The Challenge of Teacher Retention in Urban Schools: Using Evidence from 16 Districts in 7 States to Examine Variation Across Sites

John Papay, Andrew Bacher-Hicks, Lindsay Page, & William Marinell

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The challenge of teacher retention

- High rates of teacher turnover impose serious costs on districts, schools, and students

- Financial costs
  - Advertising, recruiting, hiring, induction, etc.
  - $10,000 to $20,000 to replace a teacher (Milanowski & Odden, 2007; Birkeland & Curtis, 2006)

- Educational costs
  - Possible costs as more experienced teachers leave (although depends on effectiveness)
  - Organizational costs because of instability (Ronfeldt, Loeb, & Wyckoff, 2012)
The challenge of teacher retention

- Popular press asserts that we have a teacher retention crisis:
  - “The Teacher Dropout Crisis” (NPR, 2014)
  - ...

- But, what do we know of the teacher retention challenge?
  - National studies with limited data
  - Local studies with better data but results that are difficult to compare due to different methodological approaches
Our study

Data
- Admin data from 16 urban school districts in 7 states
- Longitudinal, up to 12 years in some cases
- Sample represents about 5% of US public school children

Guiding Questions
1. How do one-, three-, and five-year teacher retention rates vary at the school, district and state levels?
2. How do these rates differ when we take re-entrants into account and when we examine cross-district moves within a state?
3. How do teacher retention rates vary across districts by teacher experience and effectiveness?
Working with these “big data”

- Challenges & Limitations
  - Renewing and extending MOUs/DUAs
  - Districts/states both desire and oppose “benchmarking”
  - Inconsistent time period—a potentially big limitation given the economic recession that spanned the period
  - ≈2500 hours of RA/RM time cleaning data; economies of scale working with state data

- Opportunities
  - Data enable most comprehensive x-site analysis of retention
  - Use consistent data practices, definitions of retention, and analytical techniques to examine retention across districts
  - State data allow us to quantify the extent of mobility between districts
Key findings

1. Turnover is quite high, particularly at the school level
   - Across districts in our study, 55% of novice teachers leave their district and 70% leave their school within 5 years.
   - In 9 of 13 districts, 1/3 or more of novice teachers don’t remain in their same school for a second year.
2. There is substantial variation in teacher retention across districts.

Within-district retention rates for novice teachers.

![Bar chart showing percent of teachers remaining in each district for 1-year, 3-year, and 5-year spans.]

- **Districts**: A, B, C, D, F, G, H, K, L, M, N, O, P
- **Percent of Teachers Remaining** from low to high:
  - 1-Year: 40, 55, 61, 69, 73, 76, 81, 83, 89, 92, 96, 100
  - 3-Year: 50, 66, 77, 82, 86, 90, 95, 98, 100
  - 5-Year: 58, 70, 82, 86, 90, 95, 100

**Legend**:
- Light gray: 1-Year
- Medium gray: 3-Year
- Dark gray: 5-Year
3. Cross-district moves within state do not contribute much to the retention challenge

Three-year within-school, -district, and -state retention rates for novice teachers
4. Adjusting for returners exacerbates variation in retention rates across districts

Three-year within-district retention rates for all teachers, adjusting for teachers who leave and subsequently return

1 to 4 % points

6 to 8 % points

District

A  B  C  D  E  F  G  H  K  L  M  N  O  P

Percent of Teachers Remaining

Observed  Adjustment for Returners
5. Retention rates are lowest (and variation greatest) early and late in teachers’ careers.

Five-year within-school retention rates for all teachers, across levels of teaching experience.
6. There is substantial variation in retention rates by teacher effectiveness.

Three-year within-district retention rates for novice teachers, by value-added tercile.
7. Because teacher retention rates vary, so too would the financial costs of turnover.

Hiring required to fill 650 novice slots, in districts with highest and lowest retention rates.
Conclusion: Policy-related

- Even among similar districts, rates of teacher turnover vary widely
  - 44-74% of novice teachers left their district within 5 years.
  - Thus, costs of turnover vary widely.
  - Estimates from national data insufficient for informing local policy.
- Little evidence of cross-district mobility within states
- However, within-district transfers are substantial
- School-level turnover universally quite high, particularly for novice teachers
- Turnover is greatest early in teachers’ careers and among teachers who are less effective, on average
  - Substantial differences in retention rates by effectiveness across districts
Conclusion: Research-related

- “Big data” can help us add important nuance to widely held beliefs.
- Our understanding of the retention challenge would have been substantially different in District B than District C.
- How much variation would we observe in other key research findings if we looked across a range of sites?
Thank You

Questions/Comments
william_marinell@gse.harvard.edu