Teacher Value Added
Motivation, Strengths, and Weaknesses

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School Quality Matters

- Achievement directly related to economic well-being
Improved GDP from Achieving the Governor's Goals -- First in the World by 2000

percent additions to GDP

year

10-year reform
Total U.S. K-12 spending
School Quality Matters

- Achievement directly related to economic well-being
- U.S. not competitive internationally
School Quality Matters

- Achievement directly related to economic well-being
- U.S. not competitive internationally
- California not competitive in U.S.
NAEP Eighth Grade Math: All Students, 2007
(National=38th percentile; MA=21st percentile)
Teacher Quality as Key Element

- Substantial evidence that teacher quality is most important part of schools
- Wide variation in effectiveness
Figure 3. Kernel Density Estimates of Teacher Quality Distribution: Standardized Average Gains Compared to Other Teachers at the Same Campus by Teacher Move Status.
Teacher Quality as Key Element

- Substantial evidence that teacher quality is most important part of schools
- Wide variation in effectiveness
- Unrelated to common quality measures
  - Teacher graduate degrees
  - Experience*
  - certification
Teacher/Administrator Personnel Policies

- Single salary schedule
  - Parameters unrelated to effectiveness
- Variations by effectiveness
  - Impacts of bottom
Alternative Estimates of Least Effective Teachers on Student Achievement

- Finland (Massachusetts)
- Canada

Legend:
- High estimate of teacher effectiveness
- Low estimate of teacher effectiveness
Attention to Performance of Teachers and Administrators

- Improvement/professional development
- Performance pay
  - Effort
  - Selection
    - Voluntary
  - Change pool
- Individual v. group
- Identifying the extremes
- Active retention policies
Evaluation Approaches

- Subjective
- Objective
- Combinations

Value-added
- Reasonable at extremes
- Ways to lessen inaccurate variability
- Improvement in performance assessment
Issues with Value Added Measurement

- Measurement error
- Sorting of teachers and students
- Beating the test

- Real but not decisive
- Combination of methods

*Hypothetical given (lack of) California data*
The Parable of Rochester

- Innovative contract
  - +45 percent salaries
  - Differentiation by performance
- “Not all the best”
- Lack of objective measures
Conclusions

- Improving teacher quality is imperative
- Cannot do it without focusing on teacher effectiveness directly
- Value added measurement provides important information
- Value added estimation one part, but not only part
NAEP Eighth Grade Math: All Students, 2007
(National=38th percentile; MA=21st percentile)
NAEP Eighth Grade Math: Hispanic Students, 2007
(National=40th percentile; TX=24th percentile)
NAEP Eighth Grade Math: White Students, 2007
(National=40th percentile; MA=29th percentile)