Innovations for Poverty Action

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Timeline
2016-2017

Study Status
Results

Study Type
Randomized Evaluation

Sample Size
135 student teachers and 1,604 children

Research Implemented by IPA
Yes

Mentoring and Experiential Learning for Early Education Student Teachers in Ghana

A classroom in Ghana photographed during IPA's evaluation of the Fast Track Transformational Teaching (FTTT) program. © 2019 IPA Ghana

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Abstract

Although enrollment and access to primary education has increased across sub-Saharan Africa, student learning remains low. Educators and policymakers want to strengthen teacher training in order to improve student learning, but evidence is lacking about what makes teacher training most effective, especially in early childhood education. In Ghana, researchers conducted a randomized evaluation to measure the impact of a teacher training program for student teachers—later newly qualified teachers—teaching kindergarten on curriculum implementation, teacher well-being and classroom quality, and student learning. They also evaluated the impact of additional training for head teachers in schools where the program was implemented and had newly qualified teachers. Results showed that the program substantially increased student teachers' implementation of the kindergarten curriculum, and persisted at smaller levels when they became newly-qualified teachers. There were mixed impacts on teachers' professional well-being and teaching quality and no impacts on student learning under newly qualified teachers. The head teacher training did not have any impact on newly-qualified teachers' teaching practices.

Policy Issue

Child learning outcomes remain low across sub-Saharan Africa, despite increased access to free primary education and higher school enrollment. Early childhood represents a crucial window for learning and quality preprimary education helps children form the foundation for future learning. However, many early childhood teachers are undertrained, resulting in poor quality teaching and low learning outcomes for their young pupils. While little research exists about pre-service training, a growing body of evidence suggests that in-service training can be effective in changing teachers' attitudes and improving learning outcomes, primarily through specifically guided instruction and improving student experiences.[1] This research in Ghana provides new evidence about how a year of intensive in-service coaching and mentoring of preprimary student teachers impacts teaching quality and children's outcomes.

Context of the Evaluation

In 2007, Ghana expanded access to preprimary (kindergarten) education by including it in the free and compulsory public education. As a result, kindergarten enrollment is one of the highest in Africa at 75 percent.[1] To improve teaching quality at this level, many pre-service teacher training programs in Ghana include a year during which people learning to become teachers are placed in classrooms as student teachers. One of these programs is the Fast-track Transformational Teaching Training (FTTT) program.

In the FTTT program, student teachers received in-service coaching and mentoring during their student teacher year. They attended intensive training workshops focusing on developmentally appropriate early childhood education curricula and techniques and received in-classroom coaching where trainers modeled best teaching practices and helped student teachers address school-specific challenges.

Details of the Intervention

Researchers worked with IPA, Sabre Charitable Trust, and Ghana Education Service to conduct a randomized evaluation assessing the impact of the FTTT program on classroom quality, teacher well-being, and child school readiness.

A total of 137 student teachers were randomly assigned to either be placed in schools in the FTTT program or in non-participating schools that served as the comparison group. The following year, when student-teachers became newly-qualified teachers, the FTTT schools with student teachers (69 schools in total) were randomly assigned to receive either training to increase head teachers' receptiveness of the FTTT training practices or no additional training.

The FTTT program was evaluated in the Western region of Ghana during the 2015–2016 and 2016–2017 academic years. Researchers conducted an initial survey in 2015 collecting basic demographic information, language proficiency, and children's basic pre-literacy skill knowledge before the student-teaching year of training. To measure impacts on teaching quality, teacher well-being, and early childhood education knowledge, researchers conducted three follow-up surveys: in June 2016 after the student-teaching year, in October and November 2016, and in May and June 2017. They also conducted video-taped classroom observations of teachers throughout data collection.

Results and Policy Lessons

The FTTT program substantially increased student teachers' implementation of the kindergarten curriculum. The effects persisted the following year when student teachers were newly-qualified teachers, but were smaller. There were mixed impacts on teachers' professional well-being and teaching quality and no impacts on student learning under newly qualified teachers. The head teacher training did not have any impact on newly-qualified teachers' teaching practices.

Implementation of Curriculum: On average, student teachers in FTTT schools implemented 7.9 kindergarten-specific curriculum activities whereas student teachers in comparison group schools implemented 3.2. In addition, student teachers in FTTT schools implemented 4.6 pedagogical activities compared to 2.7 for student teachers in comparison group schools. As newly qualified teachers, by the end of the year, FTTT teachers implemented 4.7 kindergarten-specific materials and 4.4 pedagogical activities compared to 2.7 and 3.9 for comparison group teachers. FTTT also led to small-to-moderate increases in newly qualified teachers' knowledge of developmentally appropriate practices, supporting children's social-emotional needs, and family-sensitive practice.

Teacher Well-being: FTTT student teachers displayed higher levels of personal accomplishment than comparison group student teachers, which persisted when they were newly-qualified teachers throughout the school year. FTTT student teachers reported higher levels of motivation in the fall and lower levels of burnout in the spring but reported lower

levels of job satisfaction both in the fall and spring as newly qualified teachers. The results suggest that newly qualified teachers missed the strong support system they had as student teachers and struggled to implement the pedagogical activities.

Classroom Quality: FTTT led to an increase in child-led activities in the classroom, but this decreased over time from large impacts for student teachers to medium- to small-sized impacts for newly-qualified teachers in the fall and spring, respectively. Although child-led activities increased, teacher support for student expression decreased for FTTT student teachers, which persisted in the fall as newly-qualified teachers.

Sources

1. Ganimian, Alejandro J., and Richard J. Murnane. "Improving education in developing countries: Lessons from rigorous impact evaluations." Review of Educational Research 86, no. 3 (2016): 719-755.

Evans, David K., and Anna Popova. "What really works to improve learning in developing countries? An analysis of divergent findings in systematic reviews." The World Bank Research Observer 31, no. 2 (2016): 242-270.

2. Ghana Ministry of Education (2016). Education Sector Performance Report 2016. Ghana.

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