schools	N	1999-00	99-00 to 00-01	99-00 to 01-02	99-00 to 02-03
0% to 80% poverty	1516	100%	85%	78%	67%
80% to 90% poverty	1911	100%	82%	72%	60%
90% + poverty	1666	100%	79%	68%	53%
Missing	1	100%	0%	0%	0%
Total	5094	100%	82%	72%	60%

Table 7: Middle Schools: One, Two, and Three-Year Teacher Retention Rates by School Poverty Level

Middle Schools	N	1999-00	99-00 to 00-01	99-00 to 01-02	99-00 to 02-03
0% to 80% poverty	833	100%	82%	75%	65%
80% to 90% poverty	1171	100%	78%	69%	51%
90% + poverty	284	100%	74%	66%	42%
Total	2288	100%	79%	71%	55%

Table 8: High Schools: One, Two, and Three-Year Teacher Retention Rates by School Poverty Level

High Schools	N	1999-00	99-00 to 00-01	99-00 to 01-02	99-00 to 02-03
0% to 80% poverty	2292	100%	86%	78%	65%
80% to 90% poverty	801	100%	84%	74%	62%
Missing	90	100%	80%	71%	59%
Total	3183	100%	85%	77%	64%

Years of Teaching Experience in the District by School Type and Poverty Level: 2002-03

Tables 9-10. The number of teachers in the District has declined since 1999 by about 4%, while the average experience of teachers has increased slightly.

Table 9: Total Teachers in District

	N	Change	% Change
1999-00	13175		
2000-01	13449	+ 274	+ 2.1%
2001-02	13757	+ 308	+ 2.3%
2002-03	13197*	- 560	- 4.1%

*includes Literacy Interns

Table 10: Average Experience of Teachers in District

School Year	Avg. Experience (yrs)
1999-00	13.36
2000-01	13.54
2001-02	13.97
2002-03	13.85

Table 11: Middle schools have the highest percentage of new teachers, while high schools have the greatest number of teachers with 20 or more years of experience.

Table 11: Teacher Experience by School Type: 2002-03

School Type	N	Avg. yrs of exp.	Percent of Teachers by Years of Experience in the District					
			New	1-5 yrs	6-10 yrs	11-20 yrs	21-30 yrs	30+ yrs
K-8	1748	14	3%	25%	16%	26%	21%	9%
Elementary	4711	13	6%	30%	15%	25%	18%	6%
Middle	2000	12	8%	31%	16%	24%	16%	5%
High School	3030	17	5%	21%	14%	15%	32%	13%
Other	432	15	6%	21%	18%	19%	26%	9%
Missing	478	15	4%	26%	16%	18%	30%	6%
Total*	12399	13	6%	30%	15%	21%	21%	7%

*This total does not include Literacy Interns.

Table 12: High-poverty schools have teachers with the least amount of experience. Almost half (49%) of all teachers in high-poverty schools have between zero and five years of experience.

Table 12: Teacher Experience by School Poverty Level: 2002-03

Poverty Level	N	Avg. exp.	New	1-5 yrs	6-10 yrs	11-20 yrs	21-30 yrs	30+ yrs
0% to 80% poverty	6161	15.7	4%	19%	14%	23%	28%	11%
80% to 90% poverty	4099	11.1	7%	32%	17%	22%	17%	5%
90% + poverty	1773	8.8	8%	41%	15%	20%	12%	3%
Missing	349	13.4	5%	31%	13%	18%	27%	7%
Total	12382	13.1	6%	30%	15%	21%	21%	7%

Teacher Certification Levels: 1999-00 to 2002-03

Table 13: The percentage of fully certified teachers (versus emergency certified) has dropped steadily over the past three years, from 92 percent to 84 percent. This percentage is highest in K-8 schools and lowest in middle schools.

Table 13: Percent of Certified Teachers by School Type

School Type	N (02-03)	1999-00	2000-01	2001-02	2002-03
K-8	1748	94%	92%	90%	88%
Elementary	4711	92%	90%	88%	83%
Middle	2000	86%	83%	82%	78%
High School	3030	93%	92%	90%	86%
Other	432	96%	91%	88%	85%
Missing	478	88%	87%	85%	82%
Total	12399	92%	90%	88%	84%

Table 14 and Figure 1: The highest-poverty schools have the lowest levels of teacher certification, AND the levels of certification have been decreasing most rapidly in the highest-poverty schools.

Table 14: Percent of Certified Teachers by Poverty Level of School

Poverty Level	N (02-03)	1999-00	2000-01	2001-02	2002-03
0% to 80% poverty	6161	94%	93%	91%	88%
80% to 90% poverty	4099	90%	88%	87%	81%
90% + poverty	1773	87%	86%	84%	76%
Missing	349	92%	90%	87%	85%
Total	12382	92%	90%	88%	84%

Figure 1

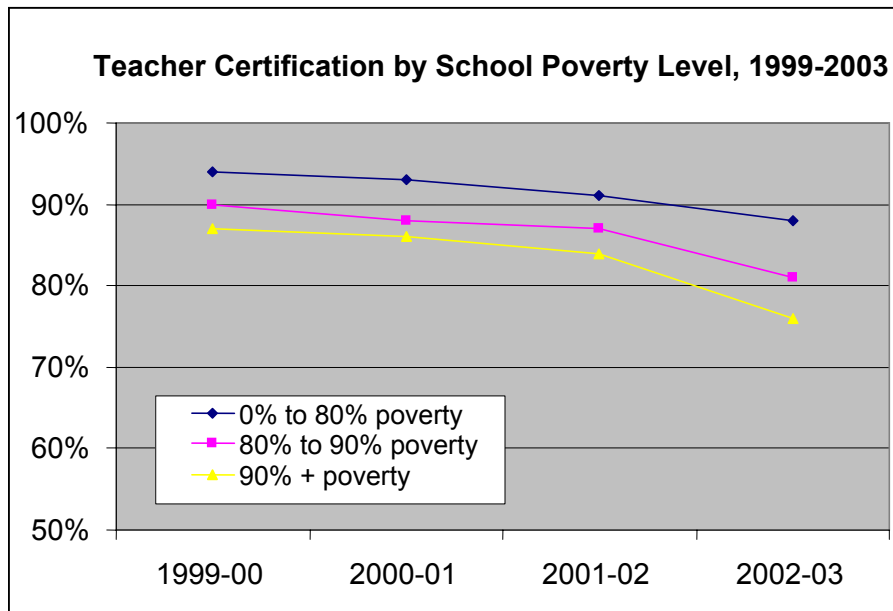


Table 15: Among high schools, the lowest-poverty schools have the highest levels of teacher certification, but the differences among these types of high schools are not large.

Table 15: Percent of Certified Teachers in High Schools by School Poverty Level

Poverty Level	N (02-03)	1999-00	2000-01	2001-02	2002-03
45% to 70% poverty	1460	94%	93%	91%	88%
70% to 80% poverty	744	93%	91%	88%	84%
80% + poverty	732	90%	90%	88%	84%
Missing	94	95%	91%	85%	93%
Total	3030	93%	92%	90%	86%

Teacher Certification by Minority Composition of the Student Body (Middle and High Schools)

Table 16: Looking at high schools by levels of minority student enrollment, we find that there are large differences in teacher certification levels between high schools with low and high minority enrollment. High schools with a large percentage of minority students are much more likely to have uncertified teachers. Furthermore, the percentage of certified teachers at high-minority high schools is decreasing at a faster rate than at low-minority high schools.

Table 16: Teacher Certification Level in High Schools

Percent Minority	N(02-03)	1999	2000	2001	2002
11-50%	354	97%	96%	94%	94%
51-90%	1238	94%	93%	91%	87%
90-100%	1417	91%	90%	87%	82%
Missing	20	96%	100%	96%	100%
Total	3009	93%	92%	90%	86%

Table 17: The same holds true for middle schools although the inequities between certification levels are much more pronounced in these schools. Schools with low minority enrollment have maintained roughly consistent levels of teacher certification, while schools with high-minority populations have seen their teacher certification levels drop significantly, leading to a situation in the Fall of 2002 where more than one out of every four teachers in high-poverty middle schools was teaching without certification.

Table 17: Teacher Certification Level in Middle Schools

Percent Minority	N (02-03)	Teacher Certification Level			
		1999	2000	2001	2002
11-50%	71	97%	97%	96%	99%
51-90%	623	92%	91%	89%	84%
90-100%	1307	83%	80%	79%	74%
Total	2001	86%	83%	82%	78%

Data Sources and Methodological Notes

Teacher Data: The School District of Philadelphia made available a complete data set of teachers in the School District of Philadelphia, 1999-00 to October 2002.

Calculating Teacher Retention: To calculate the one-year teacher retention rate, teachers were counted as retained if they were listed as teaching at the same school the following year. The two and three year retention rates were calculated in the same manner: teachers were counted as retained if they were listed as teaching at the same school two and three years later, respectively. Teachers who left the District for one or two years and then returned to the same school were **not** considered retained.

Calculating Teaching Experience: To calculate years of experience, the teacher's date of hire was subtracted from the most current year of teaching to determine the number of years between the teacher's first and last years of teaching. Teachers who are currently teaching in the District were given an end date of January 1, 2003. Due to the limitation of the data set, there is no way to account for teachers who temporarily left the District. Therefore, the experience values calculated are not completely accurate, and would most likely be lower than they appear, although the difference would probably be very small. New teachers were calculated as those hired after June 15th of the 2001-02 school year.

Coding Teacher Certification: Teachers were considered uncertified if their certificates read: "Appointed Emergency," "Long Term Sub Emergency," "Limited Long Term Sub," "Limited Special," "Per Diem Sub," "Foreign Alien Provisional," "Interim," "Intern," "Provisional Equivalent", or "Provisional." "Pre-Professional Teachers" were classified as uncertified as well. Teachers with "Instructional I", "Instructional II," "Education Specialist I," and "Education Specialist II" certificates were coded as certified.

Literacy Interns (who are enrolled in an alternate certification program and who share a classroom with a veteran teacher) were excluded from the analyses of certification trends and years of experience. They are included in the teacher retention tables.

School Poverty and Minority Composition Data: These data were taken from the Pennsylvania Department of Education School Profiles (Year 2000) web page, www.paprofiles.org. Poverty is defined as eligibility for free or reduced-price lunch. Minority composition refers to the percentage of Black, Hispanic, Asian, and "Other" students in a school.

"Other" and "Missing" Categories: The "Other" category appearing in some tables refers to schools that do not fit into traditional grade configurations: Boone, Fitler Elementary, Girard/GAMP, Lambertson, Masterman, E.S. Miller, Shallcross, and Widener Memorial. The "Missing" designation in tables refers to teachers located in schools where pieces of school information (e.g. school type, percent poverty or percent minority) are missing.