

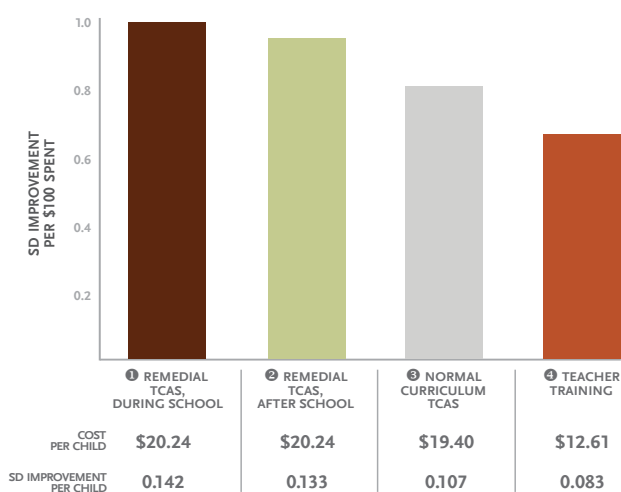
COST-EFFECTIVENESS REPORT: THE TEACHER COMMUNITY ASSISTANT INITIATIVE (TCAI)

The cost-effectiveness that education programmes achieve can vary widely, even among those that have a proven impact on learning. When making policy decisions, it is important to first determine which programmes have been rigorously shown to have a positive impact, but this is not enough. TCAI evaluated four different interventions: community assistants providing remedial instruction to low-performing children during ❶ or after school ❷, having community assistants alternately split classes with normal teachers to reduce class size ❸, or having teachers split their classes by ability and provide targeted instruction for one hour each day ❹. All four arms of the TCAI programme increased student learning by varying amounts, and they also incurred different costs, meaning that some arms achieved learning gains more cost-effectively than others.

Providing targeted instruction to the lowest-performing pupils through teacher community assistants (TCAs) is more cost-effective than either smaller-group instruction or targeted lessons alone. Although it is slightly cheaper to provide either small group instruction through normal curriculum TCAs ❸, or targeted lessons through classroom teachers ❹, these interventions do not improve test scores as much as the combination of targeted instruction for low performing students and community assistants ❶❷.

In regions where TCA attendance and quality were especially high, the remedial instruction by TCAs was even more cost-effective—between \$30 and \$75 per standard deviation (SD) of test score improvement. As the programme was scaled up nationally and monitoring quality improved, the cost per SD of test score improvement from in-school remedial TCAs could be as low as \$75.

**COST-EFFECTIVENESS OF TCAI INTERVENTIONS:
COSTS AND IMPACTS PER CHILD**



The bulk of the costs of TCAI directly fund the components that drive programme effectiveness: training for TCAs who provide targeted instruction in basic skills to small groups of pupils. When programme costs are projected over 10 years of government implementation, training in targeted teaching methods accounts for around 75 percent of the total cost. This includes initial training of the “master trainers,” training of teachers and TCAs in the targeted instruction methods, and refresher trainings to keep the curriculum fresh. Because TCAI takes advantage of community youth who would already be paid through GYEEDA, salary costs are limited to programme management, and account for less than 10 percent of total costs. The remaining 15 percent of programme costs cover teaching materials, administration, and programme monitoring.

Calculating Cost-Effectiveness

Cost-effectiveness analysis calculates the ratio of the amount of effect a programme achieves for a given amount of cost incurred (e.g. the increase in test scores per child, divided by the cost per child of running the programme). To calculate a programme’s cost-effectiveness, it is always necessary to make assumptions about costs and impacts. In this analysis, costs were projected for 10 years of government implementation, and TCA salaries were excluded, since these would be paid by GYEEDA even in the absence of TCAI. Impact estimates were taken from pupils who were in P3 and P4 at the end of the evaluation, and had the longest exposure to the programme.

These findings are in line with results from across Africa, which show that targeting instruction towards students’ actual learning levels is consistently effective and cost-effective. In general, programmes that improve access to school increase learning levels only where enrolment is very low, and so are often not cost-effective. Providing “more of the same” resources, such as textbooks or additional teachers to reduce class sizes, has generally not improved learning levels when unaccompanied by other reforms. But contract teachers or assistants—hired outside of the normal civil service structure—are often more likely to attend school and extend more effort than their civil service counterparts. The combination of inexpensive community assistants, teaching a targeted curriculum to the lowest-performing students, is particularly cost-effective and can be implemented in a number of ways, including through modifications to existing programmes.

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