

# **Teacher Compensation Reform: The Devil You Don't Know May Be Preferable to the One You Do**

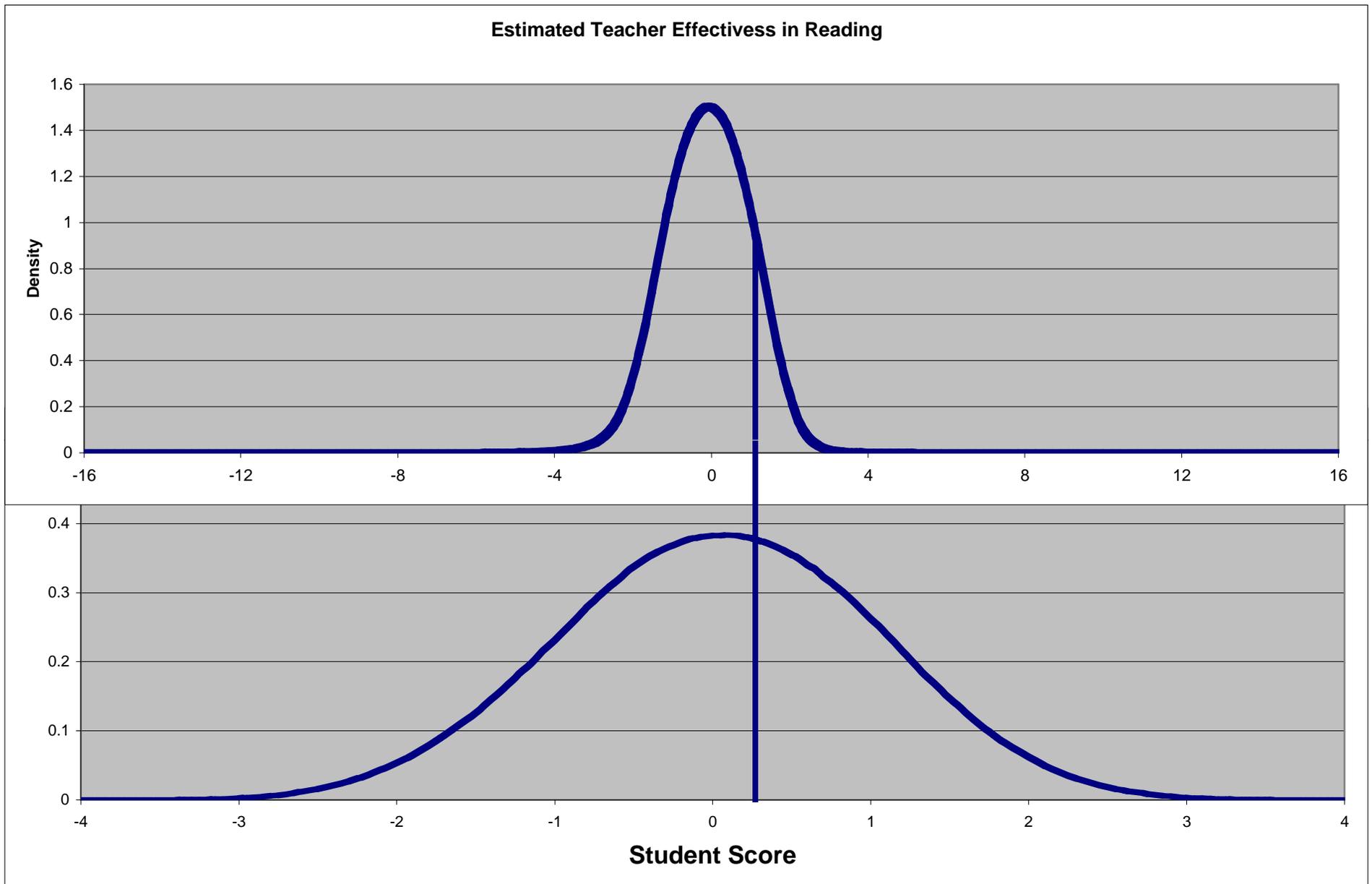
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*Joint Task Force on Basic Education Finance  
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# Why Focus on Teachers?

- Teacher quality is the key to school success
  - Its impact is far larger than any other quantifiable schooling input (Coleman et al., 1966; Goldhaber, 2002; Rivkin et al., 2005)
- The estimated impact of teacher quality is large
  - It can explain more than a full grade-level equivalent in test performance (Hanushek, 1992)



This is equivalent to **20-40 percent** of students' typical yearly gain.

# Why Focus on Compensation?

- Input-based policies won't have large impact because
  1. Gateway ([licensure](#)) policies don't impact existing workforce
  2. Teachers are [more different than alike](#)
- Compensation is a key workforce tool
  - Currently little connection between input policies, teacher compensation and teacher quality
  - Single salary schedule is out of step with the way the labor market as a whole functions
  - Compensation reform has the potential to influence *all* teachers in the workforce

# Where I Stand on Various Reforms

- Differential for hard to staff schools (“combat pay”)
  - “Yes absolutely, it’s unconscionable that we allow these inequities”
- Differential for training/subject
  - “Yup, the labor market reality is that teachers have very different opportunity costs and these have profound impact on the ability of schools to recruit and retain teachers.”
- Differential pay for performance (“merit pay”)
  - “Cautiously optimistic about experiments, but there are really important details that need to be worked out and most places currently lack the infrastructure to do it well”
  - “Making bad mistakes will likely undermine the notion that this reform could be successful”

# Hard to Staff Schools/Classrooms

- By every measure I've seen, the more disadvantaged schools (and classrooms) have higher attrition rates, and are staffed with less-qualified teachers (e.g. experience, degree level, licensure & NBPTS certification status, exam scores)
- No surprise, in teaching, reward comes in the form of assignment
  - Seniority transfer policies, informal practices in schools
- *One* school poverty incentive (“combat pay”) study shows that an \$1800 incentive reduced attrition at high-poverty schools by 12% (Clotfelter et al., 2004)
- Combat pay may not be the only answer, working conditions differentials may also be beneficial, but ...

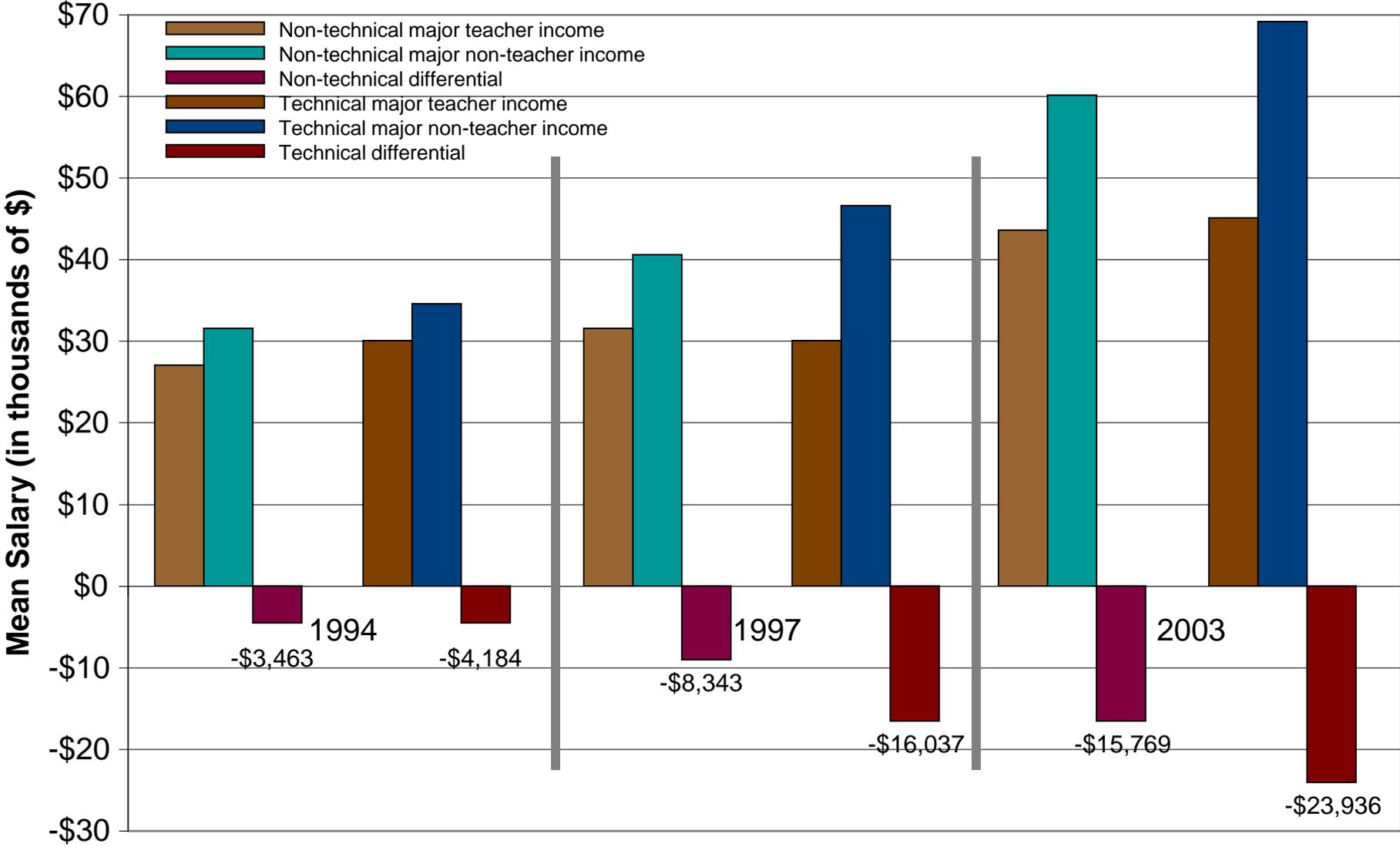
# Combat Pay vs. Working Conditions

- Not much quantitative evidence (but a fair amount of qualitative) supporting the notion that teachers are directly influenced by working conditions *policies* over which we have *direct* control (e.g. class size)
- This does not imply that we ought not to focus on working conditions issues, but when given a choice between quantifiable options, teachers say they prefer compensation; at least that's what Washington State teachers [say](#):

# Why Differentials by Training/Subject?

- Labor market as a whole differentially rewards skills and productivity
- Important “recent” changes under the surface
  - Many occupations once closed off to women and minorities no longer are
  - Returns to college quality and technical college skills (degree major) have increased
    - There is an increasing return to graduating from a top college or university (Brewer et al., 1999)
    - There is an increase in the gap (in entry-level salaries) between education and technical majors (Grogger & Eide, 1995)
- A number of studies show that the attrition/vacancy rates are far higher in technical (e.g. math/science) than non-technical subjects

# Implications of Differences in Labor Market Rewards (in and Outside Teaching)



# Merit Pay

- Few examples of long-standing programs, but recent empirical work shows that it increases student achievement (e.g. Figlio and Kenny, 2006; Lavy, 2002, 2004)
- If the desire is to reward teachers who produce high value-added then employing a credentials-based strategy will lead to significant errors ([experience](#), [degrees](#), [NBCTs](#))
- Merit pay may involve tying teacher pay to student test scores, but it can be many different things
- There are numerous devils in the merit pay details

# The Devils in the Merit Pay Details

- More costly to administrate
- Technical challenges
  - Many aspects of teaching make it less amenable to salary differentiation, particularly in the form of merit pay, than other private sector occupations
    - Jobs are complex and multi-dimensional
    - Success is hard to measure
    - We don't want to discourage collaboration
  - How is teacher effectiveness judged (data requirements) and who are teachers compared against?
- Political (union and/or [teacher](#)) opposition
  - Teachers' unions, particularly the NEA, generally oppose departures from the single salary schedule
- School district politics and institutional inertia
  - When one school wins, another may be losing
  - Capacity to administer complex system
  - Safest thing is to do nothing

# Encouraging Reform & Avoiding Pitfalls

- More basic research is needed on the data and methodological requirements for using student achievement tests as a gauge of teacher effectiveness
- Teacher pay reform is much more likely to be successful if the reform takes place at the state level
  - Broader-based comparisons are possible
  - States must make basic investments in their education data infrastructures
- We need more reality in the discussion -- mistakes *will* happen, even when using an objective system to judge teachers
- Careful pay experiments will allow us to learn far more about what does/doesn't work

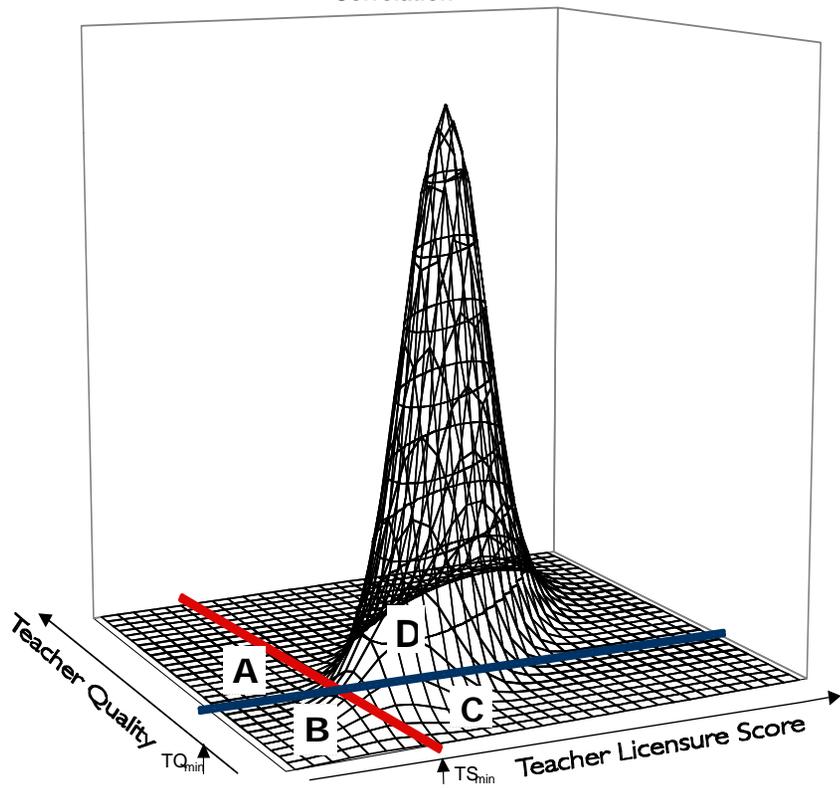
# Conclusions: It's the Devil You Know Versus the One That You Don't

- Strict adherence to the traditional single-salary schedule strips school districts of a key managerial tool
- State-level reform initiatives are more likely to be successful
- Human and data capacity issues are significant barriers to reform in most states
- Pay reform is a high-stakes endeavor
  - Rushing forward with reform is potentially costly, mistakes could greatly undercut the potential for this avenue of reform

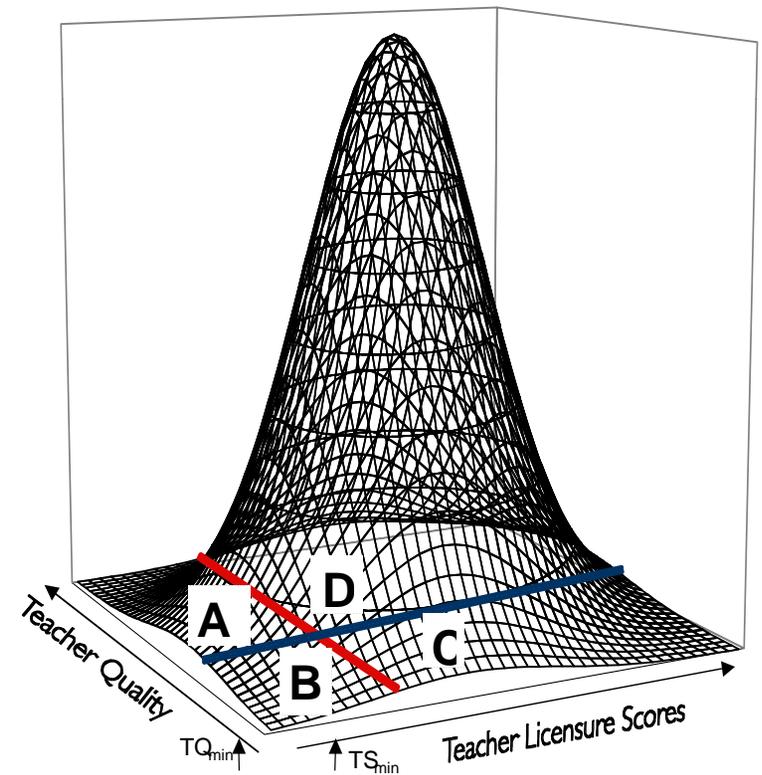
# HYPERLINK SLIDES

# Hypothetical Relationship Between Teacher Licensure Test Performance and Teacher Quality

Panel A: Stror  
Correlation

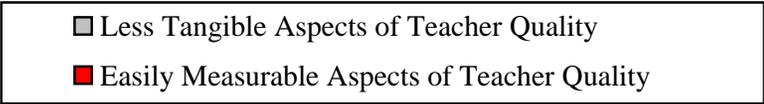
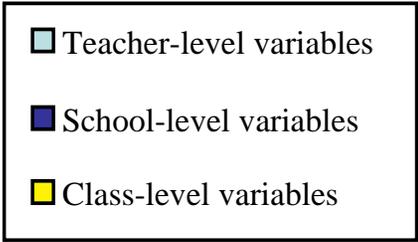
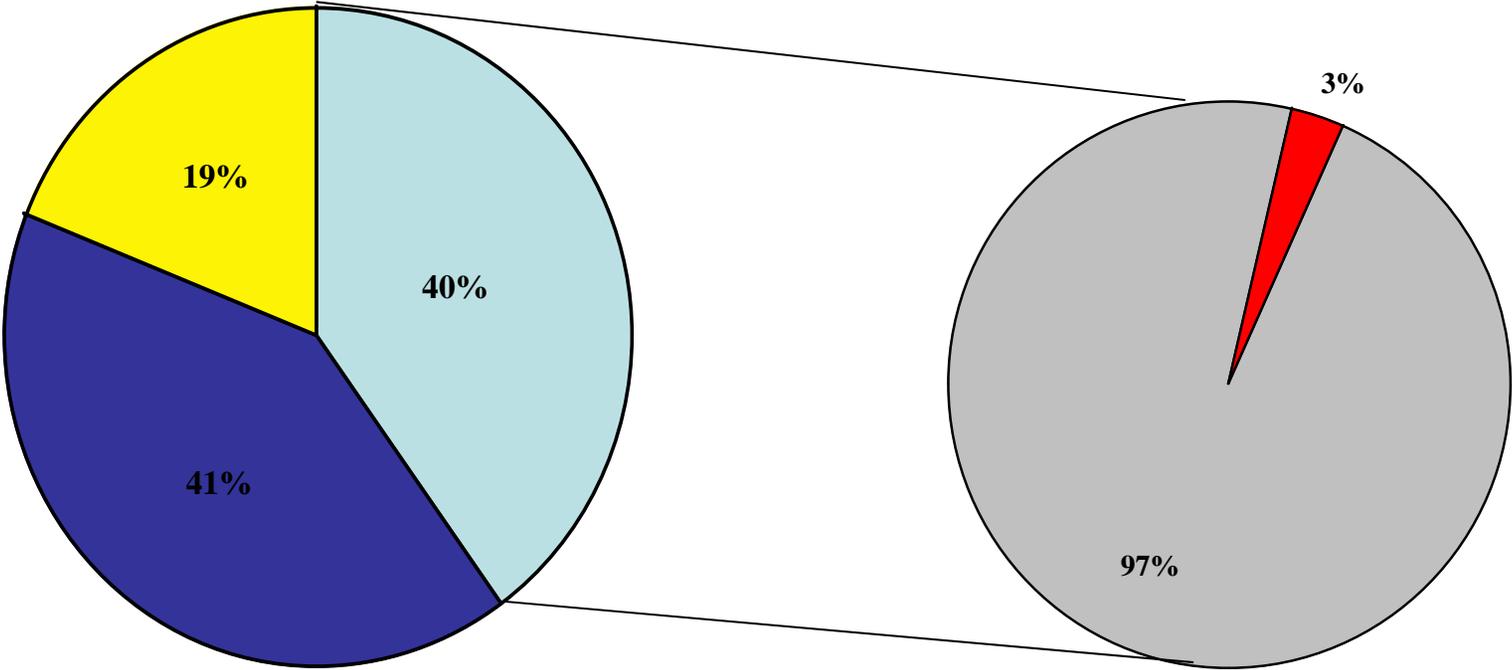


Panel B: Wee  
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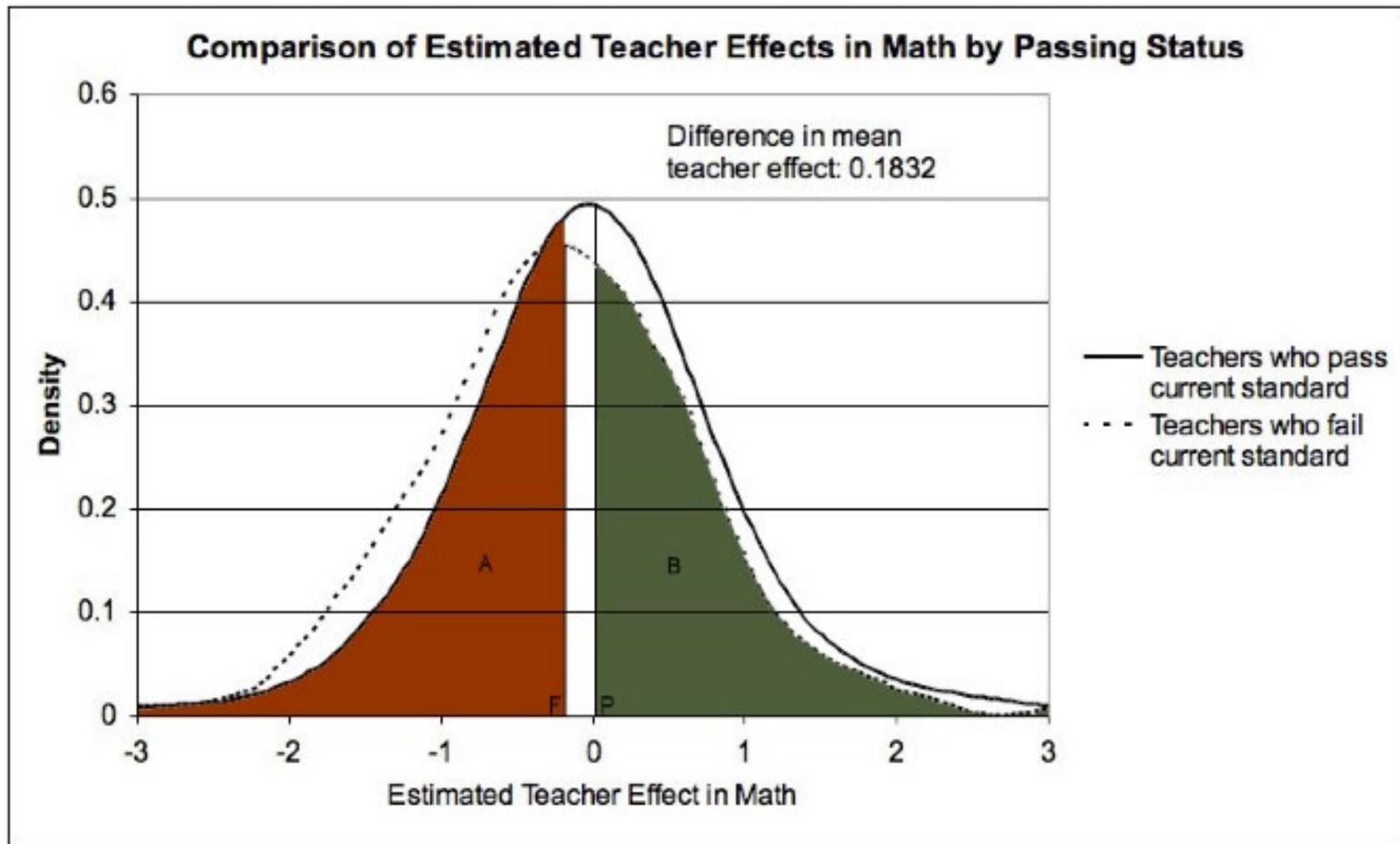
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# Teacher Quality Appears to be Primarily “Unobservable”



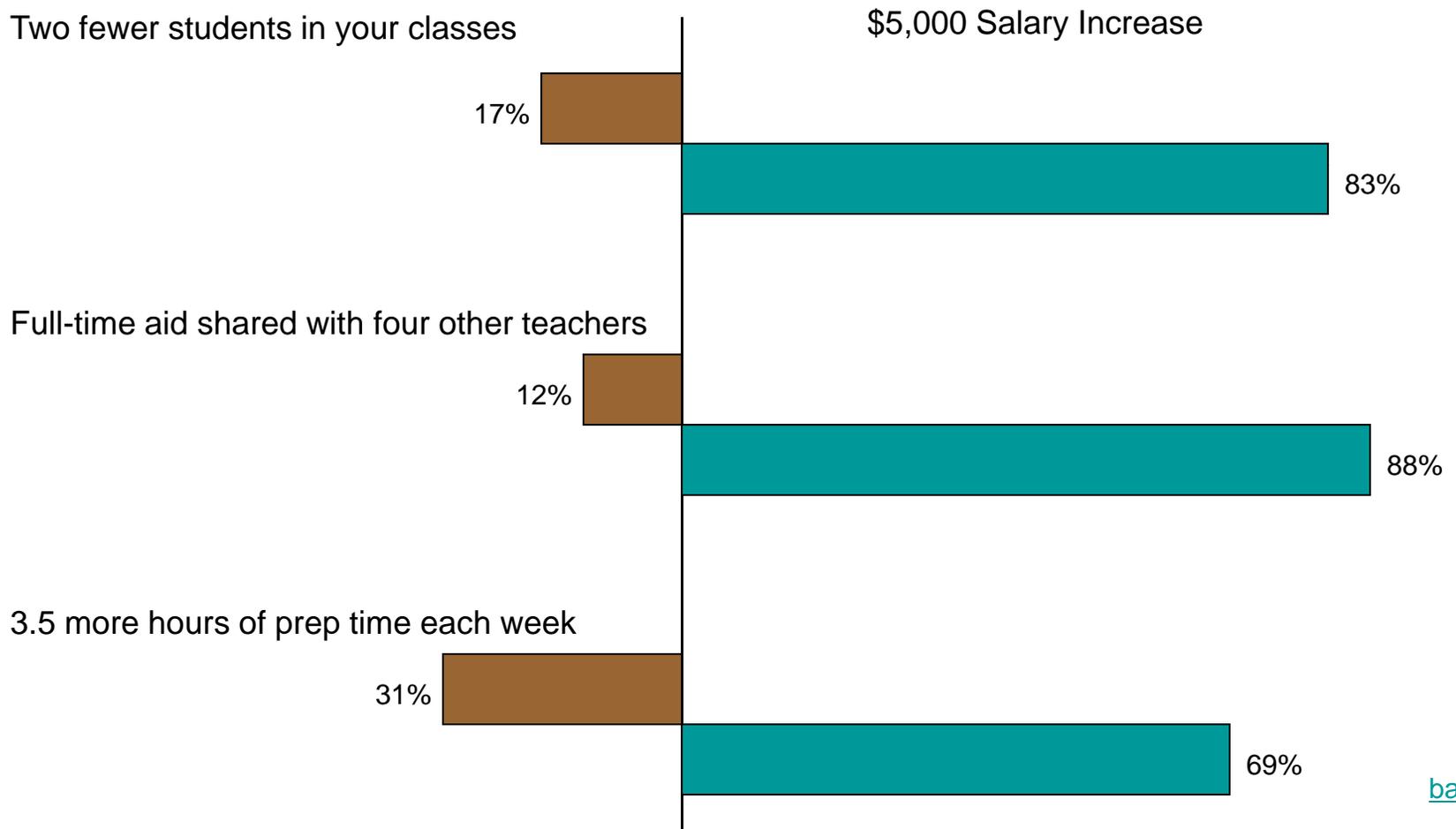
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# Licensure Tests



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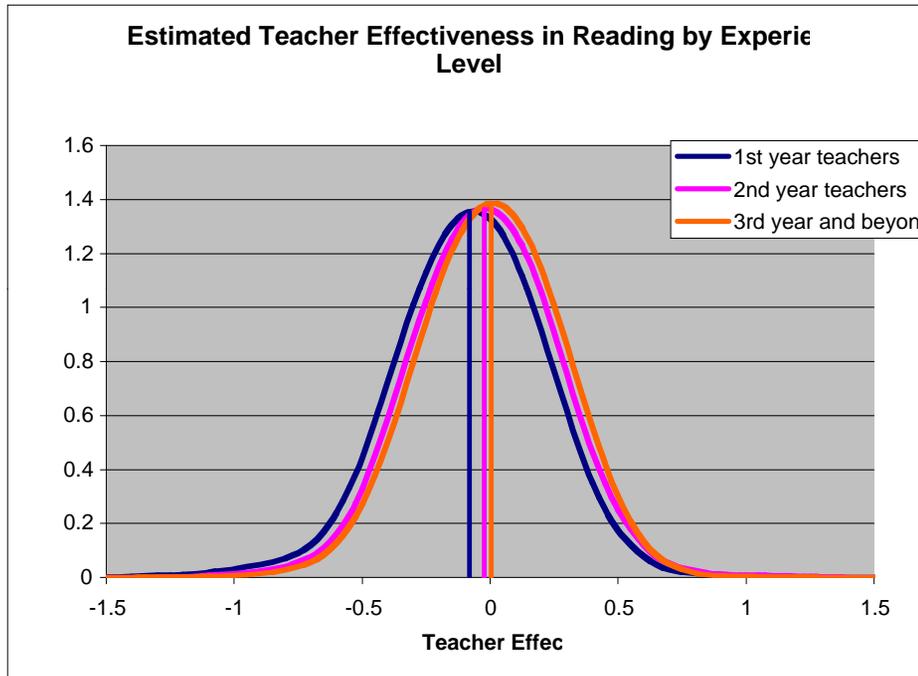
# Teachers' Preferences for Workplace Changes vs. Salary Increase



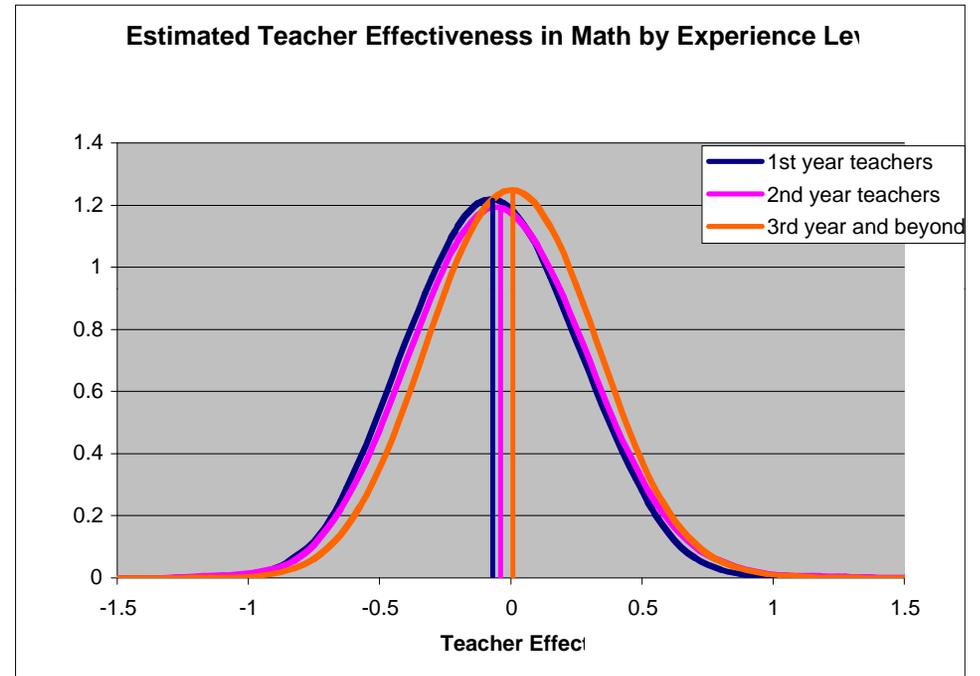
Source: Goldhaber, DeArmond, and DeBurgomaster (2007).

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# Experience Levels



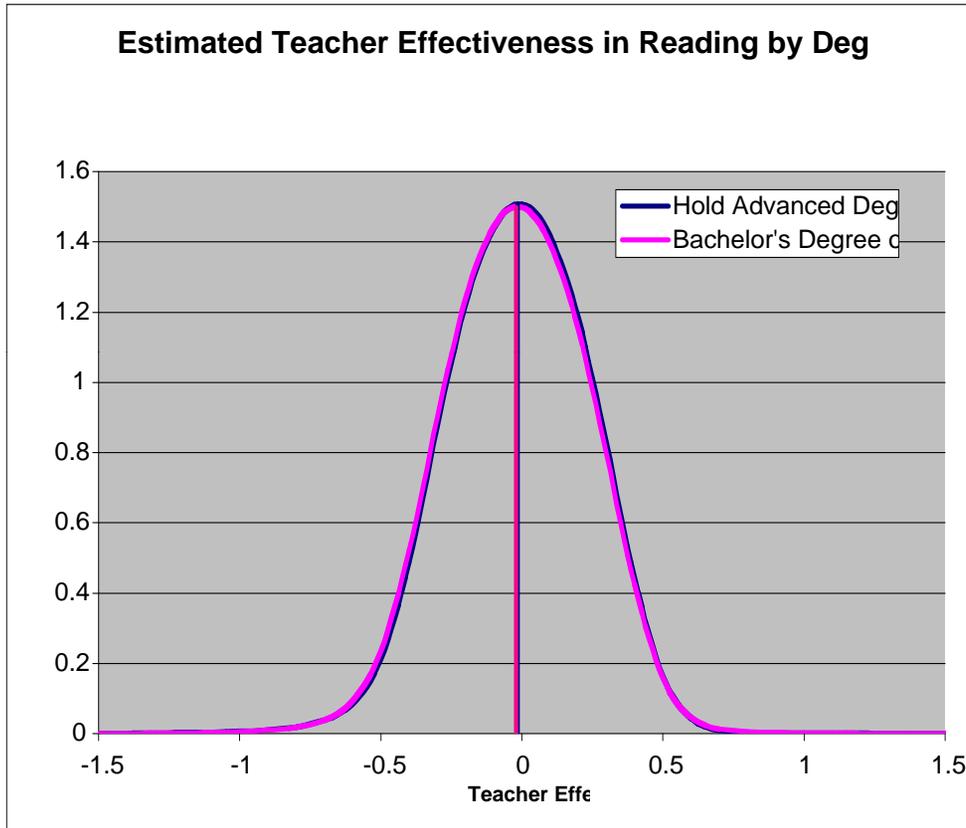
1st year mean-2nd year mean: 0.059\*\* sd  
2nd year mean-3rd year plus mean: 0.026\* sd



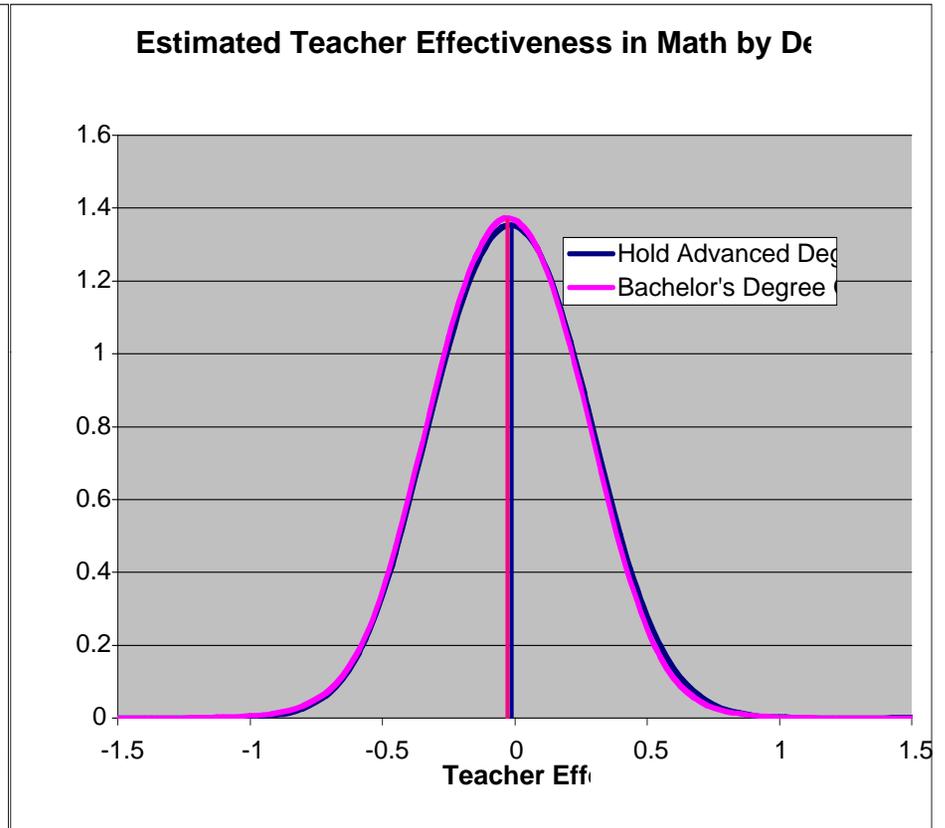
1st year mean-2nd year mean: 0.050\* sd  
2nd year mean-3rd year plus mean: 0.039\*\* sd

[back degrees NBCTs](#)

# Degree Levels



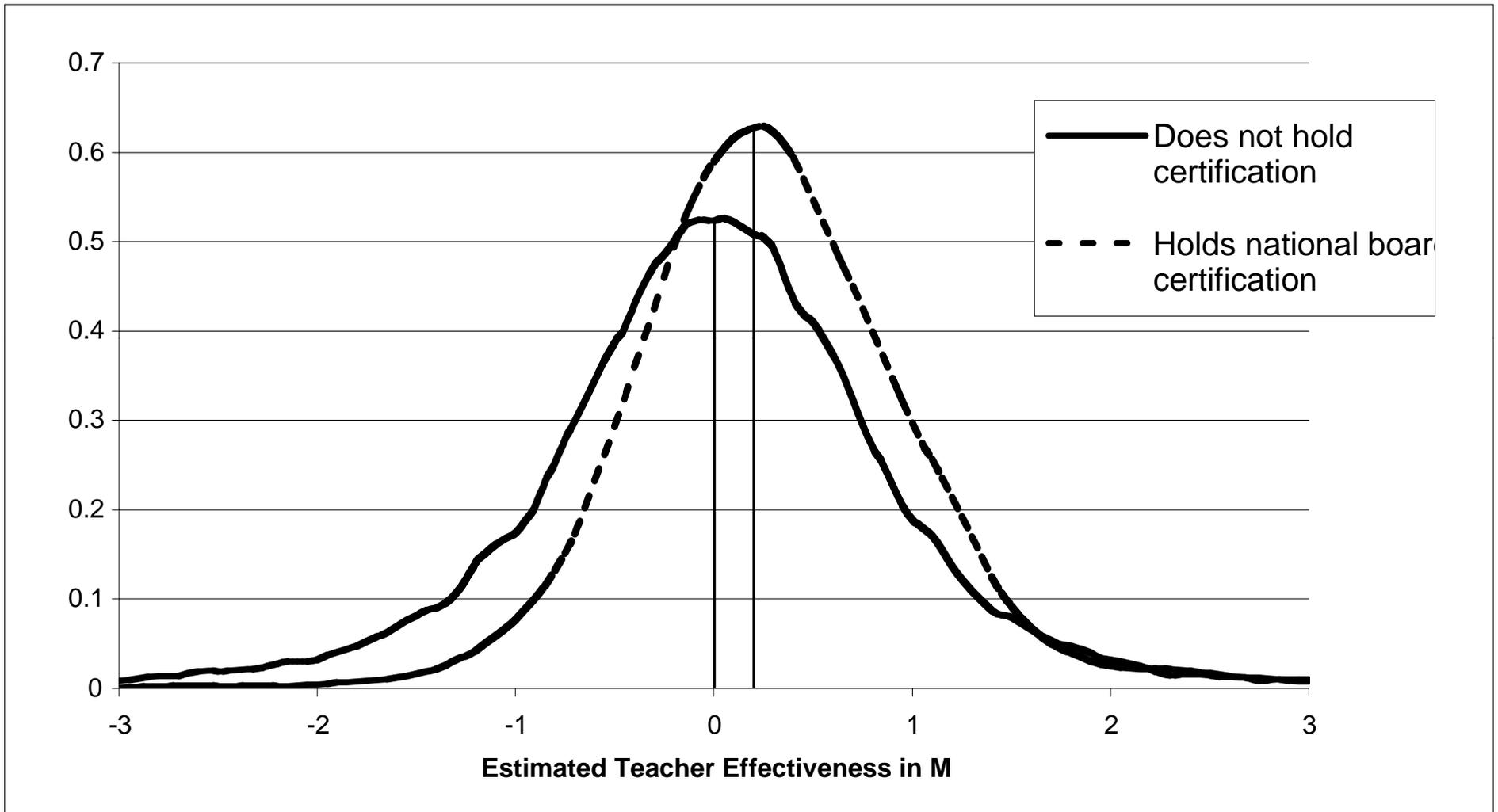
Difference in means: .005 sd



Difference in means: .014 sd

[back experience NBCTs](#)

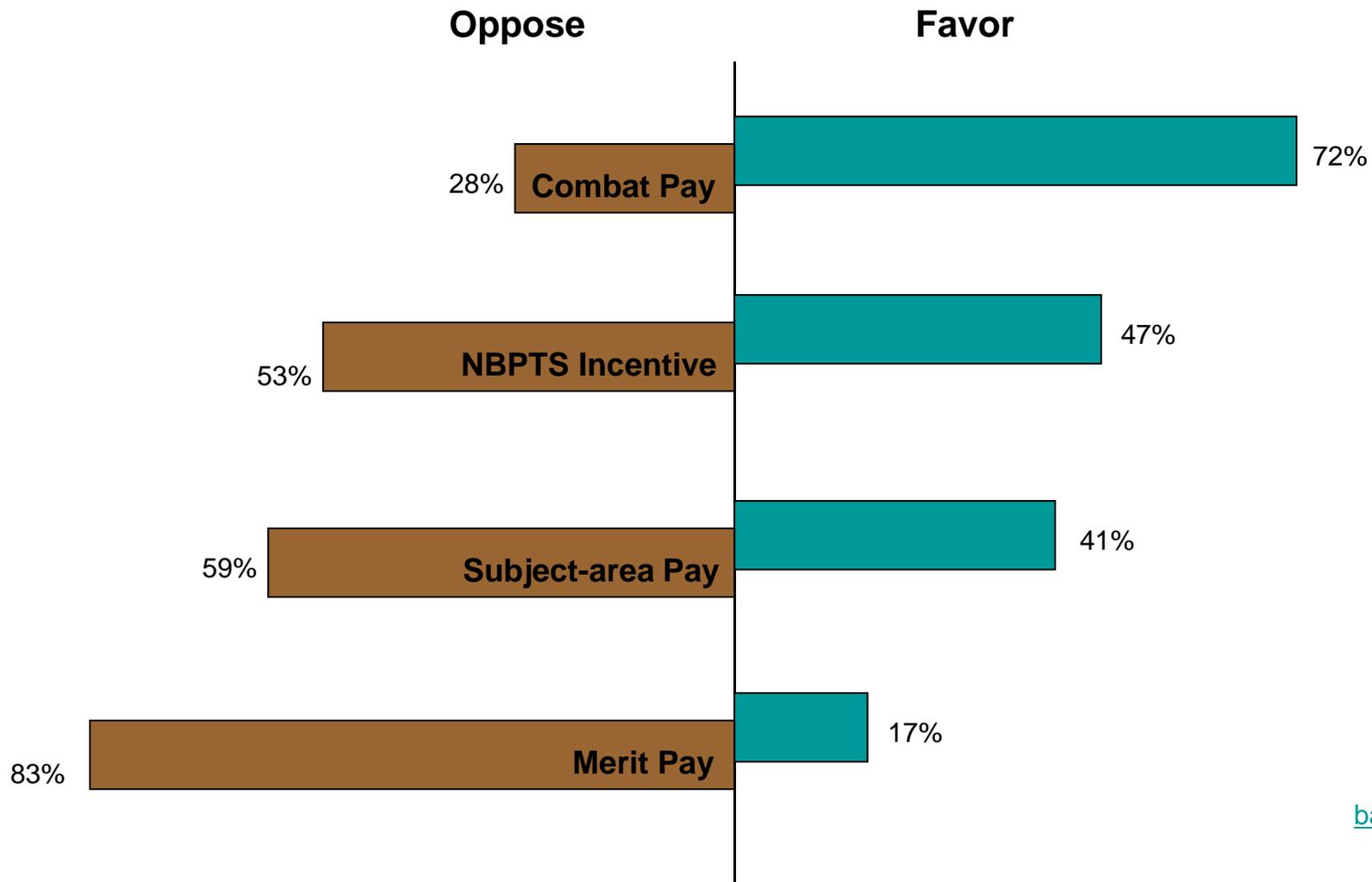
# NBPTS Certification Status



Difference in means: 0.19\*\* sd of teacher quality

[back degrees experience](#)

# Teachers' Attitudes Towards Different Pay Structures



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Source: Goldhaber, DeArmond, and DeBurgomaster (2007).