

Title

Improving Teaching and Learning for Disadvantaged Students in Diverse Classrooms:
Experiments on Teacher Incentives in Uganda

Analysis Plan

All of our analyses will focus on not only the average treatment effect on P6 students, but the distribution of treatment effects. We will examine treatment heterogeneity along the following dimensions

- 1) baseline student achievement levels
- 2) gender
- 3) baseline teacher assessments of student aptitude
- 4) baseline student reports describing student-teacher interactions in class
- 5) baseline student reports about family assets and resources
- 6) class size
- 7) baseline teacher self-assessment
- 8) how well teachers understood the bonus scheme
- 9) school resources
- 10) child household resources

The data on each of the outcomes listed above should contain roughly 12,000 observations from 302 different schools. We should have significant power to detect treatment heterogeneity. Most of our key results will be treatment-control comparisons among sets of cell means, but we cannot know exactly how we will define these cells before we see the distributions of baseline outcomes.

In this PFP implementation, each teacher receives a distinct bonus payment linked to the performance of each of her students. Thus, a teacher with 20 students will receive 20 distinct bonus payments. Since each bonus is capped at the same amount, teachers who have more students have opportunities to earn more bonus income but also less time each day to devote to each of their students. Theory does not predict which of these effects should dominate, but we will examine treatment heterogeneity by class size to determine whether or not the distribution of treatment effects varies with class size.