Many students arrive at primary school already behind, experiencing a lack of skills that may compromise their long-term learning and wellbeing. One way to address this issue is through high quality pre-primary education. In the Greater Accra Region, Ghana, where enrollment in pre-primary education is high, researchers evaluated the impact of an affordable, in-service kindergarten teacher training. Results thus far have shown that the training improved the quality of pre-primary teachers’ instruction and classroom quality, and improved children’s “school readiness” skills. Researchers also tested the additional impact of a parent training component administered through schools. This program did not add value to the teacher-training program, and appeared to have negative effects on some aspects of teaching quality and child outcomes.

Policy Issue
Although most children across sub-Saharan Africa have gained access to free primary education, many students arrive at school without the skills they need to succeed there. The early childhood years represent a crucial window for development, as it is during these early years that children form the basis for future learning. Because of this research, there is a growing consensus that investments in early childhood have high returns, and that missed opportunities to promote early childhood development could lead to lasting deficits in children’s educational attainment and future wellbeing. Ghana has made great progress in increasing enrollment in pre-primary education, though the government has concluded that the quality is low. This research examined two approaches to raise the quality of preprimary education in Ghana: training kindergarten teachers, and educating parents about high-quality kindergarten education and investing in their children’s learning.

Evaluation Context
In 2007, the Government of Ghana expanded two years of preprimary (kindergarten) education to be included in the country’s universal education. The quality of preprimary education in Ghana is low, particularly in urban and semi-urban settings, where low-cost private and public preschools account for over 90 percent of
preprimary options. The majority of kindergarten teachers are untrained, and many only have a primary school education. At the same time, research suggests that parents of kindergarteners may be largely uninformed about what high quality kindergarten teaching looks like, and they may pressure teachers to use methods that are developmentally inappropriate (for example, rote repetition of letters and numbers).

This research took place in six districts of the Greater Accra Region, across public and private schools serving children enrolled in kindergarten, aged 4-6 years.

Details of the Intervention

Researchers evaluated the impact of a short, in-service kindergarten teacher training program delivered by the National Nursery Teacher Training Center (NNTTC), with and without a parental awareness program, on teacher well-being, classroom quality, child learning, and parental knowledge of and attitudes towards early childhood education. Researchers randomly assigned 240 schools to either receive the training, both programs, or neither (comparison group). Each group was comprised of 80 schools (~40 public, ~40 private).

In-service teacher training: NNTTC's training for kindergarten teachers and head teachers began with a five-day course, followed by a two-day refresher training four months later, and a one-day refresher four months after that. The program offered experiential training for teachers, and included ongoing monitoring and support. The training focused on helping teachers provide age-appropriate/play-based instructional techniques and an encouraging, positive classroom environment.

Parental awareness training: This program consisted of three educational sessions (one per term) held during PTA meetings. District counselors screen videos, followed by discussion, which focused (1) play-based learning, (2) parents' role in child learning, and (3) encouraging parent-teacher and parent-school communication.

In addition, at each of the 240 schools, researchers randomly chose 15 kindergarten students and measured their school readiness skills, including early academic skills, social-emotional development, and behavioral outcomes. Researchers plan to follow the students as they enter their second year of kindergarten and primary school in order to understand the lasting impacts of the program of children, as well as the teachers to understand sustained impacts on teaching quality.

Results and Policy Lessons

One-year findings

Teachers who were offered the training implemented many of the activities encouraged in the training. In observing teaching practices, researchers looked for a set of practices specifically that were incorporated into the training. On average, teachers in the training program implemented 1.5 more activities compared to the comparison group teachers; and these increases occurred in a wide range of different types of activities.
The teacher training program also improved the quality of teacher-child interactions in the classroom. Specifically, the program improved teachers’ supporting of student expression (e.g., supporting students to reason and problem solve, consider student ideas) and emotional support and behavior management (e.g., positive climate, consistent routine). The program did not improve teachers’ facilitation of deeper learning, however (e.g., scaffolding, quality feedback). These skills might need more intensive and content-focused training.

In addition, the teacher training reduced teacher turnover in the private sector. Specifically, the training reduced the probability that a teacher would leave the kindergarten classroom by the third term from 43.5% to 12.3% (teacher training condition) and 17.4% (teacher and parent training condition). Notably, in private schools the program reduced turnover to levels similar to the public sector.

However, the addition of the parenting program did not improve the impacts of the program. In fact, the parenting program cancelled out the positive impacts on child outcomes in the areas of early numeracy and early literacy, and classroom emotional support and behavior management. This suggests that there was a negative result from the parenting program.

**Policy Implications**

The in-service teacher training was largely effective in making classrooms more child-friendly and developmentally appropriate. These changes had the largest impact on children's social-emotional development compared to other developmental domains. Policymakers should consider how to build on this to and integrate a more enriching literacy and numeracy experience for children.

Careful consideration must be given as to why the parenting component had negative impacts on child development, as parental involvement has been shown to be important for children's learning and development. Parents may require much more intensive training than the brief intervention tested in QP4G. This should be a topic for further research.

Finally, the program was found to be equally effective in the public and private sector, suggesting that the conditions for teachers may not differ greatly across the sectors and that trainings could be useful for teachers in both public and private schools.

*A follow up of children in the spring of 2017 enabled researchers to measure if impacts on socio-emotional development lead to future impacts in other developmental domains. Those results, as well as results from an additional follow-up in 2018, are forthcoming.*

*The QP4G training materials are now publicly available upon request. If you would like to request access, please submit this Google Form. The evaluation datasets are also publicly available: Baseline, Midline, and Endline.*