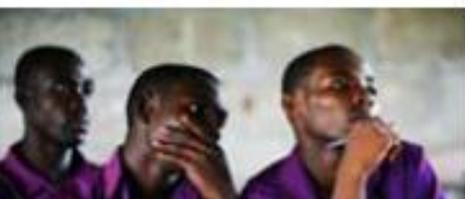




Teacher Characteristics, School Governance & Incentives

Review of the Evidence
Moussa P. Blimpo



Conference Programme

Welcoming Address

Panel 1: What Have We Learned About Improving School Participation?

Panel 2: What Have We Learned About Enabling Learning?

Panel 3: Supportive Learning Through Technology

Panel 4: Teacher Characteristics, School Governance, and Incentives

Panel 5: Evidence Gaps: Secondary Education and Girls

Panel 6: Evidence Gaps: Early Childhood Education

Panel 7: From Evidence to Action: Next Step for Scaling Up Evidence

Concluding Remarks

How to Affect Service Delivery?

- Key stakeholders who matter
 - Teachers
 - Students and parents
 - Administrators and policy makers
- Must have adequate incentives in place
 - Which matters most?
 - How to affect the incentives successfully?
- Near consensus about teachers being key
- Will focus on teachers but will also talk about governance and students' incentive

What do we know about Teachers?

- Who are the good teachers?
 - Observable characteristics have low predictive power
 - Value added approach on student learning - controversial
- Issues in low-income countries are easier to agree on:
 - Absenteeism
 - Shirking

Teacher incentives: performance pay

- Hard to measure, noisy, teaching to the test
- **Example:** Incentives for teachers based on student test scores did not improve teacher attendance in Kenya
 - Test scores rose, but mainly due to additional test prep sessions
 - You get what you pay for

Teacher incentive: supervisor discretion

- Prone to collusion, corruption, and likely to undermine incentives.
- **Examples:**
 - In Kenya, when principals were in charge of rewarding high teacher attendance with bicycles, they gave the bicycles to everyone
 - In India, making part of nurses' pay conditional on attendance broke down when supervisors began granting exemptions



Teacher incentive: Monitoring

- Effective but can be costly and hard in practice
- Technology can help
- **Example:** Incentives for teachers based on their attendance reduced absenteeism significantly in India
 - Giving schools cameras to record their daily presence, and making part of teacher pay conditional upon their attendance, cut teacher absenteeism in half
 - This, in turn, raised student test scores significantly

Sector governance reforms

- Decentralization of management and community involvement gaining popularity
- Ongoing studies in Senegal, Burkina Faso, Gambia, Mozambique, Uganda, Niger, etc.
- But what does evidence from elsewhere say?

Governance reforms:

Mixed Results from Community Monitoring

- Very mixed results from schemes to increase teacher accountability to beneficiaries
 - No emerging patterns
 - In many places accountability groups already exist, but participation is extremely low
- **Example:** In India, providing village education committees with information about the poor quality of education in local schools had no effects

Community Monitoring—With Teeth

- When communities have credible authority over teachers, community monitoring can be effective
- **Example:** In Kenya, an NGO gave communities funds to hire an extra teacher, and empowered to hire or fire them based on performance
 - These teachers had significantly lower absenteeism rates than the government teachers
 - The effects of the program were even stronger when committees were trained to monitor the teachers

Students' own incentives matter

- Often taken for granted or controversial
- But incentive to work hard could be even more inadequate for the children of the poor
- **Example:** Rewarding students based on their annual exam performance rose test scores substantially in Benin. Recent studies in US suggest that rewards should be condition on inputs (like effort) rather than output (test score).

Motivating Service Providers

- A Kenyan program that gave scholarships to high-performing girls raised test scores, and improved teacher attendance
 - When students and families became more motivated, teachers became more motivated as well
 - Reported that parents came to them and told them to work hard, so their children could win the scholarships

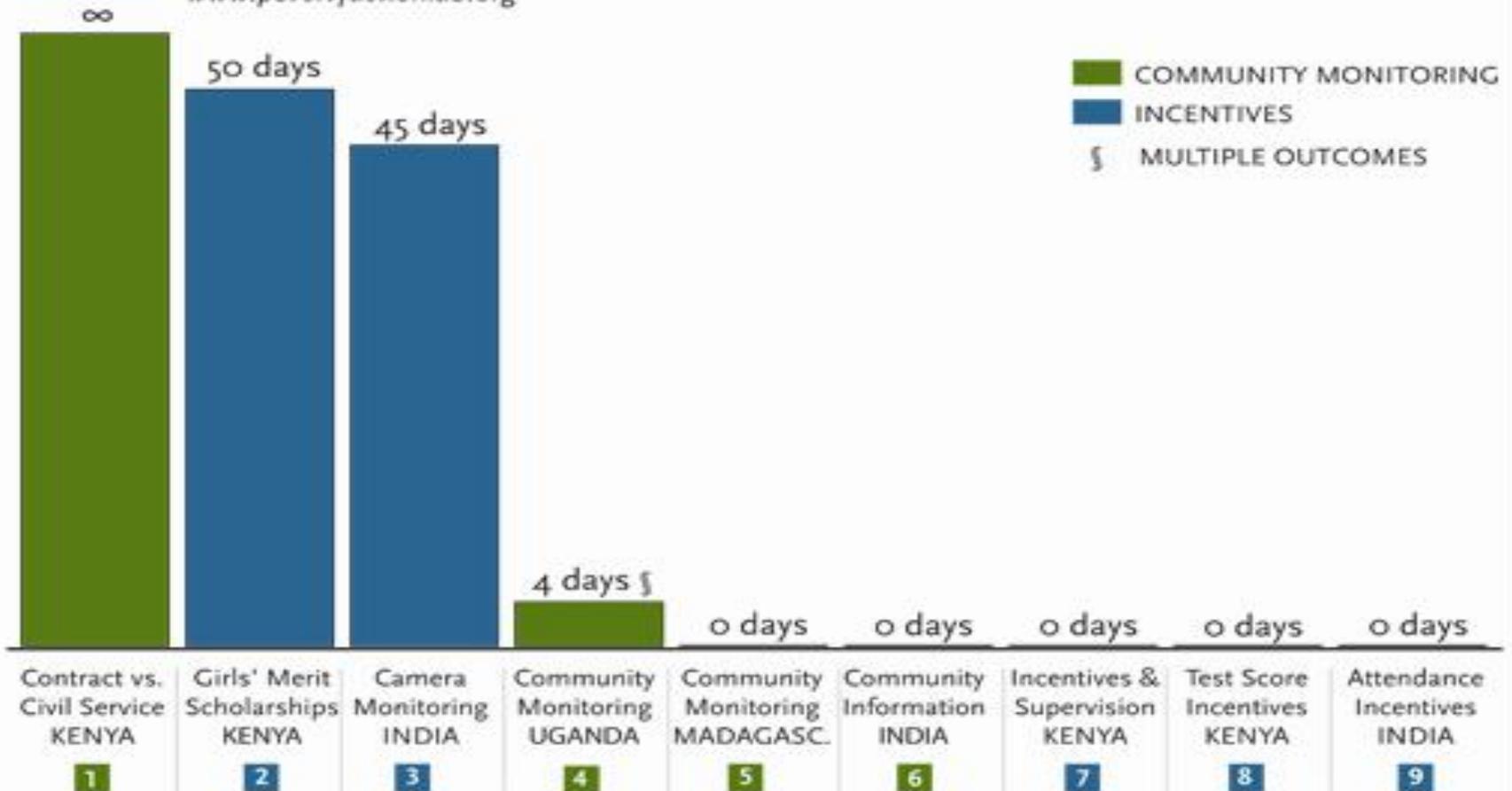


Cost-Effectiveness

Figure 1:

J-PAL COST-EFFECTIVENESS: additional days of provider attendance per \$100 spent

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Summary

- Teachers

- Effective monitoring can work well
- Performance pay can work too – Need to learn more about the design that circumvent the issues

- Governance

- Early results of community involvement are mixed
- However it appears that reform with real delegation of power can work -- More work needed on strong decentralization

- More work needed on:

- Incentive: Intrinsic incentives/motivations
- Integration of technology (mobile, camera, internet) in the management process

Teacher Characteristics, School Governance & Incentives:

Results from the Community Support Teacher Evaluation

Mukhtar Abdi Ogle

Principal Examinations Secretary/National Coordinator,
National Assessment Center (KNEC)

External Researchers:

Tessa Bold (Goethe University, Germany)

Mwangi Kimenyi (Brookings Institution, USA)

Germano Mwabu (University of Nairobi)

Alice Ng'ang'a (Strathmore University)

Justin Sandefur (Center for Global Development, USA)

1.0 Overview

- Pilot research program to evaluate the Ministry's teacher intern program in which 18,000 teachers were hired on contract.
- Coordinated by KNEC and World Vision
- Question #1
 - Do reductions in class size brought about by employing contract teachers improve learning?
 - Answer: YES. Test scores increased by 8% of a standard deviation.
- Question #2
 - Are MOE systems on the ground (DEOs, QASOs, TAC tutors, etc.) able to implement programs with same quality level as NGOs?
 - Answer: NO. MOE implementation did not replicate the large positive effects of contract teachers under NGO supervision.
- Other research questions: role of salary, employment contracts, local accountability and monitoring.

2.0 Experimental Design

- The intervention consisted of
 - Placing a community teacher in 128 of the 192 schools (all required to have P1 or above qualification, half paid KES 5000/month, half paid KES 9,000/month).
 - Providing governance training to members of the SMC in 64 of the 128 schools that received a teacher.
- In half of the treatment schools, the program is run by the Ministry of Education; in the other half it is run World Vision Kenya. Same budget, same project design.

3.0 Evaluation

- Randomized Controlled Trial (RCT) research
- The evaluation based on pupil assessments in Standard 3 and 4 in 192 schools spanning all eight provinces both before and after the program.
- Schools which receive teachers and SMC training and implementation by World Vision and KNEC have been randomly selected
- The design guarantees that any differences in learning between students in control and treatment schools can unequivocally be attributed to the placement a contract teacher
- The findings based on this rigorous research can be used for advocacy at the national level and in debate with education stakeholders (e.g. KNUT)

4.0 Experimental Design

	Ministry Implementation	NGO Implementation
Teacher + SMC Training	32 schools	32 schools
Teacher	32 schools	32 schools
Control	32 schools	32 schools

5.0 Time Line

- Jul 2009 Baseline evaluation for pilot
 - Aug 2009 Union files suit blocking contract teacher program
 - Jun 2010 Pilot teachers placed in schools (NGO & MOE)
 - Oct 2010 MOE hires 18,000 contract teachers
 - Sep 2011 18,000 contract teachers made permanent
 - Oct 2011 Final evaluation of pilot
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- **IMPORTANT LINKAGES FROM THE NATIONAL PROGRAM TO THE RESEARCH PILOT**

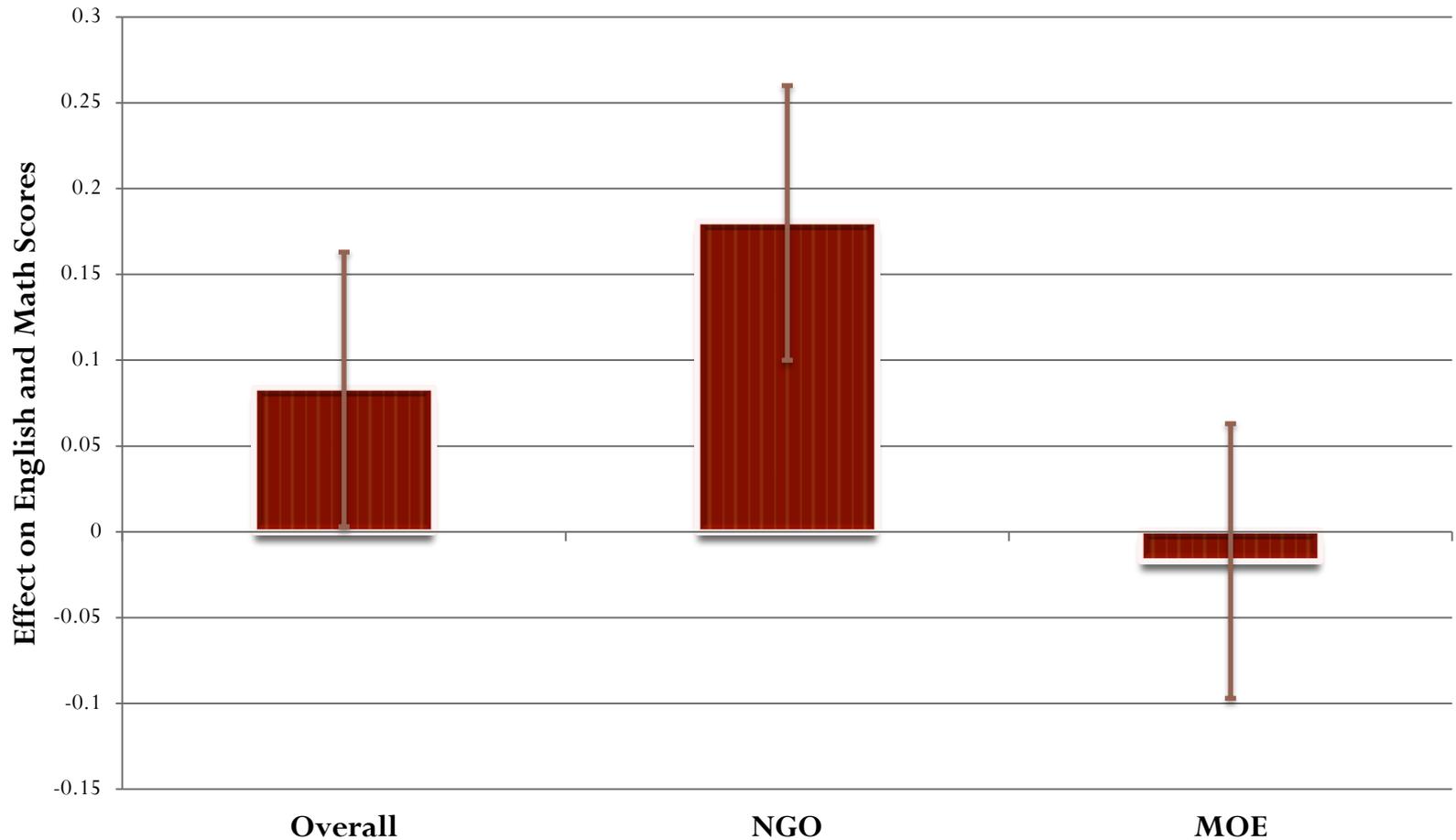
6.0 Findings

- Averaging over all treatment schools, placing a contract teacher in class 3 or 4 increased pupils test scores on an assessment of pupils in English and Maths by 8% of a standard deviation.
- Implies that contract teacher model is a viable model for delivering quality education.

Results for Specific Contract Types

- Salary levels (randomly assigned)
 - In research pilot, teachers that earned KES9000 did not produce significantly better results than those on KES5000
- Recruitment (randomly assigned)
 - Contract teachers are usually recruited locally (possibly less oversight/vetting), TSC teachers come from DEO shortlists.
 - In the research pilot both local (SMC) and central (DEO) recruitment were tried. No significant difference in results.
- Suggestive evidence that contract teachers perform equally well as civil service teachers at lower cost.

Impact of contract teacher on pupil scores in MOE & NGO implementation



Results for MOE vs NGO implementation

- Overall effect of 8% improvement was drive by NGO half of of the program.
- NGO program had 19% improvement
- MOE program had zero improvement
- Budgets and program design were held constant.
- Also note these differences are not explained by any difference in NGO's ability to recruit teachers.

Policy issues to discuss

- Revival of teacher internship/contract teacher program?
 - This rigorous evaluation shows that contract teachers can raise pupil scores at very low cost.
 - A teacher at Sh. 5,000 per month with P1 qualification is still highly effective.
- Improvements to the design of the teacher internship/contract teacher program that MOE conducted in 2010
 - A key feature of the pilot was that teachers were not guaranteed employment at the end of the program = strong incentive to work hard
 - National implementation of program should not guarantee a position on TSC payroll unless school and parents approve of performance.
- Improvements to monitoring and accountability for district staff
 - MOE treatment arm in this project lagged far behind NGO performance. Points to need for stronger accountability at district level.
 - Some (statistically insignificant) evidence that SMC training may help with this.