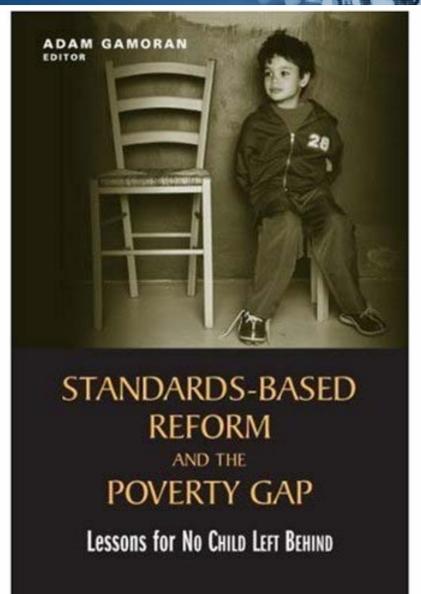


#### THE BROOKINGS INSTITUTION



Institute for Research on Poverty





### The book is about...

- Whether standards-based reforms have led to reduced inequality
- How NCLB reforms designed to reduce inequality have been implemented so far
- Implications of these findings for NCLB's reauthorization

## Today's talks are about...

- Teacher and teaching quality
  - Standards-based reforms of the past have improved *quality*, but generally have not reduced *inequality*
- Tutoring
  - □ Why it should work, and why it won't work as currently implemented under NCLB
- Implications
  - □ NCLB needs consistent implementation to reduce, let alone close, the poverty gap

## Part I

- The Context of Contemporary Education Reform
  - □ NCLB as a Standards-Based Reform (Adam Gamoran)
  - ☐ Integration of NCLB and IDEA (Barbara Foorman and colleagues)



### Part II

- Looking Back: Standards-Based Reform and Opportunities for the Disadvantaged
  - □ State Accountability Policies and Instructional Quality (Meredith Phillips, Jennifer Flashman)
  - □ Teacher Quality and Evidence-Based Practice (Laura Desimone, Tom Smith, David Frisvold)

### Part II

- Looking Back: Standards-Based Reform and Opportunities for the Disadvantaged
  - □ State Accountability Policies and Instructional Quality (Meredith Phillips, Jennifer Flashman)
  - □ Teacher Quality and Evidence-Based Practice (Laura Desimone, Tom Smith, David Frisvold)

### Part II

- Looking Back: Standards-Based Reform and Opportunities for the Disadvantaged
  - ☐ Grade Retention in the Era of Accountability (Robert Hauser, Megan Andrew, Carl Frederick)
  - ☐ High School Exit Exams (Thomas Dee and Brian Jacob)

#### Contents

#### Part III

- Looking Forward: Standards, Sanctions, and the Future of NCLB
  - □ Tutoring in Standards-Based Reform (George Farkas, Rachel Durham)

#### Contents

#### Part III

- Looking Forward: Standards, Sanctions, and the Future of NCLB
  - □ Tutoring in Standards-Based Reform (George Farkas, Rachel Durham)
  - □ NCLB School Choice (Paul Hill)
  - ☐ The Peculiar Politics of NCLB (*Tom Loveless*)
  - □ NCLB Lessons Learned (*Andrew Porter*)

#### Contents

#### Part III

- Looking Forward: Standards, Sanctions, and the Future of NCLB
  - □ Tutoring in Standards-Based Reform (George Farkas, Rachel Durham)
  - □ NCLB School Choice (Paul Hill)
  - ☐ The Peculiar Politics of NCLB (*Tom Loveless*)
  - NCLB Lessons Learned (Andrew Porter)

## **Key Conclusions**

- Schools alone cannot eliminate the poverty gap, but schools can play a role in reducing it
- NCLB has highlighted inequalities and created new incentives for response
- Some NCLB alarms have proved false
  - □ Good teachers have not been driven out
  - □ Retention rates have not spiked upwards

## **Key Conclusions**

- But identifying inequalities, setting standards, and developing strategies are only the first step
- Most discussions of NCLB focus on targetsetting, but this book suggests a greater challenge is inadequate implementation of improvement strategies
- NCLB's strategies remain promising, but largely untested

# Has NCLB Improved Teacher and Teaching Quality for Disadvantaged Students?

Laura M. Desimone University of Pennsylvania

Thomas M. Smith Vanderbilt University

David Frisvold University of Michigan

## Research Questions

- 1. What were the gaps in teacher and teaching quality for students in poverty compared to their more advantaged peers in 2000, and to what extent did those gaps narrow by 2003?
- 2. Are improvements in teacher quality and/or the narrowing of teacher quality gaps associated with state implementation of NCLB?

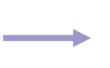
# Why is Teacher and Teaching Quality Important?

**Teacher Quality** 

Teaching Quality

More Experience & Content Knowledge

Improved Instruction



Increased Student Learning

Certification

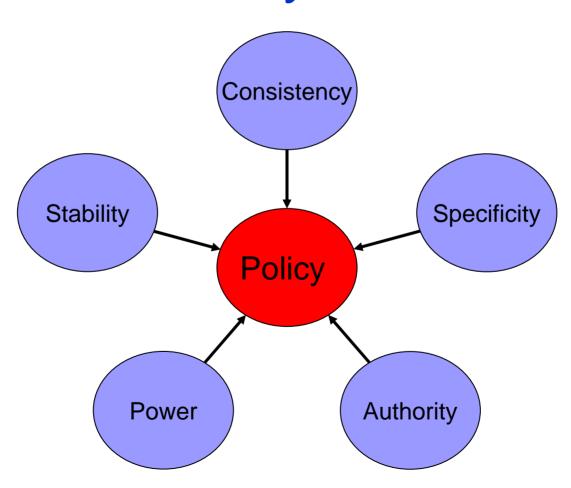
# State Implementation of NCLB

NCLB requires states to take steps to ensure that poor and minority children "are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers."

Time period: 2000-2003

Target: 2005-2006

# Conceptual Framework: Policy Attributes Theory



## Data

State Policy Database

•2000 National NAEP

•2000 and 2003 State NAEP

## Measures

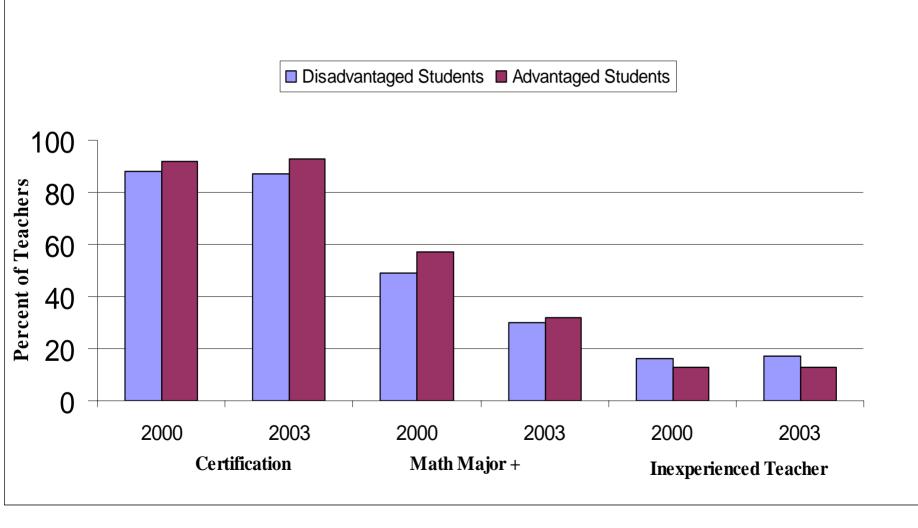
- Instruction
  - Conceptual emphasis
  - Conceptual strategies
  - Procedural teaching
- Full vs. partial certification
- Inexperienced teacher: 2 years or fewer
- BA or higher in mathematics

RQ1: What were the gaps in teacher and teaching quality for students in poverty compared to their more advantaged peers in 2000, and to what extent did those gaps narrow by 2003?

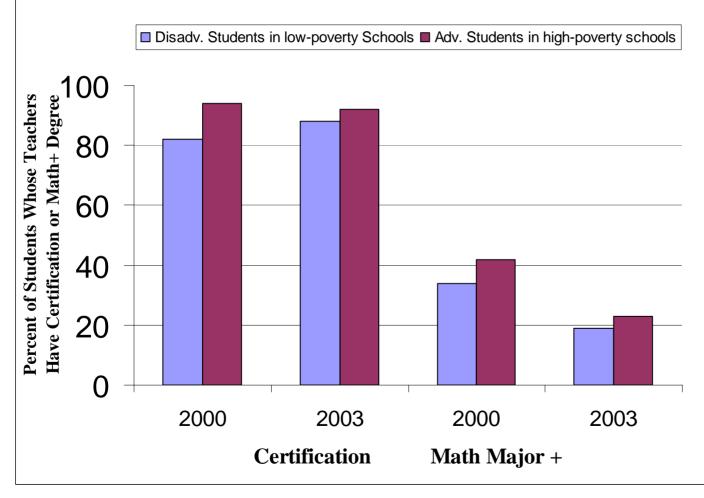
#### Mean comparisons

•2000 & 2003 national and by state and free lunch status

# **Comparing Disadvantaged to Advantaged Students on Three Indicators of Teacher Quality**

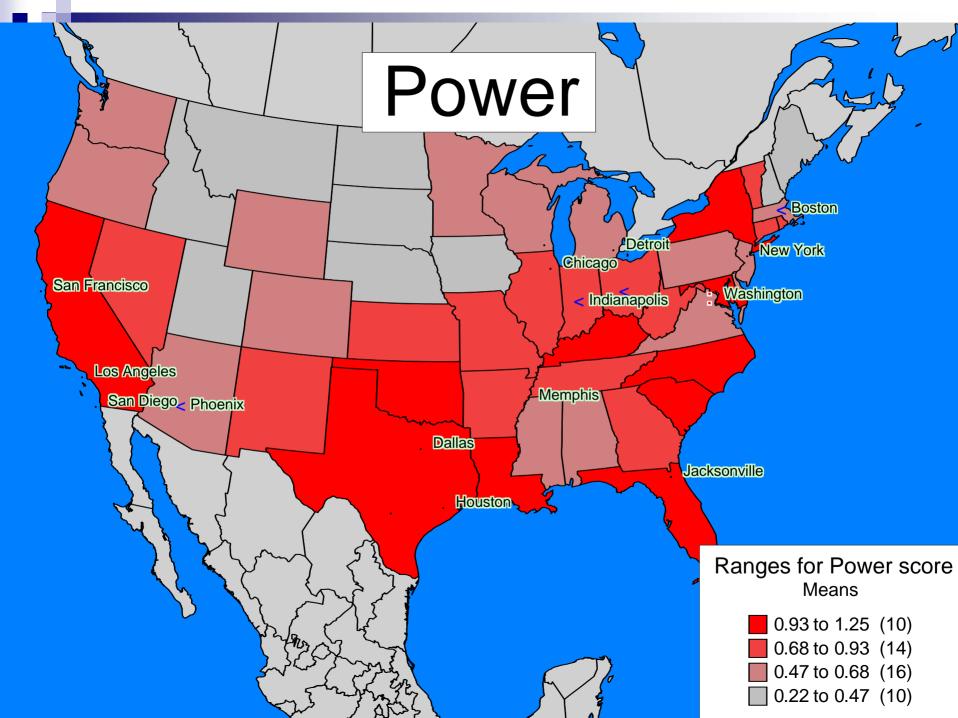


#### Comparing Advantaged Students in High-Poverty Schools to Disadvantaged Students in Low-Poverty Schools



# RQ2: Are improvements in teacher quality and/or the narrowing of teacher quality gaps associated with state implementation of NCLB?

- Are changes in state policies between 2000 and 2003 associated with increases in teacher quality?
- Was the implementation of policies between 2000 and 2003 associated with a reduction in poverty gaps in teacher quality?



# Are changes in state policies between 2000 and 2003 associated with increases in teacher quality?

Change in State Policy from 2000 to 2003 Associated with Change in Teacher Quality from 2000 to 2003

	Inexperienced	Regular	Mathematics
	Teacher	Certification	Major or Higher
Aligned standards and assessments (consistency) Clear and detailed standards (specificity) Providing assistance to low-performing schools (authority1) Offering professional development resources (authority2) Ranking low-performing schools (power1) Number of sanctions imposed (power2 Free lunch		(+)	<b>+</b>

Change in State Policy from 2000 to 2003 Associated with Change in Teacher Quality from 2000 to 2003 for High Poverty Schools

Inexperienced Regular Mathematics
Teacher Certification Major or Higher

(+)

Aligned standards and assessments (consistency)

Clear and detailed standards (specificity)

Providing assistance to low-performing schools (authority1)

Offering professional development resources (authority2)

Ranking low-performing schools (power1)

Number of sanctions imposed (power2)

Free lunch

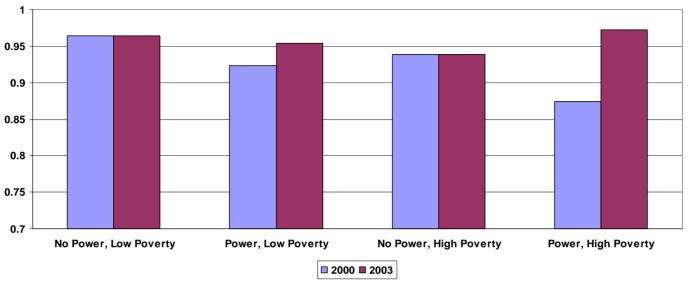
(-)



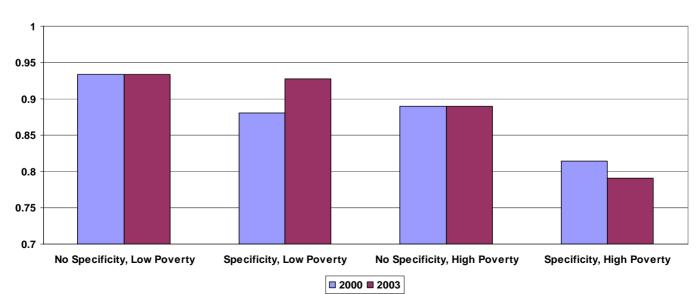
Was the implementation of policies between 2000 and 2003 associated with a reduction in poverty gaps in teacher quality?



#### Predicted percentage of teachers certified by power (whether a state ranks schools) and student poverty level



Predicted percentage of teachers certified by specificity (clear and specific standards) and student poverty level



# Summary: Poverty Gaps and How They Have Changed

Small poverty gaps exist and didn't change much from 2000 to 2003.

Disadvantaged students in advantaged schools are worse off than their advantaged peers in disadvantaged schools.

# Summary: Associations of Teacher Quality with NCLB-Related Policy

- Policy attributes and teacher quality were not much different for advantaged and disadvantaged students.
- Authority was related to conceptual teaching strategies.
- Sanctions were related to use of procedural instruction and teachers with higher content knowledge.
- Weak association between policy and teacher quality, but did not reduce the relationship between poverty and teacher quality.
  - □ Power mitigated it, specificity made it worse

# Challenges to Studying Policy Effects on Teacher Quality

- Complexity of interactions
- Simultaneous multiple policy levers
- Time ordering
- Real change vs. random fluctuation
- Quality of measures

## Significance

Teacher and teaching quality affect student outcomes.

Currently we are implementing multiple policy levers to improve teaching: (1) merit pay, (2) professional development (mentoring, coaching, induction), (3) school and curriculum reforms, (4) NCLB requirements, (5) teacher preparation reforms (6) recruitment

# Supplemental Educational Services under No Child Left Behind

## The Role of Tutoring in Standards-Based Reform

George Farkas, Penn State Rachel E. Durham, Johns Hopkins

## Background...

■ Title I schools in their 2<sup>nd</sup> year of Improvement Status (after 3 years of not meeting AYP) are required to spend up to 20% of their Title I allocation on Supplemental Educational Services (SES) for low-income students.

SES still in the early stages of implementation.

## Rates of Student Participation

- State and national evaluations indicate about a 20% overall participation rate among eligible students; participation increasing.
- 24-28% of eligible students in grades 2-5
- <5% of eligible students in high school</p>
- Black and Hispanic students had higher participation rates (17% and 12%) than white students (10%)



#### Effectiveness unknown

 After-school programs – attendance problematic, time-on-task low, students weary from the school day

 Prior studies of after-school programs find little or no effect on academic achievement (Dynarski et al 2003; 2004; Vandell et al. 2005)

# М.

#### Effectiveness unknown

Current evaluations of SES are not finding expected gains

(e.g., GAO 2007; RAND 2007; Chicago Public Schools 2005)

Difficult to determine source of student gains

## v

## Program Implementation

SES vs. Title I pull-out program

Treatment variability -

15:1 5:1, 3:1, 1:1; pedagogy, methods, tutor training, alignment with curriculum varies or is unknown

# Program Implementation

## Per-pupil cost/hour varies

For instance, with a per-pupil allowance of \$1200:

- -At \$30/hr, Provider A can provide 40 hours of instruction.
- -At \$15/hr, Provider B can provide 80 hours of instruction.
- \*\*60-100 hours of year-long instruction is needed for treatment effects\*\*

-With a student-teacher ratio of 5:1, Provider A nets \$150 minus the cost of the tutor while Provider B nets only \$15 minus cost of tutor; thus, providers motivated to *increase* instructional group size.

## 1

## Recommendations

If treatment is going to be effective:

- Limit instructional groupings to 1:1 or at least 2:1
- Intervention should begin early when student first falls behind
- Closer alignment to classroom instruction

If market is going to be effective:

- Increased communication to parents about availability and program effectiveness
- We need further scientifically rigorous evaluation (perhaps nation-wide) of provider services and effectiveness

## NCLB Lessons Learned: Implications for Reauthorization

Andrew C. Porter University of Pennsylvania

# Between State Differences in Implementation

- Standards for proficiency
- Determining AYP
- Defining highly qualified teacher
- Minimum number of days a student must be present to count in accountability

## Methodological Effects of NCLB

- Student ID and longitudinal data
- Vertical scales
- A renewed emphasis on value added and how that might be used in holding schools accountable
- A turn away from performance assessments
- Development of alternate assessments

## Reauthorization

- Surprisingly little resistance to NCLB's requirements
- Achievement gap remains large

# Based on Early Results, Some Thoughts on Reauthorization

- Voluntary national content standards
- Voluntary national tests
- Testing in subjects beyond reading and mathematics
- More testing in high school

# Based on Early Results, Some Thoughts on Reauthorization (cont.)

- Tightening the requirements around AYP and defining a criterion that's a function of every student's achievement
- Include all students, not just those who stay in a school for most of the school year
- Student accountability
- National standard for teacher quality



#### THE BROOKINGS INSTITUTION

