

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



Enrollment in early childhood education has increased dramatically in Ghana, but the education sector now faces the challenge of ensuring young children learn and develop school readiness skills. This study evaluated the impacts of a scalable, in-service training and coaching program for kindergarten teachers, delivered with and without parental awareness meetings, on teaching practices and children's learning and development.

## Key Findings

- » The in-service teacher training and coaching improved teachers' use of the play-based kindergarten-specific pedagogy that is specified in Ghana's national early childhood education curriculum.
- » The program led to moderate impacts on teachers' professional well-being, reducing teacher burnout for all teachers, and teacher turnover in the private sector.
- » The teacher-training and coaching 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 with high emotional support and in classrooms where teachers had low burnout levels.
- » The parental awareness meetings were not effective in improving children's outcomes, and alternative approaches to engage parents need to be explored.
- » Overall, the results of the in-service teacher training hold promise for improving the quality of education delivered in Ghana's kindergarten educational system.

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### COUNTRY

Ghana

### TIMELINE

2015-2017

### SAMPLE

240 schools; 444 kindergarten teachers; 3,800 parent-child pairs

## The Challenge

**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 growing evidence that investments in early childhood can have high returns, and that this is an important window of opportunity to support children's educational attainment and future well-being.

In 2007, the Government of Ghana expanded two years of preprimary ("kindergarten") education to be included in

the country's universal basic education, and Ghana now has one of the highest enrollment rates for preprimary education in the region. However, the quality of preprimary education in Ghana is generally low. A large share of kindergarten teachers is untrained, and many only have a primary education. With high enrollment rates across the country, equipping teachers with skills and training is a top government priority, and has the potential to improve the quality of early childhood education that can lead to large-scale improvements in child learning and development.

## The Program

**The Quality Preschool for Ghana (QP4G) program was designed to build capacity and support for the implementation of the 2004 kindergarten (KG) curriculum and to enhance the quality of early childhood education (ECE).**

The goal of the project was to develop and evaluate an affordable and scalable model of teacher training to provide high-quality ECE services to children. It also tested the added benefits of engaging parents via educational awareness meetings.

### ***In-service teacher training and coaching program:***

The in-service kindergarten teacher training program was delivered to kindergarten teachers and head teachers by the National Nursery Teacher Training Center (NNTTC). The training 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 in-classroom monitoring and support. The training focused on helping teachers provide age-appropriate and play-based instructional techniques and an encouraging, positive classroom environment.

The training was built into existing education structures: the teacher trainers and training center, NNTTC, offered the

five-day course in its center. In addition, trained coaches were education coordinators from the district government who visited teachers in their classrooms each term. As such, the program was designed to be scalable with national and district government support.

***Parental awareness meetings:*** Because the KG curriculum differs from what many parents expect from schooling (i.e., it is activity-based and child-centered as opposed to teacher-driven), parental awareness meetings were held in order to align parental expectations with the practices promoted in the teacher training. The program consisted of three educational sessions (one per term) held during Parent Teacher Association meetings. District coordinators screened informational videos and afterwards led discussions on play-based learning, child development, and parents' role in children's learning. They also encouraged parent-teacher and parent-school communication.

The NNTTC was a key partner in the development and implementation of the teacher training program, and Sabre Education helped develop the curriculum. Additionally, a QP4G Steering Committee, which included representatives from Ghana Education Service and the Ministry of Education, provided important feedback and guidance throughout the development of the program.

## The Evaluation

**Researchers evaluated the impact of the in-service kindergarten teacher training and coaching program, with and without a parental awareness component, on teachers' professional well-being, classroom quality, and child learning outcomes.**

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

Researchers randomly assigned 240 public and private schools to either receive the teacher training and coaching, both teacher and parental awareness programs, or neither (comparison group).

In addition, at each school, researchers randomly chose 15 kindergarten students from the class roster and measured their school readiness skills, including early academic, social-emotional, and executive function skills. Students were assessed during implementation year and again one and two years later, to assess if program impacts on child outcomes were sustained as the younger cohort of children attended their second year of kindergarten, and the older cohort of children entered primary school. Researchers also collected qualitative interviews with 25 parents and 25 teachers of the children to examine their experiences with the program and interacting with each other.

# Results

Note: The two-year follow-up results are preliminary and may change after further data collection and/or analysis.

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 component, however, had the unintended effect of canceling out the positive impacts of the program, suggesting alternative approaches are needed to effectively engage parents.

### In the year the interventions were implemented, the in-service teacher training and coaching program significantly improved classroom quality.

The program had moderate impacts on the implementation of developmentally appropriate practices, and on some dimensions of quality teacher-child interactions. 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.

### The program led to moderate impacts on teachers' professional well-being, reducing teacher burnout for teachers in the private and public sector, and reducing 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 training and parental awareness program). Notably, in private schools the program reduced turnover to levels similar to the public sector.

### However, one year after the program implementation ended, researchers found that impacts on classroom quality faded out after support was removed.

They also found that impacts on support for student expression were lower than in the comparison group. 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.

One year after the program ended, teachers were still using more developmentally appropriate practices and reported lower levels of burnout than comparison group teachers.

### The teacher-training and coaching improved children's school readiness, including their early literacy, early numeracy, and social-emotional skills in the first year, and some impacts persisted two years later.

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, in executive function skills such as cognitive flexibility and inhibitory control, and children's behavioral regulation.

### Primary school classroom emotional support and teacher burnout levels had moderating effects on numeracy outcomes.

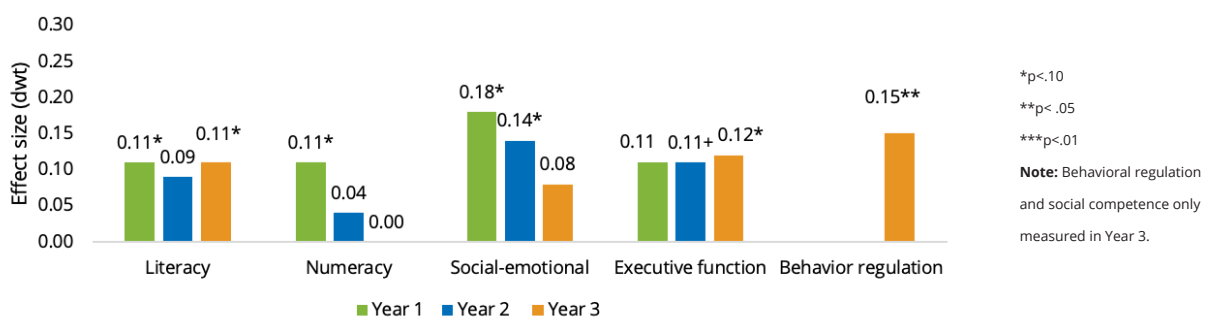
For the teacher training program, numeracy outcomes were highest when children were in primary school classrooms with relatively high levels of emotional support. For the teacher training and parental awareness program, a similar pattern was observed, and there were also small persistent negative impacts on numeracy in classrooms with low levels of emotional support. Numeracy outcomes were highest in classrooms with relatively high levels of emotional support.

There were also persistent positive impacts on both literacy and numeracy outcomes in classrooms where primary school teachers had low burnout levels, suggesting that teachers' professional well-being is consequential in supporting the sustained impacts of the program.

### Adding the parental-awareness component to the teacher training did not enhance these effects, and in fact canceled out the positive impacts children experienced from having QP4G-trained teachers.

Researchers did not conclude that parental awareness meetings are necessarily harmful to children. But rather, such interventions must be done carefully and administered by the right personnel in ways that successfully convey to parents the advantages of novel approaches to early childhood education and build on parents' desires for their child's early learning experiences. More research would be needed to learn the best approaches in the Ghanaian context.

Impacts of QP4G Teacher Training on Child Outcomes over Three Years



## COST-EFFECTIVENESS:

- » The teacher training and coaching program was designed to be affordable and scalable. The average total costs per school, teacher, and child were approximately \$1,108, \$529, and \$21. When considering budgetary expenditures only (excluding resource and time costs of participants), expenditures per school, teacher, and child were \$966, \$461, and \$18, respectively.
- » Overall, the program would be more cost-effective in increasing school readiness and the implementation of KG-specific pedagogy than any other program with a cost-effectiveness ratio (CER) of a one standard-deviation improvement of more than \$129.86 per child per year.

## 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.
- » Parents 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 on how to discipline children in their classrooms, embracing more proactive, positive behavior management approaches.
- » Some teachers felt frustrated with parents and that they 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.

## Conclusion

**The findings suggest that the QP4G teacher training and coaching program is an effective and potentially scalable way to train teachers on the KG-specific pedagogy specified in the national curriculum.**

While the effects of many ECE programs fade over time, some impacts on aspects of children's school readiness were sustained one and two years after program implementation ended, making the program stand out from similar interventions.

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.

The findings also suggest that the parental awareness meetings as implemented were not an effective way to involve parents in their child's education, and alternative approaches to engage parents need to be explored.

**Overall, the results hold promise for improving the quality of education delivered in Ghana's KG educational system. The research team supports scaling the program in urban and peri-urban areas of Ghana, while adapting and testing it in rural areas.**

*This project is funded by UBS Optimus Foundation ([www.ubs.com/optimus](http://www.ubs.com/optimus)), the World Bank Early Learning Partnership, and The Strategic Impact Evaluation Fund (SIEF).*



UBS Optimus Foundation



SEPTEMBER 2019

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Innovations for Poverty Action (IPA) is a research and policy nonprofit that discovers and promotes effective solutions to global poverty problems. IPA designs, rigorously evaluates, and refines these solutions and their applications together with researchers and local decision-makers, ensuring that evidence is used to improve the lives of the world's poor. Our well-established partnerships in the countries where we work, and a strong understanding of local contexts, enable us to conduct high-quality research. This research has informed hundreds of successful programs that now impact millions of individuals worldwide.

