KIATGuru

Community Participation and Teacher Accountability:

Improving Learning Outcomes in Remote Areas of Indonesia

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List of Abbreviations

ACDP   Analytical and Capacity Development Partnership

ASER   Annual Status of Education Report

BaKTI   Eastern Indonesia Knowledge Exchange (Bursa Pengetahuan Kawasan Timur Indonesia)

BAPPENAS   National Agency for Development Planning (Badan Perencanaan Pembangunan Nasional)

BOS   School operations fund (Biaya Operasional Sekolah)

BPS   Statistics Indonesia

Rp   Indonesian Rupiah

Kalbar   West Kalimantan Province *(Kalimantan Barat)*

KIAT Guru   Improving Teacher Performance and Accountability (*Kinerja dan Akuntabilitas Guru*)

MoEC   Ministry of Education and Culture

NTT   East Nusa Tenggara Province (*Nusa Tenggara Timur*)

NUPTK   Unique number for teachers and education personnel (*Nomor Unik Pendidik dan Tenaga Kependidikan*)

OECD   Organisation for Economic Co-operation and Development

PPM   Pay-for-Performance Mechanism

SAM   Social Accountability Mechanism

SD   Primary school *(Sekolah Dasar)*
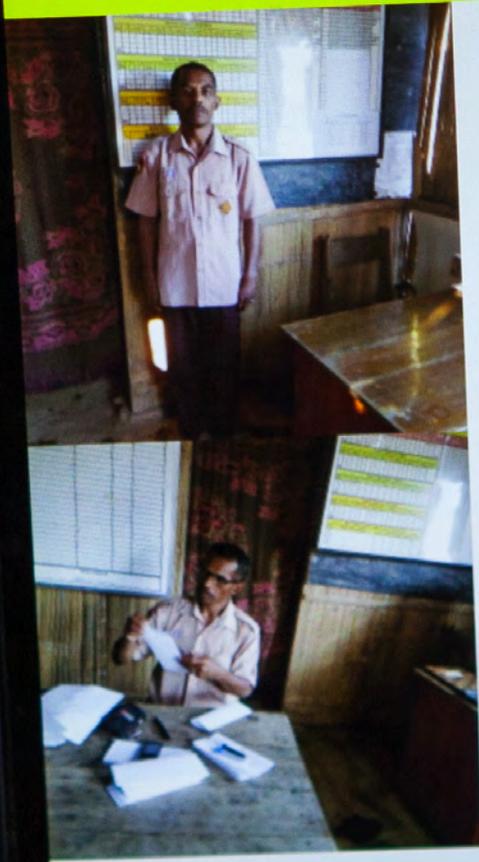
Executive Summary

Financial investments in education have increased enrollment rates in many developing countries, including Indonesia. The 2003 Law 20 on the National Education System mandated that 20 percent of national and district government budgets be earmarked for education. This target was achieved in 2009 and has been sustained since then. Over the following decade, gross enrollment at the primary school level hovered around 100 percent, with gross enrollment at the secondary school level increasing from 55 to more than 86 percent.[1]

The Government of Indonesia has introduced many reforms to improve the quality of education, but learning outcomes have continued to lag. Quality improvements have included providing cash transfers to students from impoverished backgrounds, providing schools more education resources, improving teacher qualification, enhancing community participation through school committees, and benchmarking student performance using international assessments. Despite these attempts to facilitate changes, student learning outcomes have remained flat, near the bottom of international achievement test league tables (Beatty et al. 2018; OECD 2017; World Bank 2013).

Improving the quality of education has been especially challenging in rural and remote areas. Teacher absence is high in poor and remote areas. Although the rate of teacher absenteeism has declined over the past decade, it remains high in remote areas (19.3 percent) compared with the national rate (9.4 percent) (SMERU 2004; ACDP 2014). Due to a combination of managerial, financial, and geographical challenges, schools in remote areas are monitored less often by supervisors (UNICEF 2012). High teacher absenteeism negatively affects student absence and drop-out rates in poor and remote areas (UNICEF 2012; World Bank 2013) as well as student learning outcomes (SMERU 2004; Suryadarma et al. 2004; Suryahadi and Sambodho 2013). To incentivize teachers who work in special areas, including remote locations, the Government of Indonesia provides eligible teachers a Teacher Special Allowance (*Tunjangan Khusus Guru*, hereafter TSA), which can double a teacher's base salary. However, a study found that teachers who received the TSA were more likely to be absent compared with their colleagues who did not receive the TSA (SMERU 2010). Unfortunately, sanctioning teacher absenteeism is rare, and badly-performing teachers are often moved to remote or poorer parts of the country (Glewwe, Ilias, and Kremer 2003; Usman, Akhmadi, and Suryadarma 2004; Kremer et al. 2005).

Gross enrollment at the primary school hovered around

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A quantitative impact evaluation that analyzed the effects of program initiatives and compared them with a control group, with data collection conducted in

203

participating schools

Qualitative case studies in

9

of **203** participating school

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1 Gross enrollment is the percentage of the population who were at school regardless of age, compared with the number of school-age population for the particular school level. Source: World Bank World Development Indicators Database, https://data.worldbank.org/indicator/SE.SEC.ENRR?locations=ID.

Starting in 2016, the World Bank supported the Government of Indonesia's efforts to promote social accountability to improve teacher performance in remote areas through KIAT Guru. KIAT Guru built on insights gleaned from research conducted in other countries that documents the benefits of capitalizing on community participation to leverage changes in the behavior of frontline service providers (Joshi, 2010; Ringold et al, 2012, Brinkerhoff & Wetterberg, 2013). At the local level, KIAT Guru made benchmarked data on learning outcomes available to education stakeholders, facilitated service performance standards, evaluated teacher performance against these standards, and provided communities with means to voice their concerns and dissatisfactions. In addition, the pilot aimed to improve the efficiency of education expenditure and service delivery by holding teachers accountable for performance. The initiative sought to empower communities to support and monitor teachers and tied the payment of the TSA to teacher presence or teacher service performance.

This report provides qualitative insights on how an innovative social accountability model resulted in significant improvements in learning outcomes. The study finds social accountability is more effective when it is linked with a strong and objective enforcement mechanism. The success is attributed to five key elements:

1. Actively engaging external stakeholders in monitoring and evaluating teacher attendance and service performance,

2. Increasing parental involvement in learning,

3. Keeping teacher performance indicators simple,

4. Using objective rather than subjective measures to evaluate teacher performance, and

5. Paying teacher allowances based on objective performance indicators.

KIAT Guru combined a social accountability mechanism (SAM) with a pay-for-performance mechanism (PPM) to improve teacher presence, teacher service performance, and student learning outcomes in remote schools. The project supported 203 participating schools in developing a community-driven joint agreement that included locally identified and agreed indicators designed to improve the learning environment in school and at home. The SAM was combined with two variants of PPM, which linked the payment of teachers' TSA with assessments of their presence or service quality. The two mechanisms were combined into three intervention groups: (1) SAM, (2) SAM + PPM based on teacher presence verifiable using a tamper-proof Android-based camera application (SAM+Cam), and (3) SAM + PPM based on a broad measure of the quality of teacher service performance (SAM+Score).

To assess the impact of the program, three distinct—but complementary—monitoring and evaluation systems were implemented: (1) a quantitative impact evaluation that analyzed the effects of program initiatives and compared them with a control group, with data collection conducted in 270 schools; (2) qualitative case studies in nine of the 203 participating schools; and (3) process monitoring, which collected implementation data at a higher frequency in all 203 schools.

This report focuses on the results of the qualitative study of the nine case study schools. The nine schools were in three of the five pilot districts: Ketapang, Landak, and Manggarai Barat. In each district, three villages of similar characteristics were sampled, with each representing one of the intervention groups. Researchers visited the nine schools three times between the end of 2016, before KIAT Guru started, and early 2018, shortly after the KIAT Guru project facilitators handed over implementation responsibilities to the stakeholders. The qualitative research was structured to gauge changes in stakeholders' views about education service delivery as well as the community facilitation processes. The qualitative data collected through the case studies of the nine schools complements the quantitative measurements of the impact of KIAT Guru. For better understanding of the heterogeneous effects of the interventions, the qualitative analysis includes data from the quantitative impact evaluation and process monitoring.

The data collected by the qualitative researchers indicate that implementation of the KIAT Guru project had a strong and pervasive impact on the nine schools included in the study. The researchers concluded that in all nine locations, the quality of teaching and school-community relations

improved over the course of the project. Education stakeholders opined that the introduction of KIAT Guru exerted a particularly powerful impact in the following areas: (1) teacher attendance, (2) parent attitudes about student learning, (3) teacher performance, (4) student attitudes about learning, (5) teacher discipline, and (6) stakeholder relations.

Although the researchers observed that all three approaches had positive outcomes, SAM+Cam showed the greatest potential to produce long-lasting change in the villages. The data generated by the quantitative researchers underscore the benefits of the changes introduced in SAM+Cam schools, where SAM was combined with PPM based on teacher presence. Creating a formal structure that empowers members of local school communities and centering their work on monitoring the presence of teachers appears to offer the greatest potential to produce positive changes in the educational services provided to rural school communities.

The researchers concluded that the positive outcomes of KIAT Guru outweighed the challenges that surfaced in the communities they studied. As would be expected, all the communities faced some challenges as they implemented the changes specified in the project guidelines. In some settings, those difficulties were more pronounced than in others. Although the evidence collected in the nine schools indicates that implementing SAM leveraged some improvements in schools, this approach to reform was considered more unpredictable and difficult to enforce, as it relied on social rewards and sanctions. Hypothetically, it might have been expected that schools in SAM+Score (SAM + PPM based on teacher service performance) would yield the most widespread changes, because greater authority was delegated to community representatives. Yet, the depth of change associated with SAM+Score proved strenuous and ultimately limiting. SAM+Score initially showed great promise, but several issues connected to the evaluation of teacher performance surfaced over the course of the project and interfered with the school improvement process. By the final round of data collection, none of the researchers expressed support for the SAM+Score approach.

Another key finding from the qualitative study is the importance of clearly communicating the goals of KIAT Guru and clarifying the duties of all the parties involved. In the schools that achieved the most impressive gains, this was done with noteworthy transparency. Because the initiative requires the buy-in of actors operating at multiple levels of the education system, it is imperative that all stakeholders understand the overarching structure of the implementation of KIAT Guru and how they fit into that system.

In summary, the results from the qualitative study of KIAT Guru indicate that social accountability linked to pay based on teacher presence (SAM+Cam) shows the greatest potential for leveraging change in teacher behavior. The responsibilities of the key stakeholders need to be carefully delineated and communicated, and training should be provided to educators, community representatives, and government officials. Given the similarities in the membership criteria between school committees and UCs, it is important to either include school committees as part of UC memberships, or to incorporate the roles of the UC as part of school committee's roles. In addition, it will be important to focus the stakeholders' efforts on collaboration to improve learning outcomes, rather than holding teachers accountable for being present in school per se. If these conditions can be met, KIAT Guru can establish a more stable foundation for improvement of education in schools throughout Indonesia.

Based on KIAT Guru results, starting in 2019, the Government of Indonesia is expanding the scope of SAM+Cam to 410 primary schools. The World Bank continues to provide technical assistance by simplifying and further digitizing the processes. A diagnostic student learning assessment test, administered by parents and community representatives on mobile phones, becomes the basis for school stakeholders to prioritize three joint agreement indicators, which link efforts from principals, teachers, and parents to improve learning environment at school and home. Education stakeholders meet monthly to discuss its implementation and record the results electronically. In this monthly meeting, parents also check whether teachers' absences are formally excused by the principal. The monthly meeting results are shared at the village, district, and national level, and TSA for eligible teachers are paid based on their presence in school. At the end of every semester, another diagnostic student learning assessment will kickstart a village-wide meeting to identify progress and areas of improvements for the upcoming semester.

The expansion also tests two institutional arrangements for the government to scale up KIAT Guru: through village governance and through school governance. Expansion through village governance continues the model of empowering village cadres and UC members, which now requires the inclusion of school committee members. The expansion will be facilitated three times by NGO facilitators, before being handed over to school stakeholders. On the other hand, expansion through school governance will empower school committee members, whose role will include collaborating with teachers on improving learning environment with support from school supervisors. While the actors are different, the focus will be on getting all stakeholders working together to improve learning, coined using the Indonesian terminology of *gotong royong pendidikan* (mutual cooperation in education).

01 Introduction

Despite increasing financial investments in education, developing countries around the globe still struggle to improve learning outcomes. In an attempt to expand access to school and enhance academic achievement, governments have increased the percentage of their gross domestic product that they allocate toward education (Mbiti 2016; UNESCO 2011). For example, Fan, Yu, and Saurkar (2008) studied government expenditures in 44 developing countries between 1980 and 2002 and discovered that over that period, spending in Africa, Asia, and Latin America increased by more than 20 percent each decade. Furthermore, "most of the increase in total government expenditures came from Asia" (Fan, Yu, and Saurkar 2008, 22). In many countries, including Indonesia, access to schooling has steadily increased, but a significant number of children still lack basic literacy and numeracy skills. A factor that has presented challenges to developing countries as they attempt to raise levels of student achievement is the limited capacity and/or effectiveness of teachers. Once students attend school, they often do not receive the support that is necessary to develop strong basic academic skills.

Many strategies have been employed to promote and support improvements in education service delivery in Indonesia. Although reports on education initiatives carried out in Indonesia typically mention the importance of learning lessons from the problems that surfaced in previous attempts to improve the quality of education, the repeated appearance in reform proposals of the same objectives suggests that such attention to precedent is not occurring—or that reports are misidentifying the key factors impeding smooth policy implementation (Sweeting 2001). As Nielson observes, "a wide range of projects having state-of-the-art quality improvement features" have been enacted, yet, analyses of these programs "reveal a pattern of disappointing results in terms of actual quality improvement" (Nielson 2001, 11).

Another theme that is common in the education reforms promulgated by the Ministry of Education and Culture (MoEC) is fostering coordination between schools and broader communities. A mechanism that is frequently utilized to improve school quality has been to promote community participation in school management. In pilot programs that have provided extensive support and ongoing monitoring to schools, some progress has been made. There is a long history of educational reforms introduced in Indonesia producing effective results in the pilot stage. However, when those success stories lead the government to expand the scope of a program to the national level, things often fall apart (Cannon 2018). Teachers' sense of their obligations to parents, local communities, and the central government appear deeply entrenched. This is particularly apparent when status differentials are at play. The legacy of a highly centralized, authoritarian government can have a powerful influence on teachers' responses to reform policies. Socialized to respect the verticality of the system's hierarchy, they often reject opportunities to act autonomously. Instead, they continue to wait for direction from central officials, who assume that local actors have accepted and acted on the authority that has been delegated to them (Bjork 2003, 2005; Dahl 2011).

Improving the quality of education has been especially challenging in poor rural and remote areas. Effecting change in rural schools is often constrained by demand, supply, and accountability issues. On the demand side, communities sometimes lack the organizational capacity, time, and resources to oversee education performance, as well as mechanisms through which to submit feedback or complaints. Some parents also question the value of the long-term benefits of sending their children to school. Overseeing local education services exacts a cost in time and effort, which are frequently in short supply among the poor in rural communities. Furthermore, in the absence of information on minimum service standards, education budgets, and willingness of teachers and principals to act on feedback from communities, communities may have little incentive to engage.

On the supply side, teacher absence is high in poor and remote areas. Although the rate of teacher absenteeism has declined over the past decade, it remains high in remote areas (19.3 percent) compared with the national rate (9.4 percent) (SMERU 2004; ACDP 2014). High teacher absenteeism negatively affects student absence and drop-out rates in poor and remote areas (UNICEF 2012; World Bank 2013) as well as student learning outcomes (SMERU 2004; Suryadarma et al. 2004; Suryahadi and Sambodho 2013). Many schools in rural areas also face challenges related to providing adequate resources to support teaching and learning. This issue relates to physical and instructional materials. Schools in remote areas often lack basic provisions such as connectivity and well-maintained classrooms. Teachers are frequently challenged to introduce curricula without the benefit of textbooks or technology (World Bank 2019).

The lack of systems and incentives to hold teachers to account also undermines attempts to improve the quality of education. Due to a mixture of managerial, financial, and geographical challenges, schools in remote areas are monitored less often by supervisors and experience higher teacher absenteeism rates (UNICEF 2012). Unfortunately, sanctioning teacher absenteeism is rare, and badly-performing teachers are often moved to remote or poorer parts of the country (Glewwe, Ilias, and Kremer 2003; Usman, Akhmadi, and Suryadarma 2004; Kremer et al. 2005). The absence of sanctions for underperforming teachers creates a demotivating working environment for the teachers who do invest in their work.

This evidence, while striking, may underestimate the extent of the problem. Ethnographic research conducted in Indonesian schools indicates that teachers often appear at school late and leave early (Dahl 2011). Furthermore, educators who are present at school may not show up for all their assigned classes. Teacher absenteeism from classrooms is reported to have been around 20 percent nationally in 2014 (SMERU 2004; ACDP 2014).[2] A study of classroom implementation of an education reform revealed that teachers did not show up for approximately 30 percent of all classes held at a sample of junior high schools (Bjork 2005). This evidence of unreliable attendance has been linked with broader questions related to teacher professionalism. School norms in many Indonesian schools do not create strong incentives for teachers to invest a great deal of time in preparing lessons or evaluating student work.

Cognizant of these issues, the Government of Indonesia has introduced several financial incentives that aim to augment teacher effort. Between 2001 and 2010, the total budget for education in Indonesia almost tripled, representing an increase from 2.4 to 3.4 percent of gross domestic product (Al-Sammarai and Cerdan-Infantes 2013). As shown in figure 1, half of the national education budget has been allocated for payment of salaries and allowances for close to three million teachers, which in 2018 amounted to Rp.225.4 trillion (US$16.1 billion). As a result, teachers' welfare has increased significantly, with those being certified receiving a Teacher Certification Allowance (*Tunjangan Profesi Guru*, at an amount up to one times the base salary. Those working in special areas (including remote locations) now receive a Teacher Special Allowance (*Tunjangan Khusus Guru*, hereafter TSA), which can double a teacher's base salary.[3]

Despite these ambitious and costly reforms, research suggests that improved teacher welfare has not led to improved teacher performance or better student learning outcomes (SMERU 2010; OECD 2014; World Bank 2014, 2015; de Ree et al. 2018). Providing teachers financial bonuses does not necessarily provide them the motivation to improve their practice. SMERU (2010) finds that teachers who received

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2 The ACDP (2014) study finds that although teacher absenteeism from school was at 9.4 percent, teacher absenteeism from classrooms was at 20 percent, because teachers who were present in school were not necessarily teaching in classrooms.

3 Special areas include areas that are remote, disadvantaged, with indigenous communities, bordering other countries, or disaster- or conflict-prone areas.

Figure 1. Teacher Salaries and Allowances, 2012–17 (Percentage of the National Education Budget)
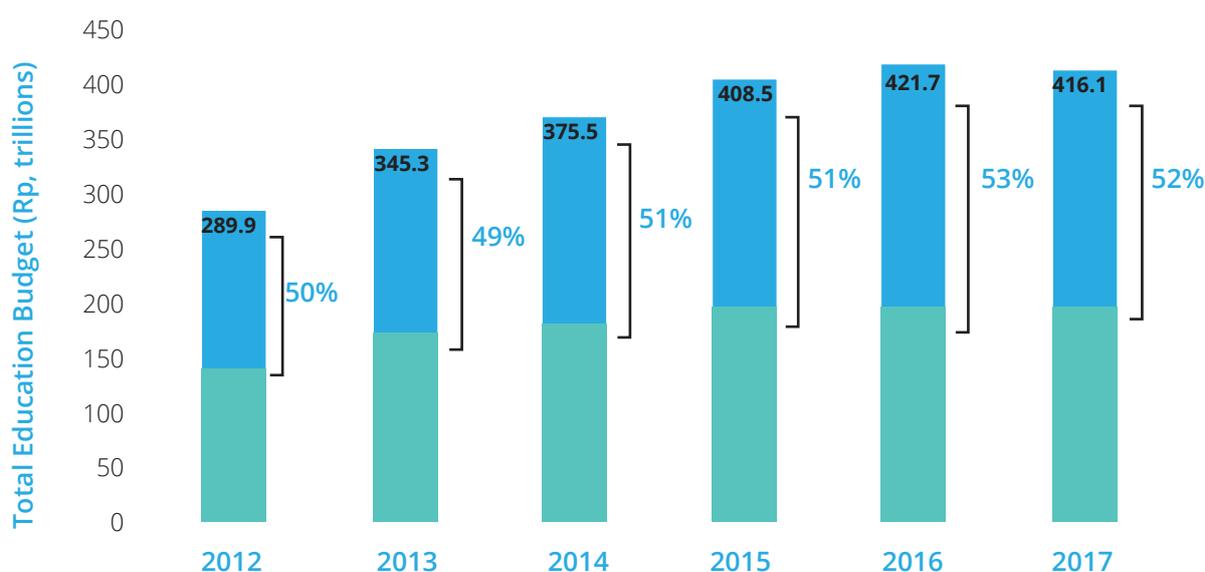
Source: APBN, Ministry of Education, and Ministry of Religious and Affairs, from respective years, analyzed by TNP2K, 2018

the TSA actually had higher teacher absenteeism compared with their colleagues who did not receive bonuses. Another study indicates that student academic performance has stagnated despite the government's financial commitment to education (Al-Samarrai and Cerdan-Infantes 2013). Al-Samarrai and Cerdan-Infantes (2013, 119) posit that, "perhaps the most worrying result is the lack of significant improvements in learning outcomes over the last decade." Indonesian student learning outcomes have remained flat, near the bottom of many international achievement league tables (Beatty et al. 2018; OECD 2017; World Bank 2013). In addition, gaps between the performance of high- and low-income students remain considerable.

Starting in 2016, the World Bank supported the Government of Indonesia's efforts to improve teacher performance and accountability in remote areas through KIAT Guru. KIAT Guru aimed to improve the efficiency of education expenditure and service delivery by holding teachers accountable for their presence and service performance. The initiative sought to empower communities to support and monitor teachers and tied the payment of the TSA to teacher presence or service performance.

The project draws from research conducted in other countries that documents the benefits of capitalizing on community interest in education to leverage changes in teacher behavior. Studies that document best practices in

education systems in diverse educational settings suggest that demand-side-only interventions are less likely to improve service delivery outcomes compared with those that are combined with supply-side reforms. In contexts where it is costly for the government to conduct top-down supervision to improve teacher accountability, technical solutions and community participation can offer an alternative for monitoring service delivery. Duflo et al. (2012) find that paying private school teachers in India based on presence as recorded by a tamper-proof camera increased presence and student learning. There was also evidence that allowing service users to monitor and provide feedback could help to improve service quality (Björkman and Svensson 2009; Barr et al. 2012; Pradhan et al. 2014). Nonetheless, the overall evidence on the effectiveness of community monitoring on service delivery improvements has been mixed (Banerjee et al. 2010; Joshi 2013; Ringold et al. 2012).

Global evidence suggests that making service providers accountable to the communities they serve can be effective in improving service delivery quality. In poor and remote areas, reform efforts may be insufficient or, worse, ineffective. The *World Development Report 2004: Making Services Work for Poor People* identifies two routes to improve the accountability of service delivery: the long route through citizens electing, influencing, demanding, and pressuring policy makers, and the short route through communities

directly influencing, demanding, and pressuring service providers (World Bank 2004). Making teachers accountable to their community, as opposed to solely being accountable to higher levels of the education system, can be effective in improving education service delivery (Joshi 2010; Ringold et al. 2012). As Pritchett (2013) posits, "a centralized system cut off from the judgment and concern of local parents and teachers is doomed to succeed at schooling but fail at education" (p. 2). He also observes that a combination of common standards, "thin" accountability on outcomes from above, and "thick" accountability from inside schools and communities can provide a strong incentive for schools to produce improvements in learning outcomes. To this end, relationships between community members and school-based actors need to be clear and coherent; they need to identify concrete rewards and punishments that have the potential to motivate teachers and administrators to alter their behavior (Pritchett, 2015).

Enacting policies that rely on community representatives to take an active role in school activities presents some formidable challenges in Indonesia. Indonesian schools have not traditionally been run as democratic institutions that invite or respond to the input of everyday citizens (Pongtuluran & Moyle, 1989; Rahardjo, 1985). For decades, schools operated as isolated institutions in their communities, answerable more to district and provincial offices than to local families. Information passing from the school to the community and back has been limited. That framing of school-community relationships pervaded—and extended beyond—the education system. After Indonesia gained independence, the government carefully assessed the consequences of an active populace and intervened when freedom of expression had the potential to threaten the central government's policy priorities (Bjork, 2005).

Beginning in the 1980s, government technocrats began devising strategies for closing the gaps that separated schools from their surrounding communities. Over the next thirty years, a number of policies and programs designed to spur community involvement in education were introduced. Education officials believed the expanding parental participation would bolster support for schools and generate additional resources (UNDP, 1994). The introduction of school committees throughout the country became a key mechanism to enhance school-community ties. In 2002, the GoI adopted a decree that expanded the responsibilities of school committees. Previously, school committees usually functioned as fundraising bodies. After 2002, they were expected to engage in activities such as making recommendations about school budgets, serving as a mediator between schools and communities, and encouraging more parents to become involved in schools' activities (Pradhan et al, 2014).

Although school committees were encouraged to play a greater role in advising and supporting school management, it was unclear how prepared they were to carry out those tasks, especially in rural areas, or what type of impact they were having on the educational opportunities delivered to students. Nevertheless, they were regarded as an important component of the government's plans to improve the quality of education. Ideally, school committees would augment the sense of accountability experienced by teachers and administrators; as representatives of the community, they would provide inputs to schools that would be invaluable as they tackled the challenge of improving educational quality.

Research conducted in Indonesia and internationally suggests that several elements are required to involve communities in improving the accountability of service providers. These include the following: (1) having a standard to which the service providers will be accountable; (2) improving communities' access to information, including their basic rights to services; (3) giving communities the means to influence and voice concerns to service providers; and (4) providing mechanisms to sanction poorly performing service providers (Joshi 2010; Ringold et al. 2012). There is some evidence that locally defined and agreed upon service standards are more effective than nationally defined service standards in improving performance (World Bank 2014, 48; Barr et al. 2012). Brinkerhoff and Wetterberg (2013) provide a useful pathway that includes standard-setting, results-based management, performance-based payment, and increased information flows and transparency.

Teacher pay for performance has shown some promise for improving learning outcomes. Over the past decade, many countries and states have introduced pay-for-performance elements of some components of teachers' income. Although the findings have been mixed, pay for performance in the education sector has shown better results compared with other sectors, and studies in

developing countries have documented more positive impacts in raising student learning outcomes compared with impacts in developed countries (Duflo et al. 2012; Glewwe et al. 2010; Springer et al. 2010; Muralidharan and Sundararaman 2011; Muralidharan 2012; Contreras and Rau 2012; Hasnain, Manning, and Pierskalla 2012; Fryer 2013; Dee and Wyckoff 2013; Jinnai 2016; Mbiti et al. 2019). Among its key recommendations, World Bank (2018) identifies the use of pecuniary and nonpecuniary incentives to improve teachers' motivation and align teaching with learning to improve student learning outcomes. A World Bank study in Indonesia on the Teacher Certification Allowance strongly endorses the need for new policies to tie its payment to demonstrated teacher performance (de Ree et al. 2018).

02 KIAT Guru Intervention Design

KIAT Guru was organized to build on the insights gleaned from the above research and apply the lessons learned to rural communities in Indonesia. KIAT Guru combined a demand-side social accountability mechanism (SAM) with a supply-side pay-for-performance mechanism (PPM) to improve teacher presence, teacher service performance, and student learning outcomes in remote schools. The two mechanisms were applied to three intervention groups, all with SAM, but with distinct approaches to the PPM:

SAM: Social accountability mechanism

SAM+Cam: SAM + pay-for-performance mechanism (PPM) based on teacher presence

SAM+Score: SAM + PPM based on teacher service performance

Social Accountability Mechanism (SAM)

The SAM included a facilitator-driven set of meetings to establish a service agreement that would be implemented in the school. The first of these meetings was an orientation meeting, attended by parents, community members, and school management (including teachers), to inform them about the project and their roles in education service delivery. Subsequently, three separate meetings were held to solicit ideas from stakeholders on how to improve learning environments at school and at home: with students and alumni, parents, and school management. Afterward, the adult stakeholders came together to formulate the service agreement for their school. Each service agreement included a list of actions that would be taken to improve the learning community, as well as the specific roles that parents, community leaders, teachers, and the principal would play in that process.

A critical component of the SAM was the community scorecard. Education stakeholders in each village created a community scorecard that was utilized to provide teachers and principals specific feedback about their work. The scorecard consisted of between five and eight indicators, prioritized from the service agreement indicators and used to evaluate teachers and principals. Although meeting participants were free to choose which indicators to include on the scorecards, they were

required to include the teacher presence indicator. Once the indicators were chosen, participants then assigned a weight to each indicator that reflected their views of its relative importance in the process of improving student learning. The total weight of the five to eight indicators added up to a maximum score of 100. All scorecards therefore included a set of weighted indicators and a guide for scoring those indicators.

In each school, a user committee (UC) was established to monitor and evaluate the scorecard. The UC consisted of six parent representatives (one from each grade level) and three community leaders, with at least 50 percent female representation. A detailed set of UC selection criteria guided the process of electing UC members. The UC was expected to monitor and evaluate teacher service performance, including teacher attendance. Together, UC members developed standards that were utilized to determine scores for each indicator included on the scorecard.

Another key player in this process was the village cadre. Candidates for the village cadre were shortlisted by the project facilitator by consulting stakeholders at the village level and elected by community members. The UC members and village cadres were formally appointed through village head decrees. They received capacity development training at the district or subdistrict level and on-the-job mentoring from the facilitators. This training taught them how to evaluate teacher presence and service performance in three ways: conducting unannounced visits to the school, interviewing students and teachers, and auditing administrative documents. Throughout the implementation period, the facilitators trained the village cadres to take over the role of project facilitator. After the facilitators trained the education stakeholders, the village cadres and UCs were expected to assume responsibility for overseeing KIAT Guru together. The first three monthly meetings were led by project facilitators. After that, the village cadre facilitated the KIAT Guru monthly meetings.

Throughout the implementation process, monthly meetings were conducted to review the implementation of the service agreement and evaluate the scorecard. At these meetings, stakeholders presented evidence of progress that had been made toward the service agreement indicators and discussed potential improvements. UCs presented the evaluations of the indicators included on the scorecards, and teachers were given opportunities to respond. Once the scorecard evaluation for each teacher was finalized, the participants signed off on the results. These evaluation results were then posted in the village and sent to the district government.

At the end of the first semester of implementation, an evaluation meeting was held. At this meeting, the effectiveness of the service agreement, community scorecard, and UC was assessed by all stakeholders (teachers, parents, and other community members). Prior to the meeting, the village cadre, parents, and members of the UC administered an adaptive diagnostic student learning assessment (hereafter, the diagnostic test) to a random sample of six students at each grade level. The diagnostic test measured students' skills in basic literacy and numeracy along a learning continuum linked to the national curriculum. The test items were administered adaptively to meet students' current level of achievement and ongoing progress. Students were initially presented with items of their current grade-level difficulty: if the items were answered correctly, the level of difficulty of subsequent items increased; if the items were answered incorrectly, the level of difficulty of subsequent items decreased. The test concluded at the most difficult items that students answered correctly.

Additionally, grievance redress mechanism was set up to provide external support for SAM implementation. Complaint handling system using verbal/ written/ short messaging system (SMS) was provided to assist parents, community members, and school management in addressing issues that can only be resolved by district and national authorities. Grievances were tracked on a monthly basis at the national level. Most grievances received were found to be related to government administration of the TSA.

SAM+Cam: SAM + PPM based on Teacher Presence

At schools in SAM+Cam, the amount of the TSA awarded to teachers varied, depending on their presence in school. Schools in SAM+Cam were provided a tamper-proof smartphone camera (KIAT Kamera) that was used to document teacher presence. Instructors were required to have their pictures taken at the beginning and end of the school day. In addition, those times were recorded on a

teacher attendance form (the *Daftar Hadir Manual*) as an alternative proof in cases where data from the camera were inaccessible. The times from the camera and teacher attendance form were documented on a form known as the teacher attendance verification form (*Formulir Pencocokan Kehadiran Guru*), which was used by UC members to verify teacher presence and absences based on the data provided by the camera and teacher attendance form, as well as administrative documents, such as formal approval of leave requests. Some UC members also conducted announced spot checks at the school and used those observations as supporting evidence in verifying teacher presence.

If it is implemented effectively, the PPM component in SAM+Cam schools could create a strong incentive for teachers to avoid being absent. Although schools in SAM implemented the SAM, all teachers at those schools received 100 percent of the possible TSA amount, regardless of the scores they earned. At schools in SAM+Cam, in contrast, the amount of the TSA awarded to teachers varied, depending on the UC's assessment of their presence in school. The amount of TSA was calculated based on the attendance records submitted by the UC: educators who were present 94 percent of the time, for example, received 94 percent of their TSA. The amount of the TSA cut (per day) was based on the following criteria: full presence (0 percent cut), partial presence (up to 1.5 percent cut), excused absence (2 percent cut), and unexcused absence (5 percent cut). Individuals whose attendance in a month was less than 85 percent in total did not receive any TSA for that month. After each monthly meeting, the results of the teacher attendance verification form and scorecard completed for each teacher were sent to the district government office and announced publicly, in writing or verbally at other village meetings.

SAM+Score: SAM + PPM based on Teacher Service Performance

The amount of the TSA for teachers at schools in SAM+Score was determined based on a variety of indicators included on the scorecard. The rationale for this was that tying only teacher attendance with their TSA might not be enough to leverage changes in teacher behavior or get them to take their work more seriously; presence does not always result in improved performance. The size of the TSA was adjusted based on the scores the teachers received from the UCs. If they received a perfect score from the UC, they received the full allowance; a score

of 90/100 resulted in a 10 percent cut in the TSA. In this way, the conditions for SAM+Score challenged teachers to consider carefully their ability to meet the requirements of the service agreements and how their actions affected student learning. If a UC determined that a teacher was not meeting those requirements, the amount of their hardship allowance was reduced.

In summary, the conditions of the PPM implemented in each treatment group were adjusted to test different incentives for modifying educators' behavior. Table 1 presents the key differences between the treatment groups. All groups followed the basic features of the SAM, including the creation of a UC, development of a service agreement and community scorecard for each teacher, and monitoring and evaluation of teachers and principals based on the scorecard indicators. All UCs were responsible for keeping teachers accountable to the scorecard indicators, including presence in school according to their daily schedules and other characteristics of effective teaching. For SAM, the SAM was implemented without a PPM. For SAM+Cam, the SAM was implemented with a PPM based on teacher presence as recorded by KIAT Kamera and verified by the UCs. The camera was not provided for schools in Groups 1 and 3. For SAM+Score, the SAM was implemented with a PPM based on teacher service performance as evaluated by the UCs. Although the UCs had the same responsibilities across the three groups, the UCs in SAM+Score had more autonomy and broader responsibilities compared with those in Groups 1 and 2. Their ratings on teacher performance could affect the amount of the TSA teachers received.

Most schools in the KIAT Guru sample employed permanent, contract, and school-contracted teachers. Permanent teachers are tenured civil servants whose pay includes a base salary as well as additional allowances. At the time the project was conducted, an entry level civil servant teacher received a monthly salary of Rp.1.48 million (US$108), but this amount could climb to Rp.5.6 million (US$408) with experience. Contract teachers were hired by district or provincial governments under annual contracts. The salary of a contract teacher ranged from Rp.1 million to Rp.2 million per month (US$73 to US$146). In addition, schools could hire teachers using their school operational funds. School-contracted teachers earned much lower salaries (between Rp.300,000 and Rp.700,000 per month) and were not eligible for special government

Table 1: Summary of Treatments

Mechanism	Control	SAM	SAM+Cam	SAM+Score
SAM scorecards and UC	No	Yes	Yes	Yes
PPM based on teacher presence as recorded by KIAT Kamera and verified by UCs	No	No	Yes	No
PPM based on teacher performance as evaluated by UCs	No	No	No	Yes
Number of schools	67	68	68	67

Note: PPM = pay-for-performance mechanism; SAM = social accountability mechanism; UC = user committee.

allowances. The employment status of teachers working in private schools could be permanent, contract, or school-contracted. The monthly salaries for permanent and contract teachers were lower in private schools compared with public schools.

The amount of the TSA ranged from Rp. 1.5 million (US$103) to double the teacher's base monthly salary, but not all teachers were eligible to receive the TSA. Until 2016, the recipients of TSAs were determined based on quotas from the national government and recommendations from district governments. Beginning in 2017, when KIAT Guru was introduced, TSA schools were set according to a national index, with registered teachers assigned to work in very remote villages automatically receiving the TSA.[4]

As a result, the pay-for-performance interventions affected only registered teachers (permanent or contract, but not school-contracted). Certified teachers also received a certification allowance, which ranged from Rp.1.5 million (US$103) for non-civil servants, up to the teacher's base salary for civil servants. This meant that certified teachers who participated in KIAT Guru could earn allowances that totaled up to three times their base salaries. The TSA was distributed on a quarterly basis by district governments for civil servants and by MoEC for non-civil servant teachers. Because KIAT Guru was introduced at approximately the same time as the new government criteria for allocation of the TSA, some teachers in KIAT Guru schools associated the project as being responsible for bringing the TSA to their schools, although that was not actually the case.

Implementation, Process Monitoring, and Evaluation

KIAT Guru started as an operational pilot in 31 remote primary schools in 2014. The National Team for Acceleration of Poverty Reduction (TNP2K) and the Directorate General for Teachers and Education Personnel under MoEC led the initiative. In collaboration with the district governments of Keerom, Kaimana, and Ketapang, TNP2K and MoEC implemented an operational pilot in 31 primary schools in very remote villages of the three disadvantaged districts. Between June 2014 and December 2015, the operational pilot tested the implementation of key processes for SAM and PPM and the monitoring and research instruments. Key lessons learned from the operational pilot set the parameters for the implementation of the pilot, particularly regarding district and village selection.[5] The Government of Australia provided financial support for the operational pilot phase, which was managed by Palladium through the Poverty Reduction Support Facility, and later by Cardno through the MAHKOTA Guiding Strategy (Towards a Strong and Prosperous Indonesian Society). The three district governments provided regulations and enabled the tying of district-allocated teacher allowances with teacher presence or service performance.

The pilot expanded implementation to 203 remote primary schools in October 2016. Encouraged by the findings of the operational pilot, TNP2K and MoEC collaborated with five district governments in the provinces of East Nusa Tenggara and West Kalimantan to implement the pilot in 203 primary schools in very remote villages. The pilot was implemented by the Eastern Indonesia

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4 The NUPTK is a unique number assigned to teachers and education personnel by MoEC, to gain access to its various programs, and in particular to begin the certification process. Applicants need to have an undergraduate degree, which most school-contracted teachers do not have. Teachers with a NUPTK are eligible for the TSA if they have fulfilled the following conditions: (1) completion of a bachelor's degree, and (2) official appointment from MoEC (for permanent teachers) or the District Education Office (for contract teachers).

5 Among other findings, we find that the success of the program requires commitments at multiple levels. The community needs to be willing to contribute time and resources and demand better education services. Management at the district and school levels needs to be sufficiently transparent about finances. Finally, the district bureaucracy needs to be reform-minded enough to provide full support for program implementation.

Knowledge Exchange (BaKTI), a non-governmental organization, with funding from the Government of Australia and the U.S. Agency for International Development managed by the World Bank. At the end of December 2017, responsibility for overseeing the pilot was transferred from BaKTI to village and school stakeholders.

The World Bank conducted an impact evaluation of the pilot in 270 schools. The schools were randomly assigned to one of the three intervention groups or a control group, where surveys were conducted without intervention. The impact evaluation surveys were conducted before the interventions started (from October 2016 to March 2017) and after the pilot was handed over to the village and school stakeholders (from February to April 2018). The surveys consisted of an unannounced teacher absence survey, interviews with various village and school stakeholders, and student learning assessments for all students in the school. Process monitoring data were collected monthly from the 203 intervention schools. These data captured the service agreement and scorecard indicators, monthly scores given to teachers by the UC on the scorecards, and revised service agreement and scorecard indicators from the evaluation meeting. The implementation team also conducted an unannounced teacher absence survey and a diagnostic test between September and December 2017. In addition, a qualitative study was implemented in nine schools. This report focuses on the qualitative study but draws from the data collected through the surveys and process monitoring. Figure 2 presents the timeline for data collection and implementation.

Figure 2. Timeline for KIAT Guru Data Collection and Analysis
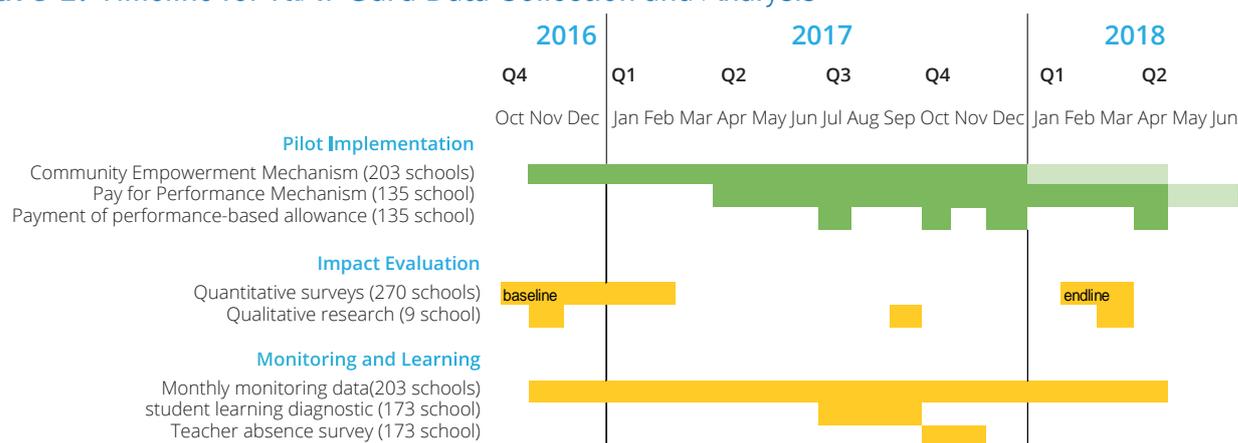
03 Qualitative Study

Sample Schools

The qualitative study was conducted in nine villages. The villages are in three of the five districts that participated in KIAT Guru: Ketapang (West Kalimantan), Landak (West Kalimantan), and Manggarai Barat (East Nusa Tenggara) (map 1). The three districts were selected based on several factors, including district governance (availability, management, and transparency of data), student learning outcomes (on a range of academic performance), geography (average distance to subdistrict and district centers), and community characteristics (homogeneity and exposure to community participation). Secondary data were analyzed to identify a priori some trends in school, community, and household characteristics. The villages that were included in the qualitative study were selected purposively based on these characteristics. The highest priorities were given to student learning outcomes, geography, and community characteristics.

Figure 3. Three Pilot Districts of the Nine Qualitative Study Villages
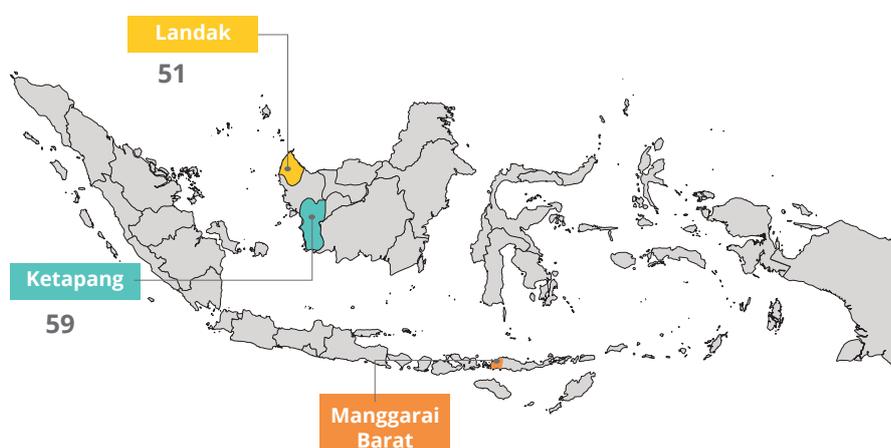
The nine case study schools represent the three intervention groups. Using the same indicators, the 203 implementation schools were ranked to identify villages that fell in the middle of the distribution of each district. This resulted in a shortlist of seven schools in Manggarai Barat, 16 schools in Landak, and six schools in Ketapang. From each district, three schools assigned to each of the treatment groups were identified. The main indicators used were student learning outcomes (in each district, we selected schools whose achievement scores fell in the higher, middle, and lower ends within the district), and two of the private schools on the

shortlist were included. The sample was composed of schools that included enough students and teachers to ensure that a range of scores and opinions could be documented, and schools that were not too far from the subdistrict center. Table 2 lists the final sample schools.

discussion guidelines, and observation procedures. Researchers also reviewed forms that would be used to assess each village's effectiveness in eight different areas on a scale of 1-10 (see Tables 8-14 for more detail). All participants studied a few hypothetical scenarios, used the forms to record their assessments of effectiveness, and discussed

Table 2: List of Schools Included in the Qualitative Study

District	School	Group	Public (N) or private (S)	Teachers with TSA/ total teachers	Number of students	Student learning outcomes (US$/month)	Distance to sub-district office (km, h)
Manggarai Barat	SD Sangka	1	N	6/9	109	173.16	17km, 2h
	SDK Kondok	2	S	8/10	200	232.23	17km, 1h
	SDI Konang	3	N	8/10	103	213.9	17km, 1h
Landak	SDN 10 Engkangin	1	N	6/8	80	142.09	5km, 1h
	SDN Sampuraneh	2	N	4/7	69	169.62	12km, 1h
	SDN 20 Sungai Keli	3	N	3/6	121	212.21	32km, 1h
Ketapang	SDN 18 Sungai Laur	1	S	5/7	152	152.08	4km, 1h
	SDS Usaba Sepotong	2	N	6/8	125	188.88	14km, 1h
	SDN 07 Simpang Dua	3	N	6/8	73	159.72	20km, 1h

Note: Data on number of teachers, students, and distance from school to the subdistrict office were taken from the World Bank's baseline survey conducted between October 2016 and February 2017. Data on student learning outcomes were taken from the 2015/2016 sixth grade national exam scores. h = hours; km = kilometers; SD = primary school; TSA = Teacher Special Allowance.

Data Collection Procedures

The qualitative study was structured to gauge changes in stakeholders' views about education service delivery and community facilitation processes. The survey was designed to contribute to a better understanding of the heterogeneous effects of the interventions. The qualitative data that were collected through the case studies of the nine schools would complement the impact evaluation of KIAT Guru conducted in 203 schools. The qualitative study sought to explain why education stakeholders responded to the interventions in the ways they did. The qualitative researchers visited the nine villages to document practices that might not be captured by the survey enumerators, and to gain an understanding of the benefits and challenges associated with KIAT Guru from the perspectives of the people directly affected by the initiative.

Qualitative researchers participated in a rigorous week-long training workshop before they entered the field. During that workshop, they discussed the data collection instruments, including interview protocols, focus group

the criteria they used to produce their scores. This training continued until the scores produced by each member of the research teams were the same or within one rating point. When researchers entered the field, they followed this same procedure, and averaged their ratings to produce the scores included in Tables 5-14. Although these ratings represent the researchers' subjective assessments of effectiveness, they were based on careful review of multiple sources of evidence; inter-rater reliability was consistently high.

Three visits were conducted between October 2016 and March 2018. Two researchers were assigned to study each school in the sample. Together, they entered the field, divided the data collection responsibilities, conducted interviews and focus group discussions, and prepared a report for each research site. The teams of researchers visited these communities three times: October-November 2016 (baseline), August-September 2017 (midline), and February-March 2018 (endline). The baseline was conducted before the KIAT Guru intervention started. The midline was implemented after the monthly teacher evaluation meeting had already been conducted several times in the schools.

The endline was scheduled after the evaluation meeting at the end of a semester, when the service agreement, teacher service performance, and UC member indicators could be amended. The endline was after the community facilitators handed over their responsibilities to the village cadres, UC members, and school stakeholders.

During the visits, the research teams implemented a series of instruments designed to elicit multiple perspectives on the effects of KIAT Guru. At each research site, they interviewed education stakeholders (students, teachers, parents, principals, UC members, government officials, and members of the community); attended UC meetings; facilitated focus group discussions with teachers, students, parents, and UC members; examined school records; observed lessons; and collected evidence of student learning outcomes. The interviews were semi-structured and lasted 30-60 minutes. Focus group discussions followed an established

protocol, included six to eight participants, and lasted approximately 90 minutes. All interviews were transcribed and coded by the research teams. At the end of each day, the researchers completed daily team review forms that asked them to reflect on the effects of KIAT Guru they had observed and develop theories about why the stakeholders responded the way they did.

During each round of data collection, the qualitative researchers produced numerical ratings of the performance of participating schools in 11 areas.[6] Drawing from interview and focus group discussion data, classroom observations, and school records, they scored each school on a 1-10 scale. In almost every case, the data yielded overlapping views of policy and practice in the schools, which provided valuable triangulation. At the end of each round of data collection, the entire team of qualitative researchers gathered to review the data they had collected and analyze patterns in the data across the research sites.

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6 The 11 assessment categories were (1) teacher presence; (2) teacher performance; (3) school/administrative leadership; (4) student learning, attitudes, and discipline; (5) level of local government support; (6) parent participation; (7) school committee effectiveness; (8) user committee effectiveness; (9) village cadre effectiveness; (10) facilitator effectiveness; and (11) overall impact of treatment.

04 Findings of the Qualitative Analysis

Overall Impact

KIAT Guru stimulated significant changes in teacher behavior as well as connections between schools and their surrounding communities. Within six months of the introduction of KIAT Guru, the qualitative researchers documented evidence of positive impact in all the schools included in the sample of case studies. Table 3 presents data collected in a survey that was distributed to 30 randomly selected parents in each of the school communities included in the qualitative study. The highest rated changes were in teacher attendance, parent attitudes about student learning, teacher performance, and student attitudes about learning. In addition to the changes listed in the table, some parents mentioned the performance of the principal, support of parents, physical condition of the school, active role of students in learning, and improved attitudes in the village about school.

Table 3. Stakeholder Assessments of the Primary Impacts of KIAT Guru at Midline

Impact of KIAT Guru	Stakeholders listing this outcome (%) (n=270)
Teacher attendance	78
Parent attitudes about student learning	78
Teacher performance	67
Student attitudes about learning	56
Teacher discipline	33
Stakeholder relations	33
Student learning outcomes	22
School culture	22
Process of teaching and learning	22
Student discipline	22
Parent support for education	22

The positive outcomes of KIAT Guru far outweighed the issues that surfaced during project implementation. At extended analysis workshops held after the second and third rounds of data collection, the researchers shared their findings, analyzed the data collected by the entire group, identified areas of most significant change, and discussed the factors that supported and impeded change. In addition, they formulated recommendations related to the sustainability of the KIAT Guru project in the future. As would be expected, all the schools faced some challenges as they implemented the changes specified in the project

guidelines. In some settings, these difficulties were more pronounced than in others. Nevertheless, the researchers felt that in all nine locations, the quality of teaching and school-community relations improved over the course of the project. The team of researchers identified seven critical areas of impact: (1) teacher presence; (2) teacher performance and school leadership; (3) parent participation; (4) student learning, attitudes, and discipline; (5) local government support; (6) UC effectiveness; and (7) village cadre leadership. In the following subsections, these areas of impact are discussed in greater detail.

Teacher Presence

Baseline survey conducted in 270 schools found an average of 19 percent teacher absenteeism rate in study areas (World Bank, 2019). Three quarters of the absent teachers provided written justification to the principals. Thirty percent of absent teachers were reported to be on school-related assignments, followed by 14 percent being sick, 14 percent had other reasons, and 7 percent had unknown reason. The most recent teacher absenteeism in Indonesia (ACDP, 2014) similarly found teacher absenteeism rate of 20 percent in remote areas and identified that absent teachers tend to be those who lived outside of the villages where the schools were located. However, in KIAT Guru locations, most teachers (81 percent) lived in the village where they teach, and those who lived outside the village spent an average of 30 minutes commuting, with an average cost of Rp 9,000 (US$ 0.60) daily. Although 90 percent of teachers taught in one school, 66 percent were not certified and had average monthly income of Rp. 4.6 million (US$ 329), compared to Rp. 8.4 million (US$ 600) for certified teachers. Of those not certified, 42 percent were school-contracted, with monthly income averaging merely Rp. 0.55 million (US$ 40). This low income may affect teachers' motivation. A total of 70 percent of teachers reported having other jobs, spending up to 32 hours per month for agricultural works, compared to only five hours per month for training or self-development.

Over the course of KIAT Guru implementation, teacher attendance rates increased steadily in most of the schools. The high absenteeism rate among Indonesian teachers is a persistent problem that has interfered with efforts to enhance the quality of education provided to students. One of the objectives driving KIAT Guru was to create mechanisms that would encourage teachers to attend school more regularly and punctually. Did the system of external reporting combined with financial incentives produce changes in teacher behavior? The UC reports on teacher attendance rates indicated an increase between baseline and endline in eight of the nine schools (table 4).

Parents who were interviewed in all the case study villages considered teacher attendance to be the most impressive change in teacher behavior. When asked to identify the five most important outcomes that occurred as a result of

Table 4: Teacher Attendance Patterns, by School (Percent)

Intervention	School	Baseline	Midline	Endline	Change
SAM	Sangka	90.0	90.91	98.42	+8.4
	Engkangin	57.0	90.0	90.0	+33
	Sungai Laur	87.5	100	88.0	+.05
	Average	**78.17**	**93.63**	**92.14**	**+13.97**
SAM+Cam	Kondok	89.0	98.0	99.33	+10.33
	Sampuraneh	57.0	95.0	95.0	+38
	Usaba Sepotong	89.0	85.0	100.0	+11
	Average	**78.33**	**92.67**	**98.11**	**+19.78**
SAM+Score	Konang	60.0	92.69	99.96	+39.96
	Sungai Keli	62.5	82.0	85.0	+22.5
	Simpang Dua	100.0	70.0	100.0	n/c
	Average	**74.12**	**81.56**	**94.99**	**+20.87**

Note: The figures in the table are based on user committees' records on average teacher attendance compared with the total number of scheduled school days during the week of data collection. The numbers in the "Change" column reflect differences in recorded teacher attendance between the baseline and endline stages of data collection.

KIAT Guru, 78 percent of the parents surveyed indicated that they had observed improvements in teacher attendance. In reflecting on the impact of the project, one parent stated that KIAT Guru "provides the impetus to be more disciplined as a teacher." Another parent observed that, "before, it wasn't always certain that school would start at 9:00. But now teachers are on time. That is what we expect of the teachers." The researchers recorded comments like these in all nine schools.

Several factors explain the improved teacher presence in the schools. Creation of the UC generated pressure on teachers to attend school more consistently and adhere to school start and finish times. The teachers were aware that their attendance was being monitored and felt compelled to arrive at school on time whenever possible. For teachers in Groups 2 and 3, the direct link established between teacher attendance and the amount of their hardship allowance created a powerful incentive to improve their behavior. When school employees were aware that their presence at school was being recorded—by UC members who visited the schools or the KIAT Kamera—they usually took their obligations to arrive at school on time each day more seriously. In some cases, the mere formation of the UC created a source of social pressure that had a positive influence on teacher behavior. However, concrete records of teacher attendance and absence tended to have a stronger influence on the behavior of school employees, because those records were considered more objective and difficult to dispute. As one village cadre in a SAM+Cam school observed, "teachers have to come on time now. This is due to the KIAT Guru program, which makes them more diligent. If they're not diligent, their allowance will be deducted. They can't lie now because we're using the camera. The camera can't be manipulated."

Monitoring teacher attendance by external stakeholders or a mechanical tool improved the reliability of the records. Although the nine schools have always recorded teacher attendance, the researchers noted that in the past those records were unreliable. At several schools, interviewees related that attendance records were not consistently monitored, sometimes showing evidence of having been altered; some were even filled out weeks in advance. When responsibility for monitoring attendance was transferred to an external source of authority, opportunities for

falsifying the records were reduced significantly, and teachers responded appropriately. Teachers, administrators, and UC members all viewed the KIAT Kamera as a tool that recorded attendance accurately and could not be manipulated. Although the cameras occasionally broke, when they were functioning, they created an impetus for teachers to appear at school on time. It appears that one of the keys to success is to implement a system of recording attendance that teachers view as objective and reliable.

Teacher Performance and School Leadership

Teacher performance improved in all the schools. Based on the evidence collected over the course of the project, the qualitative researchers concluded that teacher performance improved in all nine schools they visited over the course of the project. In those settings, project facilitators, parents, and administrators all reported that teachers had displayed increased seriousness about their professional responsibilities since KIAT Guru was initiated.

The most common examples of improved performance included the following behaviors:

1. Attending class more regularly;
2. Spending more time preparing lessons;
3. Assigning and correcting homework more consistently;
4. Including a greater variety of instructional approaches in lessons;
5. Receiving and responding to feedback from principals;
6. Investing more time and effort in supporting students, inside and outside the classroom; and
7. Using more positive behavioral reinforcement and avoiding corporal punishment of students. These findings are summarized in table 5.

Over 2000 service agreement indicators were developed by and for parents, teachers, and school management. Indicators for parents consisted of six main categories, listed in the following descending order of proportion: to create conducive learning environment at home (36%), to provide learning assistance and practicing positive discipline (20%), to provide school equipment (18%), to communicate and collaborate with teachers

Table 5: Teacher Performance

Intervention	School	Baseline	Midline	Endline	Change
SAM	Sangka	5	8	7	+2
	Engkangin	4.8	7.3	7	+2.2
	Sungai Laur	6	8	8	+2
	Average	**5.26**	**7.8**	**7.33**	**+2.07**
SAM+Cam	Kondok	5.5	8	9	+3.5
	Sampuraneh	4.6	6.7	5	+0.4
	Usaba Sepotong	4.5	6.5	8	+3.5
	Average	**4.86**	**7.1**	**7.33**	**+2.47**
SAM+Score	Konang	4	4	6	+2
	Sungai Keli	4.6	7	7	+2.4
	Simpang Dua	4	5	6	+2
	Average	**4.2**	**5.3**	**6.33**	**+2.13**

Note: The figures in the table are based on the qualitative researchers' assessments throughout the three research visits. Values are on a scale of 1 to 10. The numbers in the "Change" column reflect differences in assessment ratings between the baseline and endline stages of data collection.

(13%), to demonstrate positive role modeling (7%), and to support maintenance of school facilities (6%). Meanwhile, 20 categories for teachers were observed, with the three most frequent indicators being: to punctually start and end learning activities according to set schedule (20%), to practice positive discipline in school (16%), and to ensure student comprehension of learning materials, including in providing as-needed feedback (14%). Additionally, 13 categories for school management were observed, with the three most frequent indicators being: to manage and optimize school facilities for learning purposes (32%), to set school schedule, conduct supervision of teachers and classroom learning activities (19%), and to hold regular meeting and coordination with parents and school committees (16%). These agreed upon indicators consequently serve to guide teacher and principal behavior to perform in providing quality education service.

The prevalence of these behaviors tended to vary based on the contents of the service agreement adopted by the particular school. Teachers in Groups 2 and 3 were aware of the terms of the service agreements, knew that their paychecks would be affected by evaluations of their adherence to those terms, and adjusted their behavior accordingly. The amount of the hardship allowance granted to teachers who participated in the SAM treatment was not affected by the UC ratings. As tables 5 and 6 indicate, the qualitative researchers' assessments of teacher performance and school leadership increased for all three groups, and the increases were greater for Groups 2 and 3.

In most communities, parents appreciated the increased attention to instruction displayed by their children's teachers after KIAT Guru was implemented. A parent at Engkangin Elementary School, for instance, observed that, "in 2015-2016, before the UC was created, there were no improvements. In the past school started at 8 am and students went home at 9 am. Now it's not like that at all. This is all because of the UC and teacher supervision." A school committee member at the same school drew a link between improved teacher effort and student achievement: "Teachers have become more active and students can read. Now all students can read." Similarly, a parent from Konang related that, "now, because of UC monitoring, the teachers have already changed. They are pushing students to study more and taking a more active approach to teaching." Interpretation of the term "active learning" varied, but the general idea behind this concept was that teachers would design learning activities that required students to speak, engage in collaborative learning activities, or problem solve—rather than simply copy down information dictated by teachers.

At all the school sites, the terms of the service agreements exerted a strong influence on teacher behavior. This had positive and negative consequences. At schools in Groups 2 and 3, teacher awareness that the UC evaluations of their performance would affect the amount of the hardship allowance they received prompted educators to take certain responsibilities more seriously. As one principal commented, "teachers

are more disciplined because of KIAT Guru and the allowances they can earn." For example, if the service agreement specified that instructors would be evaluated based on assigning homework regularly, the researchers noticed a sharp increase in the number of homework assignments given as well as the amount of time teachers spent correcting that work.

However, this carrot-and-stick approach to evaluation undercut teacher autonomy. In some schools in Groups 2 and 3, teachers stopped implementing engaging learning activities that did not include the specific characteristics identified in the service agreement. Creative components of lessons were sometimes eliminated to make more time for activities that clearly supported the activities that were included in the service agreements. This frequently led teachers to focus on mathematics and Bahasa Indonesia at the expense of other subjects. Another concern expressed by parents and community members was the sustainability of the teacher evaluation system after KIAT Guru funding concluded. Some were afraid that if teachers no longer received financial rewards for displaying positive behaviors, their morale would suffer; in other words, if at some point the hardship allowances cease to be offered, teachers might stop investing so much effort in their work.

Parents in all the schools also noticed changes in principals' effectiveness. Although parents and other community members tended to speak most extensively about changes in the behavior of teachers and students, they also noted shifts in the performance of principals. Data collected by the qualitative researchers indicated that significant changes had occurred in principal leadership in all nine schools (see table 6 for supporting evidence). In most schools, community members noted that principals showed greater enthusiasm for their work after KIAT Guru was introduced. Principals were commended for enforcing more discipline about starting and finishing school according to the official schedule, observing lessons more regularly, encouraging more active teaching, covering lessons for absent teachers, and serving as more effective role models for children.

In most of the sample schools, the principals actively monitored the actions of teachers, which indirectly led to improvements in instructional practice. This makes sense, given that principals at all schools are expected to monitor and evaluate teacher performance. Interview and focus group discussion transcripts also support the idea that the introduction of KIAT Guru led principals to increase the time and effort they invested in their administrative responsibilities. A teacher at Kondok, for instance, stated that, "the discipline has really improved, also the supervision. There have already been changes in the division of teaching responsibilities." In sum, they displayed more active and professional leadership in the schools.

In the schools where principals earned less favorable ratings, administrative resistance and lack of transparency seemed to be the most significant barriers to change. In those schools, the principals protected their power and

Table 6: School Leadership

Intervention	School	Baseline	Midline	Endline	Change
SAM	Sangka	6	8	9	+3
	Engkangin	6	8	8	+2
	Sungai Laur	7	7	8	+1
	Average	**6.33**	**7.7**	**8.33**	**+2**
SAM+Cam	Kondok	5	7	9	+4
	Sampuraneh	3	7	7	+4
	Usaba Sepotong	3	5	5	+2
	Average	**3.67**	**6.3**	**7.0**	**+3.33**
SAM+Score	Konang	4	6	7	+3
	Sungai Keli	4	4	9	+5
	Simpang Dua	2	6	6	+4
	Average	**3.33**	**5.3**	**7.33**	**+4**

Note: Values are on a scale of 1 to 10.

limited the amount of information available to other education stakeholders, despite the KIAT Guru guidelines. For example, a teacher at Simpang Dua reported that, "we didn't know about BOS [school operational fund] money. The budget is all controlled by the principal and the treasurer. Just recently, since KIAT Guru started, we only know that they bought furniture and a stove" (implying that teachers did not have any input into this decision). Such resistance to change is not surprising, given the politics of teacher management, which are deeply entrenched in policy making and implementation in Indonesia. As Rosser and Fahmi (2016, 20) note, Indonesian teachers have historically "been severely constrained by their structurally subordinate position" within school hierarchies.

Parent Participation

Parent participation in education increased in almost all the schools (table 7). Although the researchers did not rate changes in parent participation as highly as teacher attendance or performance, they observed significant improvement in this area. In interviews and focus group discussions, parents, too, recognized the shift in home-school linkages that KIAT Guru had initiated. As one interviewee related, it was as if parents were "waking up from a long sleep." In this way, KIAT Guru initiated a shift in parents' views of their roles in the education process, creating spaces for them to engage in the learning process.

According to a teacher at Simpang Dua, "parents have started giving more tangible support to their children. Because of KIAT Guru activities, parents have become more active, whether they want to or not." This shift is significant, given the barriers that have historically divided families and schools in Indonesia (Parker and Raihani 2009, 2011).

The most notable change in parent behavior involved their role in supporting their children's studies in the home. The researchers documented many examples of this. They included providing secure spaces for children to study in the evenings, checking their children's homework and signing their homework books, supervising their children as they completed assignments, and organizing study groups in the evenings. Other examples of a shift in parents' connections to schools included attending *gotong royong* activities[7] at the schools, participating in UC meetings, and serving on UCs. The service agreement at one school (Engkangin) included a provision that required all parents to participate in community service at the school at least once every three months. According to the Engkangin village head, it has become much easier to obtain community support for education projects since KIAT Guru was initiated. The impact evaluation of 270 schools (including control schools) similarly found improved parental efforts to be statistically significant across all three groups.

Table 7: Parent Participation

Intervention	School	Baseline	Midline	Endline	Change
SAM	Sangka	4	6	8	+4
	Engkangin	4	7	7	+3
	Sungai Laur	7	8	6	-1
	Average	**5.0**	**7.0**	**7.0**	**+2**
SAM+Cam	Kondok	4	6	9	+5
	Sampuraneh	3	7	8	+5
	Usaba Sepotong	6	7	7	+1
	Average	**4.33**	**6.7**	**8.0**	**+3.67**
SAM+Score	Konang	5	6	7	+2
	Sungai Keli	3	7	8	+5
	Simpang Dua	3	4	6	+3
	Average	**3.67**	**5.7**	**7.0**	**+3.33**

Note: Values are on a scale of 1 to 10.

7 Mutual cooperation, with activities usually revolving around physical participation in cleaning up the school environment, renovating or fixing some furniture, and so forth.

However, parent participation in education was not consistent across schools or throughout the year. The "waking up" in school communities documented by the researchers after the introduction of KIAT Guru was particularly significant because it occurred in rural areas, where education levels among parents were relatively low. However, because most parents worked in agriculture, they were not always available to support their children's educational activities. Teachers and parent representatives frequently underscored the challenges this created for students. For example, as one school committee member observed, "because many fathers work as laborers, sometimes they are absent from their homes." Many did not return from the fields until after dark and were sometimes too tired to help with homework. This was especially true during harvesting season, when work in the fields was the top priority—for parents and sometimes their children too. During the harvesting and rainy seasons, afterschool study groups did not always meet. Finally, some parents simply lacked the capacity to help with homework, especially as their children advanced to the upper elementary grades; adults with limited formal education did not always have a mastery of basic mathematical concepts; and some could not read or write.

Student Learning, Attitudes, and Discipline

The improvements in teacher performance led to pervasive and positive changes in student attitudes in all the schools (table 8). The combination of more engaging learning activities and more consistent supervision from parents tended to have a positive influence on children's attitudes toward their studies.

Classroom observations conducted over the course of the project documented several positive changes in the pedagogy employed by teachers. These included more detailed lesson preparation, aligning lessons with the contents of the syllabus, providing more specific examples to help students understand difficult material, and connecting topics from textbooks to students' daily lives. In response, students participated more actively in class and asked clarifying questions when they did not understand the material that was presented. In this way, changes in teacher behavior enhanced student motivation and curiosity.

Students noticed that their teachers began attending class more consistently and were implementing more student-centered pedagogical approaches. As a student at Simpang Dua observed, "in the past, teachers did not explain enough, but now they are providing complete explanations." According another pupil, "[we're] motivated because the teachers are always present at school, so they can teach us. If the teachers are not present, I only learn and play by myself. But I'm happier if the teachers come to school."

Furthermore, in many schools, teachers took part in extracurricular activities, which had not been common in the past. They displayed more attention to formal lessons as well homework assignments. In a focus group discussion, one

Table 8: Student Learning, Attitudes, and Discipline

Intervention	School	Baseline	Midline	Endline	Change
SAM	Sangka	4	6	8	+4
	Engkangin	3	6.5	9	+6
	Sungai Laur	6.5	7.5	8	+1.5
	Average	**4.5**	**6.7**	**8.33**	**+3.83**
SAM+Cam	Kondok	5.5	6.5	9	+3.5
	Sampuraneh	3	7.5	8	+5
	Usaba Sepotong	6	7	8	+2
	Average	**4.83**	**7.0**	**8.33**	**+3.5**
SAM+Score	Konang	4.5	6	7	+2.5
	Sungai Keli	3	8	8	+5
	Simpang Dua	6	8	7	+1
	Average	**4.5**	**7.3**	**7.33**	**+2.83**

Note: Values are on a scale of 1 to 10.

student related that, "what makes me diligent to go to school is the nice teachers and now there are extra lessons for math and reading." The study groups held in the evening reinforced such behavior and provided students with additional support when they faced academic challenges. In this way, increased parental support for school activities buoyed students' academic achievement.[8]

The researchers noticed that over the course of KIAT Guru implementation, student mastery of basic academic skills improved. Over a relatively short period time, the students appeared to be developing a stronger foundation in the areas of math and language. The qualitative findings related to student achievement are also supported by the impact evaluation surveys, which documented improved student learning outcomes in all three intervention groups (see table 9 for more detail).

Table 9: Student Performance on Learning Assessments (Sample of 270 Schools)

Treatment	Language		Math	
	Baseline	Endline	Baseline	Endline
Control	37.66	43.90	38.45	43.79
	(21.36)	(24.18)	(22.55)	(23.01)
	[7,043]	[8,689]	[7,043]	[8,689]
SAM	36.94	45.04	37.14	44.67
	(20.24)	(24.16)	(21.32)	(23.15)
	[6,245]	[7,923]	[6,245]	[7,923]
SAM+Cam	38.46	48.01	37.93	47.35
	(20.75)	(24.77)	(21.16)	(24.16)
	[6,611]	[8,147]	[6,611]	[8,147]
SAM+Score	36.56	45.88	36.82	45.18
	(20.66)	(23.80)	(21.50)	(23.02)
	[6,714]	[8,377]	[6,714]	[8,377]

Note: The data reflect the average percent correct that students scored on each test. The standard deviations is in parentheses; the number of observations is in brackets

Although the qualitative as well as quantitative data highlight improvement in students' academic accomplishments, some issues surfaced over the course of the project. The most salient problem observed by the researchers related to student behavior. Many service agreements included provisions that prohibited teachers from physically disciplining students or using harsh language to reprimand

8 These lessons could also be included in the amended service agreements, as a response to the learning outcomes information generated from the diagnostic test.

them. Most students responded positively to these changes and appreciated the gentler treatment they received from their teachers. In a focus group discussion held at Engkangin, a student explained that he has started to like school, "because the teacher is good and doesn't hit students" anymore. Children at most other schools expressed similar appreciation of changes in their teachers' behavior.

However, according to teachers and parents, some students misbehaved more frequently than they did in the past, because they were no longer worried about receiving harsh punishment. This draws attention to the unintended consequences that often accompany shifts in school culture and suggests that a change appended to a deep-rooted cultural practice will take time to take hold. In some schools, aggressive management tactics (such as hitting misbehaving students) had been practiced and accepted for generations. In these settings, instructors often struggled to control students who started to question their authority. Aware that teachers could no longer hit them, some children used impolite language, showed a general disrespect of teachers, and reported instances of corporal punishment to their parents or UC members. A teacher at Simpang Dua, for example, remarked that, "we may not pinch or punish students physically anymore. Children have become more assertive, asking to play sports when they should be studying math." Another teacher at the school lamented that, "I feel sad that the children don't respect me [now]. Children here are different from other children—they do not follow my orders if I don't use my hands."

Data collected from process monitoring of 203 KIAT Guru schools indicated that after one semester of implementation, the indicators that related to teachers not using corporal punishment were reduced the most significantly compared with other indicators. At the time when the service agreements were first ratified, 14.3 percent of all the community scorecard indicators prohibited teachers from hitting students. After one semester of implementation, amendments to the service agreements indicated that 4.6 percent of the schools had dropped that provision.

Another unanticipated consequence of the heightened attention to academics was the difficulty some students had in meeting the more rigorous expectations. After the

introduction of KIAT Guru, teachers assigned homework three times a week or more. This sharp and sudden increase overwhelmed some students, especially those who could not rely on their parents for academic assistance. Although the percentage of students who completed their homework increased over the course of the project in general, the teachers could not depend on all parents to help with homework or attend school events, especially during the harvest season.

Village Government Activities

The participation of local government officials in KIAT Guru activities had a generally positive influence in the case study schools. However, as the figures in table 10 indicate, the nature of that influence varied markedly across locations. Furthermore, the participation of these leaders was influenced by their level of commitment to education, the local political climate, and their relationships with school employees. The data collected by the researchers indicate that local government officials can play a pivotal role in efforts to improve the quality of education in rural schools—but their support should not be assumed.

In some villages, government officials provided valuable financial, logistical, and moral support that helped education stakeholders meet the goals of KIAT Guru. An important contribution made by local government leaders was to participate in discussions about and oversight of KIAT Guru. When government leaders displayed strong support for the initiative, this signaled to the rest of the community that education was valued— and that everyone should consider investing in school improvement efforts. Examples of this included attending UC meetings, evaluating the performance of the UC, mediating conflicts that emerged when new forms of assessing teacher performance were implemented in the schools, and encouraging schools that were not receiving KIAT Guru funds to adopt some of the components of the program.

Per the Village Law regulation, village governments on average received Rp. 800 million in village funds in 2017. The village governments had some latitude to disburse those funds as they saw fit. With the intention of sustaining KIAT Guru activities in the 203 villages beyond the life of the project, the KIAT Guru project facilitators encouraged village governments to allocate some of the village funds to KIAT Guru. The village funds were utilized to pay for a variety of things, such as: (1) covering the costs of the monthly meetings, (2) providing financial support to the village cadre, (3) paying UC members to attend subdistrict meetings, and (4) providing stipends to UC members who attended meetings.

However, the allocation of village funds for KIAT Guru was not regulated by the district government. As a result, the researchers observed large differences in levels of financial support for KIAT Guru from village to village (even within the same district). This resulted in uneven support and large variations in the amounts provided for UCs,

Table 10: Local Government Support

Intervention	School	Baseline	Midline	Endline	Change
SAM	Sangka	5	7	7	+2
	Engkangin	8	8	9	+1
	Sungai Laur	4	5	5	+1
	Average	**5.67**	**6.7**	**7.0**	**+1.33**
SAM+Cam	Kondok	5	7	9	+4
	Sampuraneh	5	5	5	0
	Usaba Sepotong	5	6	8.5	+3.5
	Average	**5.0**	**6.0**	**7.5**	**+2.5**
SAM+Score	Konang	4	6	8	+4
	Sungai Keli	6	6	6	0
	Simpang Dua	5	5	6	+1
	Average	**5.0**	**5.67**	**6.67**	**+1.67**

Note: Values are on a scale of 1 to 10.

village cadres, and schools. Of the schools included in the qualitative sample, Kondok provided the most generous financial support to KIAT Guru: Rp.10.5 million (US$751) per year. Simpang Dua, in contrast, only dedicated Rp.3 million (US$315) per year toward the project. Some village heads chose not to allocate a substantial portion of those funds to support KIAT Guru, which made it difficult for the UCs in those locations to carry out their work.

User Committee Effectiveness

Most of the UCs in the case study schools performed their roles well. By the time the researchers conducted their endline visits to the villages, the UCs at six of the nine schools were functioning effectively. At those sites, the UC members understood their primary responsibilities and worked diligently to realize the goals of KIAT Guru. They held monthly meetings, which they invited teachers, parents, and local government employees to attend. At those gatherings, members of the UC worked together to socialize the community about the goals and structure of KIAT Guru. The meetings enhanced communication from the community to the UC and from the UC outward. Those regular opportunities to discuss strategies for improving the quality of education in the village provided concrete and symbolic evidence of a positive shift in the relationship between families and schools.

Although school committees had previously provided input into decision making in the schools, KIAT Guru provided a framework that directed the UCs to monitor teacher attendance and effectiveness. The specificity of these tasks appeared to enhance committee efficacy (table 11). Especially in remote areas, where many parents may not feel confident providing advice to school personnel, the clearly defined priorities established for the UCs were helpful. This change is noteworthy, given the disappointing results of the reform initiatives that were previously implemented in Indonesia that failed to link teacher incentives with broader goals such as improved education outcomes (Rosser and Fahmi 2016).

The UCs varied in the activities they prioritized. The responsibility that tended to attract most of their attention was monitoring teacher attendance and performance (depending on the contents of the service agreement). During the baseline visits to schools, the researchers observed widespread evidence of manipulation of teacher attendance records. This became less prevalent during the period of KIAT Guru implementation. In some schools, UC members monitored teacher attendance on a daily basis; in other settings, they checked attendance records intermittently. In all the schools, UC members developed criteria for evaluating teacher performance and implemented the scorecards. Other UC activities observed by the researchers included the following: (1) meeting with principals, (2) visiting other villages involved in KIAT Guru, (3) reminding parents of their responsibility to fulfill the service agreement, (4) sharing information about KIAT Guru at religious meetings in the villages, and (5) organizing social gatherings for teachers and parents.

Table 11: User Committee Effectiveness

Intervention	School	Baseline	Midline	Endline	Change
SAM	Sangka	7	9	+2	+2
	Engkangin	8.1	9	+.9	+1
	Sungai Laur	4.1	8	+3.9	+1
	Average	**6.4**	**8.67**	**+2.27**	**+1.33**
SAM+Cam	Kondok	6.6	8	+1.4	+4
	Sampuraneh	7.1	5	-2.1	0
	Usaba Sepotong	4.6	6.5	+1.9	+3.5
	Average	**6.1**	**6.5**	**+0.4**	**+2.5**
SAM+Score	Konang	7	9	+2	+4
	Sungai Keli	6.2	9	+2.8	0
	Simpang Dua	4.8	3	-1.8	+1
	Average	**6.0**	**7.0**	**+1**	**+1.67**

Note: Values are on a scale of 1 to 10.

The effectiveness of the UCs improved over time in most of the schools. In seven of the nine schools, parents and teachers praised the accomplishments of the UCs and described positive outcomes of those groups. A teacher at Sungai Laur, for example, observed that, "to us, the UC is good. Previously, they didn't confirm or clarify the results of the evaluations, but now they send 2-3 members to meet with us and confirm the results." A member of the School Committee at Konang shared that, "I really appreciate the UC. They work so hard. I have never heard them get angry at a teacher. They are brave and assertive."

However, most of the UCs also encountered challenges related to capacity and funding for sustainability. Although most of the UCs became more effective between October 2016 (baseline) and March 2018 (endline), all faced ongoing challenges. Some parents lived quite far from the schools and traveling to school was often challenging for them, due to the poor conditions of the roads. This made it arduous for them to carry out the tasks required of UC members. The most common issues that surfaced over the course of the project related to capacity. As table 12 indicates, fewer UC members had completed high school or university compared with those who left the formal education system before reaching high school. In six of the nine schools, the limited capacity of UC members interfered with the groups' ability to realize their goals. As a result, their knowledge base and understanding of the teaching-learning process was limited. A teacher in Sepotong, for

instance, lamented that, "the User Committee is not solid. Only 4-5 members showed up for UC meetings. We needed to assist them. UC members didn't know how to evaluate teachers; they do not really understand the indicators. I have told the facilitator to give them more assistance or training." In some cases, it also created tension between UCs and teachers, who did not feel that parents were qualified to evaluate their instructional abilities; UC members, in turn, sometimes felt that teachers did not respect them.

In sum, the UC's performed effectively – and were respected by educators – when they focused their efforts on documenting teacher presence; the system of accountability was based on objective and verifiable evidence collected. When UCs were asked to assume more professional responsibilities (assessing the performance of teachers), school employees frequently questioned the validity of the reports produced; due to this mismatch between UC members' capacity and the central tasks they carried out, the accountability system seemed to falter over time.

The second major issue concerned funding. Most of the UC members indicated that they would not be interested in serving on the committee if they were not compensated adequately. This was true of individuals serving on UCs in all three treatment groups. Some parents expressed this view quite cogently. From their perspective, serving as a UC representative required them to set aside substantial amounts of time that they could otherwise use to generate income. And when

Table 12: Education Level of UC Members

Intervention	School	No education	Primary school	Middle school	High school	Higher education
SAM	Sangka		1	4	3	
	Engkangin			1	8	
	Sungai Laur		2	3	4	
	Total		**3**	**8**	**15**	
SAM+Cam	Kondok			5	4	
	Sampuraneh	1	2	3	2	
	Usaba Sepotong			5	2	
	Total	**1**	**2**	**13**	**8**	
SAM+Score	Konang		8			
	Sungai Keli	3		2	4	
	Simpang Dua		2	4	1	1
	Total	**3**	**10**	**6**	**5**	**1**

Note: Values are the number of UC members with each level of education. This table is based on data collected in the quantitative study. It reflects conditions in all KIAT Guru schools—not just those in the nine case study schools. UC = user committee.

individual members decided to stop serving on the UC, the effects could be significant. A member of the UC at Simpang Dua acknowledged that, "the UC is no longer completing the monitoring and evaluation due to the insufficient budget provided by the village government. Three million rupiah is not enough." The UC at Simpang Dua received the lowest level of funding of all the schools included in the qualitative study.

In two schools, Sampuraneh and Simpang Dua, the effectiveness of the UCs declined over the course of the project. In both schools, this was due to the inactivity of the UC members: they did not carry out the monitoring tasks assigned to them, did not attend meetings regularly, and in Sampuraneh, did not communicate well with the community. The most significant factor that led to this stasis was that the UC members at the two schools were not remunerated for their work. In addition, some were reluctant to carry out the tasks assigned to them. As a result, the chairs of the UCs had little leverage to require the members to carry out tasks.

Finding nine community members who possessed the will and capacity required of UC members often proved more difficult than had been anticipated. This situation highlights the difficulties that may accompany community empowerment initiatives that focus on education in rural areas.

Table 13: Village Cadre Effectiveness

Intervention	School	Midline	Endline	Change
SAM	Sangka	7	8	+1
	Engkangin	8	9	+1
	Sungai Laur	7	7	0
	Average	**7.33**	**8.0**	**+.67**
SAM+Cam	Kondok	6	9	+3
	Sampuraneh	4	4	0
	Usaba Sepotong	6	6	0
	Average	**5.33**	**6.33**	**+1**
SAM+Score	Konang	5	7	+2
	Sungai Keli	7	7	0
	Simpang Dua	9	8	-1
	Average	**7.0**	**7.33**	**+.33**

Note: Values are on a scale of 1 to 10.

Another complication documented by the researchers concerned the overlap between UCs and school committees. The responsibilities of each group were not clearly delineated, which sometimes created confusion. It was not always clear to UC or school committee members how their activities complemented each other, or if the two groups should be sharing information with each other. A UC member noted that, "so far we have not coordinated with the School Committee… There are no formal relations between the SC and the UC." Some interviewees questioned why two separate representative councils were operating at the same school. Their primary responsibilities seemed to overlap in many ways, which created some redundancies. If KIAT Guru continues—in its current form or in some other iteration—it will be important to clarify the relationship between school committees and UCs

Village Cadre Effectiveness

In all the nine schools examined, the village cadre played a critical role in guiding and overseeing the implementation of KIAT Guru. In each village, the facilitator also recruited, trained, and mentored a village cadre. After completing this training, the village cadre organized and led monthly village meetings. The expectation was that after the facilitators left the villages in 2018, the village cadres would take on the responsibilities previously held by the facilitators. Table 13 shows rating on village cadre effectiveness in each school.

The village cadre acted as an intermediary who connected the constituencies involved in project implementation: government officials, school employees, UCs, and community members. Candidates for the position were shortlisted based on criteria provided by the project, which included experience in organizing community development activities, interest in education, and willingness to learn. The project facilitators encouraged democratic elections of village cadres, but in practice, the final identification was based on election or appointment by the village head or leaders. In one community that was included in this study, the village cadre was appointed by the village head, without any formal input from the villagers. As a result of this process, the village cadre had trouble gaining the support of UC members, who questioned his legitimacy.

Because of their status within the villages, the village cadres exerted a powerful influence on public perceptions of the initiative. Most village cadres assumed some important responsibilities related to coordinating and monitoring UC activities. When a village cadre was not able to attend UC meetings, the UC chair usually led the meeting.

Not all the village cadres were enthusiastic supporters of KIAT Guru. The researchers found that a village cadre's relationship with the UC was strongly influenced by the village cadre's own economic interests and political priorities. Some village cadres told the researchers that they would stop supporting KIAT Guru if they ceased to receive financial rewards for that work. Relationships between government officials and education stakeholders also influenced the level of support provided by the government. In one village, the chair of the UC and the village head were in conflict. This created problems throughout the period of KIAT Guru implementation; the village head refused to attend UC meetings and did not produce required documents on time.

The observation and interview data highlight some common characteristics of effective village cadres:

- Strong relationships with community members
- Education credentials—a high school diploma or higher
- Excellent interpersonal skills
- Good relationships with village government leaders
- Productive working relationships with project facilitators.

The village cadre's extensive obligations (to the village and the school) sometimes made it difficult to devote adequate time to the UC. In a sense, this person was performing two jobs at the same time. Nevertheless, only one of the nine village cadres was considered ineffective. The consensus among the researchers was that if village cadres are provided adequate training, support from the community, and sufficient funding, they can provide valuable leadership to the UCs and should be able to assume most of the responsibilities that were entrusted to the facilitators. The interview data also suggest that when village cadres are democratically elected, the community tends to have more respect for their authority.

05 Differential Effects of Interventions, by Treatment Group

Impact of SAM

The researchers documented a range of positive outcomes of SAM, in particular its potential to enhance rather than undermine the intrinsic motivation of education stakeholders. This approach established a formal structure for involving community representatives in education decision making and granted the UCs a great deal of autonomy. The researchers noted that the SAM encouraged members of the community to think seriously about the value of education and their relationship to the school. In theory, this tactic had seemed preferable to mechanisms that depended on financial incentives to leverage changes in behavior. In contrast with Groups 2 and 3, the conditions for SAM had greater potential to enhance the intrinsic motivation of education stakeholders—to encourage teachers to invest in the schools without adjusting the amount of their TSAs based on their attendance or performance in the classroom.

However, the evidence from the qualitative study suggests that the outcomes of SAM were the most unpredictable of the three interventions. Because teachers in SAM received the hardship allowance regardless of their performance, they may have lacked the motivation to invest more time and effort in their work. In this case, the work of the UC plays a critical role in the change process. The UCs in SAM were given the autonomy to decide how they should tackle the challenge of improving the quality of education delivered to children in their communities. If a UC devised effective strategies for garnering the support of teachers and parents in support of their mission, the outcomes could have been impressive. However, if the UCs did not gain the buy-in of education stakeholders, their ability to effect change in the schools could have been limited. And because the amount of teachers' hardship allowances did not increase or decrease based on the amount of effort they invested in KIAT Guru activities, the teachers may not have felt compelled to support the initiative. In addition, given the struggles that many of the school committees have faced in Indonesia, it may be that KIAT Guru UCs, when given the freedom to decide how to channel their energies, operated less efficiently than those that were given clearer mandates, as was the case with Groups 2 and 3.

SAM Case Study: SDN 10 Engkangin

SDN 10 Engkangin is in a small village in Landak, West Kalimantan, about an hour from the subdistrict office. The school employs eight teachers and serves 80 students. Since KIAT Guru was implemented in the village, the school has experienced many changes. The condition of the buildings provides visual evidence of the positive outcomes of KIAT Guru. This renovation was carried out as a result of collective support from the village government, parents, and the user committee (UC). Motivated to fulfill their service promise to perform community service every three months, the parents placed trash cans in every room, installed a guardrail along a wall, and repaired several damaged classrooms.

Although a first-time visitor to the school might not notice, the behavior of the education stakeholders has also improved. The community has begun to view education as a shared responsibility of the parents, teachers, principal, and village government. Parents are generally supportive of KIAT Guru, although some of them have trouble finding the time to support the directives of the UC, due to their farming responsibilities.

At 6:30, when the bell that signals the beginning of the school day rings, all the instructors are in their classrooms. This is a significant change. Teachers now make sure to arrive at school on time, because they know that if they are late or absent, the scores they earn from the UC will be affected. This information is posted publicly each month, which increases the pressure placed on teachers to arrive at school on time each day. For the first 30 minutes of the morning, students in every room are reciting math facts, reading passages from books out loud, or showing completed homework assignments to their teachers.

Six of the eight teachers at SDN 10 Engkangin are eligible to receive the TSA. Two of the school-contracted teachers cannot receive the hardship allowance because they do not have NUPTK (Nomor Unik Pendidik dan Tenaga Kependidikan), a unique number assigned by the Ministry of Education and Culture to registered teachers and education personnel.[a] Rather than pitting different classifications of teachers against each other, this situation has increased the sense of solidarity among the faculty. Because they do not feel that the system of granting TSA is fair, the six civil servant teachers at Engkangin set aside a portion of their remote area allowance money and donate those funds to their two less fortunate colleagues.

The impact of KIAT Guru can also be seen in the classrooms. Teachers now assign homework three times a week and are incorporating more active learning activities in their lessons. Parents have noticed that their children are learning more than they did before KIAT Guru. One mother explained that, "our children, who were not able to read before can read now. The first-grade class did not know the letters before, but now they do." Another parent related that, "in 2015–16, before UC, there was no improvement. Now students are actively learning. They study from 8 a.m. to 12 p.m. In the past, school started at 8 a.m. and they were home by 9 a.m. Now it's not like that. This is all because of the UC and the supervision of teachers."

The teachers and parents feel responsible for overseeing the homework given to students. The teacher can see how many parents are assisting their children at home by reviewing the homework notebooks that students are now required to keep. Likewise, parents feel that, by looking at the homework assignments, they can learn about the subjects their children are studying in school. This system is not perfect. Not all parents monitor their children's homework. According to the teachers, between 60 and 70 percent of the parents sign the homework notebooks regularly.

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a The Ministry of Education and Culture assigns unique NUPTK numbers to teachers and education personnel so that they can gain access to the ministry's various programs and, in particular, begin the certification process. Applicants need to have an undergraduate degree, which most school-contracted teachers do not have.

The teachers appreciate the increased support from members of the community they have been receiving lately, but they face new challenges related to student behavior. This is due to the provision in the service agreement at Engkangin that prohibits the use of physical or psychological violence in classrooms. On the positive side, UC members note that students are no longer afraid to come to school, because they are not afraid of getting hit by their teachers.

One of the greatest challenges for the UC has been to maintain high levels of participation and enthusiasm for KIAT Guru. Most of the villagers are busy with their work as farmers, and they sometimes have trouble finding the time necessary to support school activities. But the sense of shared responsibility among parents, teachers, and community leaders is noteworthy. There is a general sense of optimism in the village that the school is headed in the right direction.

Impact of SAM+Cam

SAM+Cam emphasizes teacher presence as the most important indicator of teacher performance. This treatment differs from that applied to SAM in two key respects. First, schools were provided smartphone-based cameras (KIAT Kamera), which were used to document teacher presence at school. Second, the amount of a teacher's hardship allowance was determined based on the teacher's attendance at school, with a minimum target of 85 percent attendance per month. Teachers who failed to meet that target did not receive their full allowance for that month. Although the UCs and teachers in SAM+Cam schools also developed community score card, most of the UCs focused their efforts on verifying teacher attendance.

Although a focus on teacher presence may seem myopic, most of the stakeholders considered this approach to be appropriate. On the one hand, this self-imposed narrowing of responsibility could be viewed as limiting: the UCs in SAM+Cam schools might have had a broader influence on teacher behavior if they had taken on other more ambitious projects. Yet, the data collected by the qualitative researchers indicate that the decision to focus primarily on a single task augmented the effectiveness of the UCs. Educators as well as community members indicated that asking the UCs to concentrate their efforts on teacher presence was feasible and appropriate. This helps to explain why the level of support for KIAT Guru observed in schools in SAM+Cam was greater than that for the other groups.

In all three SAM+Cam schools, the researchers documented a marked improvement in teacher attendance. The teachers were conscious that their attendance was being monitored, which created an incentive for them to arrive at school on time and remain at school until the end of the day. In the past, the manual records of teacher attendance that were maintained by the schools were unreliable. Documentation of teacher attendance by KIAT Kamera, which was tamper-proof and verified by the UCs, made it more difficult (although not impossible) for teachers to make false claims about their presence at school. The records generated by the KIAT Kamera were considered objective and undisputable. As a village cadre explained, "teachers have to come on time now. This is due to the KIAT Guru program, which makes them more diligent. If they're not diligent, their allowance will be deducted. They can't lie because now we're using the camera. The camera can't be manipulated." This accountability system created the impetus for most teachers to make a more concerted effort to attend school more consistently, as table 4 makes clear.

SAM+Cam provided the UC members an appropriate level of responsibility. Interviews, focus group discussions, and observation data also show that the changes introduced in the schools in SAM+Cam made sense, given the backgrounds of the individuals who served on the UCs, compared with the other interventions. Many UC members lacked the time and educational background necessary to take on more ambitious tasks (such as evaluating instructional effectiveness). However, they were capable of verifying teacher attendance. Matching UC responsibilities to representatives' capacity in this way enhanced their feelings of accomplishment.

The teachers were comfortable with this framing of UC responsibilities. In rural areas, teachers are often more highly educated than the parents of their students. The requirement for UCs to evaluate teachers had the potential to generate tension between those committees and school employees. However, teachers rarely objected when the UCs focused on verifying attendance records and collecting proof of leave requests, because those tasks seemed well aligned with the capabilities of the UC members. This assignation of responsibility was considered appropriate. As a result, at the schools in SAM+Cam, the pressure placed on teachers to attend school more regularly did not damage staff morale or school-community relations. In actuality, teachers seemed to appreciate the increased attention to important role that they play in their students' social and intellectual development, which was spurred by KIAT Guru.

Nevertheless, some issues surfaced at SAM+Cam schools. Teachers sometimes claimed that KIAT Kameras were broken or stolen, to avoid the reporting of unfavorable data. At one school in SAM+Cam, the principal was frequently late to school and could not take pictures of teacher presence/absence. Some teachers reported that they felt compelled to come to school even when they were sick, because if they stayed home their TSAs might be reduced.

Another issue that emerged at schools in SAM+Cam (as well as SAM+Score) was related to the procedure used to determine TSAs. Of the entire group of teachers who took part in the KIAT Guru project, approximately 35 percent qualified for the hardship allowance as a result of their education and occupational status. This meant that about two-thirds of all the teachers evaluated by UCs could not earn hardship allowances. In six of the nine case study schools, teachers displayed a sense of responsibility to improve their behavior, regardless of the hardship allowance, and took the feedback provided by the UCs seriously. Others demonstrated good performance to impress government officials who might grant them the TSA in the future. In three schools, however, the unequal rewards offered to different educators generated backlash from individuals who were not eligible to receive a hardship allowance. At those schools, a tensions that emerged between the two groups of teachers undermined staff morale. As one instructor explained, "the UC and facilitator were forced to give in to the teachers' demands because some of the teachers went on strike and refused to have their photos taken by the KIAT Kamera and did not fill in the manual records of teacher attendance on the grounds that they could not receive the hardship allowance. The teachers argued that as long as they completed their teaching hours, they could go home and work in the fields."

Although SAM+Cam incentivized only teacher presence, the researchers found evidence that this approach also enhanced teacher effort. The researchers noted that the treatment conditions for schools in SAM+Cam required rather basic changes in the behavior of the teachers and UC members, but did not necessarily augment the educators' intrinsic motivation. In other words, they may have complied with KIAT Guru guidelines without internalizing the goals of the project. In several schools, teachers focused their efforts on behaviors that would have a positive effect on the scores they received from the UCs. For example, the teachers tended to pay more attention to mathematics and Indonesian lessons, at the expense of other subjects that others might consider just as valuable. It could also be argued that attaching so much weight to presence at school might have reduced their motivation to work on creating more engaging or creative lessons. However, although SAM+Cam was not structured to reward teachers for improved performance in the classroom, the researchers did not collect any evidence indicating that teacher attention to performance declined as a result of the focus on presence. Furthermore, improved teacher attendance tended to bolster educators' overall work ethic; over the course of the project, they gradually displayed a stronger sense of professionalism. If this trend continues, it is quite possible that the shift in teachers' attitudes will have a positive impact on many facets of their work.

SAM+Cam offered the most feasible footing to improve the quality of education service delivery. Despite the challenges, the researchers concluded that the conditions applied to schools in SAM+Cam had the greatest potential for success, because they were easier to implement and less likely to provoke resistance from education stakeholders compared with the conditions applied to schools in the other intervention groups. Furthermore, the implementation of SAM + PPM based on teacher presence created a strong foundation on which to build. Convincing teachers to attend school regularly was an initial step that could support more ambitious reform initiatives in the future.

SAM+Cam Case Study: Kondok

Kondok Elementary School is in the village of Golo Wedong, on the island of Flores, in the province of East Nusa Tenggara. The region is sparsely populated and faces a range of challenges due to its climate, which is marked by extremely wet and dry seasons. Nevertheless, agriculture dominates the economy. In contrast with most of the regions in Indonesia, most inhabitants of the island of Flores consider themselves Catholic. Although Kondok is a Catholic institution, it follows the Ministry of Education curriculum. The school serves 181 students and employs 10 teachers. The current principal has only been at the school since August 2017 but has already earned the respect of teachers and parents. As a teacher remarked, "the sense of discipline has really increased" at the school since the new principal arrived.

Over the course of the KIAT Guru pilot, the researchers observed significant changes in school-community relations and learning activities. Some of these changes were visually apparent to visitors to the school. Students, teachers, and administrators all seemed to be taking their responsibilities more seriously. In addition, the campus looked cleaner and more inviting. According to the final report prepared by the researchers, "children are developing a culture of maintaining a clean school environment. Trash cans can now be found in the corners of the school yard." Students began to attend the weekly Monday morning assemblies more regularly and were careful to wear their school uniforms to those gatherings.

This was one indication that parents were taking seriously the contents of the service contracts they signed, which included a pledge to make sure students ate breakfast before school, were equipped with the required school supplies, and were provided the assistance they needed to complete their homework.

In class, children seemed more alert and active than was the case only a few months earlier. Teachers, too, displayed greater commitment to their work. They invested more time preparing for lessons and providing support to students who needed extra help. Over time, they incorporated more student-centered learning activities in the daily schedule. They were also more cognizant of children's behavior in class and adjusted lessons when necessary. "If the students lack energy," a teacher remarked, "I start the class by singing."

Relations between the UC and the teaching staff at Kondok were quite good. Teachers and members of the UC met informally almost every day. In addition to small talk, they discussed the development of the school and the students. This positive relationship was sustained due to the openness of the teachers to the feedback provided by the UC. According to the principal, the financial incentives offered to teachers triggered the improvements in teacher enthusiasm and discipline. "The hardship allowances they receive have made teachers more enthusiastic," he commented. Teachers backed up this assertion. For example, one instructor remarked that the provision of the allowance "has created a positive incentive for teachers. If we make KIAT Guru work, we receive allowances." Another educator stated that, "the KIAT Kamera provides me with the incentive to be more disciplined as a teacher." This finding reveals a rather wide misconception from the teachers that KIAT Guru brought hardship allowances to their schools. The rolling out of KIAT Guru aligned with the timing of the Ministry of Education and Culture changing the eligibility criteria for allowances.

Driving the improvements were the combined efforts of the principal, UC, and village cadre. KIAT Guru brought them together and encouraged them to pool their efforts. According to the village cadre, "when we experience difficulties, we all work together to support the activities of the UC." All three individuals were committed to improving the image of the school. They dedicated themselves to increasing the financial resources allocated to education and garnering community support for the school. The meeting described in the following captures the collaborative efforts that individuals in positions of authority relied on to effect changes at Kondok Elementary School:

By 11:30 on a Sunday morning, all nine members of the UC have arrived at the monthly meeting. The facilitator praises the active work of the UC at this school. In his view, one of the strengths of this UC is the members' enthusiasm for monitoring teachers and school activities. "They work hard voluntarily," explains the facilitator. "We are committed to this work only because we want to see our children succeed in the future. That's the only reason," says the chair of the UC.

At this meeting, each UC member sits next to a teacher who is being evaluated. The chair of the UC assesses the principal. The teacher evaluation is based on the teacher manual attendance and the teacher attendance verification form, as well as supporting evidence provided by the teachers, such as permits, notebooks from group study visits, teacher homework books, and photos of teacher attendance. The atmosphere in the room is very lively. One of the senior teachers most feared by students, Ibu Karoline, often referred to as Bu Lin, hurriedly approaches Mrs. Maria, a member of the UC. Mrs. Lin is carrying the attendance forms, study group visit books, and homework books. "Please prepare the documents," says Mrs. Maria modestly.

Mrs. Lin immediately hands over the documents. Mrs. Maria examines them one-by-one, starting with the attendance forms, group study observation book, and homework assignment book. She pays more attention to the list of study group visits. Apparently, the parents of the students signed the book. After reviewing the notes, she kept during her interviews with students about Mrs. Lin's actions in the classroom, Mrs. Maria indicates that Mrs. Lin kept her service promises. This conclusion is supported with evidence that she provided students motivation, in the form of advice, praise, and her teaching methods. Based on the results of the observation, Mrs. Maria gives her a perfect score. After learning of this, Mrs. Lin looks happy. A big smile spreads across her face. "Thank you," she says. Mrs. Maria nods. She looks relieved that the day's tasks have been completed.

By the end of the afternoon, most of the teacher assessments have been completed. Almost all the teachers, including the principal, received a score of 100. Mr. Afrianus, who received a score of 98, is the only exception; the reason is that Mr. Herman discovered that Mr. Afrianus missed more than three days of school. According to the service agreement, if a teacher misses more than three days, points must be deducted from their score. Mr. Herman also found evidence in the interview with students form that Mr. Afrianus sometimes arrived at school late and went home early, although he did not admit that on the forms he submitted.

"How is this, sir? On the teacher attendance verification form there is no evidence that you came to school late, but according to the data from student interviews, Pak Afri got to school late and went home early?" Mr. Herman asks fiercely. "Yes, it's true. I am not careful," said Mr. Afrianus, giving up. His score is changed. As soon as the FLG is filled out and the assessment is complete, the principal, facilitator, and village head busily sign the forms.

These descriptions highlight the widespread changes that have been implemented at Kondok in response to KIAT Guru. Several of the practices introduced, such as the system of evaluating teachers, will need to be refined; score inflation undermines the usefulness of these measures. But the community's attention to education has increased substantially since KIAT Guru was introduced. The swell of support for the school indicates that the program is on the right track.

Impact of SAM+Score

The impact of KIAT Guru at schools in SAM+Score was less powerful compared with the other intervention groups. Although the data collected early in the KIAT Guru implementation process highlighted the potential of SAM+Score, those initial signs of possibility were overshadowed by serious issues that surfaced at all three schools. Entrusting the UCs to evaluate teachers' instructional effectiveness proved more difficult than had been anticipated and created conflict between teachers and community members.

Evaluating teacher performance seems to be too overwhelming a responsibility for the UC. Finding community members who have strong education credentials and are willing to serve on the UCs can be challenging. In rural locations, teachers tend to have earned more advanced diplomas than the parents have, and the teachers have a more thorough understanding of pedagogy and curriculum. In contrast, the UC members are not likely to have a solid grasp of concepts such as how to write a lesson plan, construct a learning assessment, or modify pedagogy to accommodate students with special needs. This limited knowledge about teaching and learning undermines their ability to assess the effectiveness of individual teachers or provide specific feedback on how instructors could improve their practice.

Teachers in SAM+Score tended to receive high scores, which did not correlate with the quality of their performance. All the UCs in SAM+Score created scorecards for assessing teacher performance. Completing those scorecards with references to individual teachers proved challenging. In many cases, the UCs had a general sense of what teachers should strive to accomplish, but the scorecards rarely provided information that helped the teachers to improve the quality of their instruction. Differences in teachers' ratings tended to be minimal, and the average scores were quite high.

The UCs and teachers did not find the approach appropriate, as it created tensions between the stakeholders. At some schools, teachers were not invited to monthly meetings because the UC members did not feel comfortable discussing teacher effectiveness publicly, in front of the people being evaluated. Cognizant of these issues, teachers often questioned the validity of the performance evaluations produced by the UCs. In some schools, a sense of ill will developed between teachers and UCs, and that feeling intensified between the first, second, and third rounds of data collection. This finding raises serious questions about the sustainability of the SAM+Score interventions. Requiring UCs to evaluate teachers' instructional effectiveness undercut cooperation among education stakeholders in the village and produced a gradual but steady erosion of support for KIAT Guru. In this way, linking community empowerment to evaluation of teacher performance seemed to undermine one of the fundamental goals of KIAT Guru—developing a shared sense of responsibility for improving the quality of education in school communities.

Incentivizing teacher performance based on the community scorecard resulted in a narrowing of teachers' efforts. Another negative outcome of asking the UCs to evaluate teacher performance was that instructors tended to devote considerable attention to the specific indicators that formed the basis of the UC assessments. The researchers documented the tendency of instructors to make teaching decisions based primarily on the community scorecard indicators, rather than on their professional knowledge or understanding of student needs. This was especially problematic when performance scorecards were constructed by people with limited knowledge of the teaching-learning process. Although this finding is true across all three intervention groups, tying the community scorecard results with the amount of TSA received by eligible teachers further enhanced the narrowing of efforts.

Finally, SAM+Score resulted in conflicts among stakeholders. The strong consensus among the team of qualitative researchers at the end of the project was that the quality of education delivered at schools in SAM+Score had not improved. More striking were the conflicts between UC members and teachers that arose—and intensified—as the project progressed. After reviewing the data collected between October 2016 and March 2018, none of the members of the research team expressed support for SAM + PPM based on teacher service quality. Similarly, the impact evaluation conducted in 270 schools found that SAM+Score was the only intervention that resulted in negative findings, particularly among non-allowance recipients, whose level of effort declined significantly compared with that of their colleagues who received the hardship allowance.

SAM+Score Case Study: Simpang Dua

A visual survey of Simpang Dua Elementary School 07 suggests that KIAT Guru produced some positive changes at the school. As a member of the UC explained, "the service agreement gives value to such work because the school used to be dirty, like a slum." A teacher made a similar observation: "yes, cleanliness is actually included in the service agreement; it is mutual cooperation, and we could actually buy a lawn mower," thanks to the provisions of the agreement. Students no longer have to sidestep pigs sunbathing in mud puddles outside their classrooms. Last year, parents dug a ditch to drain the puddles. In addition, the school grounds look neater, although no one has bothered to pick up some garbage scattered outside the fifth grade classroom. Flower gardens have been planted in front of the classrooms and the school office.

Daily activities also indicate that the community is committed to improving the school. New habits are being developed through daily school routines designed to foster a sense of discipline. Before KIAT Guru was implemented, the principal was frequently absent and did not serve as a positive role model for the teachers. Now, when a teacher is absent, the principal fills in for that person. He has become more assertive and has taken responsibility for resolving conflicts among the teachers. He has begun to attend the flag ceremony every Monday and makes sure that students and teachers take the ceremony seriously.

Prior to the introduction KIAT Guru, teachers frequently arrived at school late, or not at all. They often scrawled notes on the board and then went home long before noon. Some spent long stretches of the day seated in their classrooms without teaching any lessons. That has changed. Most teachers now arrive at school before 8:30 and do not leave until 12 or 1. They follow the posted lesson schedule and teach the specified number of hours. They also explain the material more thoroughly and provide real-life examples that help students understand the curriculum. Students have noticed these changes in the behavior of their teachers. "In the past, the teacher did not explain ideas very clearly," remarked one student. "Now they give complete explanations."

An outcome of teachers' increased attention to pedagogy is that students appear more engaged and curious in their classes. During the researchers' first visit to Simpang Dua, the students tended to be passive and silent and answered only when the teacher called on them. But by the midline visit, the pupils were participating more actively in learning activities, unashamed to ask questions about information that they did not understand. Before the students go home at the end of the day, they now all shake hands with their teachers.

Creation of the UC has also increased the pressure placed on community members to become involved in the education of their children. The UC has assumed responsibility for assessing teacher presence and performance. On the surface, these changes seem positive. In practice, however, the UC has not carried out its responsibilities optimally. The principal as well as the teachers have doubts about the UC's ability to fulfill the duties outlined in the service agreement. According to the principal, most of the UC members lack the educational background necessary to evaluate teaching performance.

Although teachers at Simpang Dua initially seemed happy, open, and eager to participate in KIAT Guru, their attitudes have deteriorated steadily since the program began. Ineffective practices by the UC, combined with a lack of clarity about how hardship allowances are determined, have caused many teachers to become critical of KIAT Guru. Teachers at the school do not believe that the members of the UC are qualified to evaluate instructional activities, and the teachers worry that the assessments are not always based on accurate data. The instructors think that evaluations of their performance have been based largely on reflections shared by students. Yet, the teachers have not had opportunities to meet with the UC to receive clarification about the evaluation process. This has created ill will and jealousy among the faculty.

According to one instructor, "UC members do not understand how to assess teachers. One teacher received 113 percent of the possible performance score, which is impossible. In addition, they only assess performance based on the teacher attendance log. If teachers want to, we can be naughty. We can fill in the logs even if we are not really in school." Another teacher related that, "so far only six UC members have been active. Sometimes only three members attended the meetings when assessments were shared, so the village cadre signed on behalf of the UC members who were unable to attend." Growing concerns about the fairness of the system used to evaluate instruction has bred contempt among some school employees. As one teacher remarked, "go ahead and cut my rating, cut it. I won't let that affect me." This teacher, like many of her colleagues, has developed an adversarial relationship with the UC.

Initially, establishment of the UC as a form of community involvement was seen as a positive development. But school employees recognize that they have not yet found an effective way to involve the community in school activities. At other schools, the UCs have provided teachers with information that helped them improve. But the UC at Simpang Dua has not fulfilled its responsibility for independently collecting and analyzing data on teacher performance. Teachers at the school feel undermined rather than supported by the UC.

Influence of Local Culture

The case study schools are in disadvantaged districts, with highly homogenous communities. All the schools included are located in three districts in West Kalimantan (Kalbar) and East Nusa Tenggara (NTT). The three districts share several common characteristics. All are underdeveloped and experience higher levels of poverty compared with other districts in the country. Rural poverty and income inequality are persistent problems in all locations. Another challenge confronting all the districts is the significant difference in living standards between urban and rural areas. Villages in the three districts tend to have scarcer population compared with the national average. The communities are highly homogenous and belong to the largest local religion and ethnic groups (World Bank 2019).

Most of the parents work in agriculture, and many of them expect their children to help with household chores and farming on a regular basis. Kalbar and NTT are less developed than other parts of Indonesia, with subsistence agriculture playing an important role in their economies. Between 80 and 90 percent of the parents from the 270 KIAT Guru schools work in agriculture. As a result of the central role that farming plays in the communities where the

qualitative study was conducted, many parents prioritize farming activities above education. Two-thirds of the children in the 270 schools are expected to help with household chores. And about 10 percent of the children are involved in farming. During the harvest season, the nine case study schools reported high levels of student absence.

Religion exerts an important influence on families living in the two provinces. Unlike most citizens of Indonesia whose religion is Islam, Catholicism is the main religion in the five districts, with NTT having nearly 90 percent Catholicism, while residents of Kalbar practice a mix of Catholicism, Islam, and Protestantism (World Bank 2019). In the case study villages, the UCs frequently held meetings and met with parents at local religious sites, because they determined that this was an effective way to spread information about KIAT Guru. However, religious culture did not appear to have a direct impact on the responses to the program. The researchers also observed that more widespread acceptance of alcohol consumption in Kalbar sometimes interfered with data collection and UC activities. The researchers did not observe correlations between families' religious orientation and their level of support for KIAT Guru.

The qualitative researchers documented significant differences in perceptions about the relationships between communities and

the government in NTT and Kalbar. At UC meetings held in schools in NTT, the teachers were always present, whereas the teachers in Kalbar rarely attended UC meetings. In NTT, people were generally more eager to engage in open discussions about government activities. Individuals who had concerns about government offices—and schools—expressed those opinions without hesitation. Such norms of open discussion helped the UCs gauge local opinions about education and communicate plans for KIAT Guru to parents. In contrast, in Kalbar, the dearth of open discussion combined with political conflicts among village leaders complicated the work of the UCs.

Summative Assessment

In all nine schools, the overall effects of KIAT Guru were positive. In March 2018, the team of qualitative researchers met to review the data collected over the course of the qualitative study, to identify the factors that had the most direct impact on KIAT Guru's success or failure and draw conclusions about the effects of the treatment conditions. Table 14 presents the researchers' assessment of the overall impact in each of the schools.

The team of qualitative researchers observed the most positive outcomes at schools in SAM+Cam. Although the evidence collected at the nine schools included in the qualitative study indicates that the introduction of KIAT Guru leveraged some improvements at schools in SAM, this approach to reform was considered more unpredictable and difficult to enforce. Although the schools in SAM+Score initially showed great promise, several issues connected to the evaluation of teacher performance surfaced over the course of the project and interfered with the school improvement process. By the final round of data collection, none of the researchers expressed support for SAM+Score.

The research conducted in Indonesia underscores the importance of developing reform approaches that fit the capacity of local actors and can be institutionalized within existing social and governmental structures (Cannon 2018; DFAT 2014; Van Der Werf et al. 2000). The evidence from the KIAT Guru qualitative study indicates that SAM+Cam, a combination of SAM and PPM based on teacher presence, has the greatest potential to produce these outcomes.[9]

Table 14: Overall Impact of KIAT Guru, by Treatment Group

Intervention	School	Baseline	Midline	Endline	Change
SAM	Sangka	7	9	+2	+2
	Engkangin	8.1	9	+.9	+1
	Sungai Laur	4.1	8	+3.9	+1
	Average	**6.4**	**8.67**	**+2.27**	**+1.33**
SAM+Cam	Kondok	6.6	8	+1.4	+4
	Sampuraneh	7.1	5	-2.1	0
	Usaba Sepotong	4.6	6.5	+1.9	+3.5
	Average	**6.1**	**6.5**	**+0.4**	**+2.5**
SAM+Score	Konang	7	9	+2	+4
	Sungai Keli	6.2	9	+2.8	0
	Simpang Dua	4.8	3	-1.8	+1
	Average	**6.0**	**7.0**	**+1**	**+1.67**

Note: Values are on a scale of 1 to 10.

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9 It is important to recognize that the relative success of SAM+Cam over SAM is not evidence of the effectiveness a pure Cam treatment. The difference between SAM+Cam and SAM should not be interpreted as the positive impact of a pure camera-based performance-pay treatment without assuming no interaction effects between SAM and the attendance-based camera-supported performance-pay interventions.

06 Links to Impact Evaluation and Process Monitoring

The qualitative research was conducted and analyzed independently from the impact evaluation and process monitoring. Multiple tools were used to assess the impact of KIAT Guru on school communities. Although the qualitative evaluation focused on nine schools, a quantitative evaluation investigated the project's impact on 270 primary schools, and a process monitoring on 203 schools where KIAT Guru conducted three interventions. When they conducted their site visits and discussed the results of their work, the qualitative researchers were informed of some of the process monitoring data, but they were not informed of the results of the quantitative evaluation. This approach was taken so that the qualitative researchers would focus on the evidence they collected and develop their own conclusions before learning about the findings of the quantitative study.

Although the qualitative, quantitative, and implementation teams conducted their analyses independently, they all concluded that SAM+Cam had the greatest potential to leverage positive changes in Indonesian schools. The qualitative and quantitative analyses overlap in many key areas, and highlight the academic, financial, and social benefits of KIAT Guru. For example, the student learning assessments administered by the quantitative team document gains in student achievement over the course of KIAT Guru implementation. As table 9 indicates, student performance on the math and language assessments improved after KIAT Guru was introduced. Furthermore, the students in SAM+Cam made the most significant gains. The quantitative survey data also captured the positive influence of KIAT Guru on student and teacher presence in school. Table 15 shows these positive trends in the group of 270 schools surveyed.

Table 15: Student and Teacher Presence (270 Schools)

Treatments	Teacher presence in school (%)		Student presence in school (%)		Classrooms without a teacher (%)	
	Baseline	Endline	Baseline	Endline	Baseline	Endline
Control	77	80	89	90	20	15
SAM	77	84	90	91	16	11
SAM+Cam	79	85	90	92	20	11
SAM+Score	79	80	99	90	19	12

Another significant finding of the quantitative survey is that linking the amount of the remote area allowance to teacher presence increased the impact on teacher behavior. Improvements

in teacher presence were greater among individuals who were eligible to receive remote area allowances than among their non-recipient colleagues (table 16). These findings strongly align with the findings of the case studies, which underscore the value of providing financial incentives to teachers to leverage changes in their behavior.

Table 16: Presence in School between TSA Recipients and Non-Recipients

Treatment	TSA recipients (%)	Non-recipients (%)
Control	82	80
Treatment 1	84	84
Treatment 2	88	85
Treatment 3	83	74

Note: The data are from teacher absence surveys of 1,954 teachers, conducted by the World Bank in March-April 2018.

The process monitoring data also reflect increasing, although varying, local government support for education. In addition, when local government officials and community leaders are provided a more active role in education decision making, they are more likely to increase funding for education (table 17). However, the amount of village funds allocated for UCs varied across the nine case study villages, as did the willingness of village government officials to increase it over the year (table 18).

Table 17: Financial Support Provided by District, Subdistrict, and Village Governments

Year	District government budget allocation (Rp)	Village government budget allocation (Rp)
2017	1,562,000,000	889,650,000
2018	929,500,000	1,844,900,000
Total	2,491,500,000	2,734,550,000

The collection of data generated by the quantitative researchers underscores the benefits of the changes introduced in schools in SAM+Cam. Creating a formal structure that empowers members of local school communities and centering their work on monitoring the presence of teachers appears to offer the greatest potential to produce positive changes in the education services provided to rural school communities. As presented in table 19, SAM+Cam has significantly and positively improved the presence of hardship allowance recipient teachers, parental efforts, and learning outcomes in mathematics and Indonesian.

Table 18: Village Government Allocations to User Committees in the Nine Qualitative Study Villages

Treatment	School	2017 (Rp)	2018 (Rp)
Treatment 1	Sangka	10,000,000	No data
	Engkangin	1,515,000	7,744,000
	Sungai Laur	10,000,000	10,000,000
	Average	7,171,666.67	8,872,000
Treatment 2	Kondok	7,000,000	10,500,000
	Sampuraneh	902,500	7,995,000
	Usaba Sepotong	8,500,000	8,500,000
	Average	5,467,500	8,998,333
Treatment 3	Konang	3,000,000	No data
	Sungai Keli	No data	10,000,000
	Simpang Dua	3,000,000	3,000,000
	Total Kelompok 3	3,000,000	6,500,000

Table 19: Summary of Findings from the Quantitative Study

Main outcomes		SAM	SAM+Cam	SAM+Score
Teacher presence	In school	0	+	0
	In school and working	+	+	0
	In school and teaching	0	0	0
	TSA-recipients	0	++	0
	Non-TSA recipients	0	0	-
Parent efforts	Total	++	++	++
Learning outcomes	Mathematics	0	++	+
	Indonesian	+	++	+

Stronger positive effect	Positive effect	No effect	Negative effect

Note: TSA = Teacher Special Allowance.

07 Project Sustainability

The SAM introduced through KIAT Guru can be sustained in the future, provided that sufficient attention is devoted to supporting key stakeholders and the relationships that link them. In recognition of the strong opinions many community members have about their schools and the likelihood that their priorities will not always match, it should not be assumed that the activities facilitated by the UCs will always meet their goals. Yet, the evidence of changes in community relations and teacher performance documented by the researchers underscores the benefits of implementing this ambitious reform approach.

However, the challenge for longer-term sustainability is well documented in various studies. A body of research highlights the reality that successful implementation of development projects does not always correlate with prolonged positive impact. In his study of the impact of foreign aid worldwide, Riddell (2014, i) observes that over 75 percent of development projects meet their immediate objectives, yet "sustaining benefits remains a challenge and there continue to be aid failures." According to Riddell, the most valuable lesson gleaned from research conducted over the past 30 years is that "aid's potentially beneficial impact depends most critically on understanding the usually complex context within which it is inserted—though many aid decisions remain insufficiently informed by this knowledge" (Riddell 2014, 2). Framing development as a linear process organized to produce a discrete set of outcomes, Riddell asserts, is short-sighted. Instead, it is valuable to acknowledge that social changes involve nonlinear patterns and processes that emerge "from the complex interaction of cultural, economic, social, institutional and political forces" (Riddell 2014, 31).

Cannon analyzed education development projects implemented in Indonesia since 1960 and drew similar conclusions. His report on this topic draws attention to a pattern of education initiatives that meet their initial objectives but prove difficult to sustain over the long haul (Cannon 2018). The tendency to focus on impact rather than sustainability has exacerbated this situation. Another factor that frequently undermines the durability of education reform efforts is the tendency for individuals and organizations to work in isolation, to "stand as silos in a field of knowledge" (Cannon 2018, 9). Cannon, Arlianti and Riu (2014) find strong evidence of potential sustainability when the following key factors are aligned: leadership commitment, planning, financing, communities, and a history of development in basic education over an extended period.

These perspectives draw attention to the complexities associated with leveraging long-lasting changes in Indonesian schools. They accentuate the benefits of considering the short- and long-term consequences of reform initiatives, and of shaping policy recommendations to fit the unique social, political, and historical characteristics of school communities. The following sections use the factors that support sustainability identified by Cannon, Arlianti and Riu (2014) to discuss the insights gleaned through the qualitative study, which can inform future iterations of KIAT Guru.

Leadership Commitment

Obtaining the commitment of key actors is crucial for long-term sustainability. One of the key findings of Cannon's study of the education reform projects implemented in Indonesia over the past 50 years is that changes are more likely to take hold when the "district and participating schools have ownership of change, and there is a shared sense of responsibility for achieving the evident quality outcomes" (Cannon 2018, 19). The data collected by the qualitative researchers suggest that the following actors play critical roles in assuming this shared sense of responsibility for KIAT Guru: the village head, village cadre, principal, and UC.

At some point, the communities relied on all these people to provide some form of guidance for KIAT Guru activities. They were required to display leadership individually and collectively. In schools where these four stakeholders worked in tandem to promote a common set of goals, they produced an array of educational, financial, and social benefits in those communities. In communities where local leaders competed for power, the UCs were less productive.

The team of qualitative researchers concluded that the village cadre would be the most logical individual to coordinate communication among the stakeholders. The village cadre could also facilitate regular meetings of the leadership team comprised of the four key stakeholders. The leadership team would be assigned responsibility for producing clear descriptions of the roles and responsibilities of the UCs, developing priorities and focus strategies for education initiatives, cultivating support for the program within the village, and maintaining positive relationships with local government offices. It will be important to provide the village cadres extensive training so that they can coordinate the various players involved in KIAT Guru oversight.

Planning

A key finding from the qualitative study is the importance of clearly communicating the goals of KIAT Guru and clarifying the duties of all parties involved. In the schools that achieved the most impressive gains, this was done with noteworthy transparency. Because the initiative requires the buy-in of actors operating at multiple levels of the education system, it is imperative that all stakeholders understand the overarching structure of KIAT Guru implementation, and how they fit into that system. Specific roles and responsibilities need to be outlined in advance, to reduce overlap and conflict. The leadership team described in the subsection above could be given the authority to oversee this coordination at the village level.

Several key follow-up recommendations to strengthen KIAT Guru emerge. As they develop medium- and long-term plans for KIAT Guru, the national and district government leadership teams should address the following factors: (1) clarifying the overarching goals of the program, (2) developing clear plans for sustaining the program, (3) identifying the financial obligations of the different branches of government, (4) strengthening strategies for attracting a diverse group of community representatives to serve on the UCs and prevent already powerful individuals in the community from dominating, (5) socializing the wider community about KIAT Guru, and (6) strengthening tactics for mediating any conflict that might arise.

Finally, the relationship between the school committees and UCs needs to be clarified or combined. The project facilitation manual asserted that the formation of UCs should consider and draw memberships from existing committees, including school committee. However, since this was not enforced during implementation, in most cases the UCs were formed without involving school committee members. Although both groups conducted important work in the nine villages, the specific responsibilities of each committee and the ways they could support each other were not always clear. This created some confusion and duplication of efforts. Given the many similarities in the work of the school committees and UCs, to expand KIAT

Guru, it is important to either enforce that the UC memberships include school committees, or to incorporate the roles of the UCs as part of school committees' roles.

Financing

Funding from the village governments needs to be better regulated and standardized. One concrete way that local governments can demonstrate their commitment is by assuming some financial responsibility for UC activities (Cannon 2018). The Village Law requires the national government to disburse village funds for all village governments each year, which they have a great deal of discretion in deciding how to allocate. The qualitative researchers documented a range of attitudes and practices related to local government fiscal support for KIAT Guru. In some locations, the local governments provided generous subsidies for things like teacher incentives, salaries for school-contracted teachers, and UC operating expenses. In other locations, funds were only distributed after pressure was applied by subdistrict or district heads. This unevenness was a result of the absence of definite regulations on local governments' fiduciary obligations.

It will therefore be important to establish minimum (and perhaps maximum) levels of local government financial support and monitor compliance with those guidelines. In some villages, community members were only willing to participate in KIAT Guru–related activities (such as serving on UCs) if they were remunerated for their efforts. Although this financial compensation need not be exorbitant, rates of compensation should be clearly stated and consistently applied. Given the long history of corruption and financial leakage in the Indonesian government, it will be difficult to ensure strict compliance with such regulations. Nevertheless, careful planning and dissemination of expectations will be essential.

Community Participation

Community participation in education can improve teacher presence and performance. The data collected for this study support the following conclusions drawn by Suryahadi and Sambodho (2013, 156) in their research on teacher quality and absenteeism in Indonesia: "teacher absenteeism is lower in schools where communities take an active role in the management and monitoring of schools." The involvement of parents and community leaders in school decision making can create an impetus for teachers to invest more effort in their work; it can also forge a shared sense of responsibility for education. The data collected by the qualitative researchers suggest that including parents in ongoing school improvement efforts – and the documentation of teacher attendance – signals to teachers that the community values the work they do. When the responsibilities assigned to parents are clearly defined and carefully matched to fit their capabilities, representative groups of parents can generate a positive impetus for teachers to improve their performance. When there is a mismatch between what the school or government expects communities to do and the capacities of the community representatives, however, tensions can arise.

Parents also need to contribute to their children's education, which may positively affect motivation for learning. In all nine of the schools included in the qualitative study, the introduction of KIAT Guru augmented local support for education. The program provided an impetus for parents and other community members to become more involved in school activities, from supervising homework to attending special events and hosting afterschool study groups. KIAT Guru signaled to them that education is not the sole responsibility of teachers; rather, it is an obligation shared by all members of the community. In this way, various school stakeholders benefited from the collective efforts of parents, teachers, principals, and community leaders that were spurred by introduction of KIAT Guru.

In particular, support for the UCs to improve their capacities and carry out their roles needs to be strengthened. Identifying UC candidates who were qualified and interested in serving on the committees proved challenging in some locations. Serving on the UC could be quite demanding and often interfered with members' familial and income-producing responsibilities. In rural areas, many parents had little if any formal education. As a result, their knowledge about teaching and confidence in their abilities to assess school employees was limited. For these reasons, it will be important to recruit community members to serve on UCs and provide them the training and support that are necessary to carry out their work.

In addition, limiting the scope of UC responsibilities could increase their effectiveness and engender good will between teachers and UCs.

History of Development

The criteria for the UCs should continue to encourage representativeness to reduce elite capture. Relying on individuals with "a past-history of development in basic education over an extended period of time" (Cannon, Arlianti, and Riu 2014) to assume leadership for a project like KIAT Guru seems to make sense logistically, but there is also some risk associated with this approach. The researchers who took part in this study observed that in some school communities, individuals who had traditionally enjoyed a great deal of influence in the schools co-opted newly formed UCs. In locations where individuals who had previously wielded a great deal of influence continued to enjoy that power, previous practices tended to continue; key leaders did not feel compelled to consider new approaches to overseeing schools.

Setting up an institutional arrangement for the UCs to collaborate may strengthen their roles and performance. Given the context, a more productive way to capitalize on the experience of talented leaders and educators might be to form subdistrict clusters of community representatives and educators. In other words, establishing formal networks of UCs could encourage the sharing of knowledge and innovation—and prevent powerful individuals from dominating education decision making in the villages.

08 Conclusion

The data collected by the team of qualitative researchers in rural school communities underscore the positive effects of the KIAT Guru project, although with noted challenges.

The interviews with key stakeholders, observations in the schools, and review of school documents highlight the value of developing formal procedures that encourage members of rural communities to participate more actively in school activities, including the evaluation of teachers.

All nine communities experienced challenges as they formed UCs and implemented strategies designed to improve the quality of instruction and school-community relations.

These issues were connected to resistance to the power sharing that anchors KIAT Guru initiatives, as well as logistical factors (such as what to do when the KIAT Kamera broke). These kinds of challenges should be expected. They occur when almost any ambitious education reform is introduced. The inevitable bumps that surfaced as KIAT Guru was introduced should not overshadow the positive outcomes it impelled. Over a relatively short amount of time (October 2016 to March 2018), the researchers documented a range of positive changes that had taken place in the schools. These included improved teacher attendance, increased attention to instructional planning and lesson design, closer ties between schools and the surrounding communities, and a stronger sense of the value of education in the communities.

SAM+Cam of the three interventions offers the most promising approach and outcomes worth considering for policy and implementation rollout.

The implementation of three different treatment conditions afforded an opportunity to observe the impact and interplay of specific circumstances on implementation of the program. Institutionalizing a formal mechanism for connecting communities to the schools and including them in school improvement initiatives produced improvements in the schools and fortified links between communities and schools. Although the researchers observed positive outcomes from all three approaches, SAM+Cam (SAM + PPM based on teacher presence) showed the greatest potential to produce long-lasting change in the villages.

Although the team of researchers concluded that SAM could be considered in the future, the current state of the Indonesian education system makes the approach applied to SAM+Cam the more prudent choice.

If they are implemented effectively, the treatment conditions for SAM+Cam could create the foundation for change that would make it possible eventually to consider those applied to SAM.

Hypothetically, it might have been expected that the schools in SAM+Score (community empowerment + pay for performance based on teacher service performance) would yield the most widespread changes, because SAM+Score delegated greater authority to community representatives.

Yet, the depth of change associated with SAM+Score proved strenuous and ultimately limiting. The teachers objected to having their performance evaluated by the UCs, because the teachers viewed the evaluations of teaching as more subjective and dependent on UC members' interpretations and (limited) understanding of instructional practice. At the schools in SAM+Cam, in contrast, KIAT Guru induced changes that, although significant, did not provoke widespread conflict. In most cases, the individuals responsible for implementing the reforms, as well as the educators who were subject to the evaluation tools, were receptive to the more rigorous system of documenting teacher presence introduced through KIAT Guru. This reform approach provided communities a roadmap that proved helpful as they attempted to enhance the quality of teaching and learning in their schools. UC members were assigned clear, well-defined tasks. The feedback they provided to the schools—and the financial rewards tied to regular attendance—encouraged teachers to invest more effort in their professional responsibilities without generating strong resistance to change. The evidence of positive change in the schools observed by community members justified the efforts they were required to make.

For these reasons, the combination of community empowerment and pay for performance based on teacher presence shows the greatest potential for long-term sustainability.

The responsibilities of the key stakeholders (village cadres, school committees, UC members, principals, and so forth) will need to be carefully delineated and communicated; and if the project is to be scaled up, training should be provided to educators, community representatives, and government officials. If these conditions can be met, KIAT Guru can establish a more stable foundation for improvement in education in schools throughout Indonesia.

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