Place-based and Demographic Factors in Teacher Attrition: Using Data to Inform Decision Making in SFUSD

Sarah Kolterman, Taylor Myers, Keith Welch | Client: San Francisco Unified School District

ISSUE

In the midst of a teacher shortage, the San Francisco Unified School District (SFUSD), like many other California school districts, is struggling to retain and recruit qualified teachers. To fulfill their Vision 2025 plans to "attract and grow top talent to fuel our students' success and to embody a culture of boundless aspiration, innovation and collaboration," SFUSD recognizes the need to better understand teacher attrition patterns to inform policy decisions for attracting and retaining a diverse workforce.

METHODS

Analysis of SFUSD workforce data, 2002-2016. Data visualization dashboard created to allow future data monitoring.
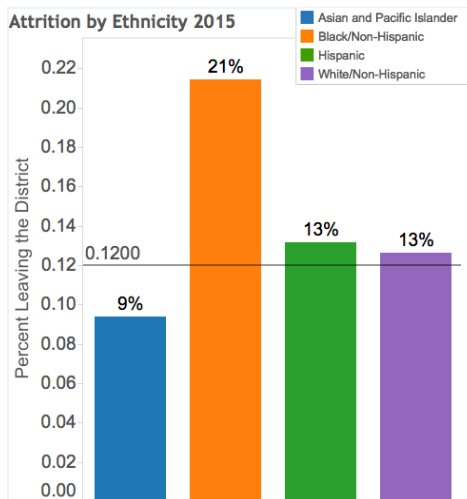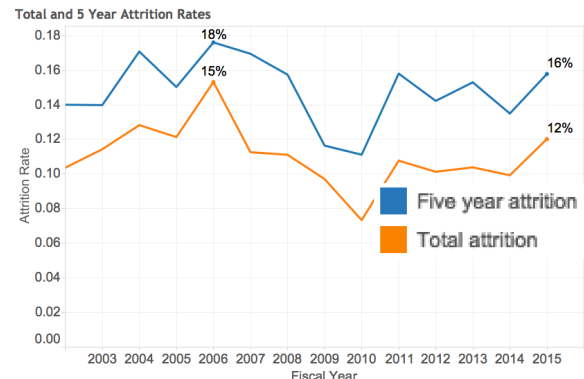
FINDINGS

Teacher attrition patterns vary based on different place-based and demographic factors. On the whole, attrition has increased since 2010, but attrition rates are still lower than 2006 levels when they reached a peak 15%.

Key Finding 1: Newer teachers are leaving at a higher rate than teachers with more years of experience.

The annual attrition rate of teachers with five years of experience is consistently higher than that of all teachers in the district.

Additionally, cohorts of teachers who started in the district more recently are leaving the district at higher rates than cohorts of teachers who started in the district further in the past. For example, 59% of teachers who began working in SFUSD in 2010 were not with the district 5 years later, whereas only 51% of teachers who started in 2007 had left the district by 2012.

Total and 5 Year Attrition Rates

Attrition by Ethnicity 2015

Key Finding 2: Teacher attrition varies by ethnicity.

Asian American attrition tends to be much lower than the overall attrition rate, while African American attrition is much higher than average. Hispanic and White attrition is closer to the overall rate.

Attrition by ethnicity also varies over time. Since 2012, the attrition rate for Black/Non-Hispanic has fluctuated from above and below the overall rate. On the whole, Hispanic attrition has been increasing since 2011.
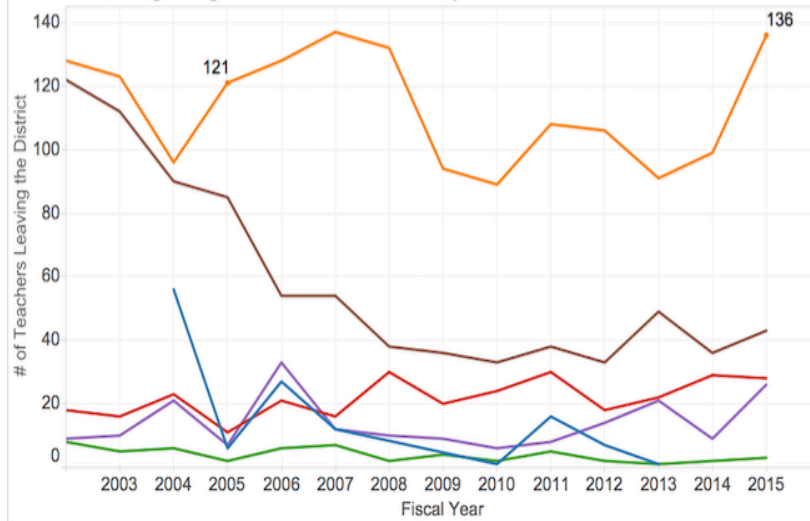
Reasons for Leaving Among Teachers with 0-5 Years of Experience Over Time

Key Finding 3: The proportion of teachers with 0-5 years of experience who resign from the district varies over time.

In 2015, 136 teachers with 0-5 years of experience resigned from the district, which made up 58% new teachers leaving SFUSD. In contrast, 121 new teachers resigned in 2005, making up 52% of new teachers leaving. SFUSD should further investigate these fluctuations.

Reason For Leaving
- End of Temp Position
- Layoff
- Resignation
- Retirement
- Termination
- Unknown

Key Finding 4: Teacher attrition varies by school.
Some schools experience much higher attrition than others and we see high trends in the rates of attrition among schools in certain neighborhoods. However, school attrition rates vary over time and schools that experience high attrition in one year do not necessarily experience the same attrition the next year.
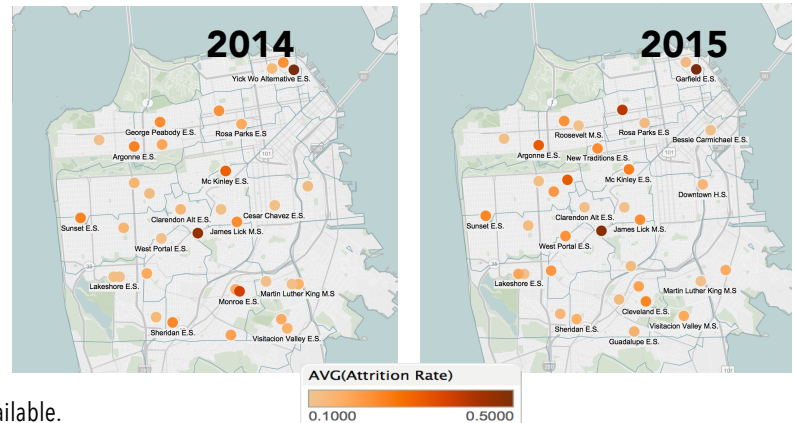
RECOMMENDATIONS

Be intentional about data systems design
- Design data systems such that information is readily available.
- Consider an interactive design that enables the district to proactively identify challenging areas in real time.

Improve Data Collection
- For example, consolidate entry fields with many similar values such as "reasons for leaving the district"
- Backwards plan to understand data needs and ensure collection of relevant measures.

Identify Attrition Risk Factors
- Conduct further qualitative analysis, such as exit interviews and focus groups for teachers leaving the district
- Consider investing in robust quantitative analysis to identify causal factors affecting attrition

Use Data to Inform Decision Making
- Create interventions that support teachers with high attrition risks
- Implement continuous data review processes to respond to trends in real time