

Texas School Finance Commission

# School Finance and School Outcomes: The Role of Incentives

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# Overview

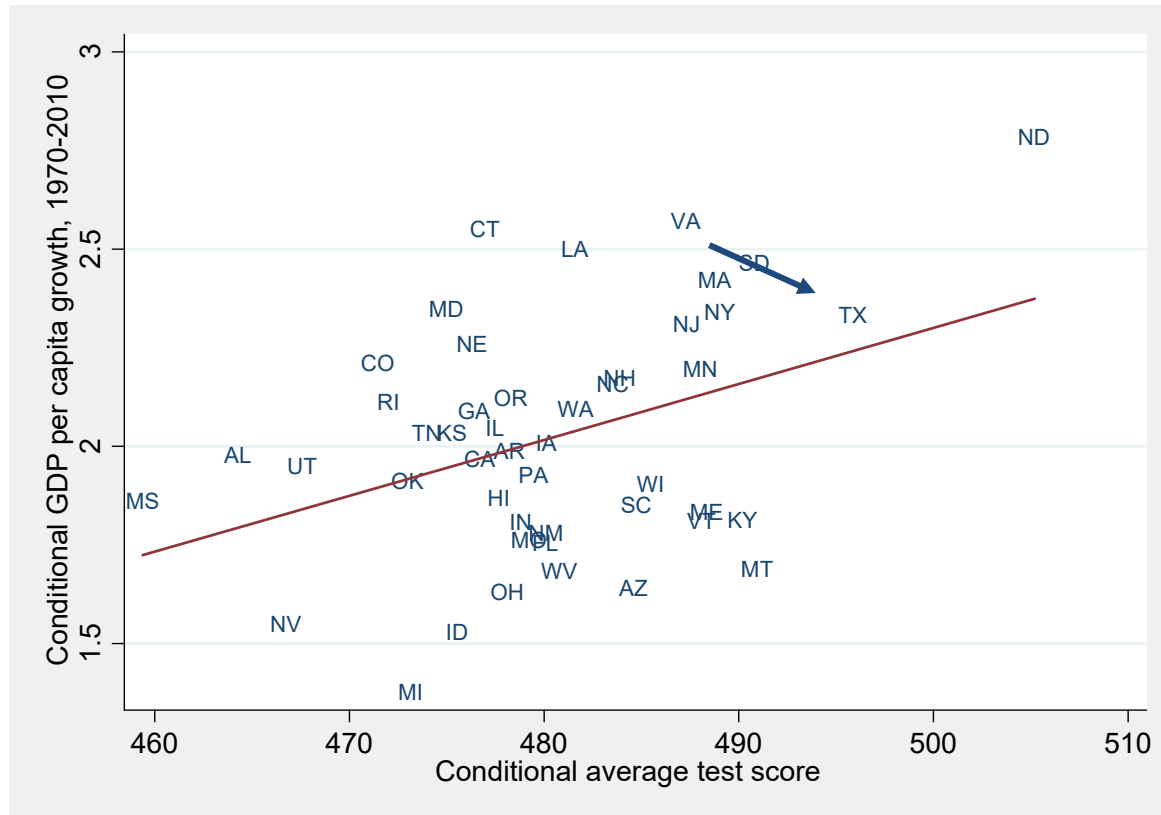
- School finance is policy
- If interested in student achievement, need to focus on student achievement
- Outcomes are economically very important
- Teacher and administrator effectiveness is key
- Cannot regulate way to better outcomes

***How money is spent is more important than  
how much is spent***

# Improved schools have a large payoff

- Texas has done well
  - More local decision making
  - Strong and early accountability
  - Less regulation
  - Lower union impediments
- Texas has slipped some in recent years
- Economic gains from improvement very large

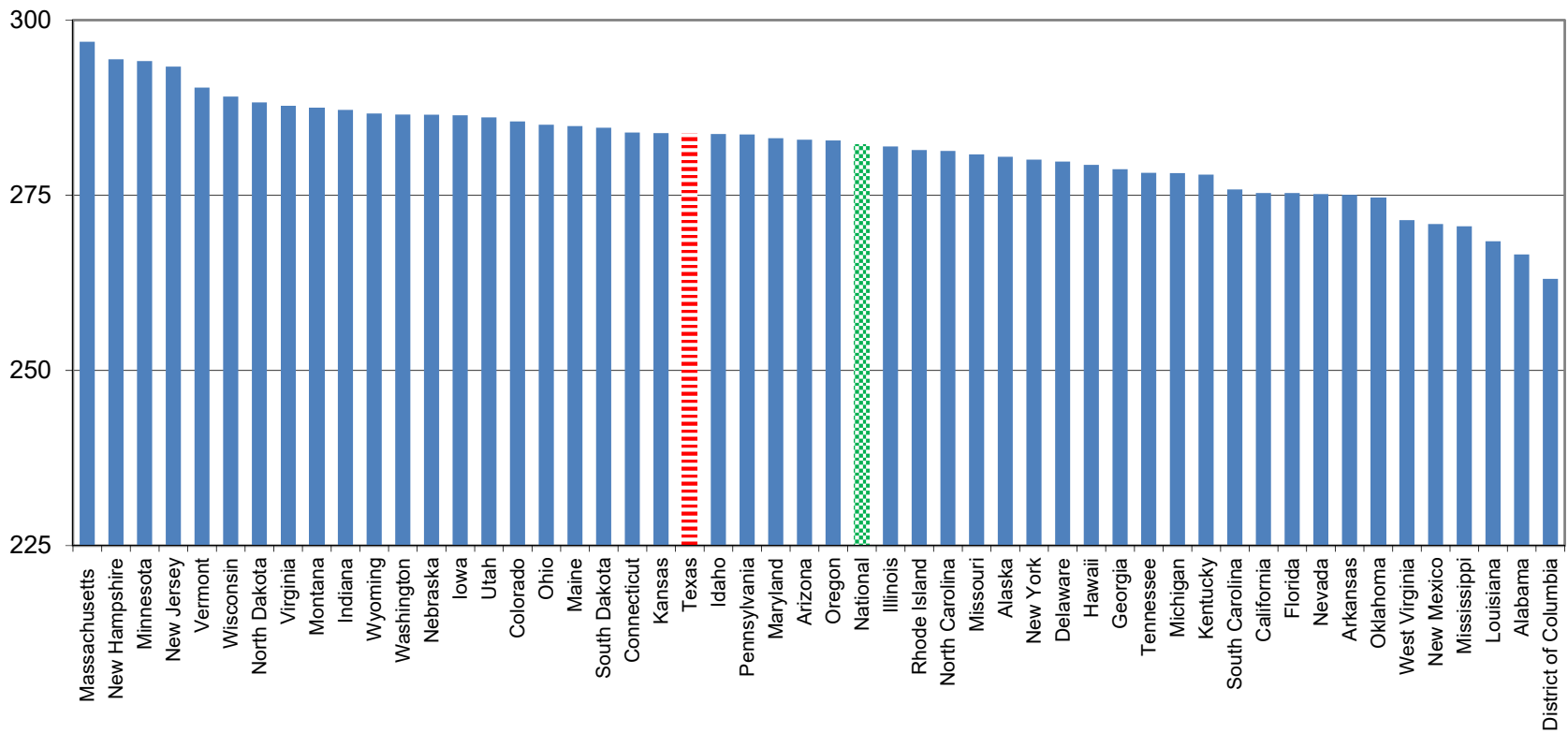
# Economic growth follows good schools



Growth in GDP/pop over 1970-2010 for states as related to math skills and conditional on income levels in 1970

# Texas has room to improve

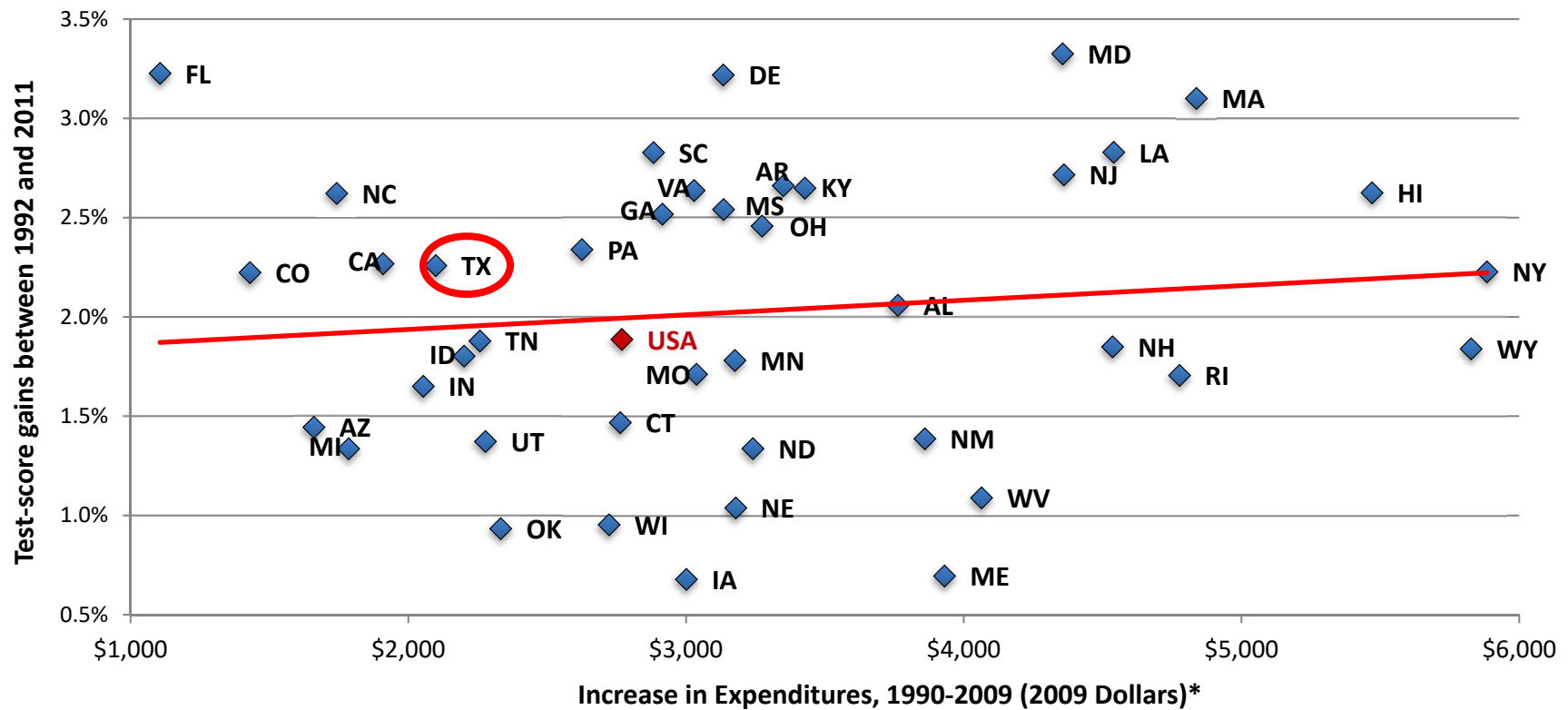
**TX is at 36<sup>th</sup> Percentile of the MA Distribution  
on NAEP 8<sup>th</sup> grade math in 2015**



# The future of Texas depends on skills of the population

- Texas keeps its students
- Projection: TX to MA means
  - Average 7.3% greater GDP
  - Present value of almost 3.5 times GDP
- Competition is international
  - Texas is ahead of Portugal but behind Poland
  - Gains from reaching Canada much larger

# How money is spent is more important than *how much* is spent



## Research shows teacher effectiveness is the most important factor of schools

- Substantial variation in teacher quality
- Observable characteristics of teachers explain little
- Salary and other factors affect teacher transitions
- Limited linkage between salaries and teacher quality

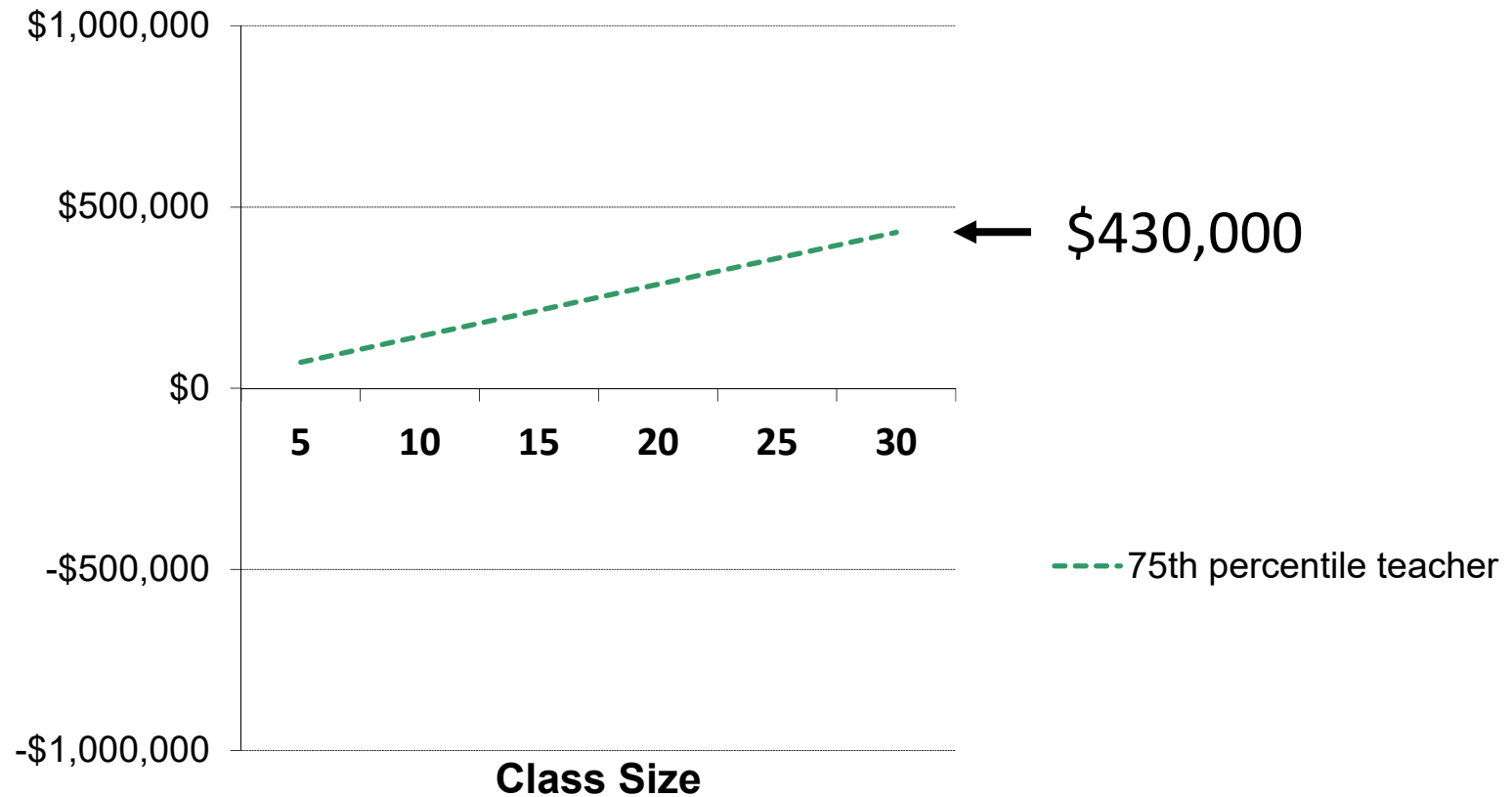


# Increasing all salaries is not the answer

- Salaries unrelated to effectiveness
- Teachers do not have excessively high turnover
- Keeping more teachers does not change overall quality

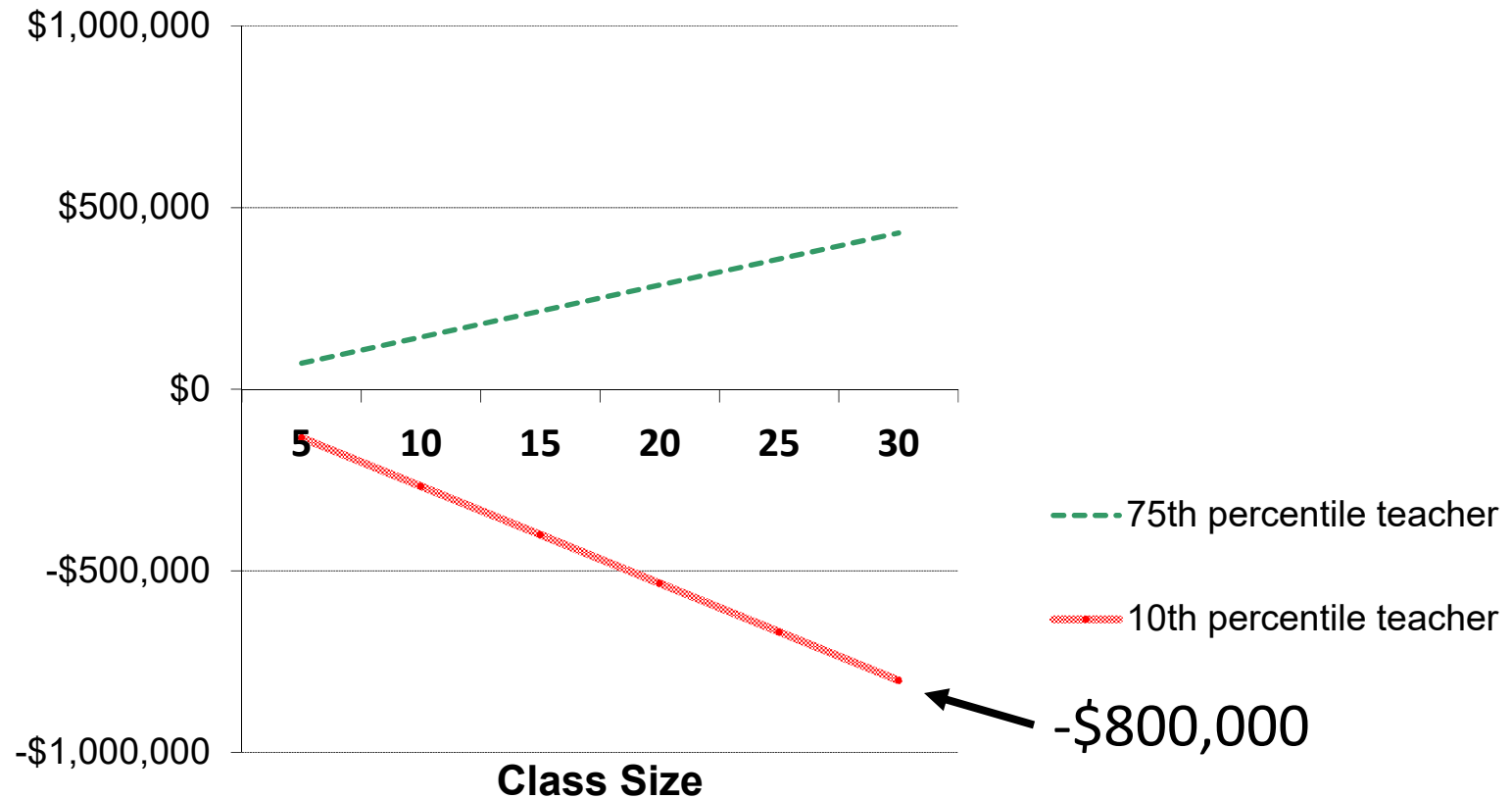
# Highly effective teachers yield large gains

(Increase in student earnings compared with average teacher)



# Ineffective teachers yield large harm

(decrease in student earnings compared with average teacher)



# Personnel policies linked to performance have huge payoffs

- Moving 5-10 percent of least effective teachers to *average* has dramatic effects
- Texas would move to top of international achievement distribution
- Reaching Finland implies average *nine percent* higher GDP

# Dallas has radically revised evaluation and pay of personnel

- Sophisticated principal evaluations
  - Supervisor ratings
  - Student achievement gains
  - Parental surveys
  - Reliability of teacher evaluations
- Sophisticated teacher evaluations
  - Supervisor ratings
  - Student achievement gains
  - Student surveys
- Use evaluations in pay and personnel decisions

# DISD has focused on student outcomes

- Would ratings suffer in most disadvantaged schools?
- Can we improve the bottom schools?
- DISD links effective personnel with most needy schools

# DISD Accelerating Campus Excellence (ACE) Schools Program

- Define chronically low-achieving among most disadvantaged (Tier 1) schools
  - Program size
    - 7 schools for 2016
    - 13 schools for 2017
  - Purposeful placement of effective principals in these campuses
  - Existing teaching staff reassigned
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# Design performance-based incentives to work in an ACE Schools

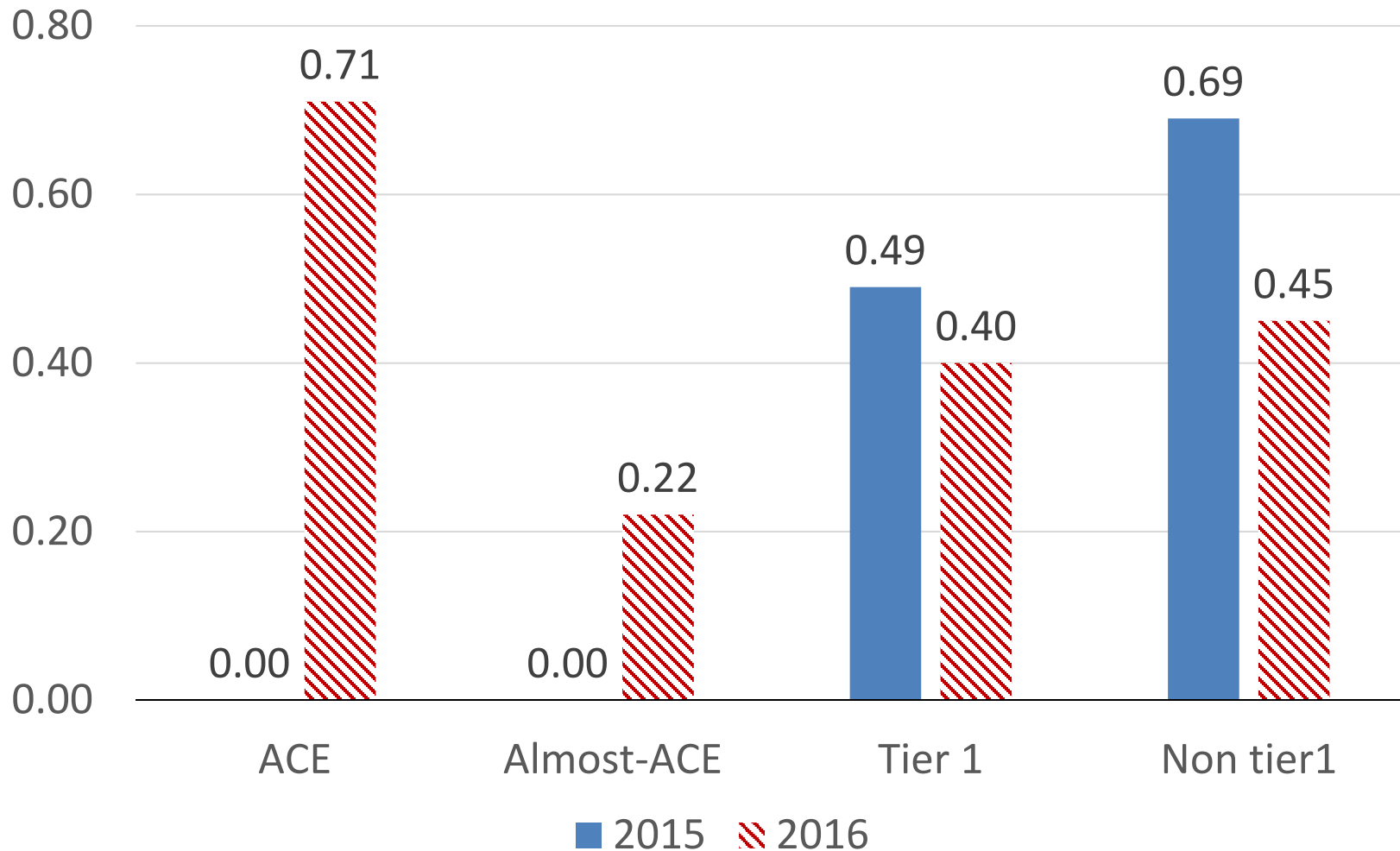
- \$2,000 signing bonuses plus annual stipends depending on position and evaluation rating
  - Principals - \$13,000
  - Assistant principals - \$11,500
  - Teachers
    - \$6,000 for those ranked progressing
    - \$8,000 for those ranked proficient
    - \$10,000 for those who are distinguished



# What is the effect of ACE program?

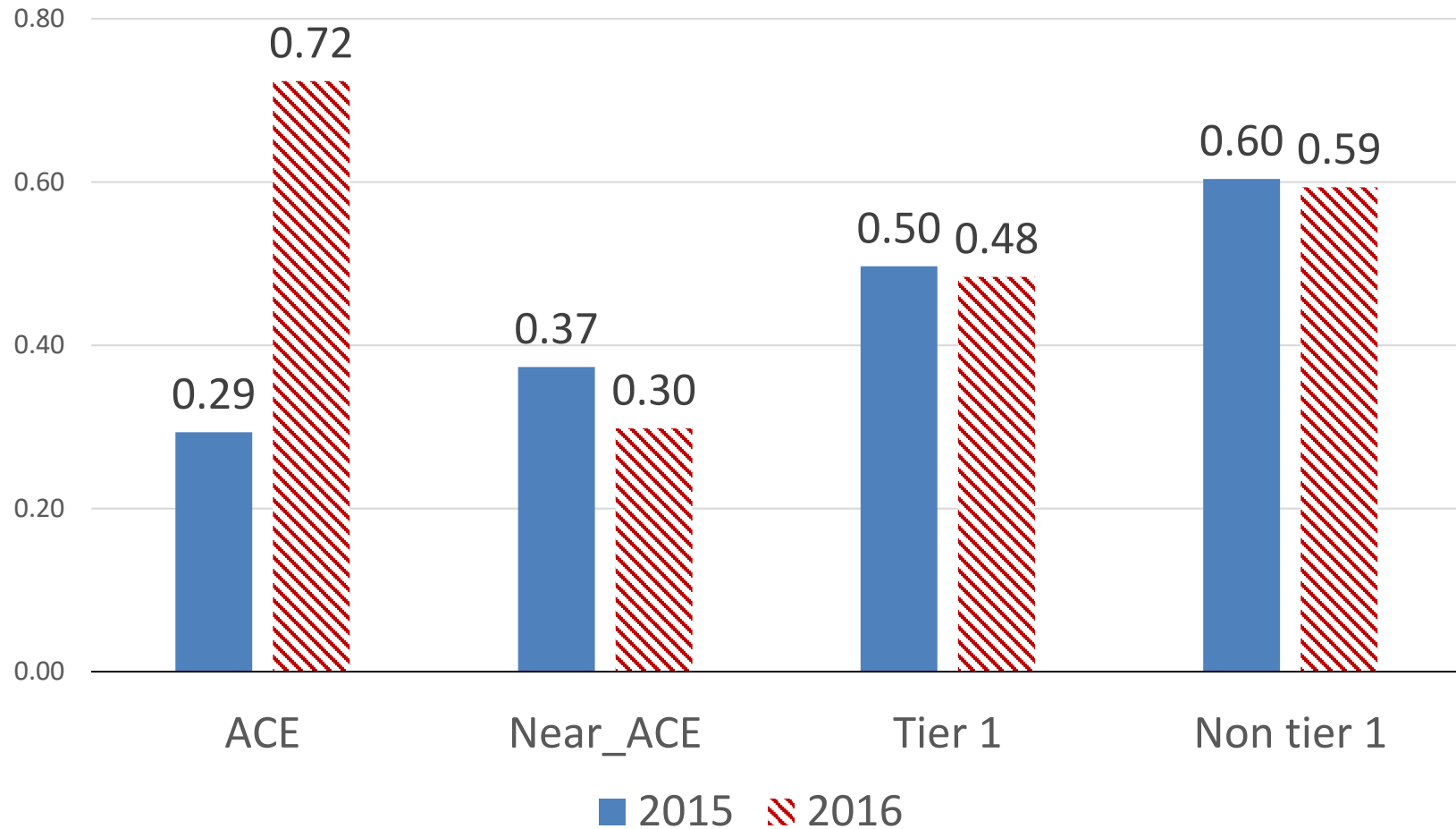
- ACE goes into effect in 2016
- Consider four categories of DISD schools
  - ACE (7 schools in 2015; 13 in 2016)
  - Near-ACE (18 schools in 2016) – next most disadvantaged
  - Other Tier 1 (53) – other disadvantage schools
  - Non-disadvantaged (165)
- Compare changes over time

# ACE schools get much more effective principals



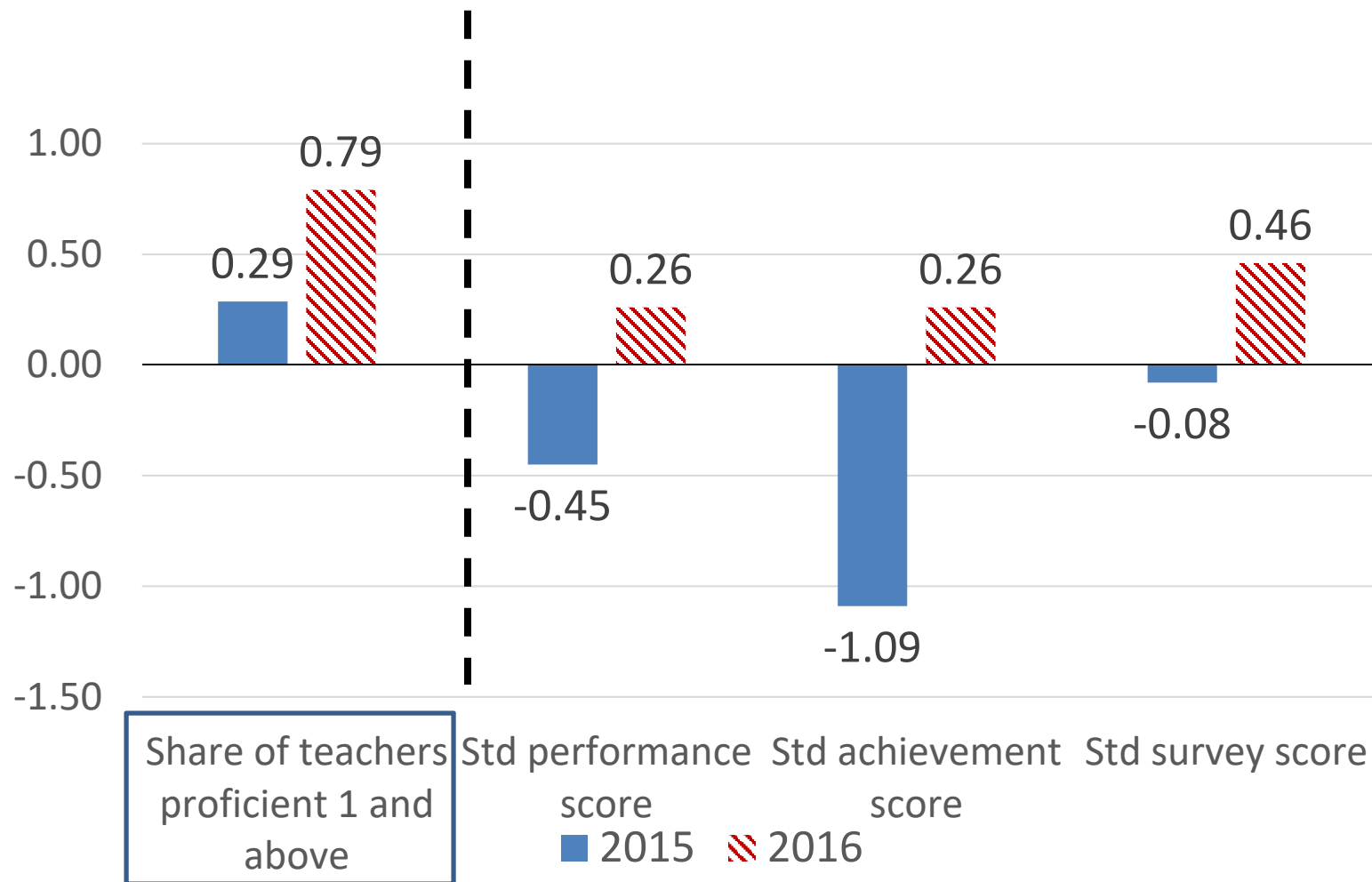
Note: Effective principal is 2015 evaluation of proficient 1 or better.

# ACE schools get much more effective teachers



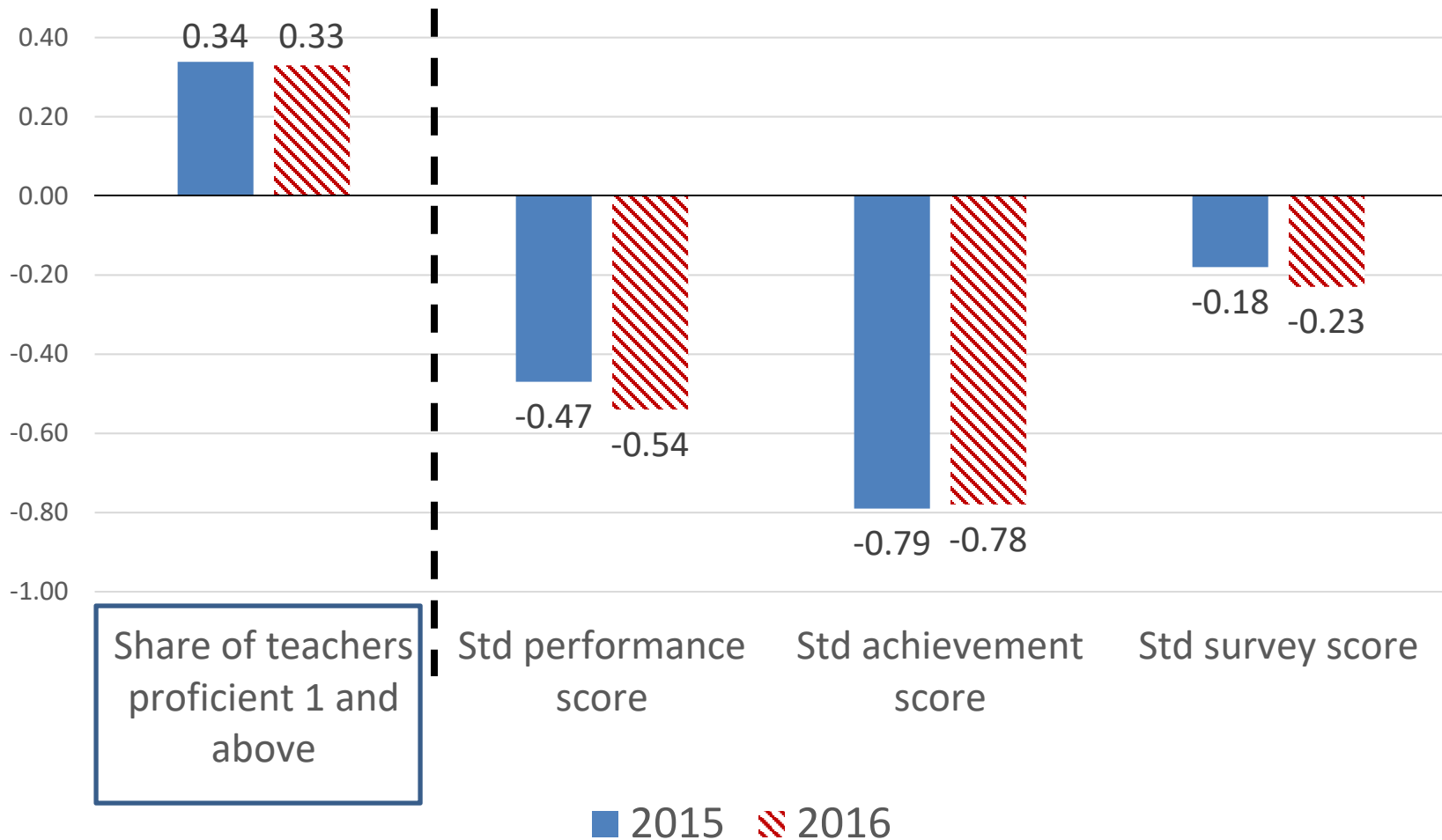
Note: Effective teacher is 2015 evaluation of proficient 1 or better.

# Teacher effectiveness is found across all evaluation categories (ACE Schools)



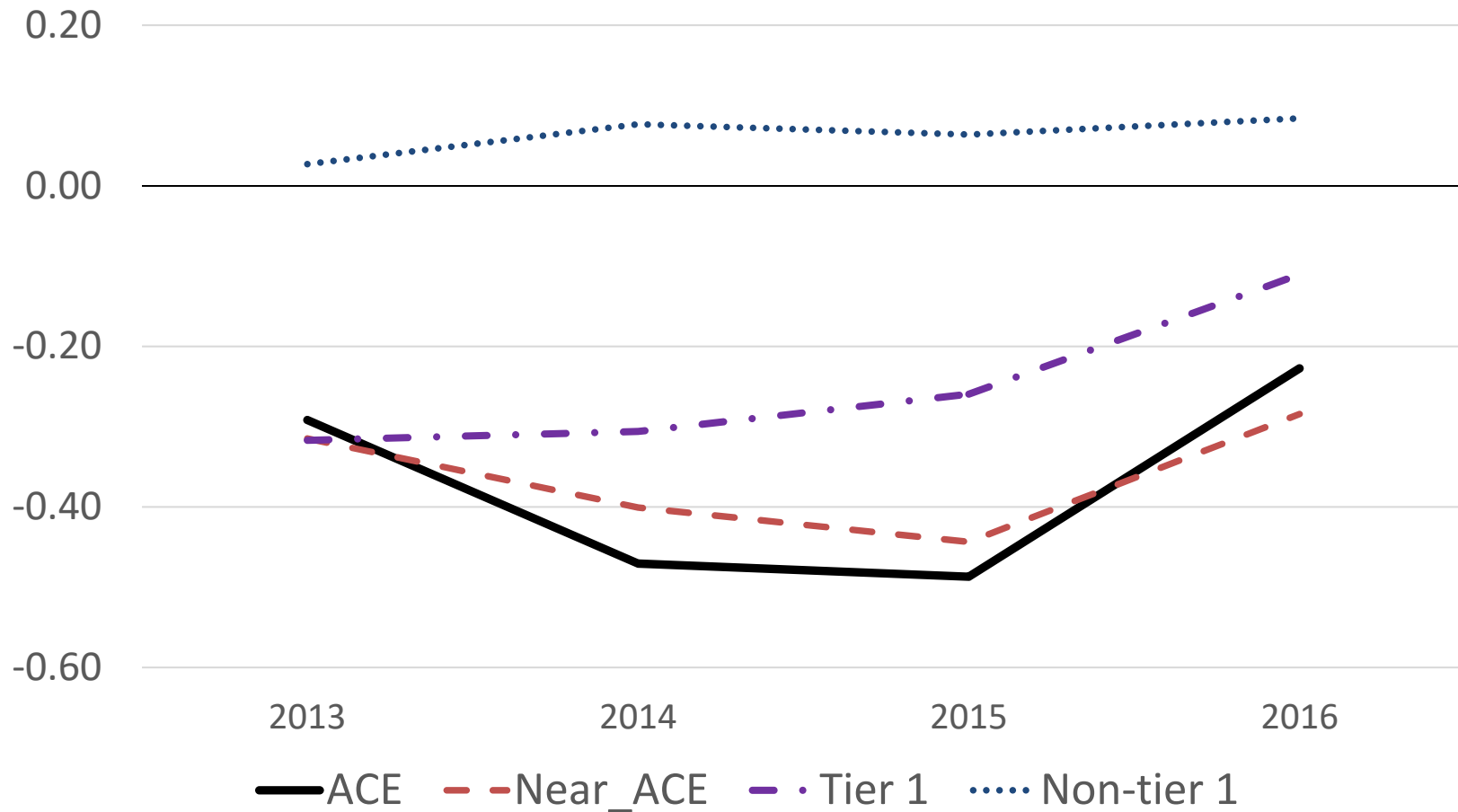
Note: Effective teacher is 2015 evaluation of proficient 1 or better (Category A).

# Teacher effectiveness is not found elsewhere (Near-ACE Schools)

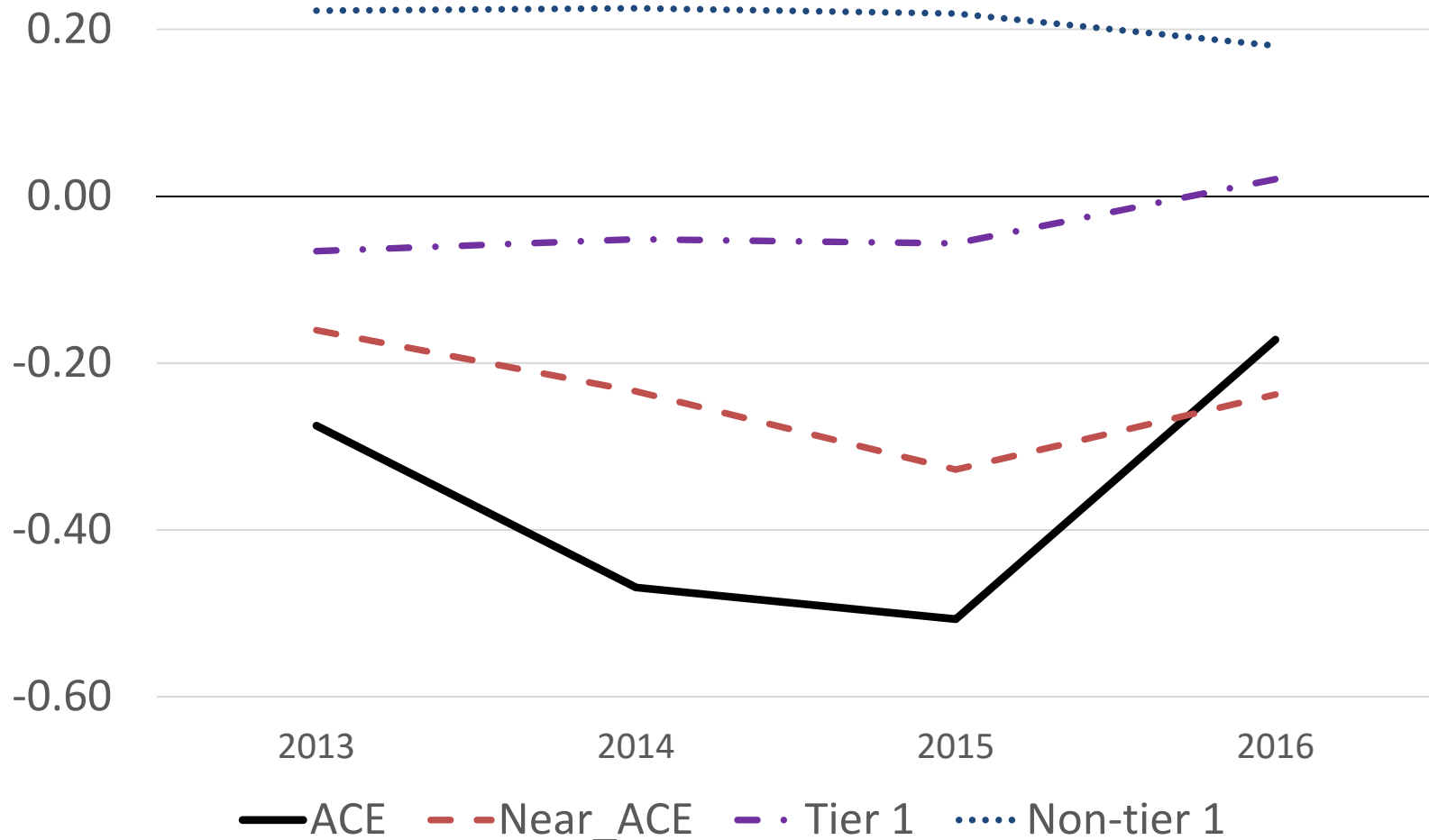


Note: Effective teacher is 2015 evaluation of proficient 1 or better (Category A).

# Student reading in ACE schools improves



# Student math in ACE schools dramatically improves



# Expanding to all of Texas suggests dramatic improvements

- Gains in narrowing achievement gaps could be dramatic for entire state
- Expanding effectiveness-based policies to Texas could bring Texas to top of nation and top of world



# Some Conclusions

- Improvement of Texas schools is economically important
- Key is effective teachers and principals
- Cannot regulate effectiveness

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# State finance must support good policy

- Schools and personnel respond to incentives
- High value of incentives with accountability and local autonomy
- Reward effectiveness, not experience or credentials

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