



Use of Value-Add Analyses: FWISD

April 14th 2008



Fort Worth
Independent School District

1882 125 YEARS 2007

- Regression analyses which control for:
 - Prior year test score in the same or most closely related subject
 - Individual student characteristics including ethnicity, Free/Reduced Lunch, Gender, Special Education, Limited English Proficiency
- For each school year, subject and student, we:
 1. Predicted the score we would expect given the student's prior score and background characteristics.
 2. Subtracted the predicted score from the actual score achieved giving the difference between actual and expected score.
 3. Summarized these adjusted student gains for each year, subject and teacher. (O'Brien, 2007)

Identified “Best Practices” Teachers

- Identified 106 elementary teachers whose students made better than expected gains
- Teachers were evenly distributed across
 - Experience levels
 - Socioeconomically diverse geographic areas
 - TAKS passing rates
- Structured interviews revealed
 - Common instructional beliefs and strategies consistent with effective pedagogy identified in educational research

Reward Collaboration and Team Efforts for Continuous Improvement



- Developed a model that uses value-add analyses to reward **teams** of teachers whose students show significant growth
- Aggregated student value-add scores are used to reward student improvement for:
 - Grade/content level teams (e.g. all 9th grade math teachers)
 - Vertical teams (e.g. all math teachers across all grade levels)
 - Horizontal teams (e.g. all 9th grade core content teachers)
 - Campus team (all teachers)

The FWISD PEAK Rewards Model



Value Add Model For Rewarding Teacher Team Performance (High School Example)

Grade	Math	Reading/ELA	Social Studies	Science	Grade Level Team
9th	v	v			
10th	v	v	v	v	★
11th	v				
Content Area Team	★				Campus ★

- v Team value-add score show student improvement at the grade/core content level
- ★ Team value-add scores show grade level student improvement across all contents
- ★ Team value-add scores show content area student improvement across all grades
- ★ Campus value-add score shows improvement across grades and content – and 50% or more of the ‘team’ cells show student improvement

Issues

- District use of value-add data
 - Identify programmatic and instructional needs
 - Provide focused professional development and staff support
 - Incorporate value-add measures in program evaluation designs
- Developing district infrastructure
 - Staff with technical and analytical skills
 - Ongoing training in the use and interpretation of value-add data
 - Tools for summarizing and reporting the data
- Data quality
 - Accurate teacher student links
 - Accounting for data anomalies related to unique campus level instructional arrangements
- Need for a quick turnaround of student level value-add scores