**Symposium Title:** Opportunities and challenges for education science in developing countries: The unique role of randomized trials

**Symposium Abstract**

A wealth of research has accumulated that informs U.S. domestic education policy and practice today. The United States has a long history of adopting the evaluation mechanism in education policy, and evaluation has played a crucial role in the development of many areas of education knowledge and practice. Much less is known about how educational processes operate in developing countries, where often the educational setting is one of high conflict and low resources. In the past several years, there has been a growing interest in rigorous evaluation research in developing countries to help inform policy and practice. There is much to be learned about how education principles proven to be effective in high-income industrialized countries operate in such settings. As education researchers turn their attention to such populations, evaluation research has an important role to play in informing future international research and policies, as well as education research and knowledge in general. For developing countries, evaluation research can be the key to enhancing their education systems.

This symposium will present three intervention studies that strategize to improve education achievement in poorly supported educational environments. **Paper 1** presents a cluster-randomized trial of a 5-year intervention titled *Opportunities for Equitable Access to High Quality Basic Education* (OPEQ), which aims to improve teachers' motivation and performance and elementary school children's numeracy, literacy and socio-emotional wellbeing in 3 provinces of the Democratic Republic of Congo through curriculum development, teacher training and community mobilization. This paper presents the evaluation design and baseline results from 6,311 children in 84 schools. Preliminary findings indicate very low levels of performance in math and literacy, higher scores in math compared to reading, higher scores for older compared to younger children, and higher scores for boys compared to girls. **Paper 2** presents the design and year one results of the *Health and Literacy Intervention* (HALI) implemented in Ukunda, Kenya. HALI is a four-group intervention designed to address two key barriers to children’s literacy in Kenya: ill-health and ineffective instruction. This design allows for the evaluation of each intervention component individually as well as the interaction between the two. Year one results are yet to be analyzed and will be presented as well. Finally, **paper 3** evaluates the impact of a large-scale social experiment (the *Aligning Learning Incentives*, or ALI, program), involving 88 Mexican Federal high schools, designed to promote mathematics achievement through performance-based monetary incentives using a combination of teacher and student incentive schemes. Results suggest that the student-alone and student-teacher in combination incentive schemes are cost-effective means of increasing high school mathematics learning.

The Millennium Development Goals (www.un.org/millenniumgoals) aim to ensure that by 2015 children everywhere will be able to complete primary schooling. Evaluation research is crucial to informing how to make education accessible and high quality for all children. The three papers in this symposium help inform this challenge by using rigorous research methodology in three different developing countries. Such studies will help not only help to inform governments, policymakers and practitioners, but will also help to build capacity for such research to continue in these settings in the future.