

**Authors**

Dean Karlan  
Northwestern University

Sharon Barnhardt  
Ashoka University

**Participation in a School Incentive Program in India**

**Sharon Barnhardt**  
Harvard University

**Dean Karlan**  
Yale University

**Stuti Khemani**  
The World Bank

April 20, 2007

**Abstract**

Education policy has recently focused on improving accountability and incentives of public providers for actual learning outcomes, often with school-based rewards programs for high performers. The Learning Guarantee Programme in Karnataka, India, is prominent among such efforts, providing cash transfers to government schools that achieve learning at specified high levels. This study examines whether schools that self-selected into the incentive program are different than those that did not. The answer has important implications for how to evaluate the impact of such a program. Although we find no significant differences in resources and characteristics, we do find significant and substantial differences in test scores prior to selection into the program, with better performing schools more likely to opt-in. These findings also provide insight into how incentive-based programs that focus on levels of (rather than changes in) achievement can exacerbate inequality in education. Failing schools, since they are more likely to opt-out of incentive programs, are likely to require other targeted programs in order to improve. In addition, our findings reinforce the value of randomized controlled trials to evaluate incentive programs since evaluations that rely on matching schools based on resources (if, for instance, pre-program test scores are unavailable) will be biased if resources poorly predict test scores.

---

The authors are indebted to the Azim Premji Foundation, particularly S. Giridhar, Manjira Kato and Karupaly for their efforts to organize and oversee the data collection in Karnataka, and also thank Siddhar Nagara and Lalitha who provided excellent research assistance. We thank Jishnu Das, Vijayendra Rao, and participants of "Social Science and Development in Karnataka: Vision for Public Action A Multi-Disciplinary Conference" at ISEC in Bangalore for valuable suggestions. For financial support we thank the World Bank Development Research Group and the Azim Premji Foundation. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors, and do not necessarily represent the views of the World Bank, its Executive Directors, or the countries they represent.

# Participation in a School Incentive Program in India

Education policy has recently focused on improving accountability and incentives of public providers for actual learning outcomes, often with school-based rewards programs for high performers. The Learning Guarantee Programme in Karnataka, India, is prominent among such efforts, providing cash transfers to government schools that achieve learning at specified high levels. This study examines whether schools that self-selected into the incentive program are different than those that did not. The answer has important implications for how to evaluate the impact of such a program. Although we find no significant differences in resources and characteristics, we do find significant and substantial differences in test scores prior to selection into the program, with better performing schools

more likely to opt-in. These findings also provide insight into how incentive-based programs that focus on levels of (rather than changes in) achievement can exacerbate inequality in education. Failing schools, since they are more likely to opt-out of incentive programs, are likely to require other targeted programs in order to improve. In addition, our findings reinforce the value of randomized controlled trials to evaluate incentive programs since evaluations that rely on matching schools based on resources (if, for instance, pre-program test scores are unavailable) will be biased if resources poorly predict test scores.

April 01, 2007