

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

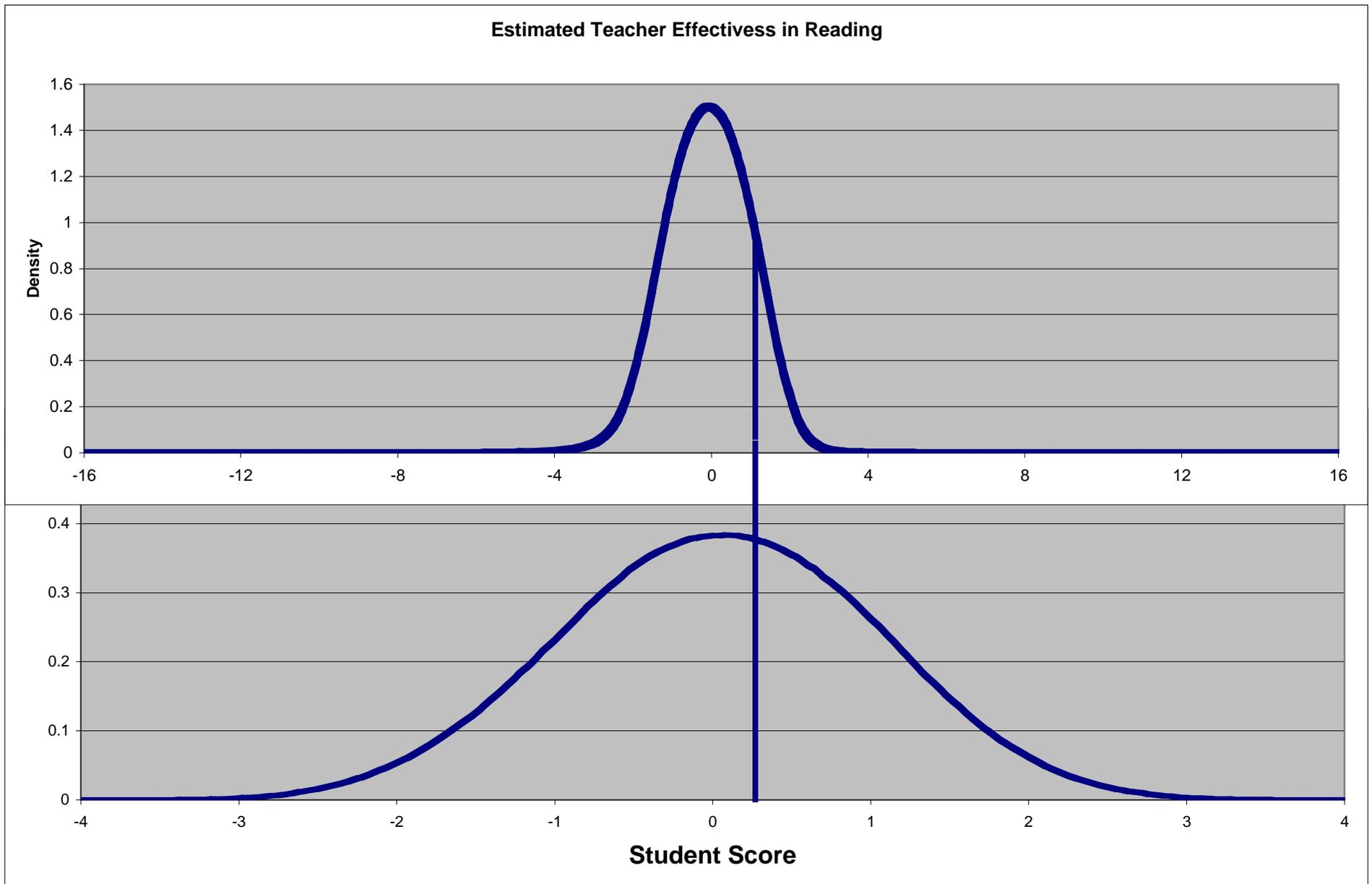
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*Joint Task Force on Basic Education Finance
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Why Focus on Teachers?

- 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 ...

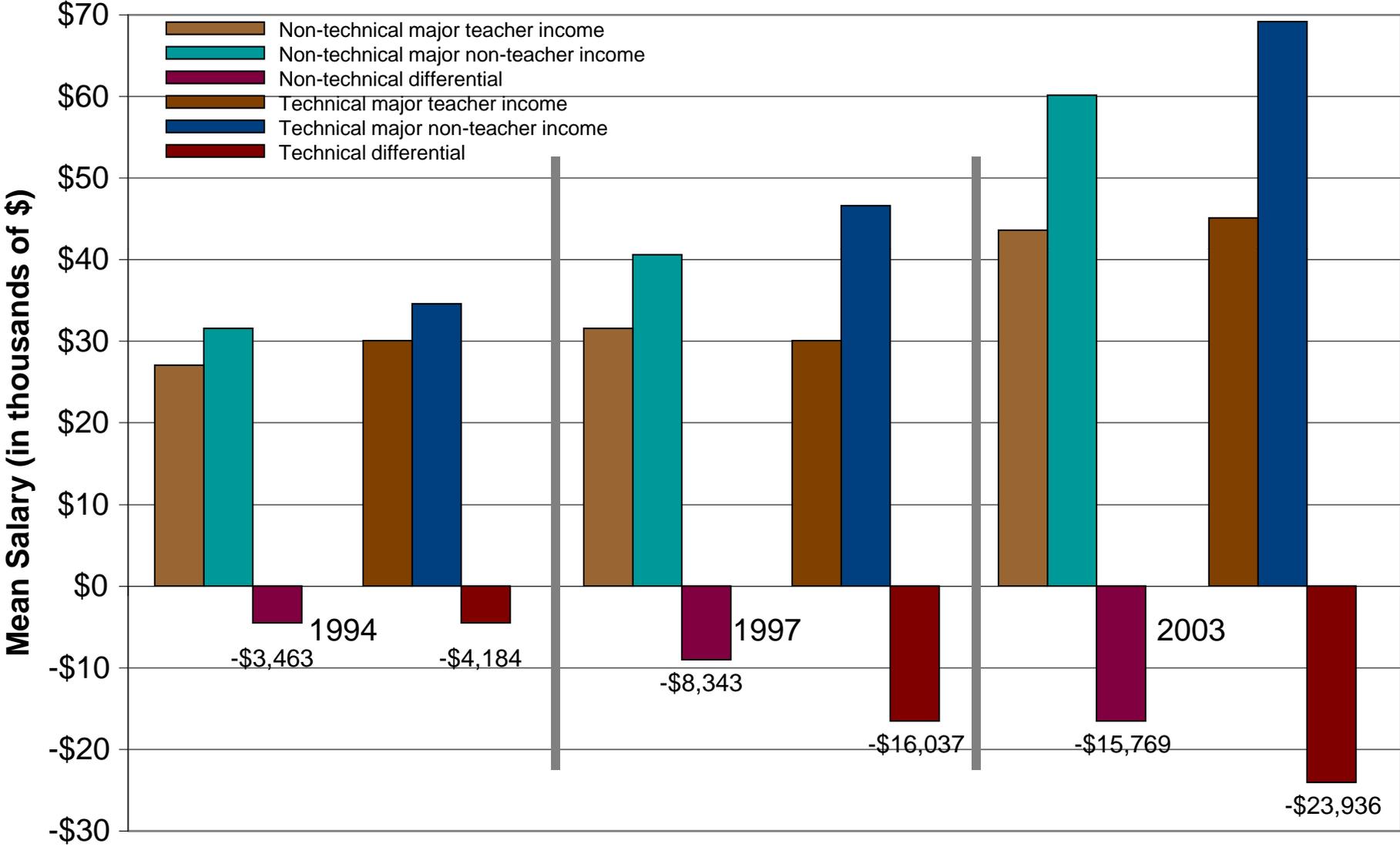
Combat Pay vs. Working Conditions

- 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

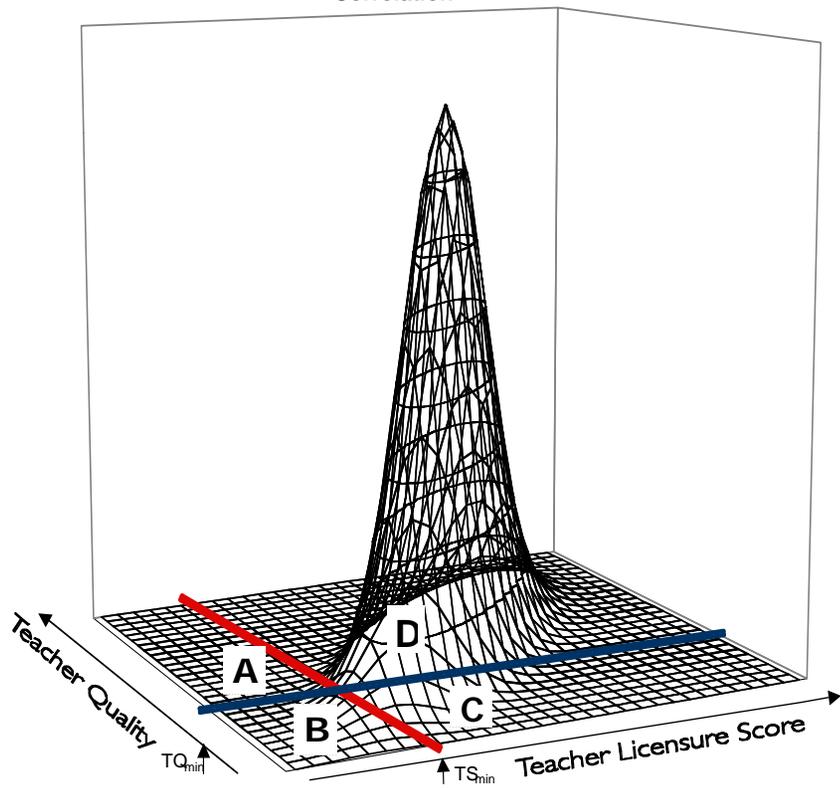
Conclusions: It's the Devil You Know Versus the One That You Don't

- 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

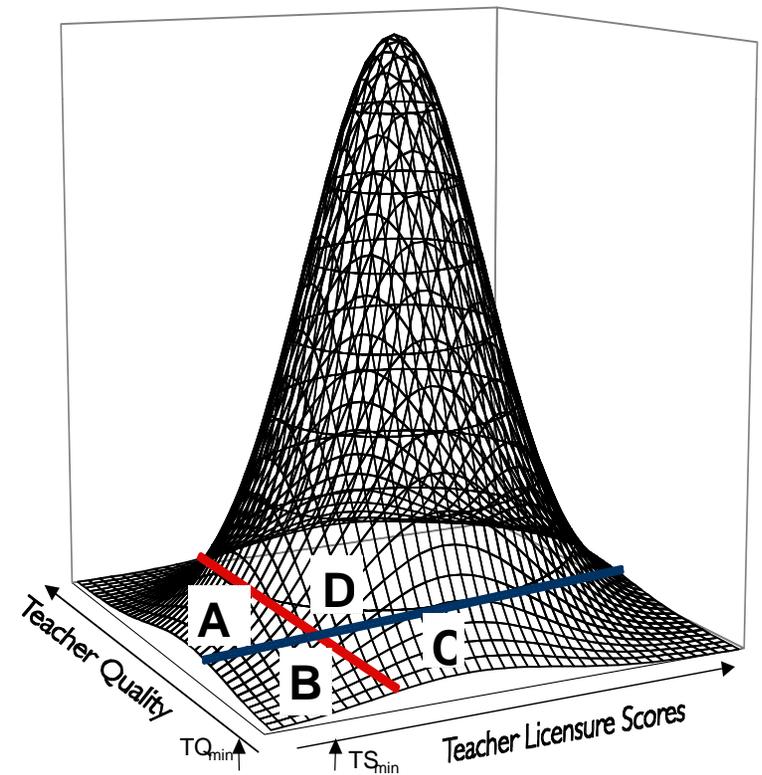
HYPERLINK SLIDES

Hypothetical Relationship Between Teacher Licensure Test Performance and Teacher Quality

Panel A: Stror
Correlation

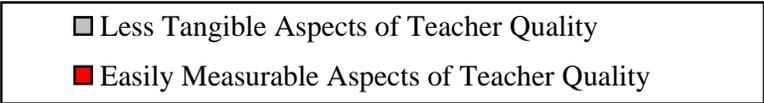
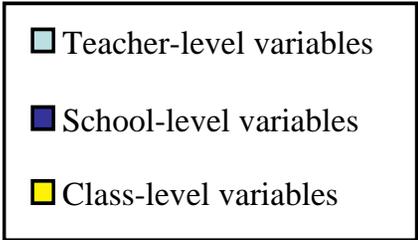
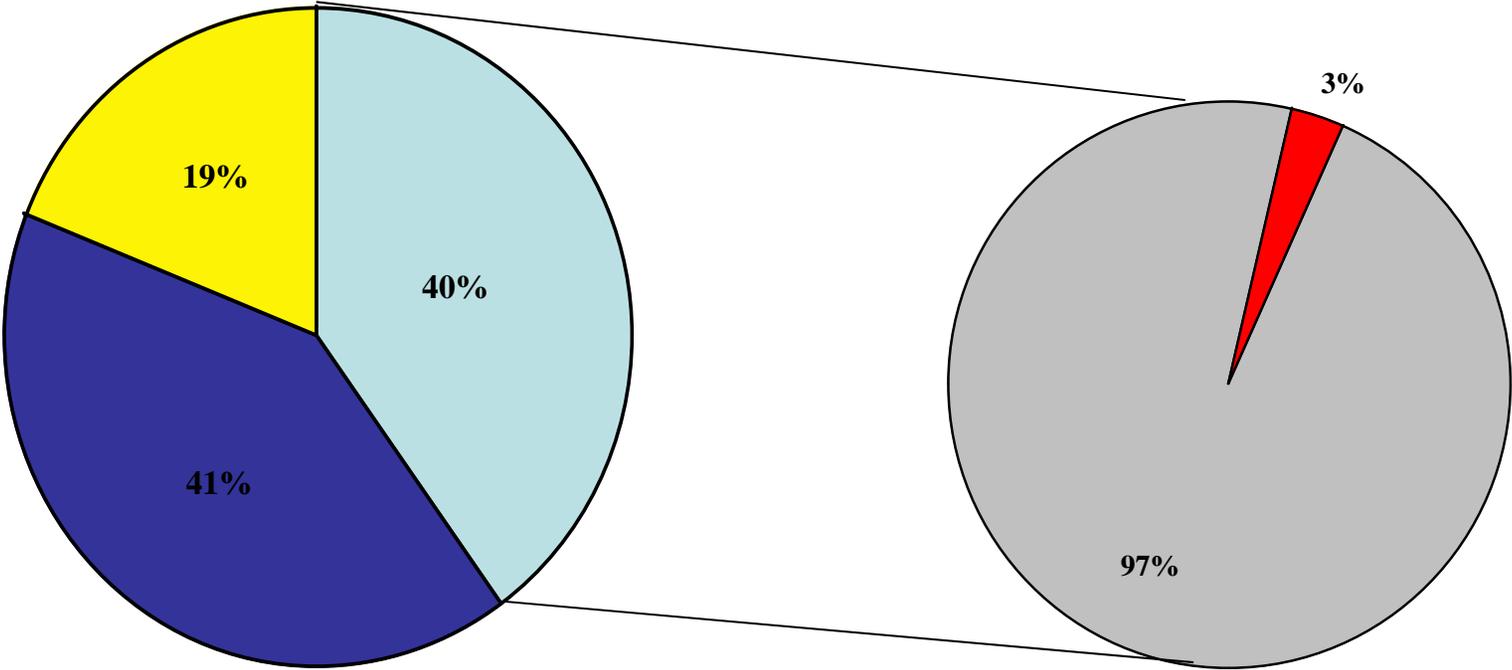


Panel B: Wee
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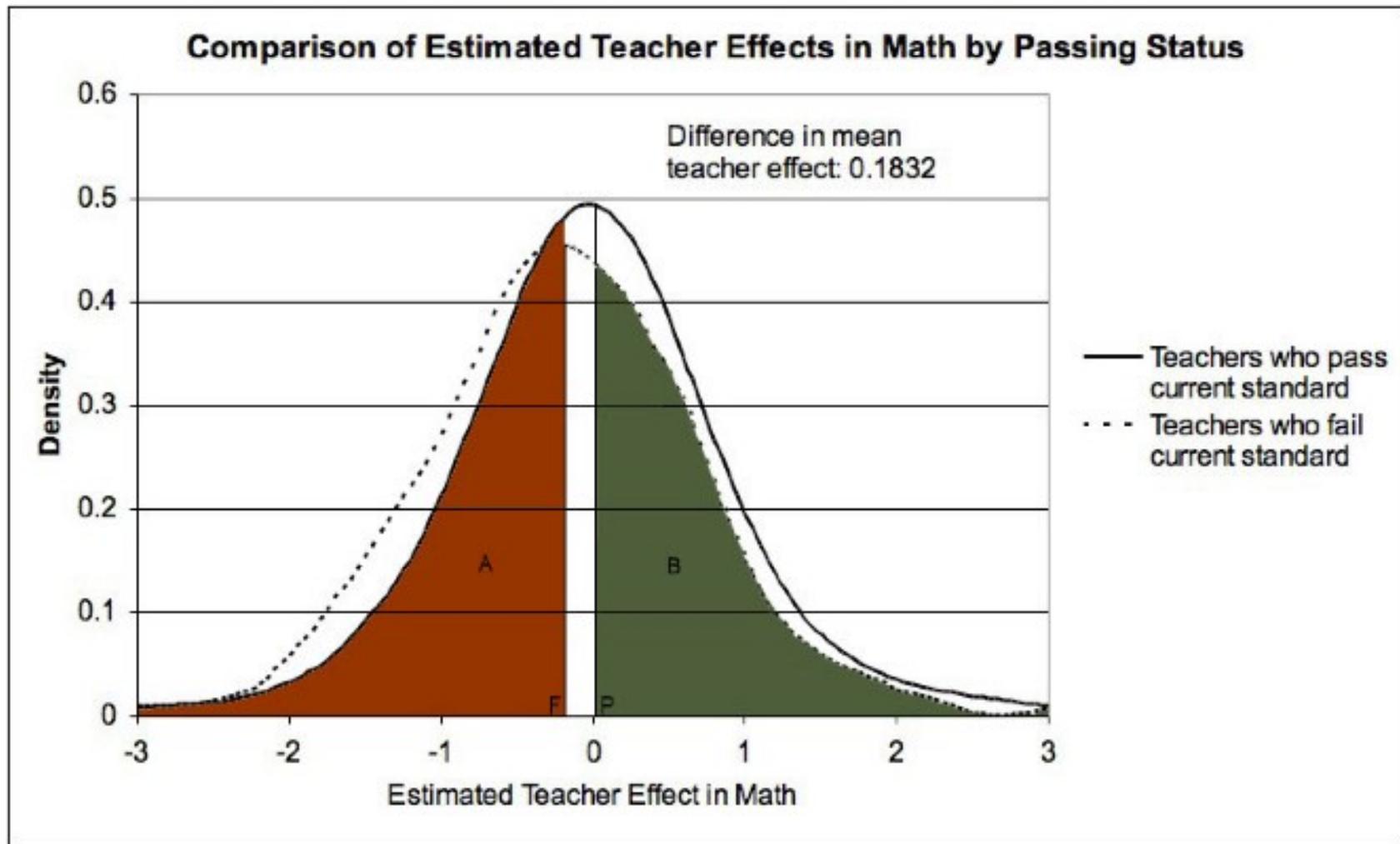
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Teacher Quality Appears to be Primarily “Unobservable”



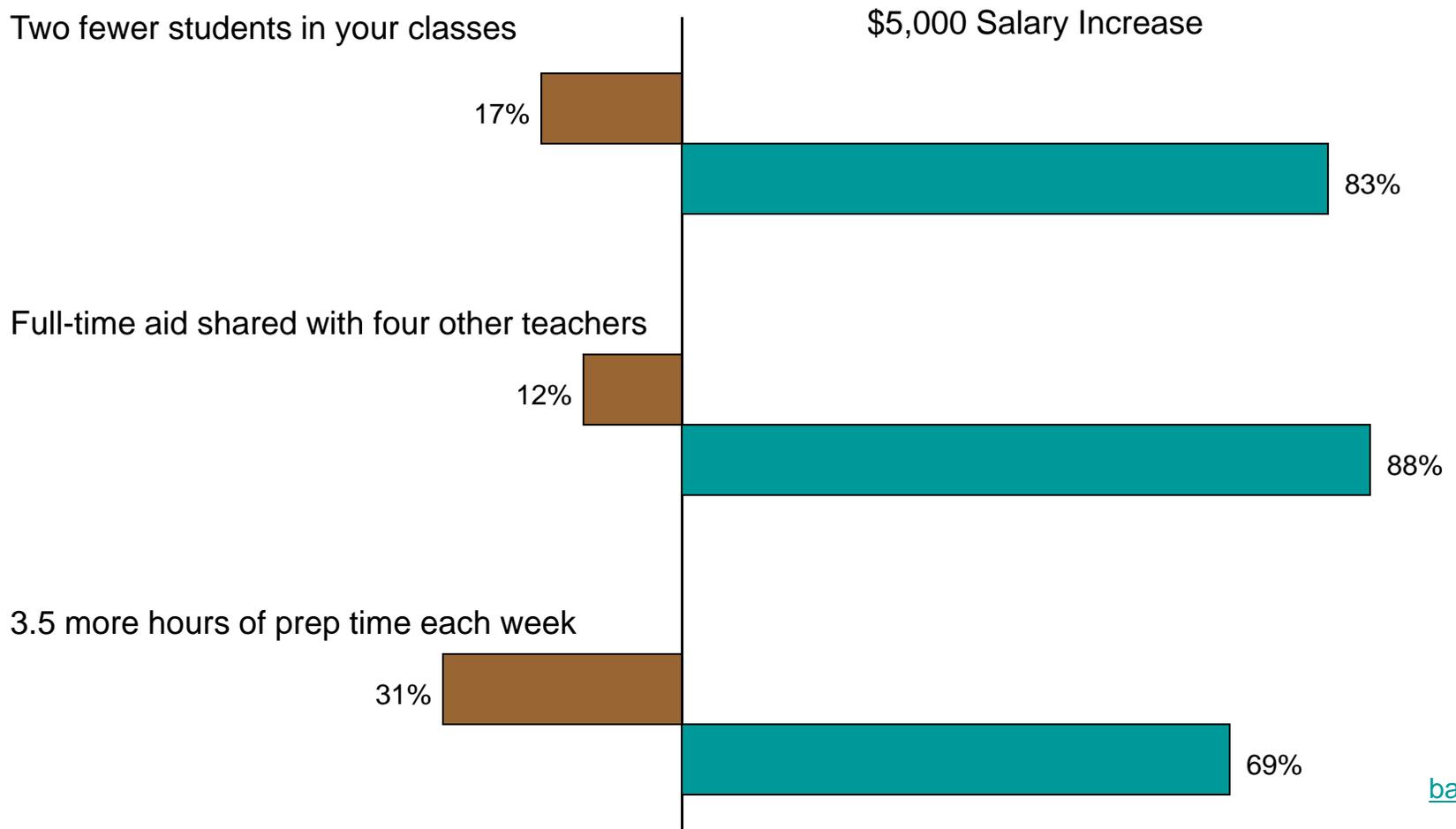
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Licensure Tests



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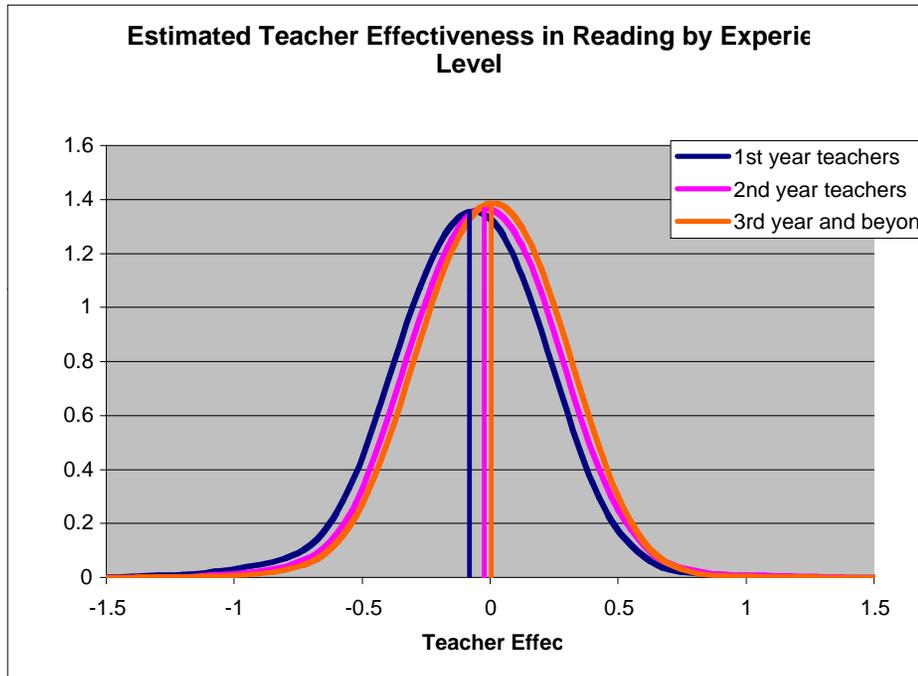
Teachers' Preferences for Workplace Changes vs. Salary Increase



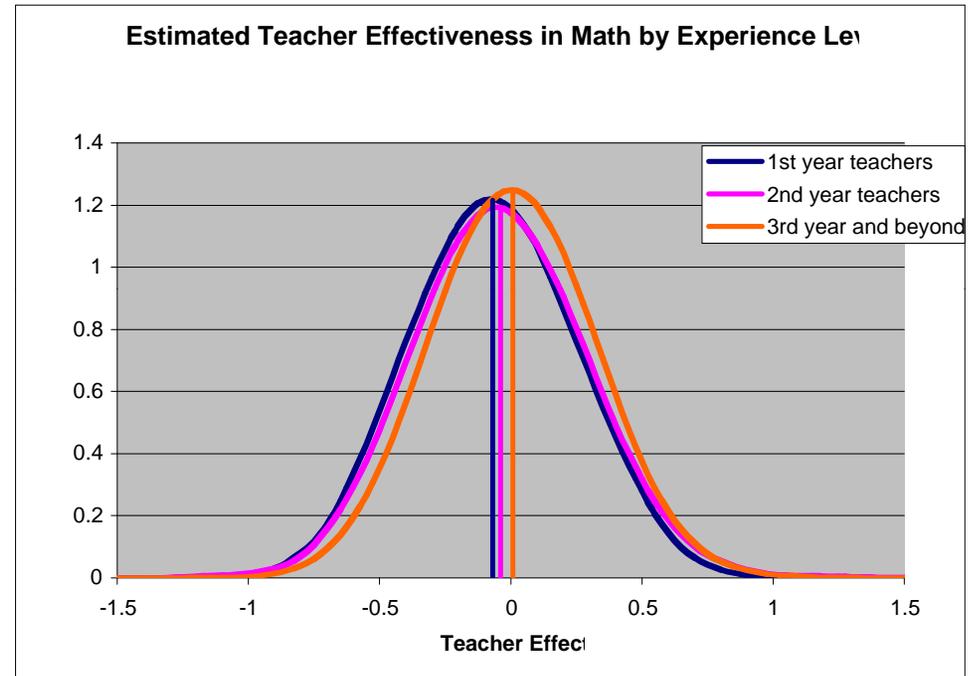
Source: Goldhaber, DeArmond, and DeBurgomaster (2007).

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Experience Levels



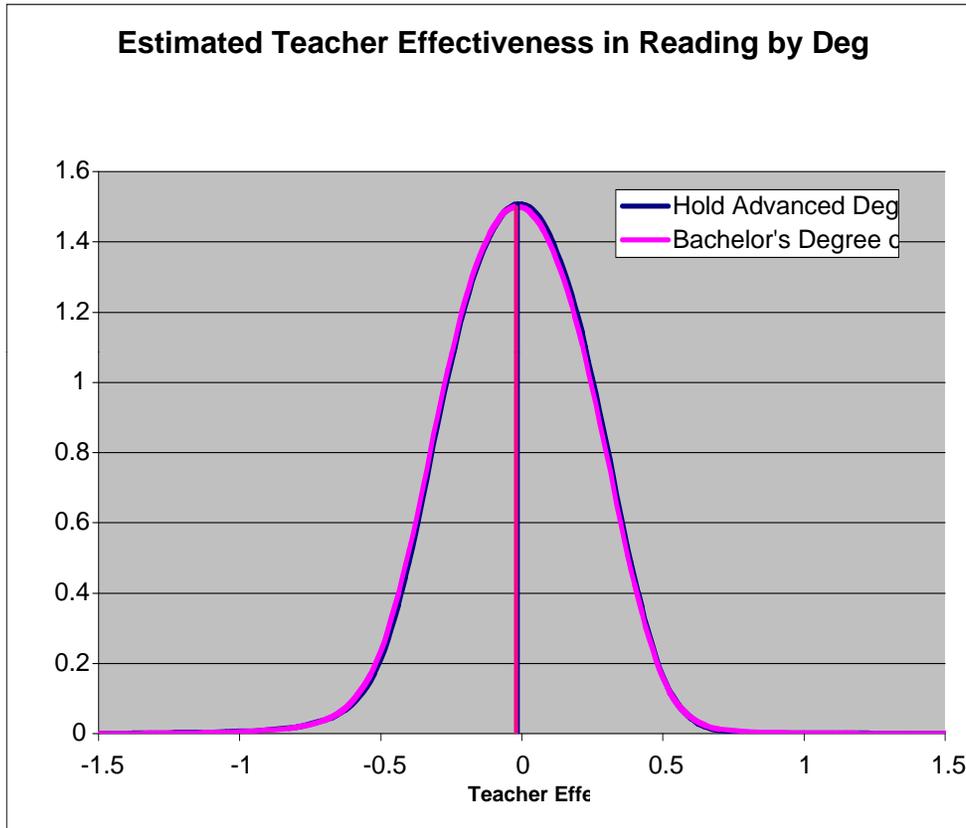
1st year mean-2nd year mean: 0.059** sd
2nd year mean-3rd year plus mean: 0.026* sd



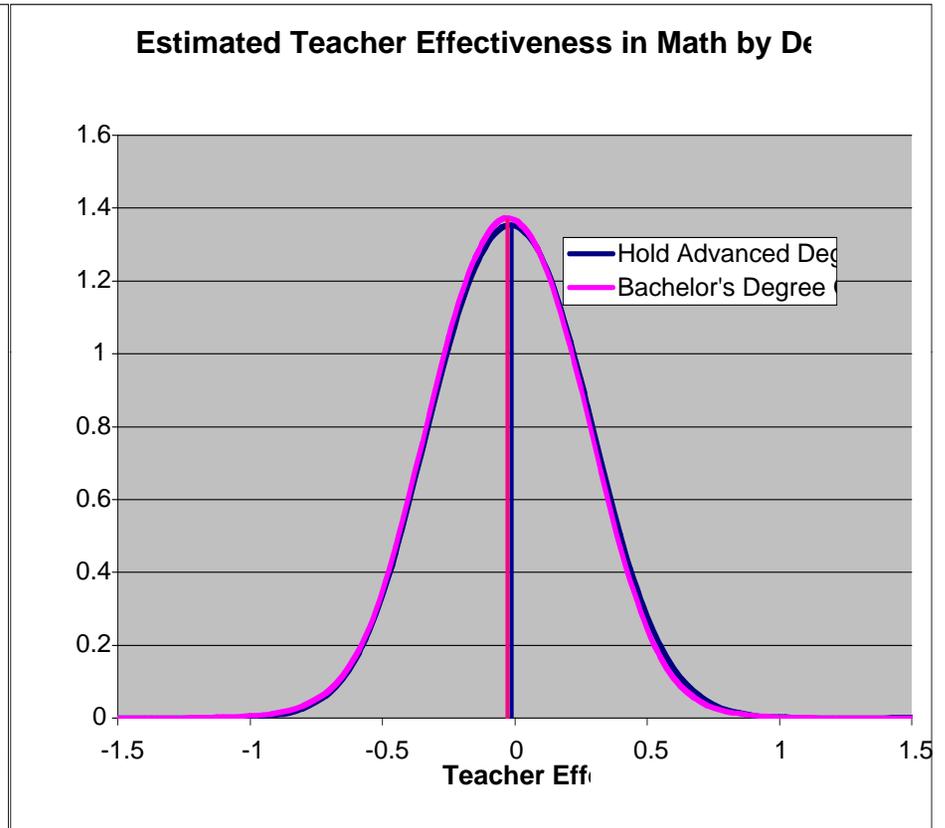
1st year mean-2nd year mean: 0.050* sd
2nd year mean-3rd year plus mean: 0.039** sd

[back degrees NBCTs](#)

Degree Levels



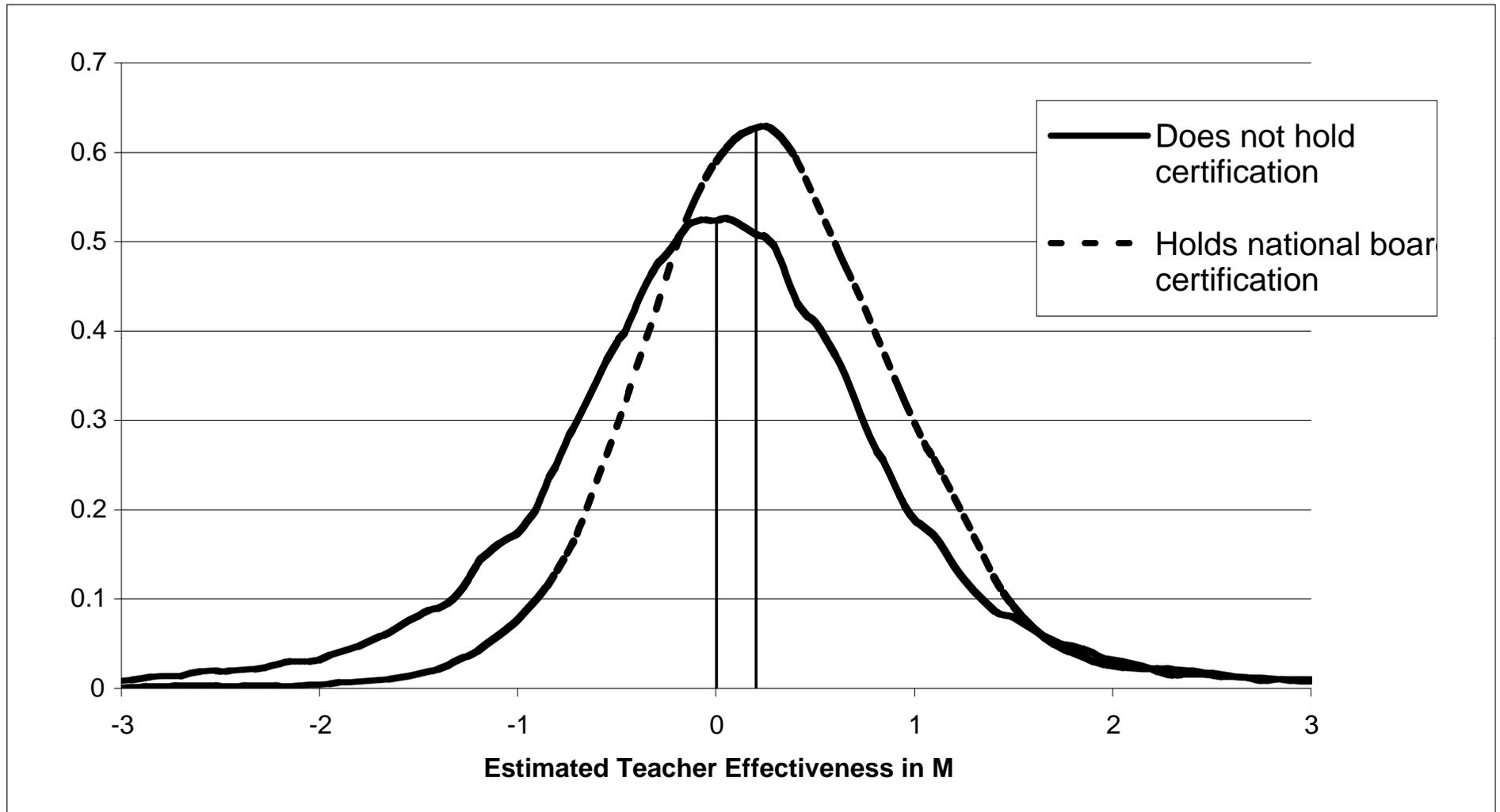
Difference in means: .005 sd



Difference in means: .014 sd

[back experience NBCTs](#)

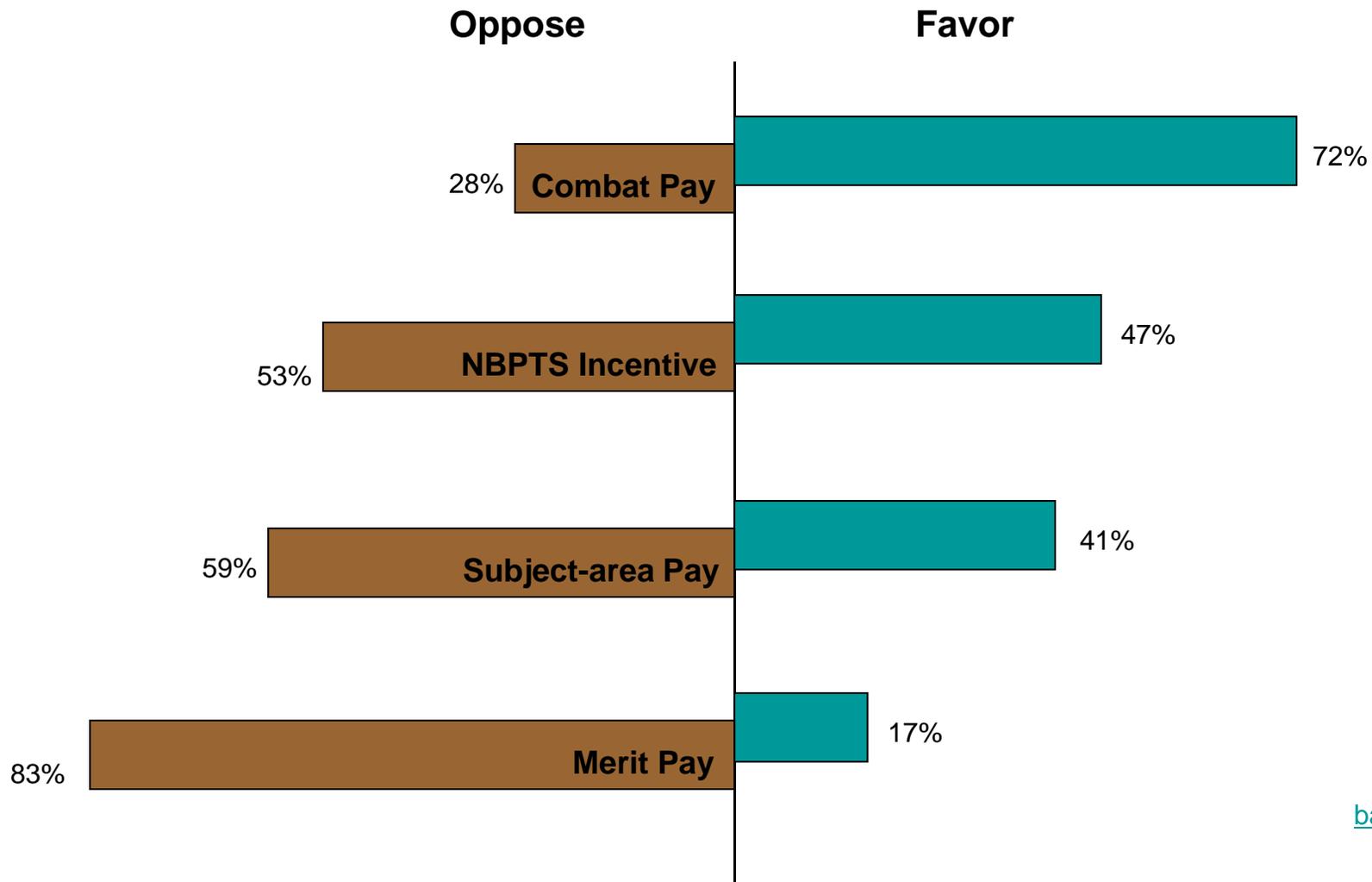
NBPTS Certification Status



Difference in means: 0.19** sd of teacher quality

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Teachers' Attitudes Towards Different Pay Structures



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