The Effect of a Contract Teacher Program Scale-up on Student Learning in Kenya

Sector(s): Education

Sample: 192 government primary schools

Target group: Students

Outcome of interest: Student learning

Intervention type: Recruitment and hiring Training Contracts Performance-based pay School-based inputs

Research Papers: Experimental Evidence on Scaling up Education Reforms in Kenya

Partner organization(s): Ministry of Education - Kenya, Kenya National Examinations Council, World Vision Kenya, United Kingdom Foreign, Commonwealth & Development Office, International Growth Center (IGC), Poverty and Economic Policy (PEP) Research Network, United States Agency for International Development (USAID)

Many children in low- and middle-income countries finish primary school without learning basic reading or math skills, partly due to poor instruction. Contract teacher programs hire extra teachers on short-term contracts to improve learning through smaller class sizes and stronger teacher performance incentives. In Kenya, researchers conducted a randomized evaluation to test the impact of one such program on student learning outcomes, comparing implementation between an NGO and the government. The NGO-led program improved student test scores, while the government-led version had no impact. Political resistance and weak bureaucratic capacity undermined government implementation, highlighting key barriers to scaling education reforms.

Policy issue

Many students in low- and middle-income countries complete primary school without acquiring basic literacy and numeracy skills. Growing evidence shows low teacher effort can contribute to this. Contract teacher programs, where teachers are hired on short-term contracts at lower wages, have shown promise in improving learning outcomes at low cost, particularly when implemented by NGOs. These programs add more teachers to schools at a lower cost, thus reducing class sizes. Contracts can be renewed for strong performers, which helps schools keep better teachers, and the lack of permanent tenure gives teachers stronger incentives to work hard. Importantly, NGOs have partnered with government schools to implement these programs, showing that the model can work in public education systems.

However, it remains unclear whether such programs can be effectively scaled by governments, which often face political resistance and limited bureaucratic capacity. This evaluation addresses a critical question: Can governments replicate the success of NGO-led education interventions at scale?

Context of the evaluation

In Kenya, 81 percent of children are enrolled in primary school as of 2006. However, learning outcomes remain low. Only three out of ten third-grade students could read a basic English story or solve second-grade division problems. This issue is often attributed to the severe shortage of qualified teachers: in 2011, the government reported a gap of 61,000 civil service teachers in the country due largely to a hiring freeze. At the same time, civil service salaries were relatively high, creating a long queue of qualified graduates waiting for government teaching jobs.

To address this, the government piloted a contract teacher initiative, providing funds to schools to hire teachers on short-term, lower-wage contracts outside the civil service system. Previous evidence showed that such NGO-led contract teacher programs in public schools improved student learning outcomes in Kenya. This evaluation tested whether the same model could be scaled effectively by the government, which faced different political and bureaucratic constraints.



Teacher teaching students in a classroom in Kenya.

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Details of the intervention

Researchers collaborated with Kenya's Ministry of Education and the NGO World Vision Kenya to conduct a randomized evaluation to test whether Kenya's NGO-led contract teacher program could be scaled up effectively by the government.

The evaluation took place between June 2010 to October 2011 in 192 public-primary schools (roughly 15,000 students) across fourteen districts and all eight Kenyan provinces. These schools had high student-teacher ratios. They were also larger and had lower test scores than the national average.

Contract teachers, who were required to hold a teaching certificate, were placed in either second or third grade in the first year, and all were moved to third grade in the second year. Schools were instructed to split classes to reduce pupil-teacher ratios. Students receiving a contract teacher were typically between seven and eleven years old.

The intervention involved multiple levels of randomization. Each school in the program received a contract teacher hired either by the government (64 schools) or the NGO (64 schools) or else was assigned to a comparison group and received no contract teacher (64 schools).

The schools with contract teachers hired by the government or the NGO were further randomized to better understand the impacts of:

- High versus low teacher salaries: Teachers in 96 schools were offered KES 5,000 ($67) per month. Those in the remaining 32 were offered KES 9,000 ($121), which was equivalent to 50 percent of the average entry level civil servant teacher salary.
- Local versus central responsibility for recruiting and paying teachers: Contract teachers in 64 schools across government and NGO implementation were recruited and paid by local school management committees (SMCs), while teachers in the remaining 64 schools were recruited and paid either by the central education authorities, similarly to civil service teachers (for government-implemented schools) or by the NGO headquarter office in Nairobi.
- Local accountability: 64 schools received a training intervention focused on ensuring SMCs understood the role of contract teachers in their schools, while the remaining 64 schools received no such sensitization. The table below depicts how many schools received each type of intervention.

Table 1. Table displaying the number of schools that received each type of intervention

Contract Teacher Hiring Authority		No Contract Teacher	Low Teacher Salary		High Teacher Salary	
			SMC Training	No Teacher Training	SMC Training	No Teacher Training
Government (64 total schools)	**Local Control**	0	12	12	4	4
	Central Control	0	12	12	4	4
NGO (64 total schools)	**Local Control**	0	12	12	4	4
	Central Control	0	12	12	4	4
Comparison group - no contract teachers (64 total schools)	**N/A**	64	0	0	0	0

Results and policy lessons

On average, hiring contract teachers improved student learning outcomes in English and math across all NGO-implemented schools, but it had no impact on test scores when implemented by the government, suggesting the design of the program, political considerations, and bureaucratic constraints were important considerations behind the program's impact.

The most effective intervention combinations varied between NGO- and government-implemented schools. In the NGO arm, the most effective design involved high salaries and training for SMCs. This combination led to test score gains of 0.81 standard deviations. By contrast in the government arm, the best-performing group involved high salary, SMC training, and centralized hiring, yielding gains of 0.53 standard deviations.

NGOs were able to rely on local oversight and community involvement to manage the program effectively. In contrast, the government needed more centralized control to ensure consistency and follow-through, given its larger and more complex administrative structure.

Political pushback may have affected the government's ability to implement the most effective design. The government's national scale-up of the contract teacher program triggered opposition from the teachers' union, which demanded permanent civil service status for all contract teachers. This undermined the credibility of short-term contracts and weakened teacher incentives. Teachers in the government arm were more likely to identify with the union and less likely to believe their contracts were performance-based, which also disrupted the link between effort and pay, contributing to the absence of learning gains in the government-implemented version.

Bureaucratic constraints may also have driven differences in impact between government- and NGO-implemented programs. On average, contract teachers hired by NGO-managed schools were more likely to be present in class (72.7 percent attendance in the NGO arm compared to 62.8 percent in the government arm), received fewer salary delays (2 months in the NGO arm compared to 3 months in the government arm), and were better monitored (96.1 percent of schools in the NGO arm had a monitoring visit compared to 85 percent in the government arm). These factors likely contributed to improved student performance.

In contrast, government-managed schools faced implementation challenges, including delayed payments and weaker oversight. These issues weakened the accountability mechanisms that were central to the program's theory of change, making it harder to link contract status to teacher effort and ultimately reducing the impact on learning.