



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, 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. These positive effects persisted one year later, after the program ended.
- » 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.
- » The parental awareness meetings were not effective in engaging parents in their child's education, 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.

* These results are preliminary and may change after further data collection and/or analysis.

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COUNTRY

Ghana

TIMELINE

2015-2017

SAMPLE

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

The Challenge

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 have high returns, and that missed opportunities to promote early childhood development can lead to lasting deficits in children's educational attainment and future wellbeing.

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 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 has the potential to improve the quality of early childhood education, leading to large-scale improvements in child learning and development.

The Program

The Quality Preschool for Ghana (QP4G)¹ 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 monitoring and support. The training focused on helping teachers provide age-appropriate/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/monitors 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 is different from what many parents are used to (i.e., it is play-based 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 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 Charitable Trust 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, across 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).

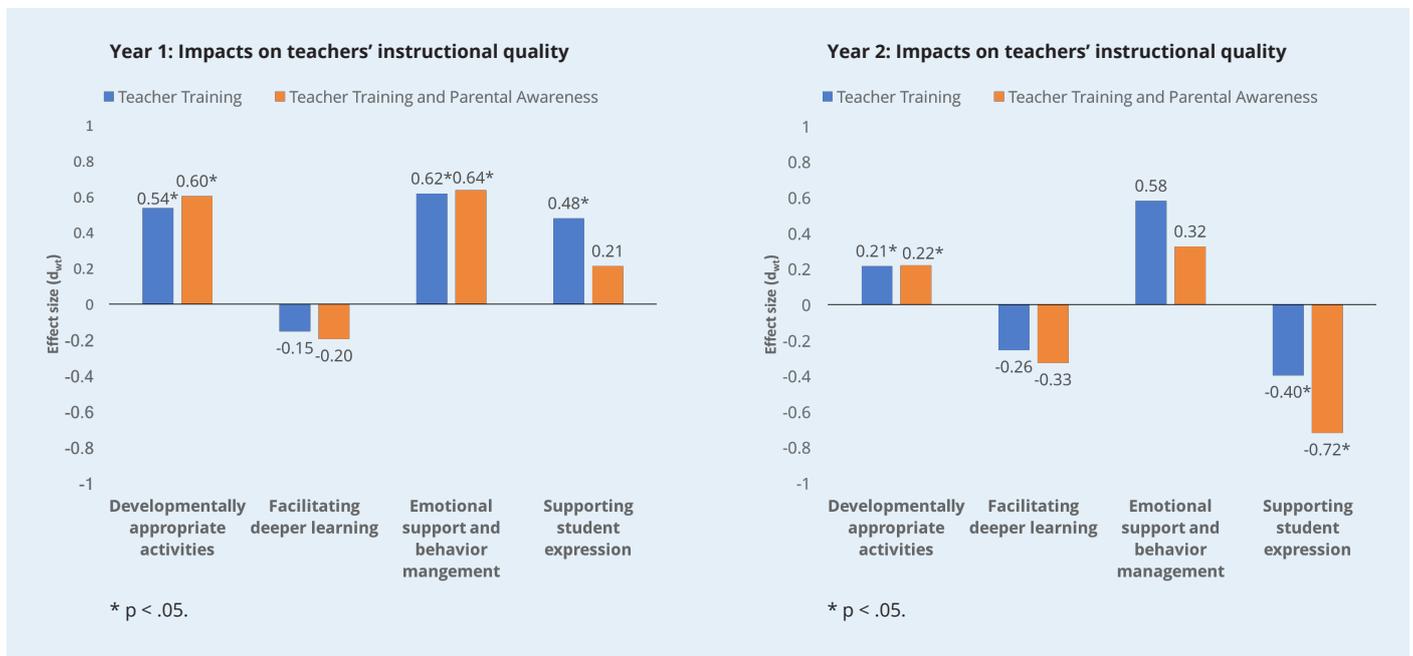
In addition, at each school, researchers randomly chose 15 kindergarten students from the class roster and measured their school readiness skills, including early academic, social-emotional, and executive function skills. Students were assessed during implementation year and one year later, to assess 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.

¹ *Preschool* in this study refers to the two years of pre-primary education in Ghana called kindergarten, or KG.

Results

Note: These 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 into the following school year. The parental awareness component, however, had unintended effects, suggesting alternative approaches are needed to effectively engage parents.



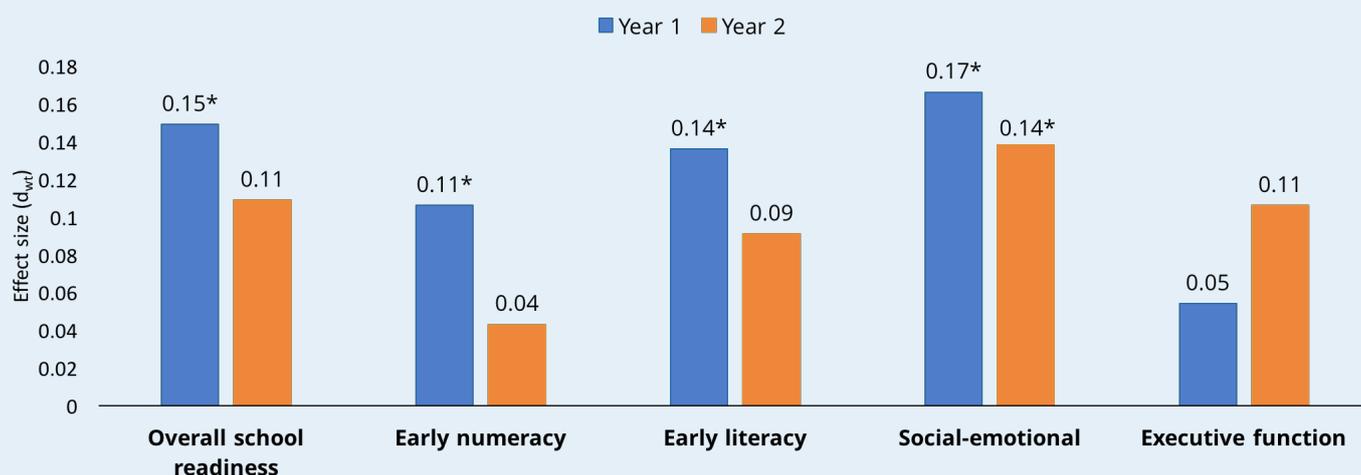
SHORT-TERM IMPACTS, DURING THE IMPLEMENTATION YEAR (AT LEFT):

- » In the year the interventions were implemented, the in-service teacher training and coaching program significantly improved classroom quality, with moderate impacts on the implementation of developmentally appropriate practices, and on some dimensions of quality teacher-child interactions.
- » The programs also led to moderate 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 condition) and 17 percent (teacher training and parent awareness). Notably, in private schools the program reduced turnover to levels similar to the public sector.
- » In addition, the in-service teacher training and coaching led to a small improvement in children's school readiness, including literacy, numeracy, and social-emotional skills.
- » Adding the parental-awareness intervention to the teacher training did not enhance these effects, and in fact counteracted the impacts on child outcomes. 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. More research would be needed to learn the best approaches in the Ghanaian context.

LONGER-RUN IMPACTS, ONE YEAR AFTER PROGRAM IMPLEMENTATION ENDED (AT RIGHT):

- » Teachers were still using more developmentally appropriate practices and reported lower levels of burnout than comparison group teachers.
- » Impacts on children's school readiness persisted, primarily for social-emotional skills.
- » Impacts on other outcomes, such as classroom quality, faded out after support was removed.
- » Impacts on support for student expression (one dimension of classroom quality) were lower in both program groups 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.

Impacts on Child Outcomes²



* $p < .05$.

² No impacts of teacher training plus parental awareness either year. Those outcomes are not shown in this graph.

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 \$842, \$402, and \$16. When considering budgetary expenditures only (excluding resource and time costs of participants), expenditures per school, teacher, and child were \$512.35, \$244.77, and \$9.79, 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 \$107.23 per child and \$744.63 per teacher, respectively, per year.³

³ Estimates based on midline results (impacts at the end of implementation year).

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, impacts on teachers' use of developmentally appropriate pedagogy and aspects of children's school readiness were sustained one year after program implementation ended, making the program stand out from similar interventions.

Researchers believe the on-going support and coaching was critical to the program's success. Offering teachers additional continued support, such as refresher trainings and coaching, has the potential to mitigate the fade out of some effects, such as teacher turnover.

Because the program was implemented and evaluated in urban and peri-urban areas, researchers conclude this approach is effective and feasible in those areas. The next step is to test what adaptations are needed for the program to be effective and feasible in rural areas of the country.

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.

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