Although enrollment and access to 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. Researchers worked with Innovations for Poverty Action, Sabre Charitable Trust, and Ghana Education Service in Ghana’s Western region to evaluate a mentoring and pre-service training program for student teachers learning to teach kindergarten. Preliminary results indicate that the program significantly improved student teachers’ implementation and knowledge of the national kindergarten curriculum. However, in the first year of posting as newly qualified teachers, these changes did not translate into improved teaching quality or impacts on child learning outcomes.

Policy Issue
Child learning outcomes remains low across sub-Saharan Africa, despite increased access to free primary education and higher school enrollment. Early childhood education (ECE) represents a crucial window for development, as it is during these early years that children form the basis for future learning. However, many early childhood teachers are undertrained, resulting in poor learning and development outcomes for their young pupils. As a result, educators and policymakers are interested in strengthening teacher training as a way to improve ECE pupil learning and school readiness. Experiential learning, in which teachers practice the pedagogies and techniques that they are studying, is commonly thought to be a critical ingredient for training teachers. Yet, many teaching schools do not provide intentional training and mentoring for student teachers, and rigorous evaluation of these teaching training programs is necessary to re-evaluate their structure and efficacy. This research provides new evidence about how a year of intensive in-service coaching and mentoring of early education student teachers impacts teaching quality and children’s outcomes.

Evaluation Context
In 2007, the Government of Ghana expanded access to two years of pre-primary education—called kindergarten—by including it in the free and compulsory basic education provided by the state. It was
the first country in Sub-Saharan Africa to do so. As a result, access to ECE in Ghana is relatively high. However, training for early childhood educators is not standardized, and its quality is uneven.

Many pre-service teacher training programs in Ghana include a year of training during which teachers are placed in classrooms as student teachers, but evidence about the efficacy of these programs is thin. Leaders of Ghana's Ministry of Education and Ghana Education Services (GES) are interested in scaling up the Fast-track Transformational Teacher Training (FTTT) program, which provides early education student teachers with guidance through mentorship and in-classroom training throughout their student teacher year. However, research is needed to rigorously evaluate the effects of the FTTT program on teachers’ techniques and children’s learning.

Participants in this study were students enrolled in the Holy Child College of Education in Takoradi, in the Western region of Ghana. Student teachers attended the college for three years, and in their third year were placed in kindergarten classrooms on practical placement.

**Details of the Intervention**

The research team worked with Sabre Charitable Trust and Ghana Education Service to conduct a randomized evaluation assessing the impact of enhanced student teacher training on classroom quality, teacher well-being, and child school readiness.

One-hundred thirty-five student teachers were randomly assigned to either the FTTT program or a comparison group during their student-teaching year. The following year, when student-teachers became full-time newly qualified teachers, half of the schools that received a treatment teacher (68 schools total) were randomly assigned to receive an additional head teacher sensitization training or no additional training.

**Fast Track Transformational Teaching (FTTT) program:** Student teachers in this group received in-service coaching and mentoring during their student teacher year. Students attended intensive training workshops (12 days) and received in-classroom coaching (4 days). Trainings focused on developmentally appropriate early childhood education curriculum and techniques. During the in-classroom coaching, trainers observed the teachers and modelled best teaching practices in their classrooms. They also helped teachers address school-specific challenges and reach practical solutions.

**FTTT plus Head Teacher Sensitization Training:** The Head Teachers in these 34 placement schools were invited to attend a short, in-service training focused on similar topics as the FTTT training. The training was meant to increase Head Teachers’ receptiveness of the practices reinforced in the FTTT training. Head Teachers were also encouraged to be effective mentors and supervisors to their student teachers.

The head teacher training component allowed researchers to assess the added value of combining FTTT with training head teachers in student teachers’ placement schools. This assessed whether such a training could provide a better environment for newly qualified teachers to successfully implement the program.
**Comparison:** Student teachers in this group were not offered any extra training or mentorship during the training or placement year.

**Results and Policy Lessons**

*Preliminary results*

Preliminary results suggest the FTTT program significantly improved implementation and knowledge of the curriculum for student-teachers, which carried forward into their newly qualified teachers posting year, but with some drop off in effect size. The program also improved some elements of professional well-being, but negatively impacted others. The training did not lead to consistent improvements in teaching practice or child learning in newly qualified teacher classrooms.

*Implementation and knowledge:* Teachers who received the training as both student teachers and newly-qualified teachers were significantly more likely to implement the ECE curriculum as intended, including using more developmentally appropriate practices. These effects were very large for student teachers, but declined to be moderate in size the following year for newly-qualified teachers. The FTTT teachers also demonstrated a moderate to large increases in knowledge of early childhood education and development as newly-qualified teachers.

*Professional well-being:* FTTT teachers had higher levels of motivation and personal accomplishment than their counterparts in the comparison group, but also reported less satisfaction with their jobs as newly-qualified teachers. It is possible that this relative dissatisfaction was a result of the mismatch between the knowledge they gained of a high quality classroom environment during the training and the limited resources and peer/leadership support they encountered once they were placed in schools.

*Classroom quality:* Impacts on classroom quality were mixed. Newly qualified teachers who had received the FTTT training used more child-led learning activities than those who had not, but also showed reductions in their support of student expression and positive emotional support and behavior management techniques. The impacts on all aspects of classroom quality lessened over time, indicating that in the absence of ongoing training, program impacts faded.

*Child school readiness outcomes:* There were no significant differences in children's learning or development outcomes between those classrooms with teachers who had completed the training and those who had not.

*Impacts of head teacher sensitization training:* The four-day head teacher training did not have any impacts on teaching quality or child outcomes. A more intensive approach or more regular training may be needed, as well as interventions which also reach GES officers at the district level.

Whilst the FTTT is widely recognized in Ghana to have transformed teaching practice in the student teacher placement classrooms, and improved the skills of college tutors, this study has shown that FTTT-trained newly qualified teachers struggle to implement the new pedagogy and active play-based learning approach in their posting classrooms.
It is notable that the FTTT training and the national kindergarten curriculum is quite different from the traditional approaches to education in Ghana.

Further rigorous research is needed to better understand the systemic and infrastructural challenges faced by newly qualified teachers in their first posting year, to ensure that they are better supported and equipped to enact the new pedagogy as directed by Ghana Education Service and the Ministry of Education. Sabre Charitable Trust has committed to testing some interventions to support newly qualified teachers as it continues to support the replication and expansion the FTTT with government partners.

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