
Teacher Value Added

Motivation, Strengths, and Weaknesses

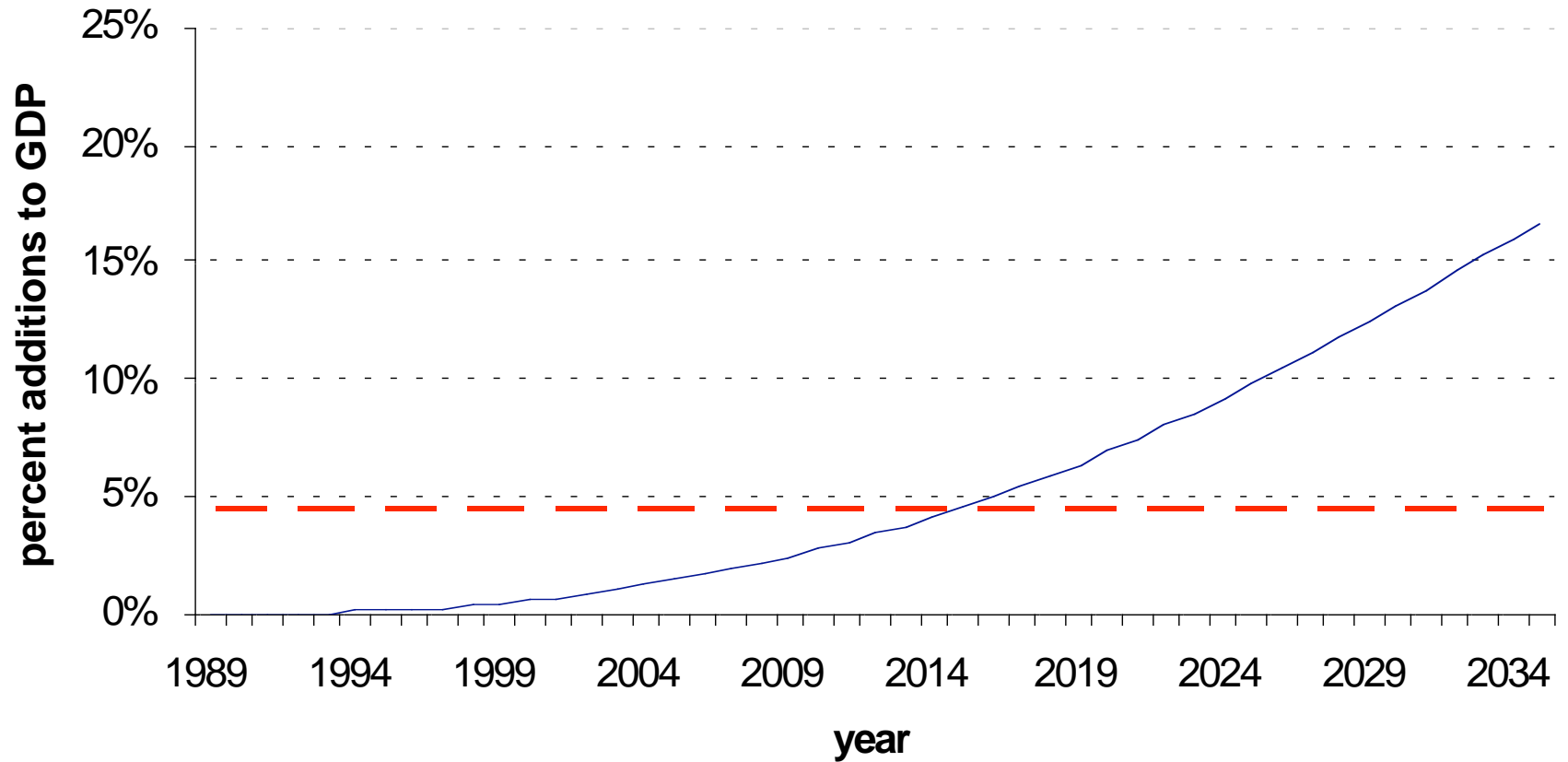
Eric Hanushek
Stanford University

School Quality Matters

- Achievement directly related to economic well-being



Improved GDP from Achieving the Governor's Goals -- First in the World by 2000



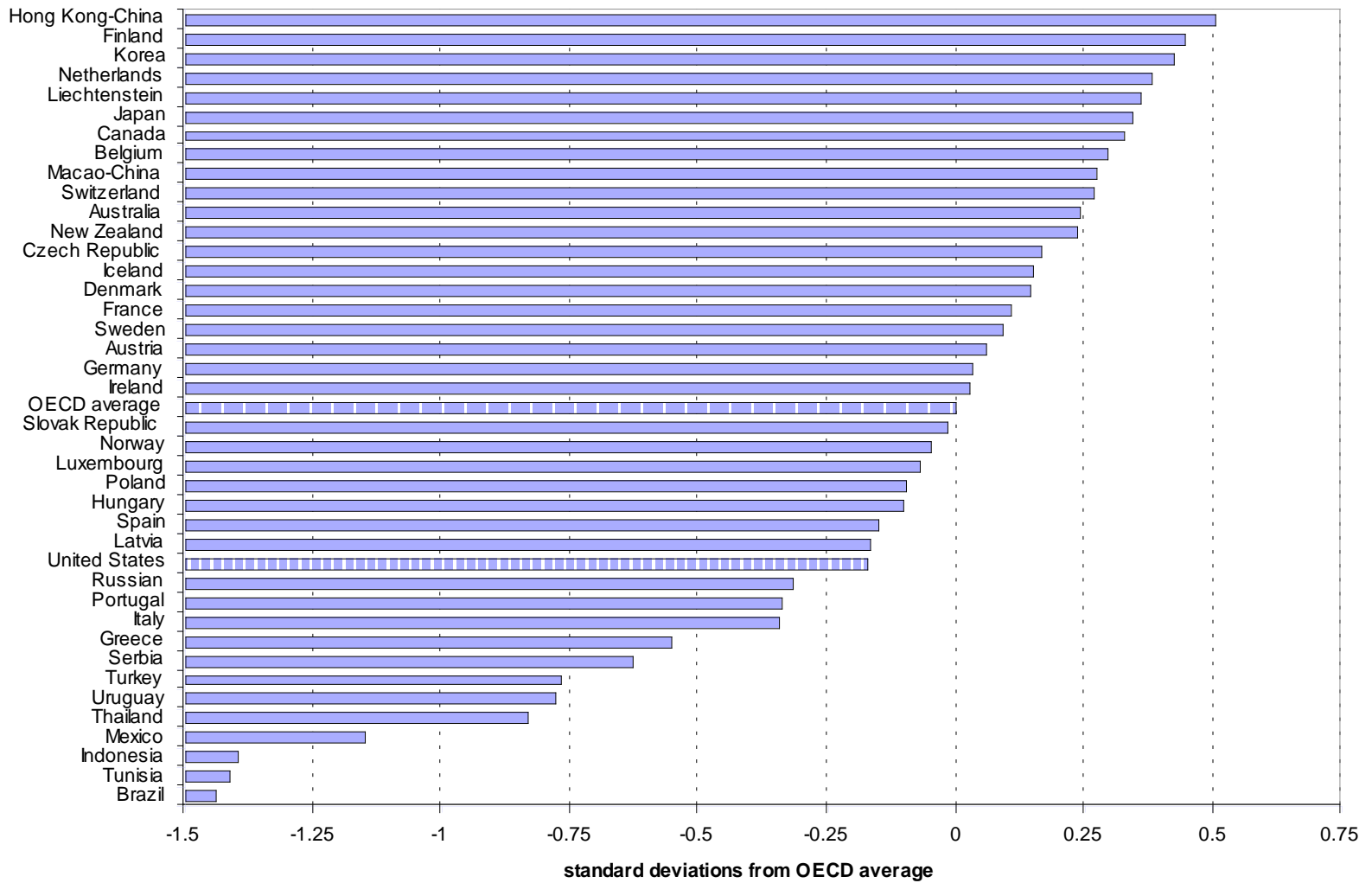
— 10-year reform - - - Total U.S. K-12 spending

School Quality Matters

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



Mathematics Performance on PISA, 2003

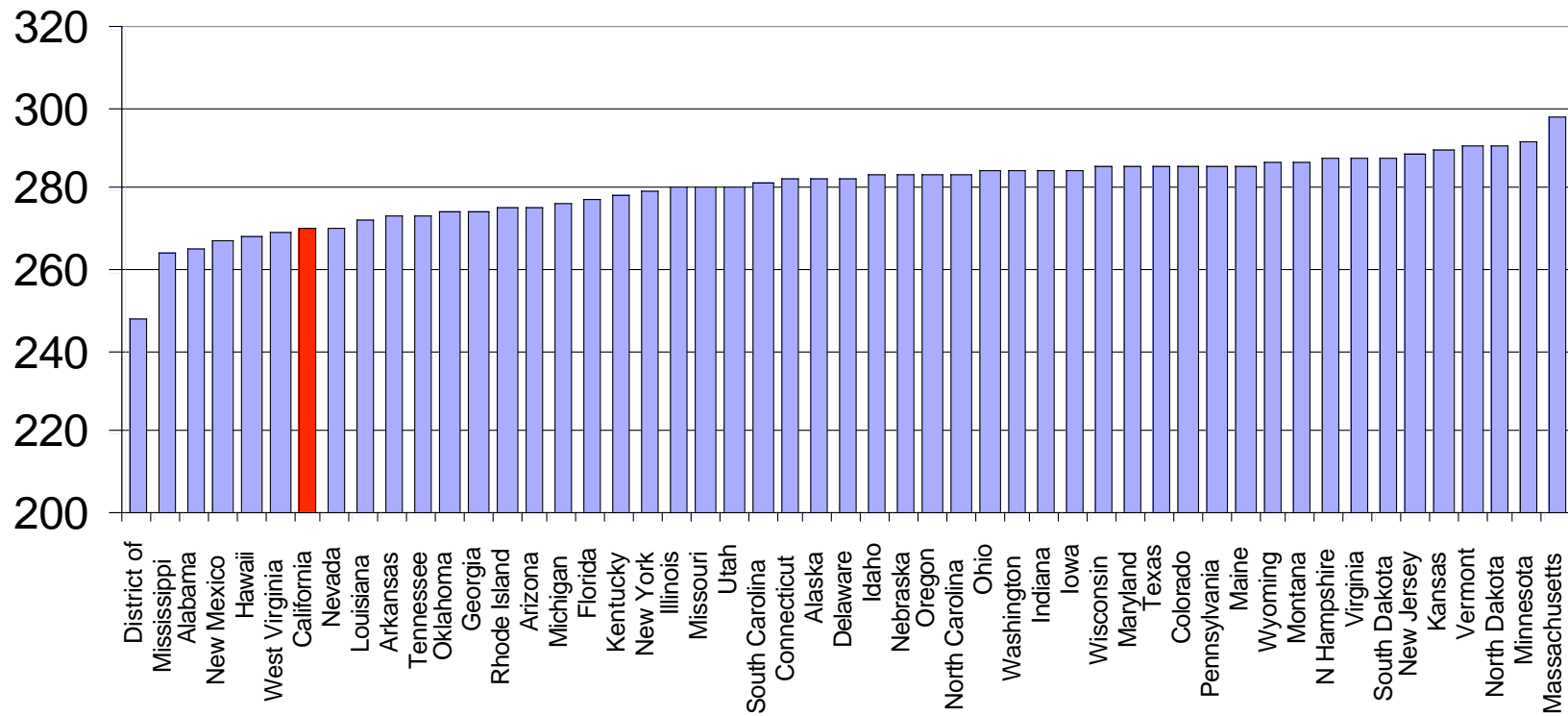


School Quality Matters

- Achievement directly related to economic well-being
 - U.S. not competitive internationally
 - California not competitive in U.S.
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NAEP Eighth Grade Math: All Students, 2007

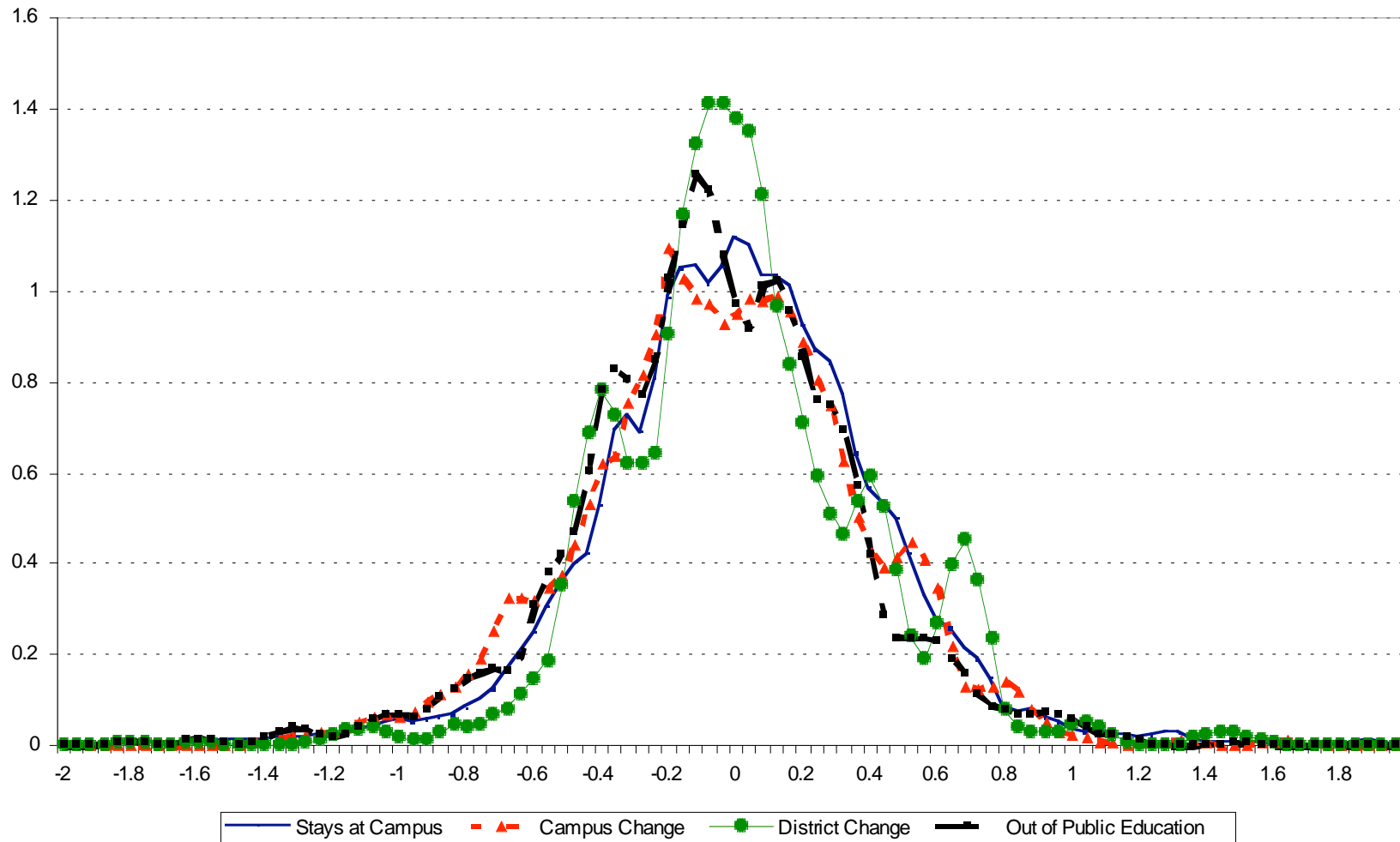
(National=38th percentile; MA=21st percentile)



Teacher Quality as Key Element

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



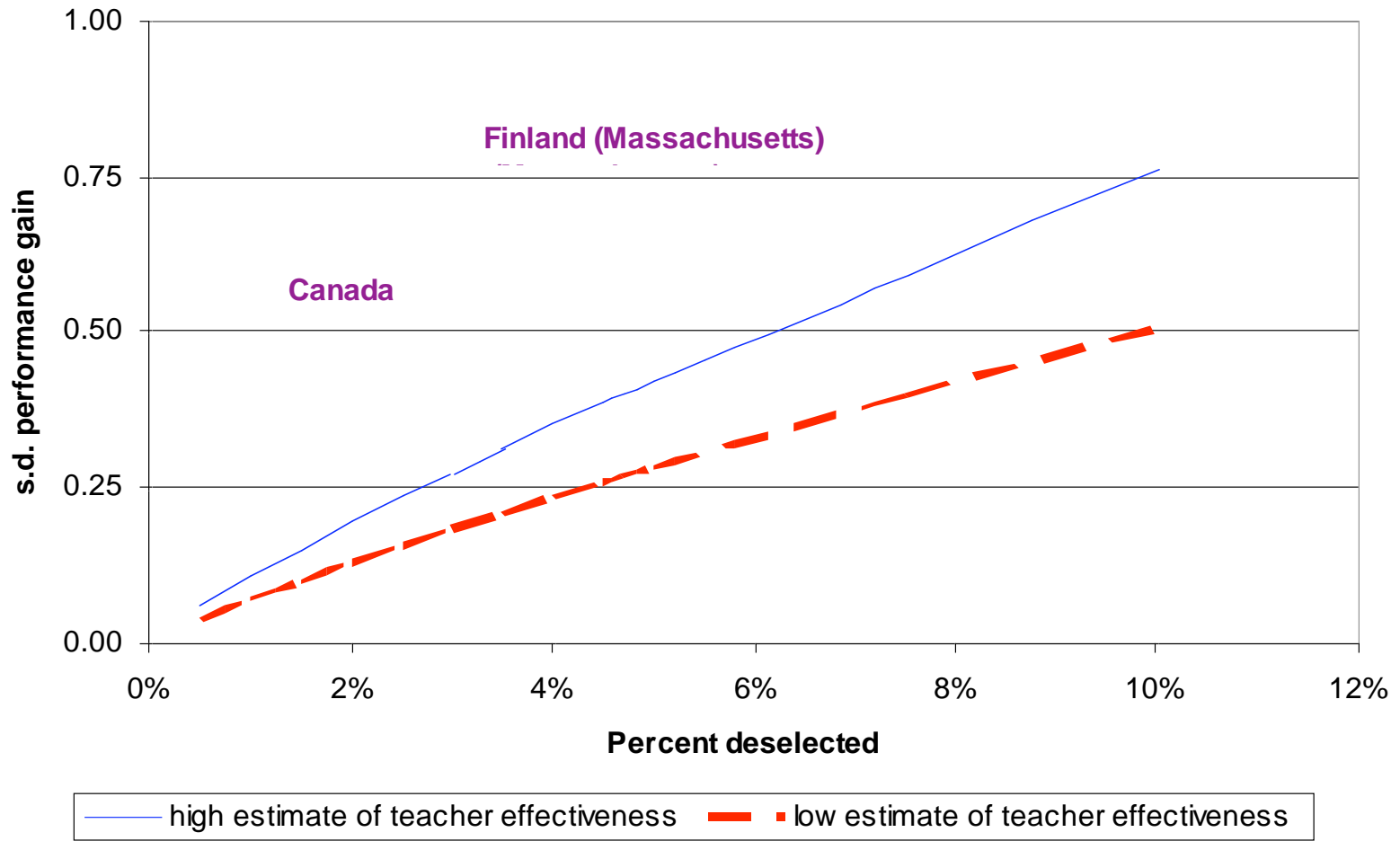
Teacher Quality as Key Element

- 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
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Alternative Estimates of Least Effective Teachers on Student Achievement



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*
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The Parable of Rochester

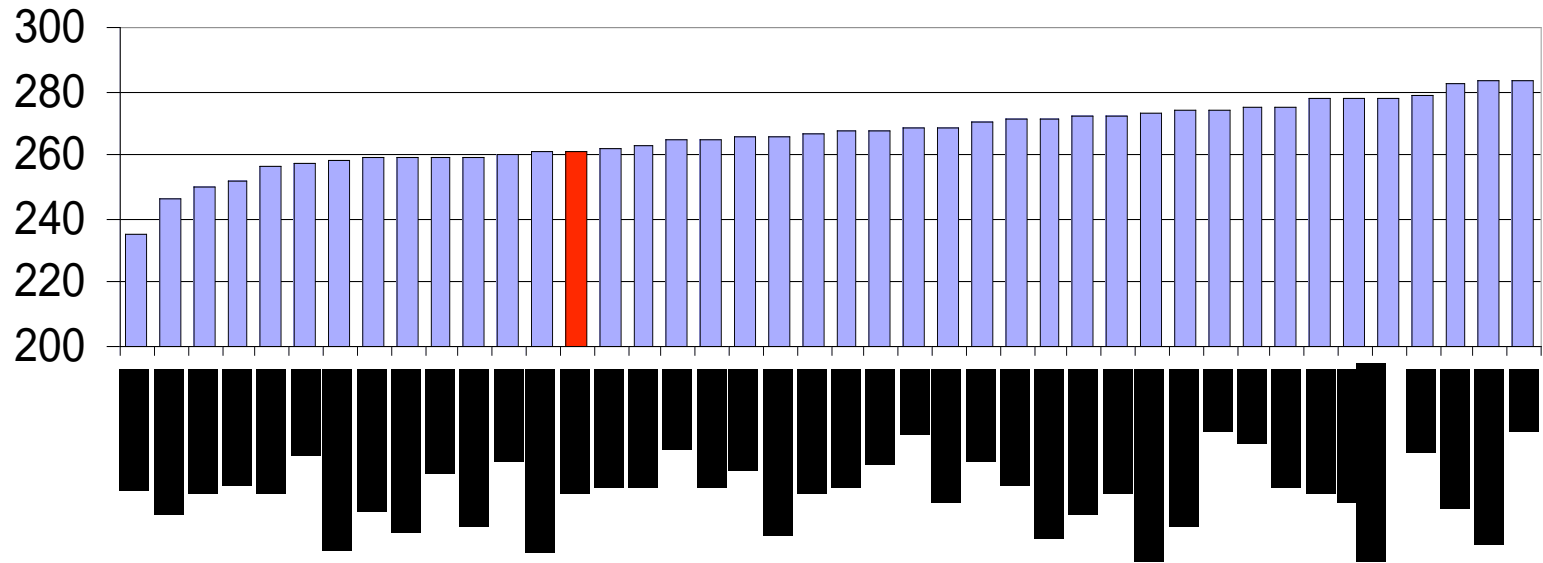
- Innovative contract
 - +45 percent salaries
 - Differentiation by performance
 - “Not all the best”
 - Lack of objective measures
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Conclusions

- 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
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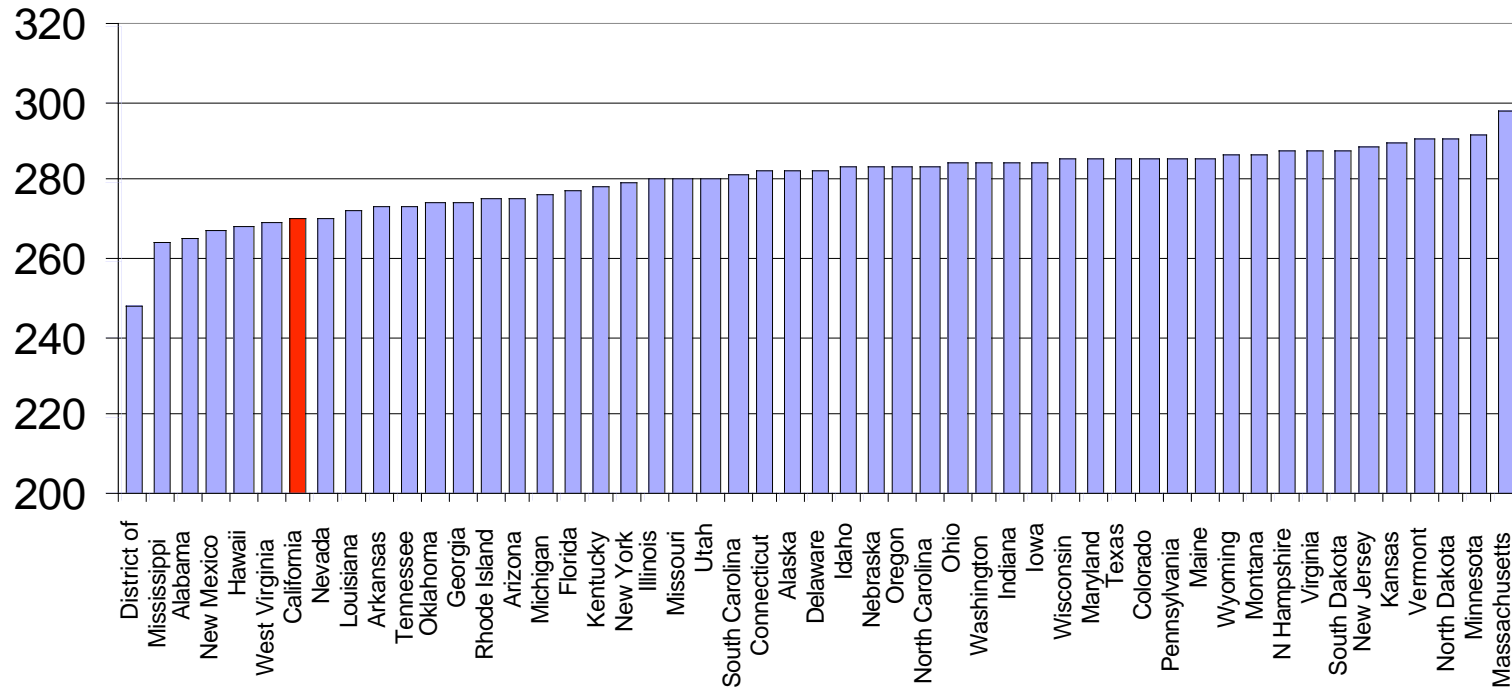
NAEP Eighth Grade Math: All Students, 1992

(National=42nd percentile; IA=22nd percentile)



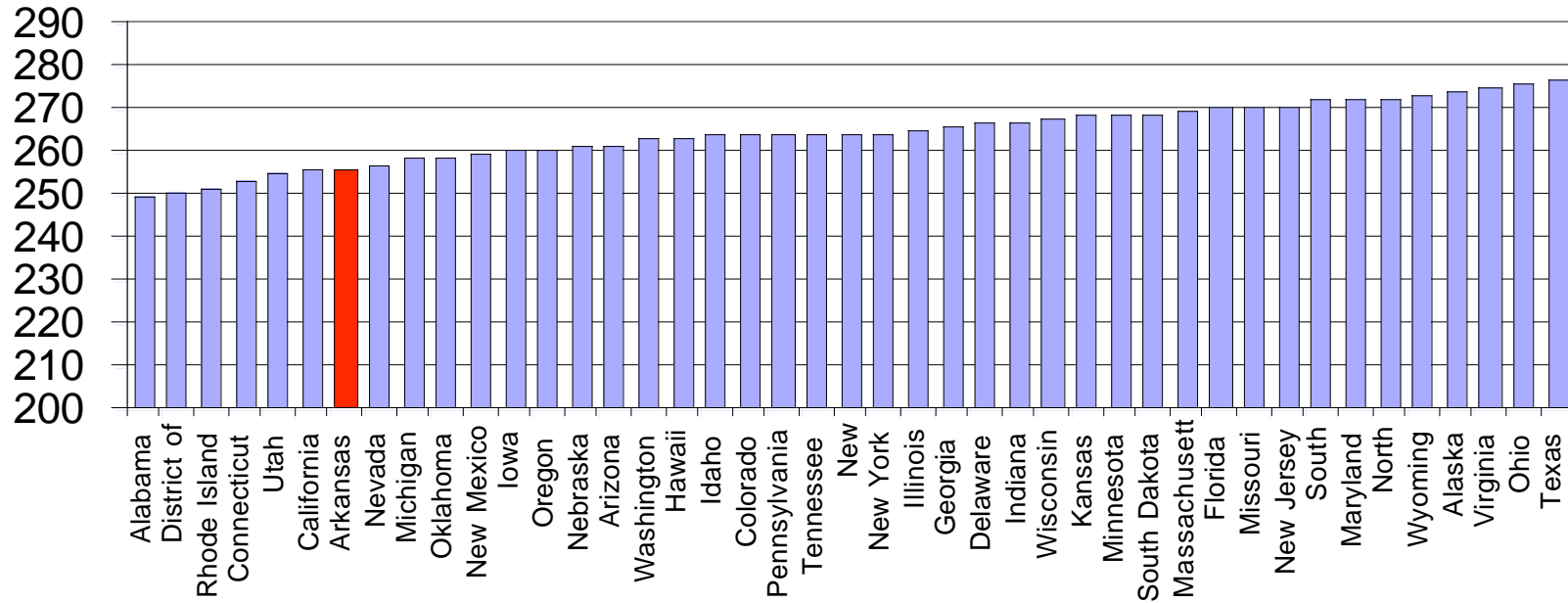
NAEP Eighth Grade Math: All Students, 2007

(National=38th percentile; MA=21st percentile)



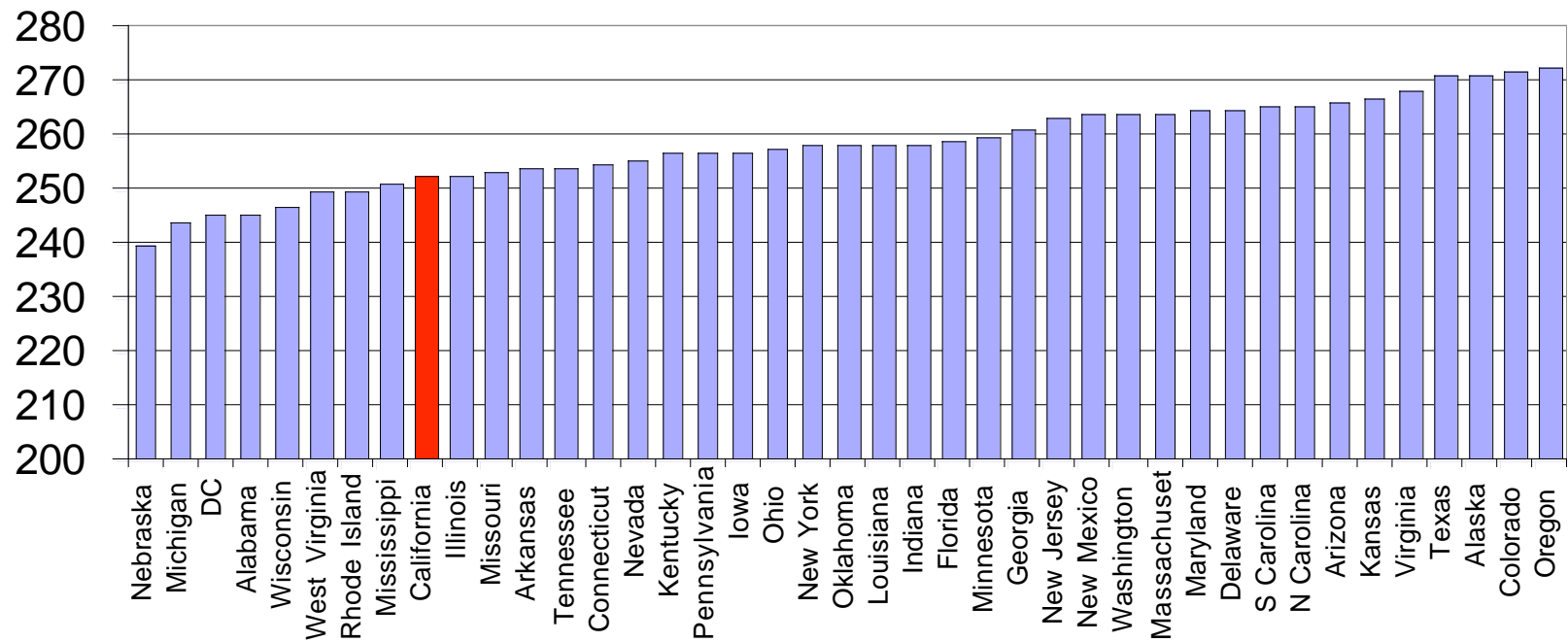
NAEP Eighth Grade Math: Hispanic Students, 2007

(National=40th percentile; TX=24th percentile)



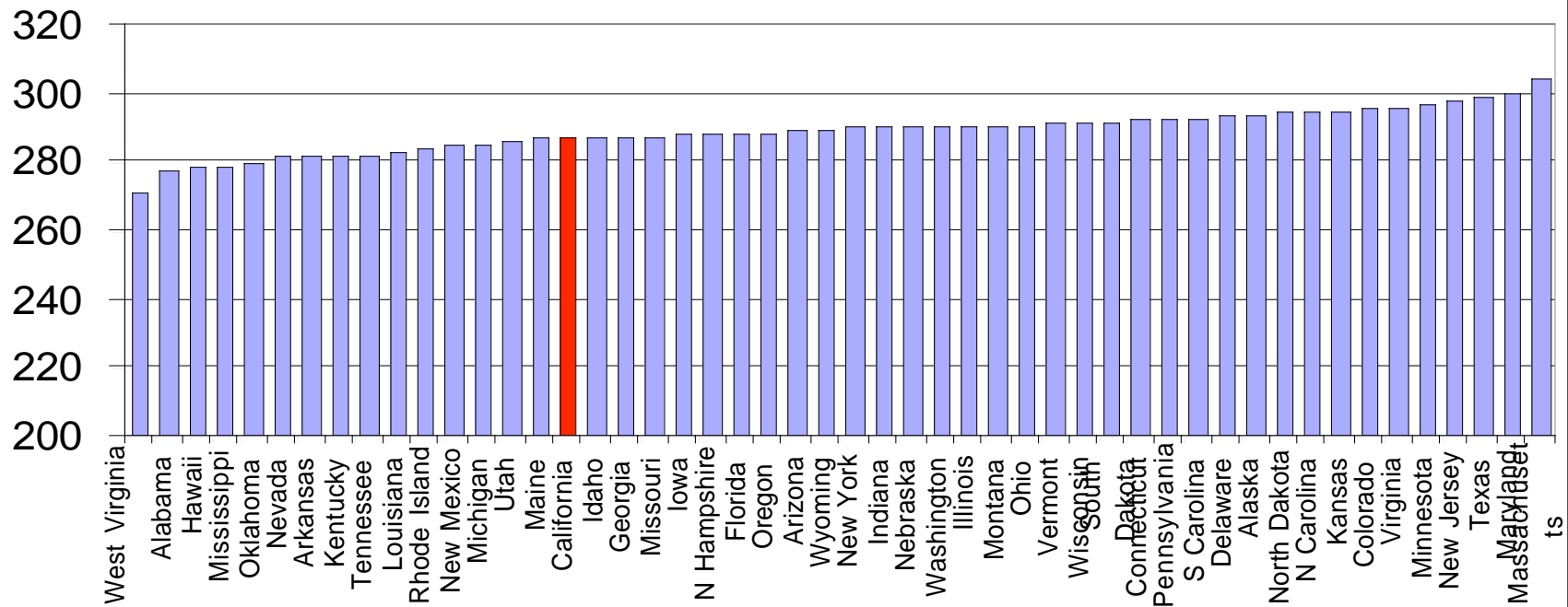
NAEP Eighth Grade Math: Black Students, 2007

(National=42nd percentile; OR=30th percentile)



NAEP Eighth Grade Math: White Students, 2007

(National=40th percentile; MA=29th percentile)



NAEP Eighth Grade Math: College Parents, 2007

(National=44th percentile; MA=27th percentile)

