The Quality Teacher and Education Act: Second Year Report (School Year 2010-11)

Heather J. Hough (hough@ppic.org)
Susanna Loeb
David Plank

September 12, 2012
Focus of Year 2 Report

- This report presents findings from the second year of implementation of the Quality Teacher and Education Act (QTEA) in San Francisco Unified School District (SFUSD).
- The first year report focused on implementation and early indicators of effectiveness across all of QTEA’s policy areas.¹
- To delve deeper into the study of QTEA’s implementation and effect, this second year report focuses on:
  - Compensation increases
  - Changes to Peer Assistance and Review
- Other QTEA policy elements were not fully implemented in 2010-11, and will not be dealt with in this report:
  - Additional Professional Development (PD) Hours
  - The Master Teacher Program
  - Whole-School Rewards

¹The first year implementation report can be found at:
http://cepa.stanford.edu/content/quality-teacher-and-education-act-first-year-report
Introduction
The Quality Teacher & Education Act

**Proposition A of 2008**

- QTEA is a parcel tax passed by San Francisco voters in June 2008 by a 69.8% vote.
- QTEA authorizes the city to collect an annual tax of $198* per parcel of taxable property for 20 years.

*As passed - the actual number is adjusted annually.*

Focus of evaluation

- Teacher compensation, training & support (71%)
- Technology (13%)
- Charter schools and R&D (6%)
- Retirement benefits for other employees (7%)
- Other (2%)

Pay scale changes (42%)
- Hard-to-fill subject bonus (9%)
- Hard-to-staff school bonus (5%)
- Master teachers (4%)
- Professional development (4%)
- Peer Assistance and Review coaches (4%)
- Whole-School Rewards (2%)
- Other salary and benefits (2%)

The Quality Teacher & Education Act (QTEA) is a parcel tax passed by San Francisco voters in June 2008 by a 69.8% vote. QTEA authorizes the city to collect an annual tax of $198* per parcel of taxable property for 20 years. The focus of evaluation is on teacher compensation, training, and support, accounting for 71% of the funds. Other areas include technology (13%), charter schools and R&D (6%), retirement benefits for other employees (7%), and other (2%).
QTEA changes in 2010-11 & 2011-12

- Some QTEA funds were reapportioned to protect teacher jobs:
  - Funds were used to help fill a shortfall through 2011-12 of $113 million.
  - Before the agreement to use QTEA funds to fill budget gaps, 811 initial staff layoff notices were sent. However, once the agreement was reached only 195 teachers received final notices.

- Compensation increases and changes to PAR remain intact:
  - Across-the-board salary increases, hard-to-staff school bonuses, and changes to Peer Assistance and Review were unchanged.
  - Retention and hard-to-fill subject bonuses were reduced by half.

- Some program elements were heavily impacted:
  - The Whole-School Reward program was not yet implemented in 2010-11.
  - Funds for the Master Teacher program were reduced by half.
  - PD hours were completely reapportioned to save PD cut by the state.
# QTEA implementation through 2010-11

<table>
<thead>
<tr>
<th>QTEA Element</th>
<th>As Designed</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Across-the-board salary increases</td>
<td>Step increases range from $500 to $6,300</td>
<td>(No change)</td>
<td>(No change)</td>
</tr>
<tr>
<td>Retention bonus</td>
<td>$2,500 after 4 years $3,000 after 8 years</td>
<td>(No change)</td>
<td>Reduced by half ($1,250 after 4 years, $1,500 after 8 years)</td>
</tr>
<tr>
<td>Bonus for teaching in hard-to-fill (HTF) subjects</td>
<td>$1000 per year</td>
<td>Math, Science, Bilingual, SPED</td>
<td>Reduced by half ($500 per year); SPED only for incoming teachers</td>
</tr>
<tr>
<td>Bonus for teaching in hard-to-staff (HTS) schools</td>
<td>$2000 per year</td>
<td>25 schools</td>
<td>25 schools; 4 schools were re-designated and replaced with 4 new schools; no change to amount of bonus</td>
</tr>
<tr>
<td>Prop A Professional Development (PD) Hours</td>
<td>18 additional hours per year</td>
<td>(No change)</td>
<td>Reallocated funds to maintain 3 staff PD days</td>
</tr>
<tr>
<td>Master Teacher (MT) Program</td>
<td>50 teachers with 0.2 release time</td>
<td>3 full time, 12 “Demonstration”, 8 with 0.2 release</td>
<td>Program funding reduced by half (only “Demonstration” MTs)</td>
</tr>
<tr>
<td>Whole-School Rewards</td>
<td>20 schools showing most improvement receive $30,000</td>
<td>Program not implemented</td>
<td>Program reduced by half; not yet implemented</td>
</tr>
<tr>
<td>Peer Assistance and Review (PAR) program</td>
<td>Easier entry, harder exit, no re-entry, voluntary participation (more coaches)</td>
<td>(No change)</td>
<td>(No change)</td>
</tr>
</tbody>
</table>
Hypothesized outcomes in the effect of QTEA

<table>
<thead>
<tr>
<th></th>
<th>Recruitment</th>
<th>Retention</th>
<th>Voluntary Transfer to HTS schools</th>
<th>Improvement of Entire Workforce</th>
<th>Support and Removal of Low-Performing Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary &amp; Bonuses</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased PD</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Master Teachers</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Whole-School Rewards</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Changes to PAR</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

- As with the first year report, this report will describe short-term indicators of effectiveness (teacher and principal reports).
- In additional, in this report we are able to begin investigating longer-term effects on teacher recruitment and teacher retention.
## Data used in analysis

<table>
<thead>
<tr>
<th>Method</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of administrative data</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Surveys</td>
<td>X*</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Interviews with district staff and stakeholders</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>School case studies</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*This survey was conducted by The New Teacher Project (2009); we build on their results in our analyses. For more information, see http://www.tntp.org/publications/other_publications.html#SanFrancisco.
Data used in analysis:

**Administrative data**

<table>
<thead>
<tr>
<th>Student data</th>
<th>Teacher data</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Demographics</td>
<td>- Teaching assignment</td>
</tr>
<tr>
<td>- Instructional Time</td>
<td>- Demographics</td>
</tr>
<tr>
<td>- Performance</td>
<td>- Receipt of salary and bonus</td>
</tr>
<tr>
<td>- Links (unique student, teacher/classroom)</td>
<td>- Teaching experience</td>
</tr>
<tr>
<td></td>
<td>- Teacher evaluations</td>
</tr>
<tr>
<td></td>
<td>- Links (unique teacher, school identification number)</td>
</tr>
</tbody>
</table>

**Applications and positions Data**

- Listing of open positions
- Applicants by year
- Teacher transfers
- Separations

**Publicly available school data**

- API ranking
- Student proficiency levels on standardized tests
- Aggregate student demographics
- Aggregate teacher characteristics

Database includes school years 2000-01 through 2010-11
Data used in analysis:

Surveys

<table>
<thead>
<tr>
<th></th>
<th>Principal</th>
<th></th>
<th>Teacher</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>112</td>
<td>105</td>
<td>108</td>
<td>3,114</td>
<td>3,116</td>
</tr>
<tr>
<td>Sample</td>
<td>112</td>
<td>105</td>
<td>66</td>
<td>3,114</td>
<td>3,116</td>
</tr>
<tr>
<td>Response</td>
<td>79%</td>
<td>83%</td>
<td>61%</td>
<td>31%</td>
<td>53%</td>
</tr>
<tr>
<td>Incentives</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>50 $150 prizes</td>
</tr>
</tbody>
</table>

*Note, in 2011, Pre-K teachers were added to the survey administration. They are not included in analyses presented in this report.

The actual survey instruments for 2010 can be found online at:


The actual survey instruments for 2011 can be found online at:

Principal: [https://suse.qualtrics.com/SE/?SID=SV_3q1L5j1qIFpksPW&Preview=Survey&BrandID=suse](https://suse.qualtrics.com/SE/?SID=SV_3q1L5j1qIFpksPW&Preview=Survey&BrandID=suse)

Compensation
Year 2 report builds on prior findings, delving deeper into effects analysis

- In the Year 1 report, findings suggested a QTEA effect, but were based on teacher and principal report
- In this year’s report:
  - We revisit the indicators presented in the Year 1 report to track change over time:
    - Teacher and principal awareness of salary and bonuses
    - Teacher reports on whether increased compensation affected their career plans
    - Principal reports on QTEA’s effect on teacher recruitment and retention.
  - We are also able to present findings on teachers’ actual response to QTEA in the areas of teacher recruitment and retention.

Contents of this section
- Implementation of compensation increases in 2010-11
- Teacher and principal awareness and perceptions
- Effect of QTEA on teacher retention
  - Teacher and principal reports
  - Causal estimation of the effect of QTEA on teacher retention
- Effect of QTEA on teacher recruitment
  - Principal reports
  - Causal estimation of the effect of QTEA on teacher recruitment
Overview of QTEA’s compensation elements:

**Overall salary increase**

- Compared to what they would have made before QTEA, teachers received an increase of $0 to over $6000, depending on their placement on the salary schedule.
- Overall salary increases most impacted early-career teachers.
- For example, teachers with 2 years of prior experience received an increase of 13% (compared to 2% for those with 10 years).
- See right for an example of how salary increases are distributed for teachers on the BA+60 salary schedule.

- In this study, teachers are considered “targeted” for the overall salary increases if they received 6% or more increase as a result of QTEA.
- For teachers in this targeted group, QTEA made SFUSD’s salaries more competitive compared to neighboring districts (see left).
- For example, salaries for teachers with 2 years of prior experience increased substantially between 2007-08 and 2009-10, while the salaries in other districts stayed the same.
Overview of QTEA’s compensation elements: 

**Salary bonuses**

QTEA also introduced bonuses for particular teachers:

- **Hard-to-staff schools bonus**
  - Teachers receive $2,000 for teaching in a hard-to-staff school.
  - In 2009-10, 25 schools were chosen: 3 alternate grade span schools, 10 elementary schools, 6 middle schools, and 6 high schools.
  - In 2010-11, 4 of these schools were re-designated and replaced. The final allocation was 2 alternate grade span schools, 13 elementary schools, 4 middle schools, and 6 high schools.

- **Hard-to-fill subjects bonus**
  - In 2009-10, chosen subjects were Math, Science, Bilingual Education and Special Education, and teachers in these subjects received $1,000. Per QTEA’s contract language, teachers receive the bonus for three years after the subject is designated hard-to-staff.
  - In 2009-10, the bonus amount was reduced to $500. In addition, in Math, Science, and Bilingual Education were dropped as hard-to-fill subjects; only incoming teachers in Special Education were awarded the bonus of $500, although existing teachers in Math, Science, and Bilingual Education received $500 as well (and will continue to receive the bonus for one more year).

- **Retention bonus**
  - In 2009-10, 4th and 8th year teachers received $2,500 and $3,000, respectively (in the year after service).
  - In 2010-11, these amounts were reduced by half.
### Salary bonuses awarded in 2009-10 & 2010-11

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th></th>
<th>2010-11</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of recipients</td>
<td>Average amount received</td>
<td>Number of recipients</td>
<td>Average amount received</td>
</tr>
<tr>
<td>Hard-to-fill</td>
<td>1453</td>
<td>$967</td>
<td>1453</td>
<td>$490</td>
</tr>
<tr>
<td>Hard-to-staff</td>
<td>1006</td>
<td>$1861</td>
<td>1011</td>
<td>$1752</td>
</tr>
<tr>
<td>4th year retention</td>
<td>159</td>
<td>$2494</td>
<td>180</td>
<td>$1250</td>
</tr>
<tr>
<td>8th year retention</td>
<td>91</td>
<td>$3000</td>
<td>161</td>
<td>$1500</td>
</tr>
</tbody>
</table>

Source: Analysis of SFUSD Administrative Data 2009-10, 2010-11.

Note: The amounts above represent the average bonus amounts for teachers who received each bonus type. Amounts are before taxes. Note that payments were adjusted for FTE, which is why averages are less than the full amount of the bonus as specified by the QTEA agreement.
Teachers’ awareness of bonuses

In order for teachers to respond to bonuses, they need to be aware of them. However, not all teachers were aware of bonuses they received, and awareness decreased slightly in school year 2010-11.

The vast majority of teachers were aware of hard-to-fill subject and hard-to-staff school bonuses they received, and awareness was similar to 2009-10. However, fewer teachers who received the retention bonus were aware of it in 2010-11.
Principals’ awareness of teachers’ bonuses

The first-year report identified principals’ awareness of the bonuses teachers received as a potential mediating factor in teachers’ awareness. In 2010-11, principals’ awareness decreased, which could affect teachers’ awareness.

Fewer principals in 2010-11 were aware of both the hard-to-staff school and retention bonuses that teachers in their school received. For the hard-to-staff school bonus, awareness went from 100% to 82%, and for the retention bonus, awareness went from 28% to 13%.
Teachers’ awareness of amounts received

In order for teachers to respond to bonuses, it might help if they know precisely the amount of money that they receive. In 2010-11, the awareness of the amount received is relatively high, but a large percentage of teachers reported inaccurately or that they “don’t know.”

For 58% of teachers who got a bonus, the amount of bonus they reported was within $1,000 of the actual amount, 19% think they got $1,000+ less than actual, and 8% think they got $1,000+ more. 15% of teachers reported that they did not know the amount. These numbers are very similar to those in 2009-10.*

*Note: The item question changed between 2010 and 2011, so responses cannot be compared.
Competitiveness of SFUSD salaries: 
Teachers targeted for overall salary increases

Teachers’ perception of the competitiveness of SFUSD’s salary could also play a role in how they respond. The more salary teachers gained as a result of QTEA, the higher the perceived competitiveness.

Comparing teachers who were “targeted” by the overall salary increases to those that were not, 24% of targeted teachers vs. 11% of non-targeted teachers say SFUSD’s salaries are “much” or “a bit” more competitive. Taken together, the data presented thus far provides an indication that QTEA’s salary increases could have influenced teacher behavior: teachers are aware of the compensation increases and those that are targeted perceive that the district is more competitive. The effect on retention and recruitment is explored next.

Source:
2011 Stanford Principal Survey (N=575)
Analysis of SFUSD Administrative Data 2010-11
Chi-square = 27.30, p = 0.00
Note: This excludes K/1 teachers, as they were not asked this question in 2011.
Compensation: Effect of QTEA on Teacher Retention
Teachers’ reports of QTEA’s effect on retention:

**Teachers targeted for overall salary increases**

A first line of inquiry is investigating teacher reports on whether salary and bonus affected their decisions. More teachers that were targeted for overall salary increases reported that compensation was important.

Teachers who were targeted by overall salary increases were more likely to report that salary and bonus was important in their decision to stay at their school. 29% of the targeted teachers reported that compensation was “important” or “very important”, compared to 22% for the non-targeted group.

Source:
2011 Stanford Teacher Survey (N=498)
Analysis of SFUSD Administrative Data 2010-11
Chi-square = 6.32, p = 0.10
Note: This excludes K/1 teachers, as they were not asked this question in 2011.
Teachers’ reports of QTEA’s effect on retention:  

**Teachers receiving salary bonuses**

Similarly, teachers that received larger bonus amounts in 2010-11 were more likely to report that QTEA’s salary and bonus affected their decision to stay in their school.

Teachers who received larger bonuses were more likely to report that salary and bonus was important in their decision to stay at their school. 31% of those receiving between $1000 and $2,250 reported that salary and bonus was “important” or “very important”, compared to only 20% for those who received no bonus.
Teachers’ reports of why they plan to leave

Teacher reports of why they plan to leave can provide an indication of their dissatisfaction. In 2010-11 and 2009-10, of teachers planning to leave in 5 years or fewer, salary was less of a reason in than in 2008, indicating that teachers may be more satisfied with compensation after QTEA.

Over the years, teachers planning to leave in five or fewer years were asked why. While “cost of living” and “pay & incentives” remain among the highest responses, fewer teachers in 2010 and 2011 reported those reasons compared to 2008 (52% vs. 42% and 44% for cost of living, and 53% vs. 42% and 44% for pay and benefits.)
Causal estimation of QTEA’s effect*

While the teacher reports on the effect of compensation on their career choices provides a useful first analysis, a more rigorous way to study QTEA’s effect is to observe actual teacher behavior before and after the introduction of the policy.

In observing teacher response, a causal approach is always warranted to separate the policy from other “secular trends” that could affect the outcome. In this case, it is particularly important because QTEA’s implementation corresponded with an economic downturn. The scarcity of alternate employment opportunities, or teacher layoffs, could have led to a change in teacher retention even in the absence of QTEA.

DATA & METHOD

Thus, in isolating the “QTEA effect,” the goal is to compare teachers who were differently affected by QTEA but similarly affected by economic changes, or any other changes that occurred at the same time as QTEA implementation. A separate approach is used for each compensation element:

- **Overall salary increase**: Compare teachers with 3-16 years of experience. Teachers in this range are very differently affected by QTEA, but should be similarly affected by the economy, since first and second year teachers (who could be affected by layoffs) and those with more than 15 years of teaching experience (whose retirement decisions could be affected) are excluded.

- **Retention bonus**: Compare teachers with three to five years of service within SFUSD, as those with four years of service are targeted for the bonus, and individuals with three or five years of service within SFUSD should not be differently affected by the economy.

- **Hard-to-staff school bonus**: Compare hard-to-staff schools to a comparison group of schools that are similar to the schools designated “hard-to-staff” in all ways except for that some actually received the designation.

To study teacher retention, we employ a dataset containing all SFUSD teachers linked to students and schools over the time period 2002-03 through 2010-11. Over the nine year time-frame, 6,024 unique individuals served as teachers in SFUSD, with a total of 25,291 teacher-year observations.

*Note: A more detailed description of this study can be found at http://cepa.stanford.edu/content/research-brief-the-effect-of-a-district-level-salary-increase-on-teacher-retention
Causal estimation of QTEA’s effect

(continued)

RESULTS

- A simple descriptive analysis (see right) shows that across SFUSD, within-school and district-level retention increased after the implementation of QTEA. After QTEA, a teachers’ likelihood of staying in his or her school increases by a factor of 1.56 relative to leaving, and a teachers’ likelihood of staying in the district but transferring schools increased by a factor of 1.32 relative to leaving.

- However, for causal interpretations, we must isolate the QTEA effect by comparing the change in retention behavior for teachers who are “targeted” for each of the salary interventions compared to those who are not targeted. A differential increase in retention rates for “targeted” teachers compared to the overall trend would show that QTEA’s salary increases improved retention rates for the targeted teachers above the “economic effect” seen district-wide.

- Unfortunately, the pattern of results in this causal analysis shows that QTEA had a minor (if any) effect; teachers targeted by QTEA’s salary increases did not have a differential increase in retention rates above the overall trend.

- Of many tests, the author identifies only two significant findings. First, “targeted” teachers had higher within-school retention rates only in the first full year of QTEA implementation (2009-10); the within-school retention rate for teachers targeted by the overall salary is 4.5 percentage points higher than it would have been in the absence of QTEA. Second, teachers targeted for the retention bonus had higher retention rates only in hard-to-staff schools; the within-school retention rate for 4th year teachers in hard-to-staff schools is 14.5 percentage points higher than it would have been in the absence of QTEA.
Compensation: Effect of QTEA on Teacher Recruitment
Principal reports on QTEA’s effect on recruitment

A first step in understanding QTEA’s effect on teacher recruitment is to analyze principals’ reports about teacher recruitment across time.

Over time, principals report that the applicant pool is improving. In 2008, 2010, and 2011, principals were asked if there were enough new-hires in high-need areas. In 2011, 49% of principals said yes, compared to 42% in 2010 and 28% in 2008.

Source:
- 2008 TNTP Principal Survey (N=69)
- 2010 Stanford Principal Survey (N=81)
- 2011 Stanford Principal Survey (N=45)

Chi-square = 5.06, p = 0.08
Some principals report that salary & bonus helped

The majority of principals reported that QTEA had no effect on teacher recruitment, however a small proportion in each year reported that salary and bonus helped teacher recruitment.

In 2010, 22% of principals reported that QTEA helped, compared to 18% in 2011. (Differences are not statistically significant.) Taken together, these principal reports suggest that teacher recruitment may have been improved by QTEA, but more research is needed.
Causal estimation of QTEA’s effect*

- In the Year 1 report, we provided a substantial amount of evidence from applicant reports indicating that QTEA’s salary and bonus may have impacted teacher recruitment by attracting new teachers into the pool. In addition, we show that principals report ongoing improvements in recruitment in both 2010 and 2011.
- While teacher and principal reports provide a useful first analysis, a more rigorous way to study QTEA’s effect is to observe actual changes in recruitment before and after the introduction of the policy.

DATA & METHOD

- This study seeks to understand changes to both the applicant pool and the cohorts of new-hires after QTEA.
- Changes to the applicant pool
  - We seek to understand 1) whether QTEA attracted more applicants who were “targeted” by the policy, and 2) whether these “targeted” applicants are drawn from higher-paying school districts.
  - The goal is to compare teachers who were differently affected by QTEA but similarly affected by economic changes. To this end, we observe changes in the applicant pool for “targeted” vs. non-targeted teachers, comparing teachers with 3-16 years of experience. Teachers in this range are very differently affected by QTEA, but should be similarly affected by the economy, since first and second year teachers (who could be affected by layoffs) and those with more than 15 years of teaching experience (whose retirement decisions could be affected) are excluded.
  - We combined surveys from applicants and teachers in 2008 and 2010 with SFUSD’s administrative data to build a dataset representing applicant cohorts from 2004-05 to 2010-11 (N = 1,611, representing 6,767).
- Changes to the cohorts of new-hires
  - We seek to understand 1) whether more “targeted” teachers were hired, which would indicate that these are “higher-quality” teachers, and 2) whether the quality of new-hires increased after QTEA.
  - To study the cohorts of new-hires after QTEA, we use a dataset containing all new-hires to SFUSD over the time period 2004-05 through 2010-11 (N = 2,456). As a measure of “teacher quality,” we use a quantitative measure of each teachers’ contribution to student achievement in each year.

*Note: A more detailed description of this study can be found at http://cepa.stanford.edu/content/research-brief-the-effect-of-a-district-level-salary-increase-on-teacher-retention
Causal estimation of QTEA’s effect (continued)

RESULTS

- QTEA attracted more applicants who were “targeted” by the policy. Because targeted and non-targeted applicants differed in how they were affected by the policy but not how they were affected by the economy, if the proportion of targeted applicants increased relative to non-targeted applicants, we can assume that these applicants were drawn to the district by the QTEA salary increases. Before QTEA, 27% of the applicants were in this targeted group, whereas after QTEA, 37% of the applicants were in the targeted group.

- “Targeted” applicants were those who apply to higher-paying school districts. An increase in the average salary of other districts applied to by the targeted group after QTEA would show that these applicants included SFUSD in their job search because they prefer districts with higher salaries and now consider SFUSD to be more competitive with higher-paying school districts. As shown to the right, for targeted teachers, the average salaries of other districts applied to were $2,255 higher than they would have been in the absence of QTEA, indicating that QTEA’s salary increases were effective in attracting applicants who would only have applied to higher paying districts before.

Changes to the applicant pool led to changes in cohorts of new hires. In the time period before QTEA implementation, 49% of the new-hires were in the targeted group, and in 2009-10 and beyond, 54% of the new-hires were in the targeted group. This provides an indication that the new teachers attracted by QTEA were higher-quality, since they were ultimately hired.

The quality of new-hires increased after QTEA. For teachers hired in 2009-10, the scores measuring teachers’ contribution to student achievement in English Language Arts were 0.34 of a standard deviation higher than teachers hired in the time period 2004-05 through 2007-08.
Conclusions

- We show that teacher and principal awareness of QTEA remains high, but has decreased slightly in 2010-11.
  - This reduction in awareness may be related to the reduction in QTEA’s funding.
- In addition to teacher and principal reports, this year we are able to study the actual effect of QTEA on teacher retention and recruitment.
- In teacher retention, we find that the economic changes that corresponded with QTEA implementation limited QTEA’s potential effect on teacher retention.
  - Teacher retention increased overall, but increases cannot be causally attributed to QTEA.
  - It is possible that policy changes may have limited teacher response
    - Changes in the designation of hard-to-staff schools
    - Reduction in the amount of hard-to-fill subject and retention bonuses
- In teacher recruitment, we find that QTEA compensation increased the size of the applicant pool, drawing applicants who would have only applied to higher paying districts in the absence of QTEA. Furthermore, it appears that changes to the applicant pool resulted in changes to the cohorts of new hires.
  - The ultimate importance of QTEA’s compensation changes depends on SFUSD’s ability to hire strategically from this growing pool.
Peer Assistance and Review
How QTEA changed PAR

- PAR is the district’s existing mechanism for supporting and removing (if necessary) underperforming teachers.
- First and foremost, the district considers PAR to be an important tool for improving teacher practice. Participating teachers receive one-on-one support for a year.
- There is a general sense among stakeholders that PAR changes may be the most meaningful aspect of QTEA, by increasing teacher support and accountability:
  - Easier entry = more teachers served
    - Teachers can be referred to PAR through “needs improvement” ratings in addition to “unsatisfactory” ratings, enabling more teachers to get support (at a higher performance level).
  - Harder exit = underperforming teachers moved to dismissal
    - The standard for successful completion after PAR participation was raised, meaning that under-performing teachers may be moved to dismissal more easily.
  - No re-entry = teachers who don’t improve moved to dismissal
    - Teachers who have participated in PAR before (and completed the program successfully) will be moved to dismissal if referred again.
  - Voluntary participation = more teachers served before it is critical
    - Teachers can voluntarily participate in PAR (without the evaluative aspect). The length of their participation varies and can start at any time during the year.
Year 2 report builds on prior findings, tracks change in indicators

- In the Year 1 report, we identified barriers to the effective use of PAR, and thus the efficacy of QTEA’s changes:
  - Teachers’ and principals’ perceptions of the program limit principals’ referral of teachers into the program, teacher voluntary participation, and teacher referral of their peers.
  - Teachers and principals were not confident with the evaluation system, which limited principals’ use of the “needs improvement” and “unsatisfactory” rating (which in turn limit referral to PAR).

- In this report, we:
  - Provide an overview of QTEA implementation and changes in 2010-11.
  - Revisit the indicators of teacher and principal perceptions of the program.
  - Explore teachers’ and principals’ perception about the evaluation system.
  - Present participation and outcomes data for the PAR program in 2010-11.
How QTEA changed PAR: 
**Specific changes**

<table>
<thead>
<tr>
<th>Before</th>
<th>Changes as a result of QTEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual (or biannual) review by principal using the SF teaching standards as part of the regular review process.</td>
<td><em>No change</em></td>
</tr>
<tr>
<td>A teacher enters PAR if s/he receives an “unsatisfactory” summary evaluation, or if s/he “needs improvement” for two consecutive years. A teacher can also be referred by other teachers through the Union Building Committee (UBC).</td>
<td>In addition, teachers enter PAR if they “need improvement” for two consecutive <em>semesters</em>.</td>
</tr>
<tr>
<td>Teacher receives coaching and weekly visits from a district PAR coach for one year.</td>
<td><em>No change</em></td>
</tr>
<tr>
<td>The teacher participates in PAR for one year. During this time, the PAR panel (which is composed of representatives selected by district and union leadership) reviews the teacher’s case in an ongoing manner. At the end of the year, if the teacher meets standards on each of 31 competencies, s/he exits PAR successfully. If a teacher fails to meet standards, the district is free to exercise its legal option to dismiss the teacher.</td>
<td>In order to exit PAR, a teacher must additionally be “proficient” on all seven agreed-upon elements of the SF teaching standards.</td>
</tr>
<tr>
<td>For a teacher who exits PAR successfully, s/he could re-enter PAR the very next year if the evaluation rating was once again “unsatisfactory.”</td>
<td>A teacher who has exited the PAR program and subsequently receives an “unsatisfactory” notice may be moved to dismissal. (Note that teacher dismissal is a separate process carried out by Human Resources.)</td>
</tr>
<tr>
<td>-</td>
<td>Teachers can voluntarily participate in PAR (without the evaluative aspect).</td>
</tr>
</tbody>
</table>
Changes made after the first year of implementation

- In response to concerns about the teacher evaluation system, SFUSD introduced changes to the evaluation rubric and provided extensive training for principals
  - Revision of language in the rubric to make it easier for administrators to assess teacher practice with lower inference.
  - Training principals and administrators to use the evaluation rubric, with an eye toward consistency (inter-rater reliability)

- In the Year 1 report, we identified that teachers were not using the voluntary program because of its association with PAR, which teachers view as punitive. The program was modified as follows:
  - Change of name from PAR to PAL (Peer Assistance and Leadership) to separate the two programs and remove any negative association (change in effect for 2011-12 school year).
  - Create a clear application process, where terms of the relationship are detailed and teachers can state their goals for participation

- In Year 1, teachers reported that they hesitated to use the peer referral option through the Union Building Committee for several reasons, including concerns that the other teacher would find out, and lack of information about other teachers’ practice.
  - To address the former, the district made changes to the referral system to make it more transparent.
Teacher perceptions of PAR

In the Year 1 report, we identified that teacher and principal perception of the PAR program limits participation and referral. Since the goal of PAR is for teachers to get the support they need, it is important to track how the perception may be changing over time.

We find that in 2011, teachers’ perception of PAR is more favorable than in 2010. For example, more teachers say PAR helps teachers improve their practice (57% in 2011 vs. 45% in 2010). Similarly, more teachers say PAR is a good use of a teachers’ time (51% in 2011 vs. 42% in 2010).
While principals’ perceptions of PAR have not changed since 2010, they have generally high opinions of the program. Principals' perceptions of PAR have not changed between 2010 and 2011; their view remains mostly positive. For example, the majority of principals in both years believe that PAR can help improve teacher practice (76% and 71% in 2010 and 2011). However, some principals still believe PAR is only useful for removing teachers (20% and 13% in 2010 and 2011).
Principal reports of how they use PAR

According to district officials, PAR is best used as a support system for teachers who could improve, rather than as a route for teacher dismissal. However, in the Year 1 report, we identified that principals often used PAR for teacher dismissal. We find that principals’ use of the program may be changing in 2011.

We find that principals' use of the program may be changing in 2011. While differences are not statistically significant (likely due to small sample size, as only principals who have recently referred teachers to PAR were asked the question), 42% of principals in 2011 reported that they sent a teacher to PAR to remove him/her (compared to 51% in 2010), and 42% of principals in 2011 reported that they sent the teacher because they thought s/he might improve with support (compared to only 24% in 2010).
Detail on the kinds of teachers sent to PAR

However, of principals who plan to send their lowest-performing teacher to PAR, these are still most often teachers the principals view as recalcitrant.

<table>
<thead>
<tr>
<th>Is this teacher someone…</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>…you would like to remove from your school?</td>
<td>95%</td>
<td>93%</td>
</tr>
<tr>
<td>…you think should leave the teaching profession?</td>
<td>83%</td>
<td>85%</td>
</tr>
<tr>
<td>…you think is ineffective and could not improve?</td>
<td>56%</td>
<td>62%</td>
</tr>
<tr>
<td>…you think is ineffective but could improve?*</td>
<td>35%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Principals were asked to answer questions about their “lowest performing teacher.” In 2011, in 55% of cases, the principal planned to send this teacher to PAR (50% in 2010). Of these principals, in 2011, in 93% of these cases, the principal would like to “remove this person from the school,” (compared to 95% in 2010). In 2011, in only 41% of cases is the principal referring a teacher to PAR who s/he “thinks is ineffective but could improve” (compared to 35% in 2010. Taken together with the results on the previous slide, this indicates that principals’ perceptions may be changing, but that PAR is still very often used as a mechanism for removing under-performing teachers.

Source: Stanford 2010 Principal Survey (N=40), Stanford 2011 Principal Survey (N=27)

Differences are not statistically significant.

*Note: On this question, principals were asked to check all that apply. That is how the responses indicating that the teacher “could not improve” and “could improve” add up to over 100%. A small number of principals selected both.
Principals’ views on the new evaluation system

Because the district introduced changes to the evaluation system, we asked principals how much their own practice has improved since the changes.

A majority of principals (61%) reported improvements in evaluation using the Standards. However, it appears that the training has been less effective for things like “doing objective evaluations” (39%) or using the rubrics to determine ratings (44%).

Source: 2011 Stanford Principal Survey (N=51)
Note: Includes principals reporting that the template improved their practice “a lot” or “quite a bit.”
Principal reports on evaluation training still needed

Principals report that they still would like training on how to best conduct teacher evaluations.

65% of principals say they would like to participate in peer feedback, 52% say they need more training using the rubric, and 51% say they need more training holding hard conversations.

Source: 2011 Stanford Principal Survey (N=51)
Note: Includes principals "agreeing" or "strongly agreeing" with various statements.
Teachers’ perceptions of evaluation

As the evaluation system is changing, we asked teachers to report on the evaluation system and compared their responses to responses in 2008.

Across the board, teachers perceptions of the evaluation system have declined since 2008. Most importantly, fewer teachers are confident in their evaluator’s ability (69% in 2011 vs. 79% in 2008), fewer teachers believe they were evaluated fairly (77% vs. 82%), and fewer teachers said the evaluation process helped them improve (56% vs. 64%). This indicates that there is still room for improvement in evaluation. However, it is also important to note that perception of the evaluation system is generally good, even if it has declined.
Teachers reports on how they would use PAR

In understanding whether any changes in teachers’ perceptions have led to changes in their use of the program, we asked them if they would consider using voluntary PAR or referring other teachers, and compared responses in 2011 and 2010.

Voluntary participation

- Teachers are still hesitant to volunteer to participate in PAR/PAL:
  - When asked if they would voluntarily participate, 67% said “no”, 24% said “maybe” and 10% said “yes.” (Responses are not different from 2010.)

- Teachers have varied reasons for not wanting to volunteer:
  - Stigma associated with PAR.
  - Fear of being evaluated.
  - Feeling that they don’t need additional help (due to consistent high evaluations).
  - Lack of familiarity with the program.

Peer referral

- PAR allows for referral of other teachers through the Union Building Committee (UBC) representative.
- In the Year 1 report, we identified that teachers are hesitant to refer their peers.
- Teachers’ willingness to refer other teachers to PAR seems to be increasing:
  - 60% of teachers report that there are teachers in their school who are “not performing up to a high enough standard (compared to 58% in 2010). In 2010, only 33% of teachers who report having low-performing teachers in their schools would refer other teachers to PAR, but this number increased to 41% in 2011 (chi-square = 6.28, p=0.04).
- Still, the majority of teachers do not want to refer other teachers, for varied reasons:
  - Evaluating and monitoring other teachers is the administrator’s job
  - Concerns with the stigma around PAR

Note: This question asked about “PAR” not “PAL,” so the survey could still be picking up on negative associations with the PAR program.
Due to PAR changes, more teachers were served in 2009-10 and 2010-11.

<table>
<thead>
<tr>
<th></th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total caseload (formal referrals)</td>
<td>14</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>Referral in Fall (2 consecutive “Needs Improvement” ratings)</td>
<td>N/A</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Referral in Spring (2 consecutive “Needs Improvement” ratings)</td>
<td>N/A</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>UBC referral</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Voluntary participation</td>
<td>N/A</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

- In 2011, 14 participants received support (as a result of QTEA) who would not have before, indicating a change in teacher and principal willingness to seek help.
  - Easier entry
    - In 2011, 9 participants were referred through this new channel; 5 were referred due to 2 consecutive “Needs Improvement” ratings in 2009-10, and 4 were referred due to “Needs Improvement” ratings in Spring and Fall of 2010. (In 2010 as well, 9 additional teachers participated in PAR as a result of QTEA.)
  - Voluntary participation
    - In the first year of implementation, 5 teachers self-referred into PAR, receiving tailored support for issues the teachers themselves identified. In 2011, an additional 5 teachers volunteered.

- In addition, in 2009-10, 4 teachers were referred to PAR by other teachers (through the UBC representative), an increase from 3 in 2009-10.
Effect of PAR changes: Teacher outcomes in 2010-11

QTEA’s changes to PAR have been effective in increasing the number of teachers served. However, QTEA’s changes have been more limited in PAR’s use as an accountability tool.

- **No re-entry**
  - Per the agreement between SFUSD and UESF, only teachers who had previously participated \( \text{in or after 2008-09} \) will be denied reentry. In 2010-11, there was one teacher referred who had previously participated. This teacher bypassed PAR and was sent to the legal department but retired prior to dismissal.

- **Harder exit**
  - Due to the higher standard for successful completion, fewer teachers exited meeting standards (22% in 2010-11 and 10% in 2009-10 compared to 43% in 2008-09).
  - In 2011, 44% of teachers did not meet standards and left the district voluntarily (compared to 60% of teachers in 2009-10 and 50% in 2008-09).
  - However, in both 2009-10 and 2010-11, 15% of teachers exited not meeting standards and went back to the classroom, receiving a 90-day notice to improve (after which point they can be dismissed). Of all 7 teachers, only one was dismissed. Many continue to work for year(s) before voluntarily leaving the district.

<table>
<thead>
<tr>
<th>Category</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeaters (prior to 2008-09)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Successful completion (exited meeting standards)</td>
<td>6 (43%)</td>
<td>2 (10%)</td>
<td>6 (22%)</td>
</tr>
<tr>
<td>Exited not meeting standards and left district voluntarily</td>
<td>7 (50%)</td>
<td>12 (60%)</td>
<td>12 (44%)</td>
</tr>
<tr>
<td>Exited not meeting standards still teaching (served a 90-day notice)</td>
<td>1 (7%)</td>
<td>3 (15%)</td>
<td>4 (15%)</td>
</tr>
</tbody>
</table>

*Note: 5 additional teachers carried over into the 2011-12 school year.
Conclusions – PAR in 2010-11

- There is a general sense within the district that PAR changes may be the most meaningful aspect of QTEA:
  - Changes mean that more teachers can be served.
  - Under-performing teachers may be moved to dismissal.

- However, the effective implementation of PAR changes also require the largest cultural shift at the central office and in schools.

- The Year 1 report identified significant barriers to the effect of PAR changes:
  - Teachers hesitate to volunteer because of stigma.
  - Principals perceive that PAR is a lot of work for them.
  - Principals do not use low evaluation ratings, even for their low-performing teachers.
  - Principals primarily use PAR for only their lowest performing teachers, and mostly as a removal tool.
  - PAR is not perceived as an effective tool for the removal of teachers, but those teachers who could improve are often not referred.

- The district has made significant investments in improving teacher and principal perception of PAR as well as improving overall evaluation systems.
Conclusions *(continued)*

- In the 2010-11 school year, indicators are moving in the right direction. As a result of these investments:
  - Teachers have a more favorable view of PAR
  - Principals are beginning to use PAR more as a tool for teacher support than teacher removal.
  - The number of teachers served continues to grow, and more teachers are receiving support before it is “too late.”

- However, the accountability aspects of PAR still do not have the “teeth” that were intended in the passage of QTEA.
  - Many teachers that exit not meeting standards leave the district voluntarily, suggesting that QTEA’s changes to PAR have been effective in encouraging the exit of the district’s lowest-performing teachers.
  - However, of the teachers who do not leave voluntarily (or do not leave immediately), very few teachers have been moved to dismissal. With the exception of one teacher who was ultimately dismissed, teachers often remain in their classroom for months or years awaiting dismissal.*
  - Because PAR is still the tool that principals use when trying to remove underperforming teachers, a more direct path to dismissal might help QTEA’s reforms have the intended effect.

*Note: The district is continuing to work on improving this process, and staff report that in 2011-12, there are more notices of opportunity to correct/ due process served. Note again that this is a separate action generated through Human Resources, not through PAR coaching support nor the legal department.*