

# Left Behind by Design: Proficiency Counts and Test-Based Accountability

(forthcoming, Review of Economics and Statistics)

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#### Responses to NCLB



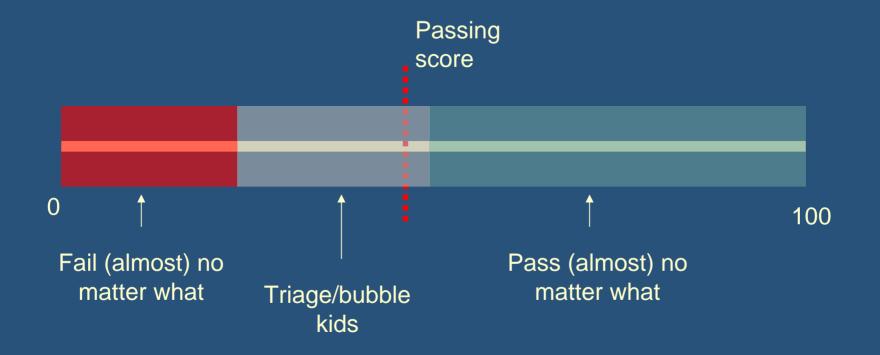
- Complex incentives & responses
- Our Paper
  - Difference-in-difference results that document changes in patterns of achievement
    - NCLB's implementation in Chicago
    - Earlier NCLB-style accountability policy
- Qualitative work (Booher-Jennings in TX)
  - Gets inside "black box" of NCLB
  - Describes how teachers change their behavior
- Popular press articles

"We were told to cross off the kids who would never pass. We were told to cross off the kids who, if we handed them the test tomorrow, they would pass. And then the kids who were left over, those were the kids we were supposed to focus on." -- de Vise, *Washington Post*, 3/4/07

#### **Educational Triage**



- Incentives in most states: only passing or failing matters
  - No credit for moving students' test scores up unless they cross the passing threshold
  - Decide how to allocate "extra" attention



#### **Previous Research**



- Schools respond to incentives (Jacob, Cullen & Reback, Reback, Figlio, Rouse & Figlio) by
  - changing what they teach
    - Effort to high-stakes subjects, grades
  - changing who they teach
    - Strategic assignment to special ed/ELL
    - "bubble" students

#### **Two Policy Experiments**



- NCLB in Illinois
  - Reasonably high passing threshold
  - Years of failure defined retroactively
    - Schools faced high sanctions in first year
- Pre-NCLB Accountability in Chicago
  - School probation based on proficiency rates in reading on ITBS
    - Threshold pretty high: national norms
  - Student incentives: summer school, retention
    - lower passing thresholds for these

### Difference-in-Difference Approach: Each Baseline Decile



Grade

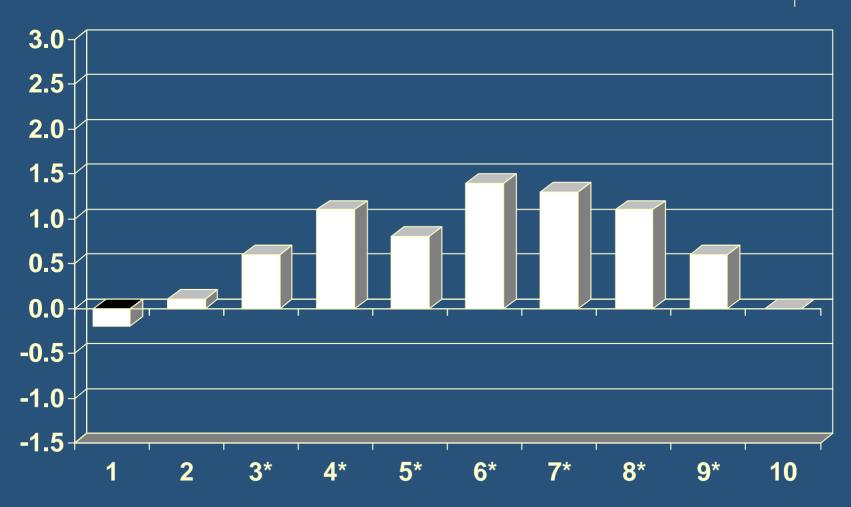
3rd 5th Cohort Prelow low reform Posthigh low reform

 $5_{\text{pre}} - 3_{\text{pre}}$ 

 $5_{\text{post}} - 3_{\text{pre}}$ 

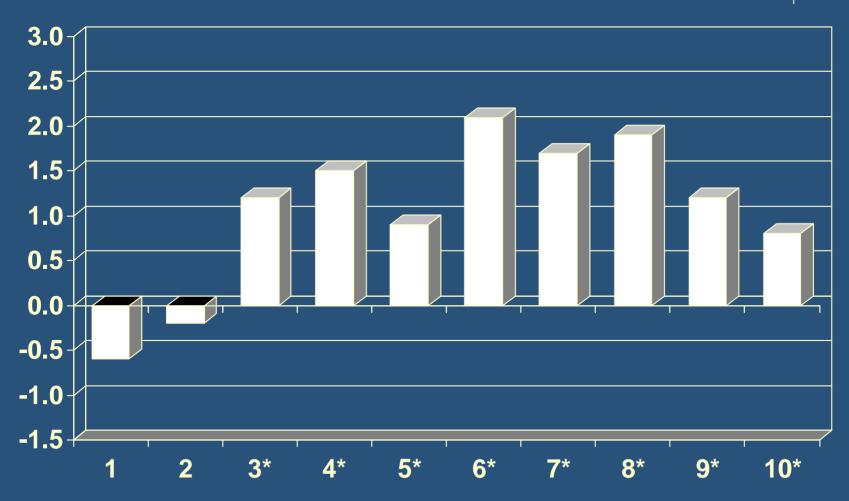
## NCLB: Change in 5<sup>th</sup> Grade Reading Scores (2003 vs. 2002)





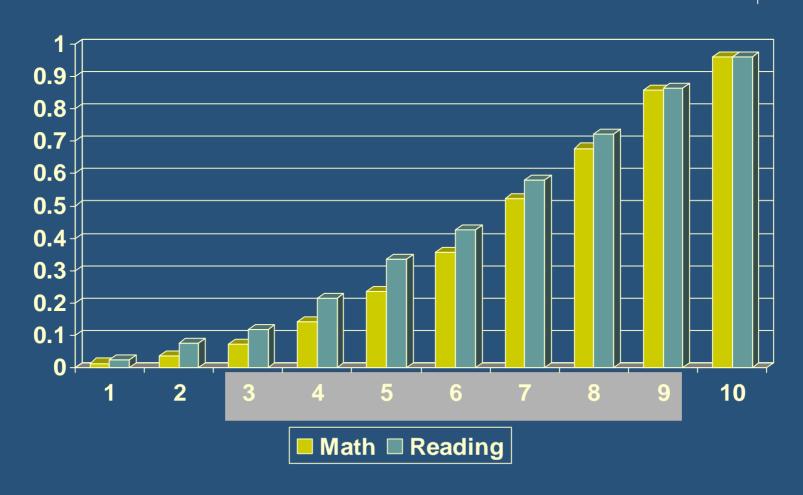
## NCLB: Change in 5<sup>th</sup> Grade Math Scores (2003 vs. 2002)





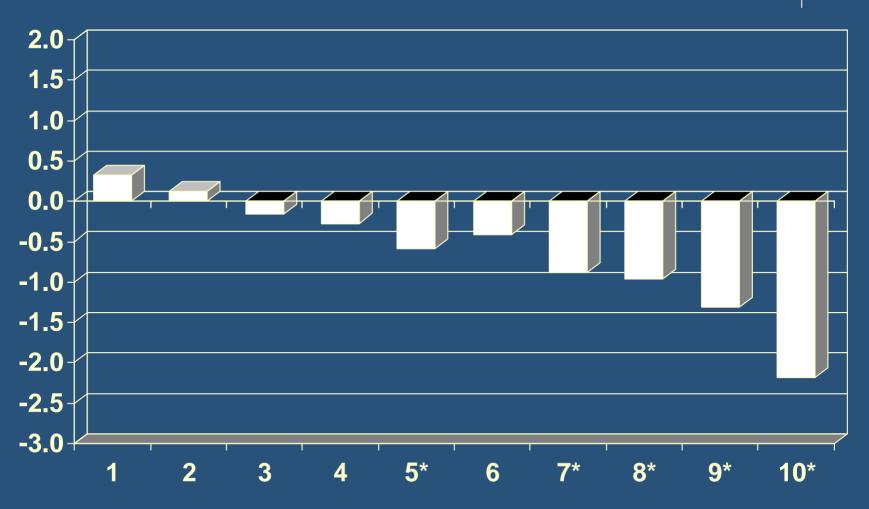
### NCLB: Expected Proficiency in 5<sup>th</sup> Grade





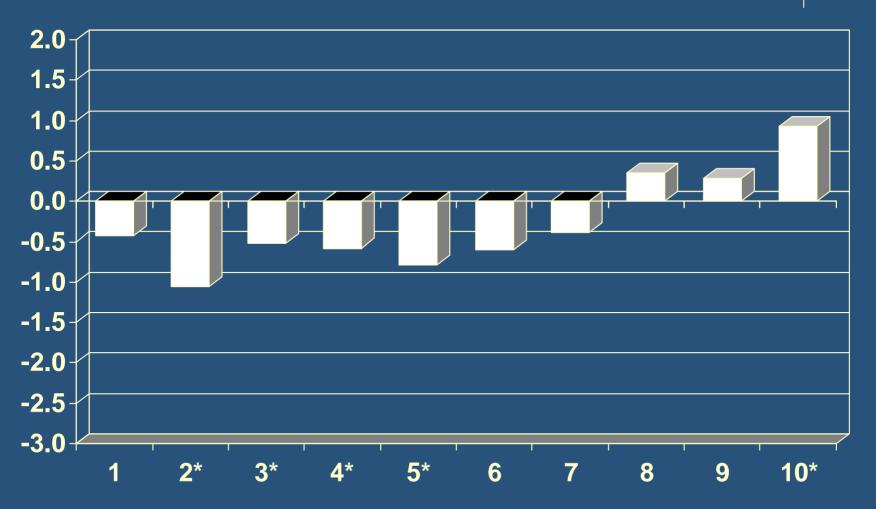
## Placebo Test: Change in 5<sup>th</sup> Grade Reading Scores (2005 vs. 2004)





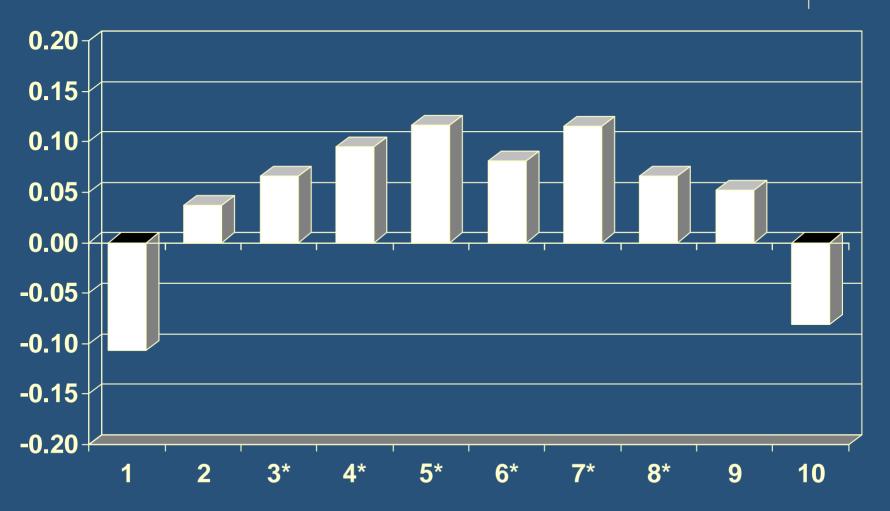
#### Placebo Test: Change in 5<sup>th</sup> Grade Math Scores (2005 vs. 2004)





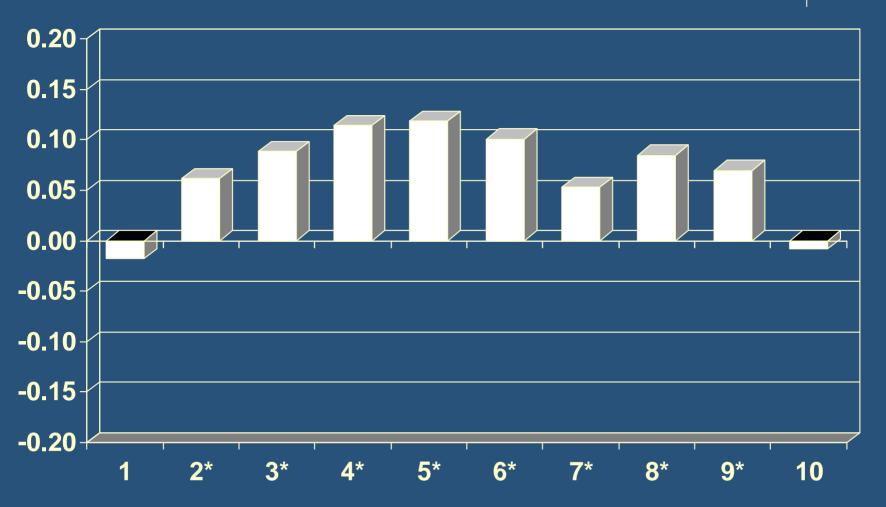
## Chicago Accountability: Change in 5<sup>th</sup> Grade Reading Scores (1998 vs. 1996)





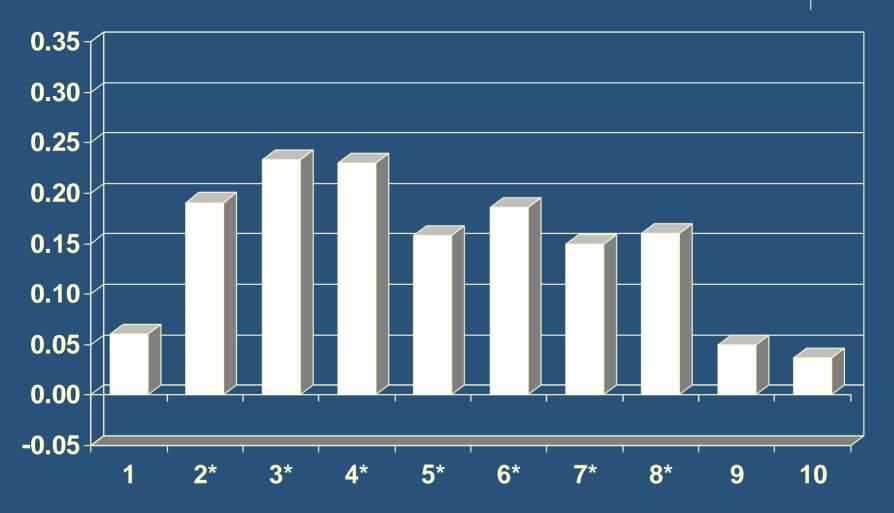
#### Chicago Accountability: Change in 5<sup>th</sup> Grade Math Scores (1998 vs. 1996)





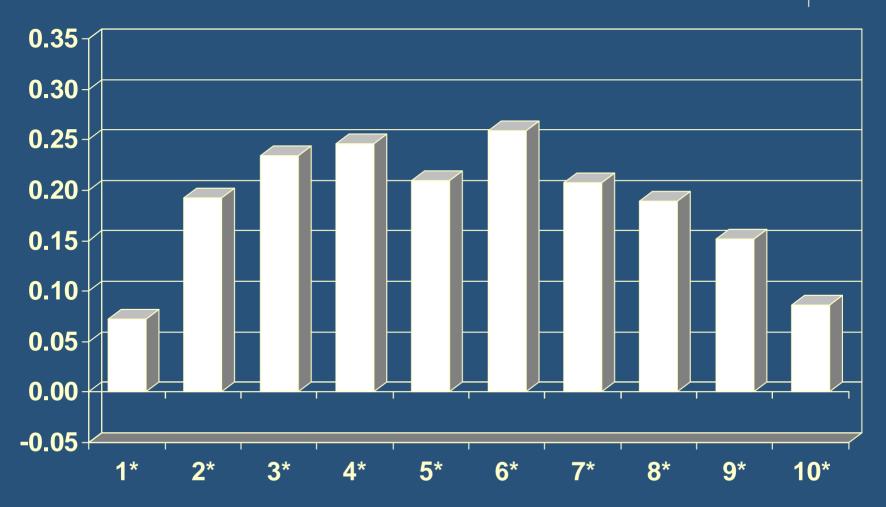
#### Chicago Accountability: Change in 6<sup>th</sup> Grade Reading Scores (1998 vs. 1996)





#### Chicago Accountability: Change in 6<sup>th</sup> Grade Math Scores (1998 vs. 1996)





## Expected Summer School Pass Rate in 6<sup>th</sup> Grade

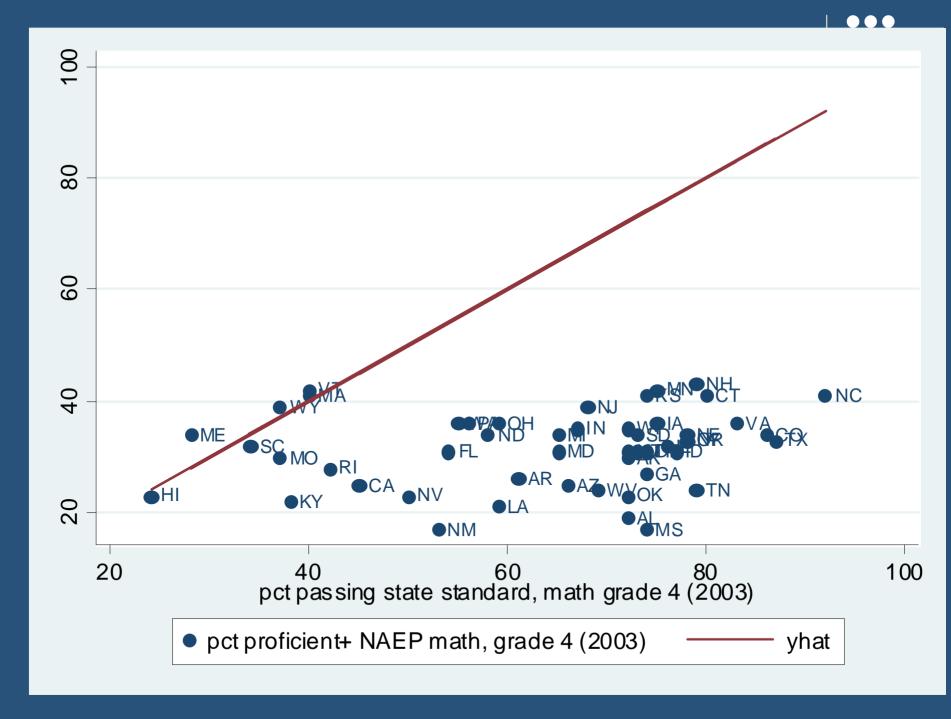




#### Policy: Race to the Top



- Rhetoric: "soft bigotry of low expectations"
- States originally encouraged to set high standards
  - Picture
- States again encouraged to set high standards
- Our model predicts if standards are high
  - -> more high achieving kids get extra attention
  - -> but can harm low achieving students



#### Policy: Value-Added Measures



- Need a system that gives some credit for moving children up in achievement throughout the distribution
  - Perverse incentives for best teachers now
- Value-added
  - Hard to get scales right
- Multiple thresholds (MA model)
- Previously the Dept of Ed limited # of states allowed to do this

#### Conclusions



- NCLB as currently structured gives incentive to leave worst (and best) scoring students behind, concentrate on middle
- Straightforward empirical evidence documenting that schools respond to this incentive by changing their behavior in such a way that students in the middle were helped
- Taken in conjunction with qualitative evidence, appears that teachers redistribute effort and attention toward "bubble" students