

Relationship between Teacher Vacancy Rates and Poverty Rates in NYC districts

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Students in New York City's higher poverty areas face a number of challenges to their academic success. At their neighborhood school, they are subject to higher levels of teacher turnover than their peers in more wealthy or even middle class neighborhoods. Teaching positions in those neighborhoods are often the most difficult to fill. Any policy that would put ineffective teachers from the Absent Teacher Reserve (ATR) pool back into the classroom, such as by requiring principals to select first from among the ATR pool rather than hiring the most qualified teachers, would disproportionately harm children in New York City's highest poverty communities.

Poverty, Teacher Vacancies and the ATR Pool

Grade elementary and middle schools (non-high schools) in higher poverty districts have higher teacher vacancy rates than do non-high schools in other districts citywide.

Among high schools, the correlation between district poverty rates and teacher vacancy rates is even greater.

Illustrating the disproportionate effect on New York's highest-need students, **Bronx district 8, which has a high rate of poverty faced a 29% vacancy rate** in FY2013 while **Staten Island district (R31), with half the percentage of high poverty students had just a 9% teacher vacancy rate.**

Because of the higher vacancy rates in higher poverty districts, **requiring all principals to hire teachers from the ATR pool would necessarily mean a greater number of those teachers would be placed in New York City's highest need districts.** Looking at a community like Bronx district 8, such a policy shift **could mean nearly one in three teachers in a high poverty school would be from the ATR pool.**

Teachers in the ATR pool are not the most effective or committed educators and do not represent the average teacher in New York City:

- *25 percent of teachers in the ATR pool have been brought up on disciplinary charges;*
- *Another one-third have received unsatisfactory evaluation ratings;*
- *Half haven't held a classroom position for two or more years;*
- *About 60 percent did not submit even one application in the city's online hiring system last year.*

Teacher Vacancies and Poverty Rates in New York City Schools

The thirty-two borough districts in New York City vary considerably in the students they serve. In some of the city's districts, fewer than 35 percent of the students qualify for free and reduced price lunch. In other districts, over 90 percent of the student population meets this poverty threshold.

The New York City Department of Education has released a new Human Capital Snapshot of Teacher Hiring and Transfers by district. This analysis illustrates that there is considerable variation among districts in the percentage of teacher vacancies in FY2013, and whether those vacancies were filled by new hires or by between-school transfers.

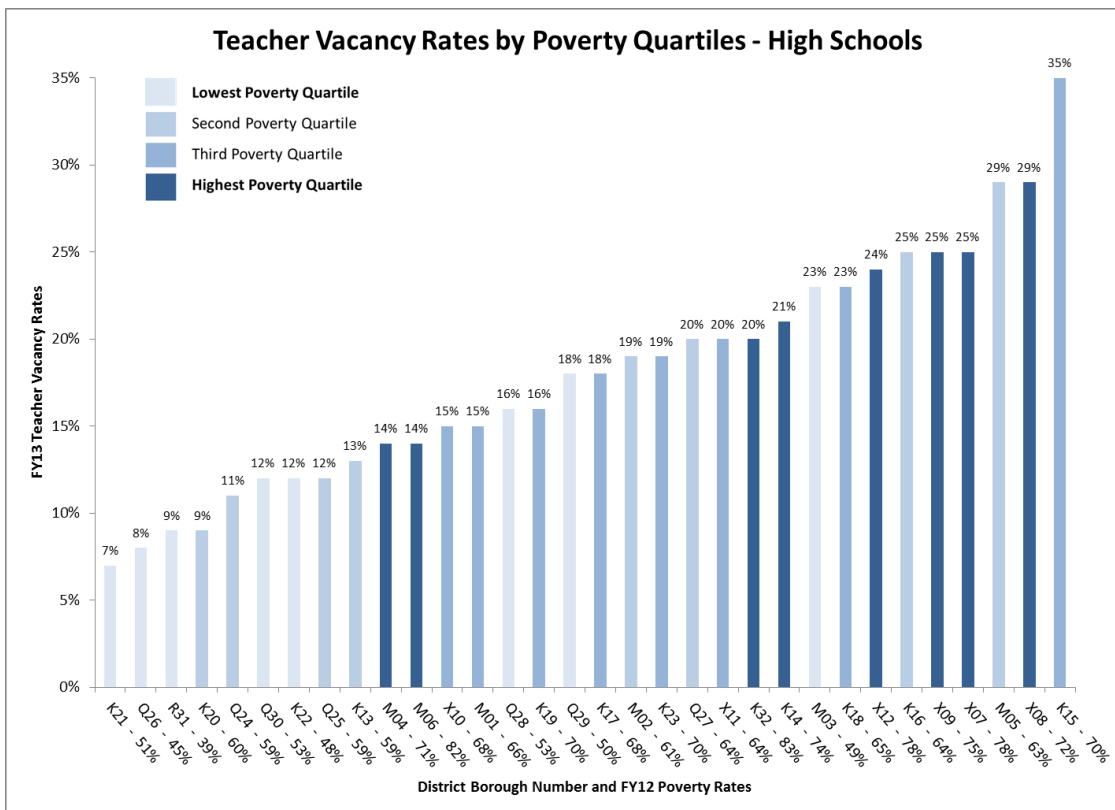
Analysis results

An analysis of the relationship between teacher vacancy rates and poverty rates in each of the city's districts finds that **there is a positive relationship between district teacher vacancy rates and the poverty rates, in both high schools and non-high schools**. This means that schools in higher-need districts are more likely to have teacher vacancies to fill on an annual basis than schools in lower-need districts.

- In high schools, the correlation is $+0.52$. *This is a strong, positive correlation.*
- In non-high schools, the correlation is $+0.36$. *This is a moderate, positive correlation.*

High Schools

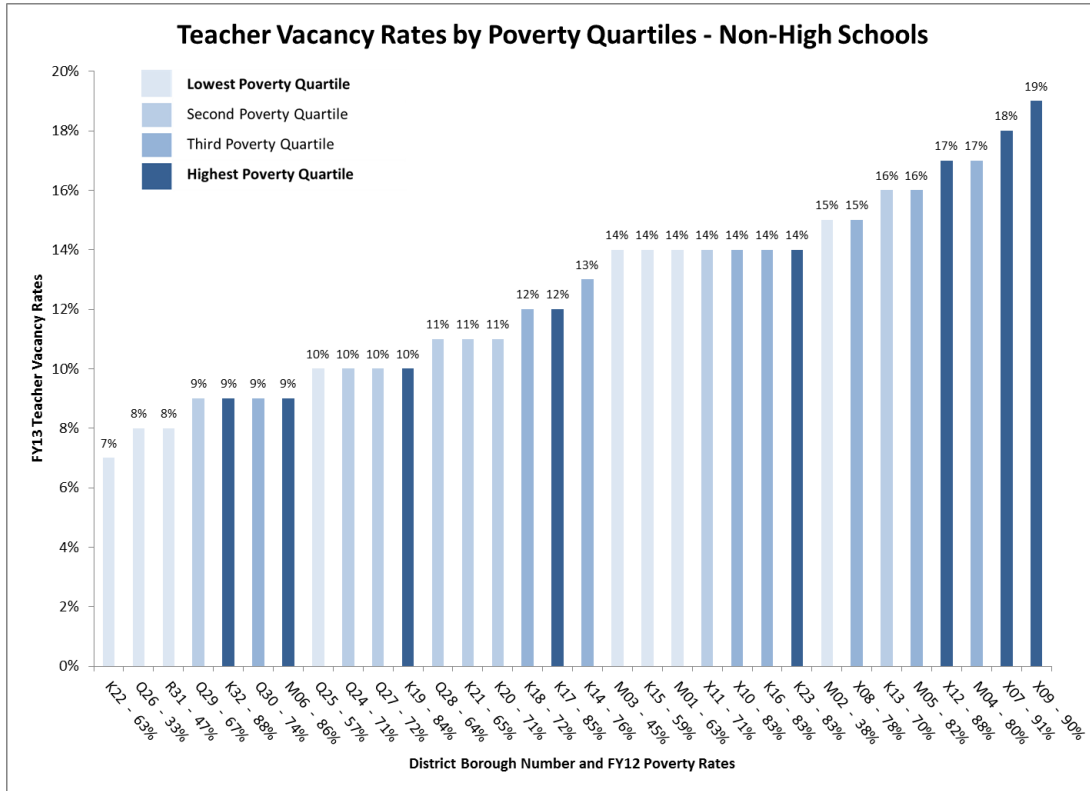
The chart below illustrates the correlation: as teacher vacancy rates increase, so does the likelihood that the district is in a higher-poverty quartile. Districts at the left side of the chart with the lowest rates of teacher vacancies are generally shaded the lightest, meaning that they have the lowest rates of student poverty. The opposite is true for districts at the right side of the chart with the highest rates of teacher vacancies.



For example, Bronx district 8 which has a very high rate of poverty (72 percent of students qualify for free and reduced price lunch) had to hire a full 29 percent of their teaching force in FY2013. In contrast, the Staten Island district (R31) where 39 percent of high school students are poor had just a 9 percent teacher vacancy rate.

Non-High Schools

We see a similar trend for non-high schools, although perhaps not quite as consistency as high schools.



For example, two districts in the Bronx (07 and 09) with extremely high needs—at least 90 percent of their students are in poverty—had to hire nearly 20 percent of their teachers in FY2013. By contrast, in Queens district 26, 33 percent of non-high school students are poor and they had just an 8 percent teacher vacancy rate.

Implications

It may not be a surprise to learn that schools serving the highest-need students have higher levels of teacher turnover than other schools, and those vacancies can be hardest to fill. But in light of a possible move to put hundreds of ineffective teachers from the Absent Teacher Reserve pool back into the classroom, these results confirm that schools and districts with the highest-need student populations in New York City will bear the brunt of this policy shift. These schools have the highest proportion of annual vacancies and would therefore receive a disproportionate number of ineffective teachers.

Given what we know about teachers in the ATR— 25 percent have been brought up on disciplinary charges, another third have received unsatisfactory evaluation ratings, half haven’t held a classroom position for two or more years, and about 60 percent don’t even seem to want to teach—this policy will truly cause disproportionate harm to the city’s neediest kids.

Notes

- Free and reduced price lunch data is from the most recent year available, 2011-12. Teacher vacancy rates are from FY2013.
- School type data (High v. Non-High) is from an LCGMS database table called the Supertable for 2013-14. We designated schools coded as “High School” or “Secondary School” as High, and all others as Non-High.
- The rule of thumb for correlations is that +.70 is a “very strong” relationship, +.40-+.69 is “strong,” and +.30-+.39 is “moderate.”