



Teacher Reform in Indonesia:

The role of Politics and Evidence-based Policymaking

A Preview

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Indonesia - Statistics



Unity in Diversity

- Population : 230 million
- Islands: 16,000 plus

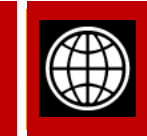
Education

- Total number of students: 50 million
- Total number of teachers: 3 million
- Total number of schools: 258,000

- Primary Completion rate: 99%
- Secondary Net Enrollment rate: 72.1% (2009)
- Tertiary Gross Enrollment rate : 22.0% (2009)
- Primary Age Children Out of School: 686,000

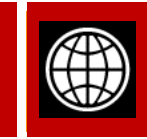
- Public Education Expenditure : 3.8% of GDP or 20 % of Gov. Spending
- Average Teacher Salary, Primary: US\$ 2,012 per annum

Teacher Reform 2005



- ✓ Reform is embedded in Law
- ✓ The Law linked a **professional** allowance (equal to double income for teachers) to quality (spelt out in terms of competencies)
- ✓ The Law had dramatic impact on Institutions associated with teachers and translated into dozens of implementing regulations.

Political-economic Context



- ✓ Original trigger for reform: Expansion of education system in 1970s led to teachers in 2005 with: low initial education, little pre-service education and few opportunities for in-service upgrading
- ✓ Led to **low student achievement** as indicated by PISA and TIMSS scores (Indonesian students performed well below OECD average in 2009 PISA tests)

Marriage of ‘status’ trigger and ‘quality’ trigger led to rare consensus between different stakeholders.

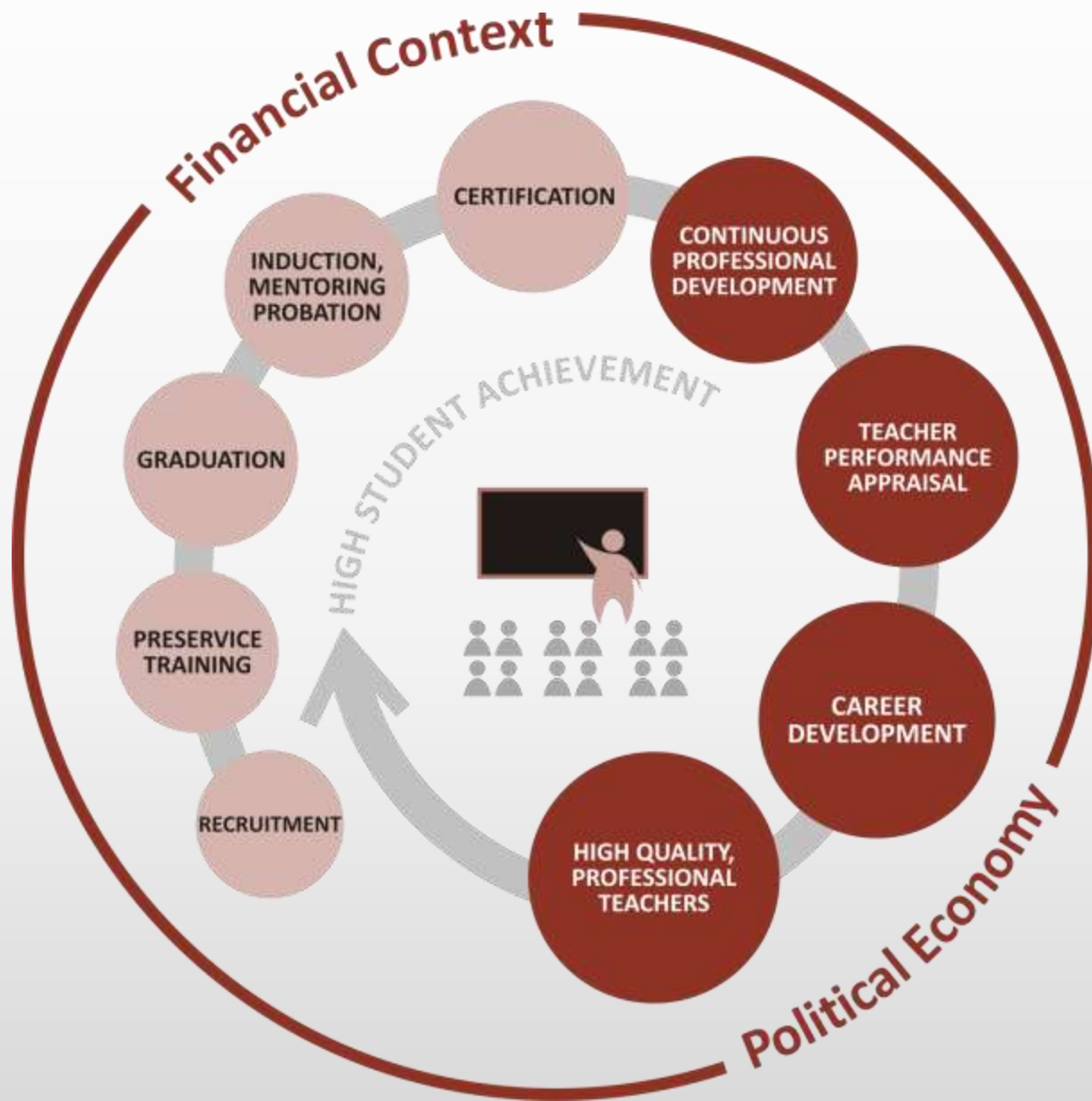
Why write a book on Teacher Reform in Indonesia?



- ✓ International evidence suggests teacher quality drives student learning
- ✓ Indonesia has invested a **lot** of money in its teachers
- ✓ Reform is embedded in Teacher Law
- ✓ The World Bank: Over 50 background papers + two major experimental studies to look at impact
- ✓ Relevance to other developing countries – Lessons
- ✓ **The reform focused on welfare, but did it address quality?**

Book tracks implementation and impact of
reform over the years

Organizing Framework



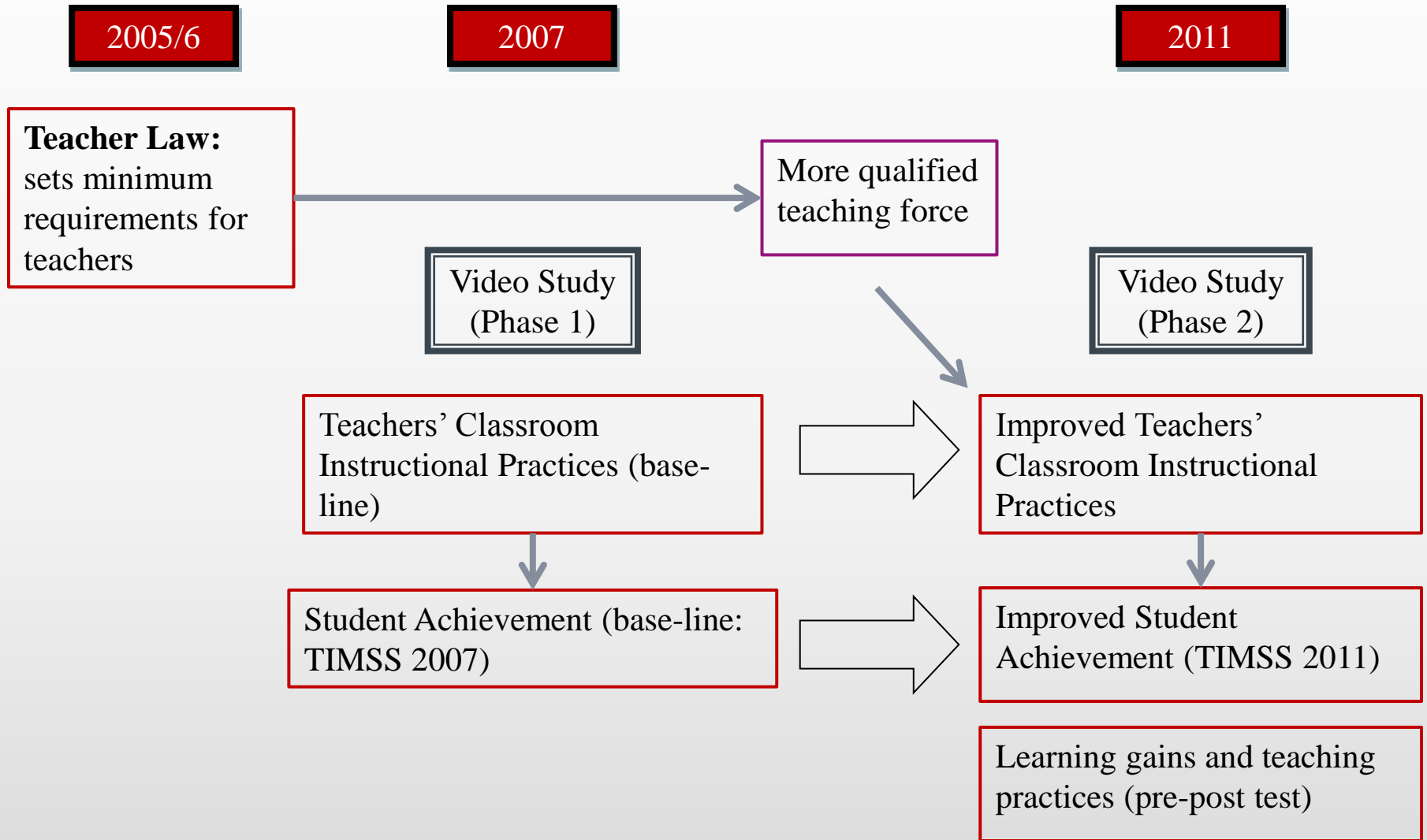
Impact Evaluation of Certification

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- ✓ Randomized Control Trial
- ✓ 360 sample schools
 - ✓ 240 primary & 120 Junior Secondary
- ✓ Approx. 3,000 teachers
- ✓ Approx. 90,000 students
- ✓ Baseline (2009), Midline (2011), Endline (2012)

Video Study Design - 2nd phase



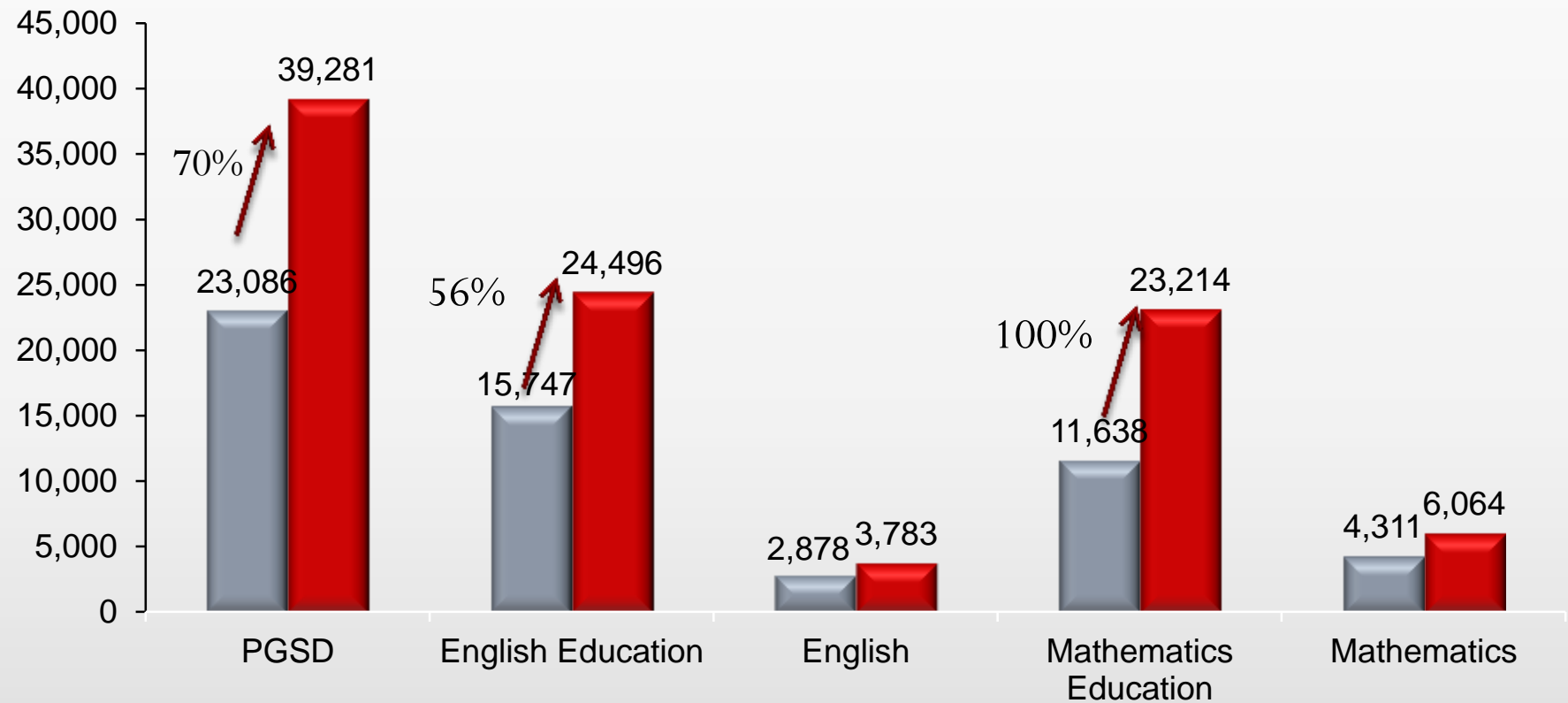


Insights from the book...

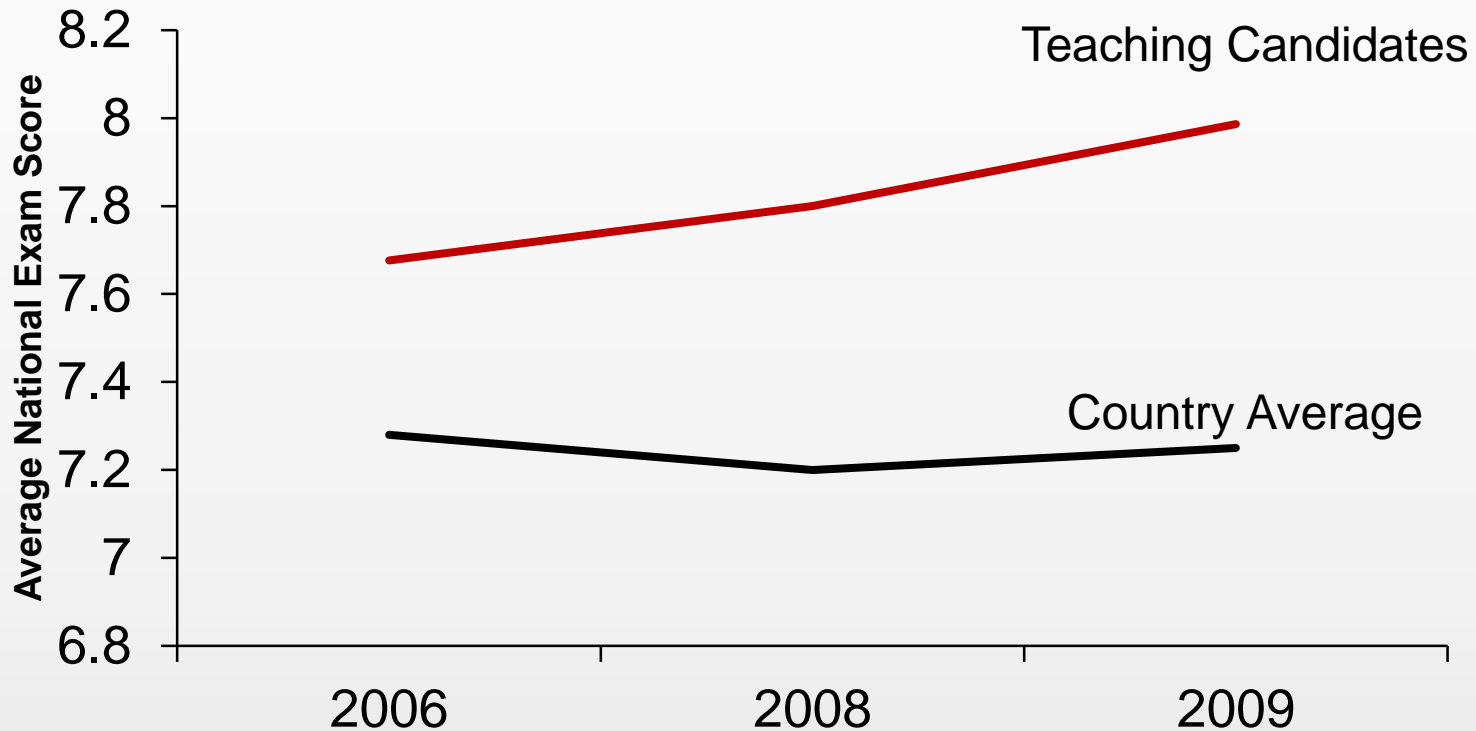
More candidates are applying to become teachers



Applicants at 5 Study Programs at 15 Institutions

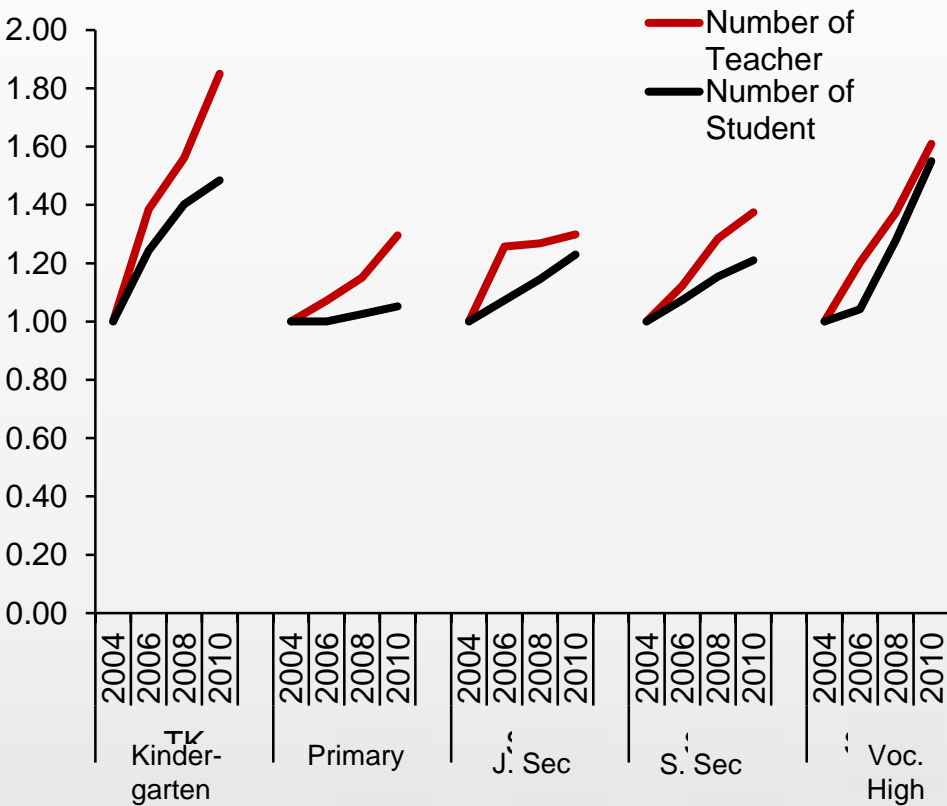
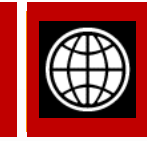


Better candidates are applying to become teachers

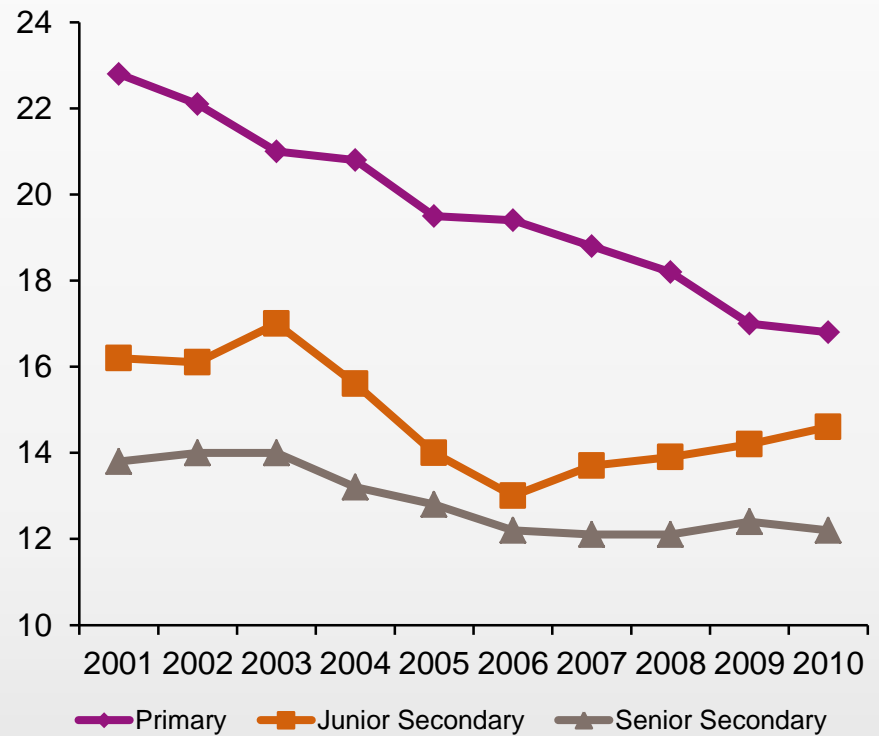


✓ **More able teacher candidates are enrolling in Teacher Education Institutions.**

High spending is a product of a large and growing teaching force...



Student Teacher Ratio

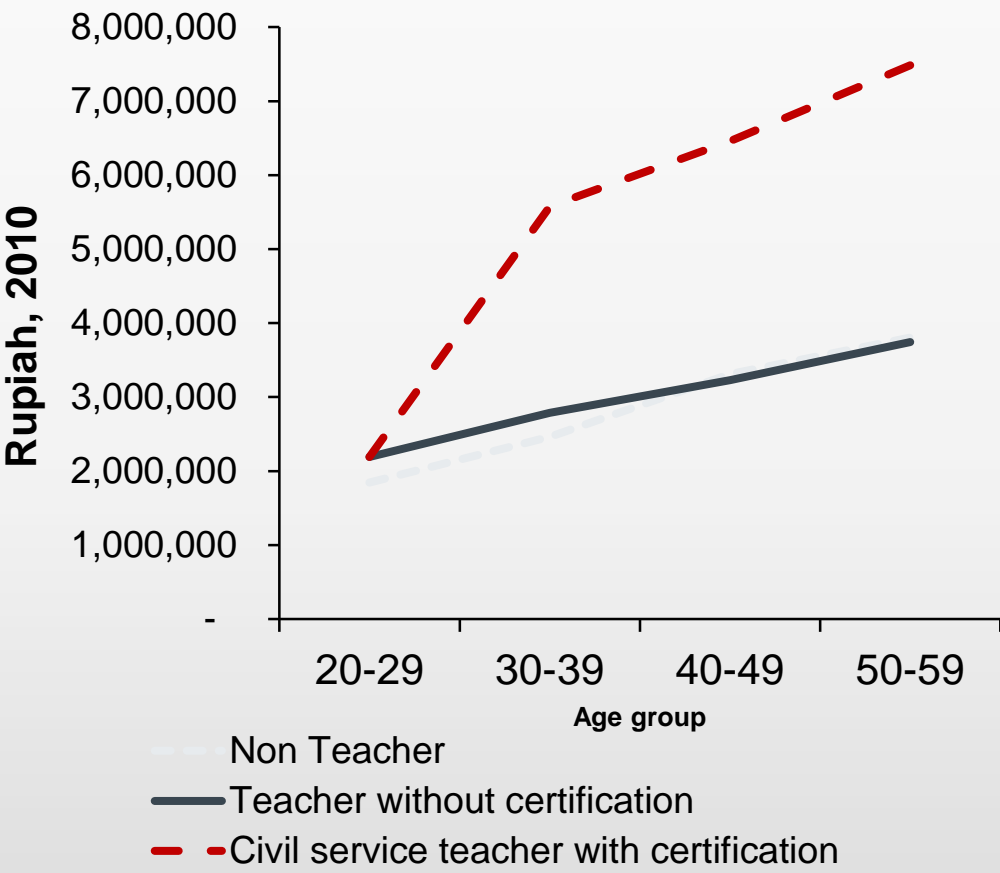


Source: Education Public Expenditure Review, 2012

...and will rise further due to certification



Salary scale of teachers compared to other workers with 4-year degree

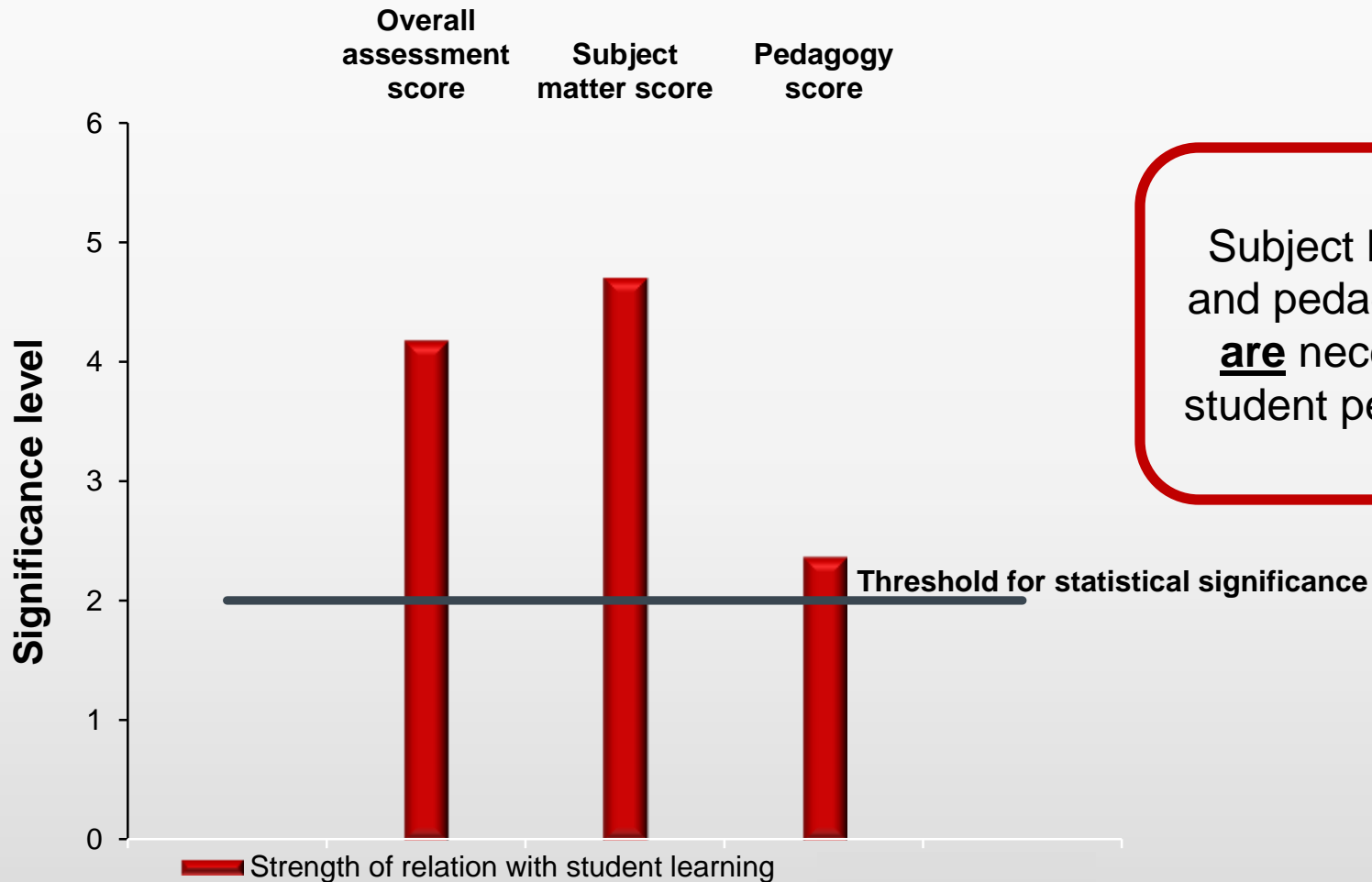


Salary bill is kept low by large number of non-PNS (40% of basic ed. teachers)

As the number of teachers with certification grows, the salary bill will rise significantly

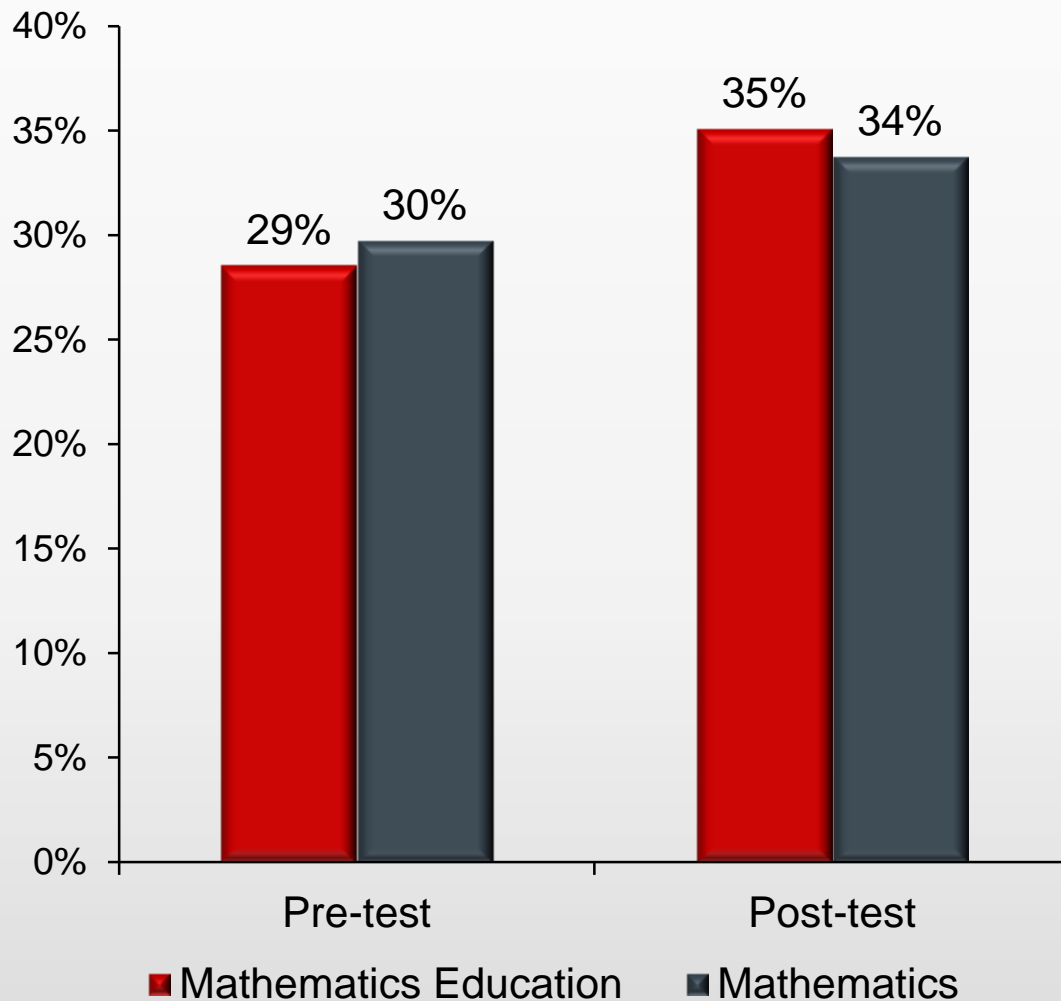
If all current basic education teachers are regularized and certified, personnel costs from 2009 levels will almost double (Rp. 69 trn to Rp. 120 trn)

Teacher subject knowledge is strongly correlated with student achievement



Subject knowledge and pedagogical skill **are** necessary for student performance.

Type of teacher degree is strongly correlated with student achievement



Teacher degree for 8th grade mathematics teachers also indicates that **additional critical teaching skills** may be developed in mathematics education that contribute to student learning

This confirms that...



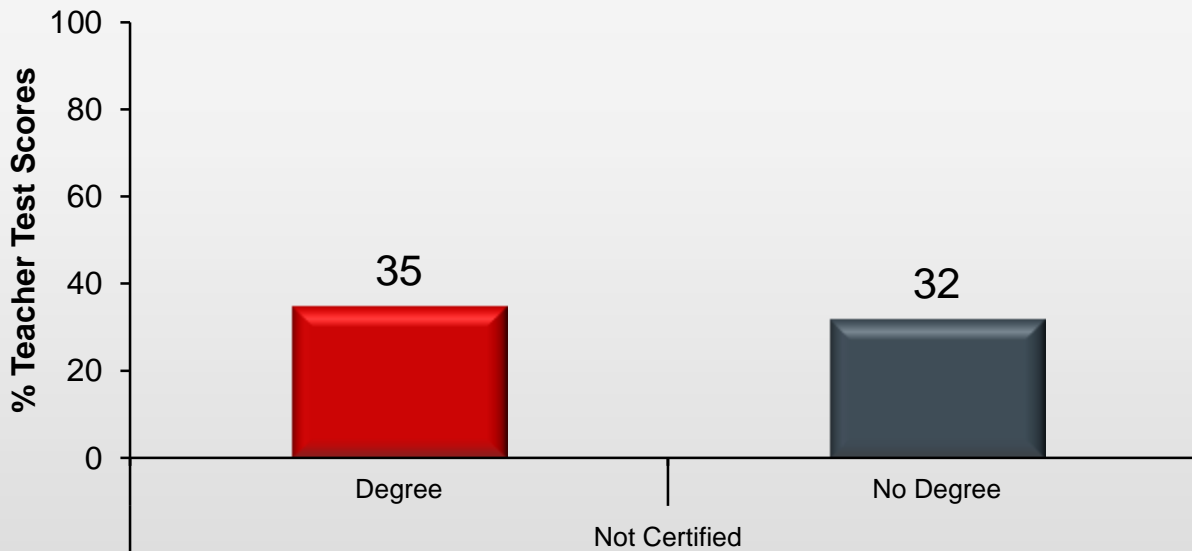
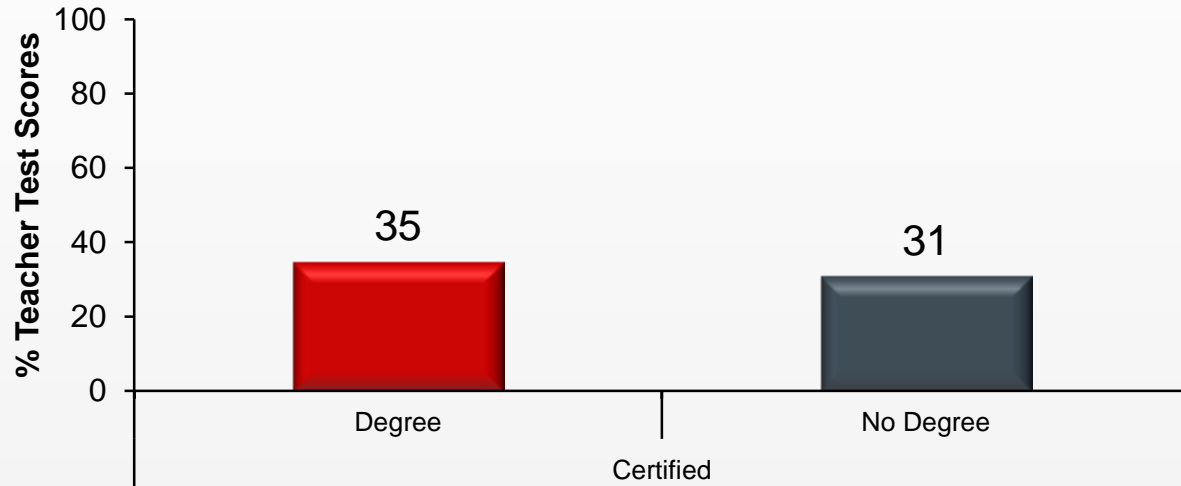
the Law was correct in defining teacher quality as depending on both subject knowledge and pedagogy.

Intentions of the Law were good and were backed up empirical evidence...



But granting of certification did not depend on competency (quality) testing at the beginning

The result is that there is no difference in competencies of certified primary teachers and non-certified primary teachers



4-year degree is the key requirement for certification

4-year degree teachers are only slightly better on average (on a 60 question subject knowledge test)

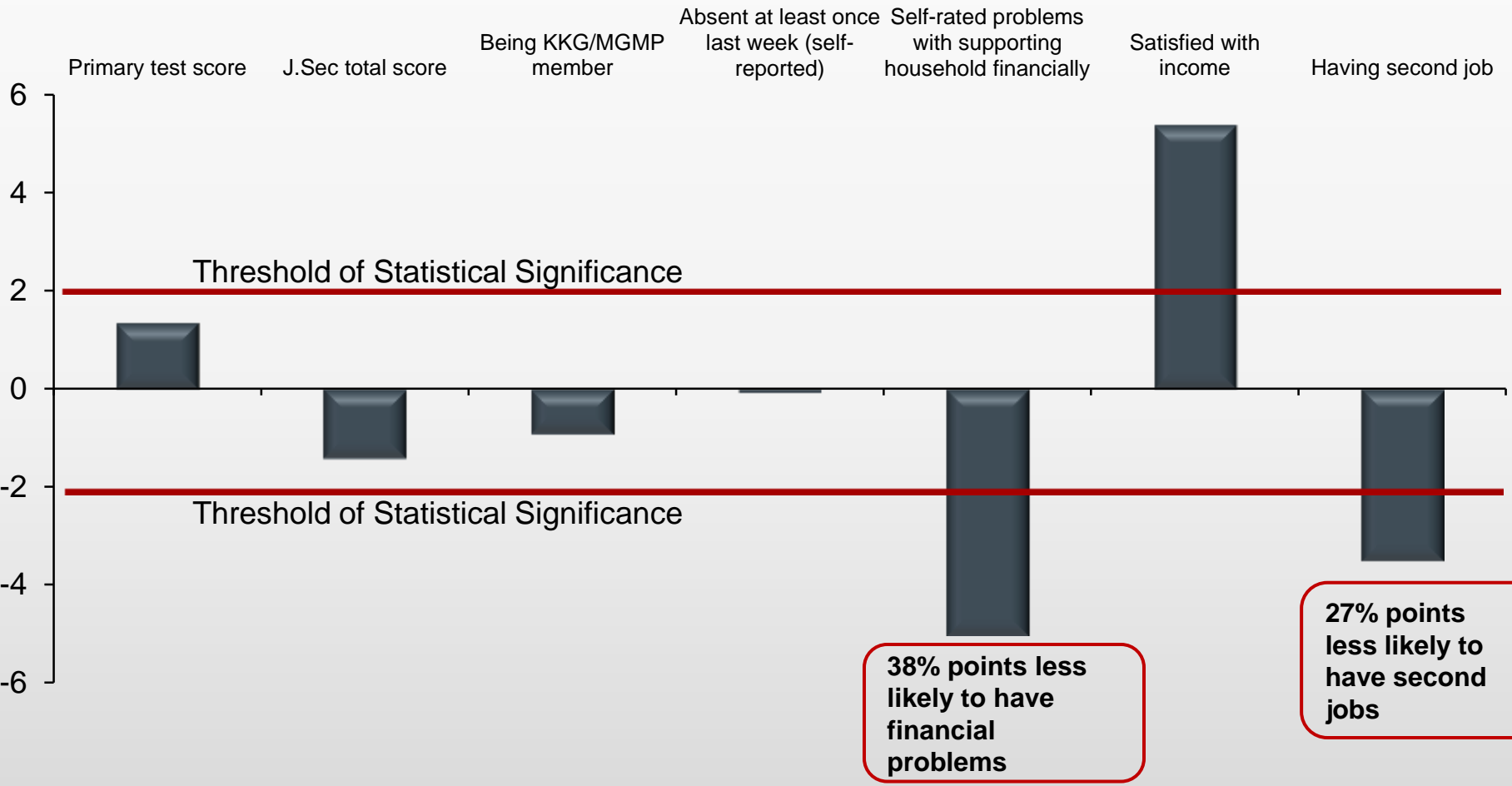
S1/Certification is not a very useful indicator of teacher subject knowledge

Certified and noncertified teachers score similarly, regardless of degree

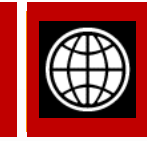
Certified teachers doubled their income, reported reduced financial burden, and quit second jobs



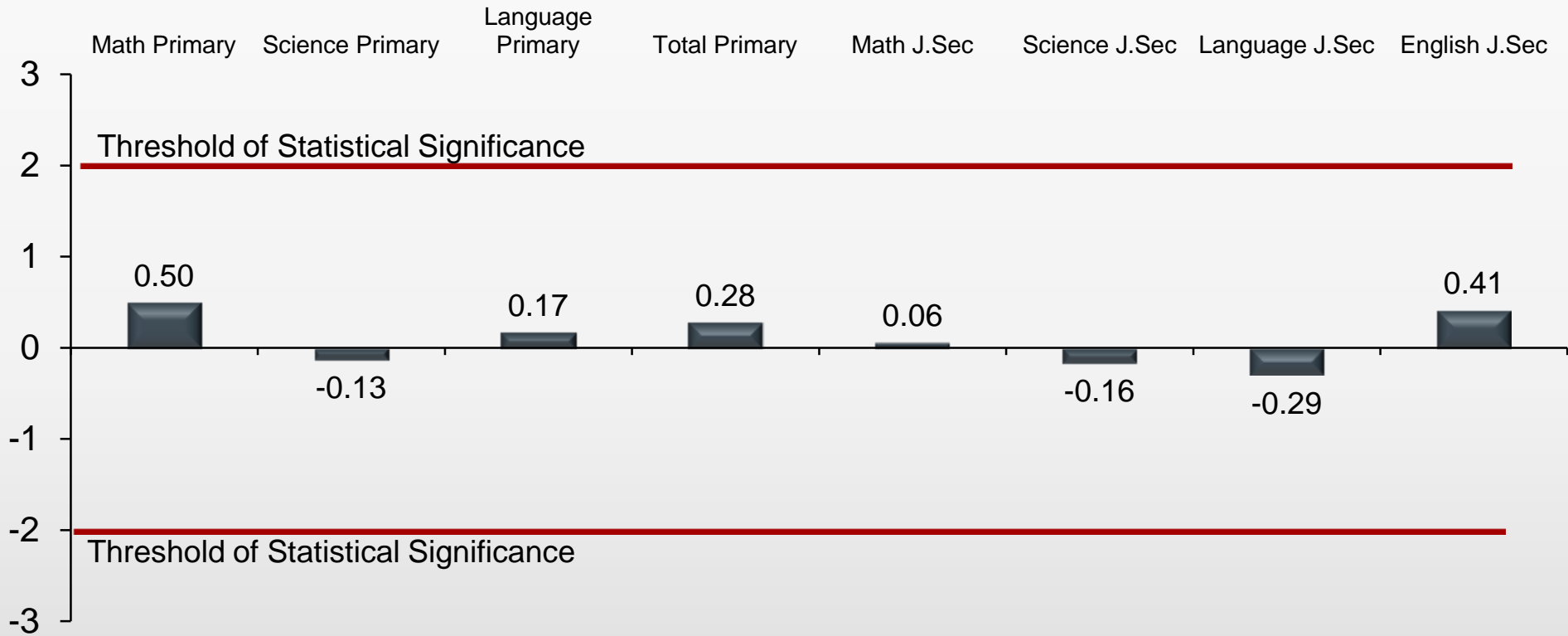
Effects of "Certification"/Double pay on Teachers (t-statistic)



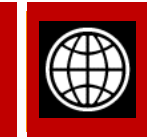
However, there is no positive impact of certified teachers on student achievement



Effect of "Certification" on Student Scores(t-statistic)



Balanced well-being and integrity



Money does help teaching become a respectable profession...



but doesn't improve student learning on its own

If at individual level, teacher does not have at least minimum pedagogic, personal, social and professional competencies...