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**Timeline**

2015-2018

**Study Status**

Results

**Sample Size**

240 schools; 480 Kindergarten teachers; 3,600 parent-child pairs

**Data Repository**

<http://microdata.worldbank.org/index.php/catalog/3439>

**Research Implemented by IPA**

Yes

# The Impacts of Teacher Training and Parental Engagement on Kindergarten Quality in Ghana

## Abstract

Many students arrive at primary school without the educational experiences that support the skills needed to succeed in school. This can compromise students' long-term learning and school success. One way to address this issue is through high quality pre-primary education. In the Greater Accra Region of Ghana, where enrollment in pre-primary education is high, researchers evaluated the impact of an affordable, in-service kindergarten teacher training. Overall, the in-service teacher training and coaching program improved teaching, classroom quality, and school readiness during the implementation year, and some impacts persisted two years later, such as literacy, executive function, and behavioral regulation. Researchers also tested the additional impact of parental awareness meetings 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 school readiness skills they need to succeed. 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. There is a growing consensus that investments in early childhood have high returns, and that promoting early childhood development could lead to lasting benefits for 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 educational quality is low. This research project 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.

## Context of the Evaluation

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

At each of the 240 schools, researchers randomly chose 15 kindergarten students from KG1 and KG2 classrooms and measured their school readiness skills, including early academic skills, social-emotional development, and behavioral outcomes. Researchers followed the students as they entered their second year of kindergarten and primary school, and one year later when children were in their first and second years of primary, in order to understand the lasting impacts of the program of children, as well as the teachers to understand sustained impacts on teaching quality.

The research team also conducted qualitative interviews with 25 parents and 25 teachers of the children to better understand what may be driving the quantitative impacts. They interviewed parents about their perceptions of educational quality, their child's ECE experience, communication with teachers, and their role in their child's education. They interviewed teachers about their perceptions about educational quality, experiences as an ECE teacher, communication with parents, and their experiences in the training program.

## Results and Policy Lessons

Overall, the in-service teacher training and coaching program improved teaching, classroom quality, and school readiness during the implementation year, and some impacts persisted two years later, such as literacy, executive function, and behavioral regulation. The parental awareness meetings, however, had the unintended effect of canceling out these positive impacts, suggesting alternative approaches are needed to effectively engage parents in this context.

*Classroom quality:* The program significantly improved classroom quality, including implementation of developmentally appropriate practices. The teacher training program also improved the quality of teacher-child interactions in the classroom. Specifically, the program improved teachers' support 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. However, one year after the program implementation ended, researchers found that impacts on implementation of developmentally appropriate practices persisted, but were smaller, and impacts on teacher-child interaction quality faded out after support was removed. Impacts on support for student expression were lower than in the comparison group one year later. This puzzling finding will require further analysis to determine if teachers in particular types of school environments were more or less likely to reduce their support for student expression after the training and district support ended.

*Teachers' professional well-being:* The program led to some impacts on teachers'

professional well-being, reducing teacher burnout for all teachers, and 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 44 percent to 12 percent (teacher training program) and 17 percent (teacher and parent training program). Notably, in private schools the program reduced turnover to levels similar to the public sector. One year after the program ended, teachers were still using more developmentally appropriate practices and reported lower levels of burnout than comparison group teachers.

*School readiness:* The program improved children's school readiness, including their early literacy, early numeracy, and social-emotional skills in the first year. One year later, when children moved to their next year of schooling, the impacts on social-emotional development persisted. Two years later, preliminary evidence shows sustained gains in literacy, executive function, and behavioral regulation. There were also persistent positive impacts on both literacy and numeracy outcomes in classrooms where teachers had low burnout levels. Numeracy outcomes were also highest in classrooms with relatively high levels of emotional support, suggesting that higher-quality subsequent classroom environments support sustained impacts better than low-quality environments. However, the addition of the parental-awareness meetings 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. This suggests that there was a negative result from the parental awareness meetings.

### ***Qualitative findings***

From the interviews that researchers conducted with parents and teachers, they found that parents prioritized academics and physical and structural resources when determining ECE quality. They also viewed their role as ensuring children had their basic necessities met, and less so as supporting children's educational experiences through engaging in enrichment or educational activities with children. They viewed teachers' role as disciplining their children and encouraging good behavior.

From the teacher interviews, researchers found that teachers had different perspectives than parents on how to discipline children in their classrooms, embracing more proactive, positive behavior management approaches. They also found that some teachers felt frustrated with parents, feeling that parents did not invest enough in their children's learning and development. Teachers also described a lack of parent participation and that they only spoke with parents if there was a concern about a child, suggesting that teacher-parent communication could be strengthened.

### ***Policy Implications***

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. Results from the qualitative parent and teacher interviews also revealed important areas of alignment and

misalignment between parents' and teachers' perceptions and goals for children's ECE experiences. These results demonstrate that efforts to engage parents in ECE should consider parent-teacher relationships.

Because the program was implemented and evaluated in urban and peri-urban areas, researchers conclude this approach is effective and feasible in those areas. Importantly, the impacts are small and suggest that improvements to the training program may be necessary to truly address the educational challenges Ghana faces. The next step is to test what adaptations are needed for the program to be effective and feasible in rural areas of the country and how to increase the size of the program impacts.

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.

*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](#).*

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