In an effort to improve education outcomes, many countries have introduced school-based management reforms to decentralize decision making to the school level. The idea is that by shifting decision-making authority to schools, where teachers and administrators are better informed about student needs, funds for education will be used more effectively to improve the teaching and learning environment.

While school-based management reforms are not uniform and vary significantly across countries, research suggests that countries where schools have more autonomy perform better on international student assessments. But evidence also shows that for school-based initiatives to be effective, institutional reforms should accompany increases in authority and resources to schools.

Indonesia began to decentralize its education services in 2003, and today schools are responsible for drawing up their own development plans and managing funds they receive through national and local school grant programs. However, evidence suggests that schools continue to struggle to implement school-based management.

Can Self-Evaluations and Soft Performance Contracts Help Schools Achieve Education Standards?

REACH supported a study in Jakarta to explore ways to strengthen school-based management and help schools use funding more effectively to improve performance.

The Results in Education for All Children (REACH) Trust Fund supports and disseminates research on the impact of results-based financing on learning outcomes. The EVIDENCE series highlights REACH grants around the world to provide empirical evidence and operational lessons helpful in the design and implementation of successful performance-based programs.
mechanisms and to use the funds they receive effectively. To address these issues, the Results for Education for All Children (REACH) Trust Fund provided a grant to Jakarta, Indonesia’s capital city and a special administrative region, to explore ways to strengthen school-based management. The project tested two interventions at the school level: a) a self-evaluation exercise based on a set of national education standards to help schools prioritize funding allocations; and b) the same self-evaluation exercise coupled with a soft performance contract between schools and the Jakarta government. While this contract committed the school to achieve targets associated with education, they were not linked to any financial rewards or sanctions. The randomized control trial explored how these interventions affected a school’s rating, as defined by its progress towards achieving the national education standards.

The results of the interventions varied with the level of managerial capacity in the schools. The self-evaluation tool only benefitted schools with low capacity and had no effect on schools with high capacity. The self-evaluation tool coupled with the soft performance contract had a positive impact on standards achievement in high-capacity schools but a negative effect on low-capacity schools. The findings demonstrate the importance of managerial capacity in determining the effectiveness of school-based management reforms.

**CONTEXT**

The Indonesian government has significantly increased its investment in education, and by constitutional mandate it must allocate 20 percent of its annual budget to education. This increase in expenditure has coincided with significant decentralization of education service delivery over the past two decades. Decentralization has put local governments, particularly district administrations, at the center of basic education service delivery. District responsibilities include the overall management of the education system as well as management of public financing for primary and junior secondary schools.

Schools receive two types of per capita grants to support the achievement of national education standards. The Bantuan Operasional Sekolah (BOS) grants are provided by the Government of Indonesia while the Biaya Operasional Pendidikan (BOP) grants are provided by local governments. Approximately 60 percent of districts and 45 percent of provinces provide schools with grants for their budgets. Schools are meant to use the funding to help them meet two sets of standards: the Minimum Service Standards (MSS) and the National Education Standards (NES), the latter of which are relevant to this study. The NES consist of 157 standards divided into eight domains: content/curriculum, process, student/graduate competency, HRD/educator, facilities/infrastructure, management, financing, and evaluation (Table 1). These are calculated for every school at least once every four years and are used for accreditation purposes.

Recent studies have shown however that schools in Jakarta were not allocating their resources effectively towards meeting the national standards. A World Bank public expenditure review found schools were spending little on teacher professional development but overspending on hiring non-civil servant teachers. Schools also spent significant amounts on school maintenance, despite that Jakarta government already implements a large school maintenance program. And government audits found many schools failed to produce expenditure plans, a requirement for receiving both types of grants.

In an effort to improve the quality of education, the Jakarta government...
introduced an electronic system to help schools align their funding allocations with the national standards and channel more funding to areas they were weak in. This system, called *Rencana Kegiatan dan Anggaran Sekolah berbasis Elektronik* (e-RKAS), features a built-in goods and services catalogue to help compute costs. It allows schools to produce an activity plan classified according to the National Education Standards, a spending plan on monthly expenditures, and a budget expenditure document that allows schools to monitor their expenditure. The system has enabled the Jakarta government to make its grant distributions conditional on the submission of school expenditure plans and allows education officials to monitor the design, progress, and implementation of these plans.

### WHY WAS THE INTERVENTION CHOSEN?

To support the use of the new electronic planning and resource-allocation system, the government wanted to explore different ways to help schools identify their weaknesses and use the system to allocate resources in a more effective way. Under the REACH grant, a self-evaluation tool was developed to help schools identify their strengths and weaknesses, while a performance contract mechanism enabled school leaders to define and work towards specific goals. Schools could then make better decisions on how to plan and allocate their resources using the online system. Little research has been done on the effects of school self-evaluations on education outcomes, while research on performance-based contracts has shown mixed results. The REACH-funded project sought to explore the effects of both by examining how self-evaluations, and how self-evaluations plus soft performance contracts, affected Jakarta schools’ efforts to achieve the National Education Standards.

The effectiveness of school-based reforms also depends on how decision-makers, particularly school principals, use their autonomy and available information. The capacity of such agents in school-based management has largely been studied from the perspective of how well participatory accountability mechanisms, such as the involvement of parents in schools, work. What has been less studied is how the capacity of the school leadership itself can alter school-based management outcomes. Presumably school-based management reforms would be less effective if school leaders lack the ability to use their autonomy and available information to make the best decisions. To address this question, the REACH project also looked at how school management capacity, measured at baseline, altered the effects of the two interventions.

<table>
<thead>
<tr>
<th>Domains</th>
<th>Examples of topics covered by standards</th>
<th>No. of standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Content/ Curriculum</td>
<td>Curriculum development and implementation; implementation of self-development programs; use of educational calendar</td>
<td>18</td>
</tr>
<tr>
<td>2. Process</td>
<td>Link between curriculum, syllabus, and lesson implementation plans; principal’s supervision of learning process and evaluation of teachers</td>
<td>11</td>
</tr>
<tr>
<td>3. Student/Graduate Competency</td>
<td>Students gain learning experience related to curricular goals (natural and social phenomena, environment, art, character development, etc.)</td>
<td>20</td>
</tr>
<tr>
<td>4. HRD / Educator</td>
<td>Qualifications of teachers, principals and other staff members</td>
<td>26</td>
</tr>
<tr>
<td>5. Facilities/ Infrastructure</td>
<td>Safety of buildings; availability of facilities</td>
<td>16</td>
</tr>
<tr>
<td>6. Management</td>
<td>School vision and setting goals; establishing and implementing planning; staff job descriptions and review</td>
<td>20</td>
</tr>
<tr>
<td>7. Financing</td>
<td>Use of RKAS planning tools in resource allocation</td>
<td>25</td>
</tr>
<tr>
<td>8. Evaluation</td>
<td>Classroom evaluation practices</td>
<td>21</td>
</tr>
</tbody>
</table>
A randomized control trial was set up to test two school-based management interventions in Jakarta schools: an electronic self-evaluation, and an electronic self-evaluation plus soft performance contract. A total of 150 junior secondary schools were randomly assigned to one of three groups, with 50 schools in each group. Schools in the first group completed the electronic self-evaluation and used the information to create their annual school plan. Those in the second group completed the self-evaluation, used the information to complete their annual plan, and signed soft performance contracts with the Jakarta government. The remaining 50 schools served as a control group, creating their school plans without any interventions. No school received the performance contract alone.

For the first group, school managers used an electronic self-evaluation tool to rate their school’s performance against the National Education Standards’ 157 standards. These included such items as principal’s supervision of the learning process and evaluation of teachers (under the Process domain) and curriculum development and implementation (under Content/Curriculum). This self-evaluation exercise helped the managers to identify where their schools needed to improve and where they needed more resources—information they could then use when drawing up their school development plans through the new online planning system e-RKAS. The school managers participated in an intensive, three-day training on how to rate schools based on the NES indicators.

For the second group, in addition to completing an electronic self-evaluation, school principals also signed soft performance contracts with Jakarta’s education department. These performance contracts were “documents of promise” in which school principals identified the NES domains where they would seek improvements for their schools and specified the target levels they would aim for, although the results were not linked to either monetary rewards or penalties.

The evaluation ultimately considered 132 of the 157 NES standards, and did not include standards that were either not collected as part of the survey or where there were a lot of missing values. Because of the high number of potential outcome variables, the evaluation grouped the standards into four categories. Three were based on the ease with which school management teams could affect them: standards that the management team could achieve alone (e.g., curricular standards); standards that required action by school stakeholders beyond the management team (e.g., student competency standards); and standards that likely required intervention from stakeholders outside the school including government authorities (e.g., staffing qualifications). The fourth category included the management standards domain (one of the NES’s eight domains and which incorporated standards addressing such things as school vision and goal-setting). This category was used to provide a measure of the management capacity of each school at baseline, so that
schools could be classified as low and high management capacity schools.

The outcome variable for the evaluation was the proportion of standards within each of the four categories that were “fully achieved.” The evaluation determined the impact of the two interventions by estimating how much the outcomes changed for each treatment group and comparing these differences with those of the control group. Tests at baseline of differences in the reporting and levels of the outcome variable between the treatment and control groups were generally statistically insignificant but a difference-in-differences approach was used to measure the effects of the two treatments.

To differentiate the effects of the interventions between schools with high and low management capacity, the average score of the management standards (for those without missing values) at baseline was used as an index. Management standards included having institutional vision and goals, having work plans and adhering to them, having guidelines and clear job descriptions for staff as well as performance evaluations of staff, among others. High and low management capacity schools were defined by being above and below the median index value, respectively.

While a randomized selection of schools allowed for effects of the two interventions to be unbiased estimates for the underlying population of 292 junior schools in Jakarta, the school management capacity was not exogenous in the evaluation and could possibly represent other underlying factors. To check if differences between high and low management capacity schools can be attributed to management capacity rather than other underlying factors, the differences in several background variables (such as school’s number of teachers, number of students, total school expenditures, etc.) between high and low management capacity schools were measured. No statistically significant difference between high and low management capacity schools was found for any of those variables.

### Table 2: Descriptive Statistics by NES Categorization

<table>
<thead>
<tr>
<th>NES standards by locus of autonomy</th>
<th>School management team</th>
<th>All school stakeholders</th>
<th>School and other stakeholders</th>
<th>NES management standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of NES standards included in the category</td>
<td>45</td>
<td>34</td>
<td>34</td>
<td>19</td>
</tr>
<tr>
<td>Average score of NES standards within the category at baseline</td>
<td>3.70</td>
<td>3.50</td>
<td>3.52</td>
<td>3.75</td>
</tr>
<tr>
<td>Proportion of NES standards fully achieved within the category at baseline</td>
<td>76.0%</td>
<td>67.4%</td>
<td>66.3%</td>
<td>80.3%</td>
</tr>
<tr>
<td>for schools with low baseline management capacity</td>
<td>74.1%</td>
<td>64.7%</td>
<td>66.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>for schools with high baseline management capacity</td>
<td>78.8%</td>
<td>71.3%</td>
<td>66.7%</td>
<td>87.7%</td>
</tr>
</tbody>
</table>
WHAT WERE THE RESULTS?

Receiving the self-evaluation increased the proportion of fully achieved standards under direct control of the school management team and of those that required action by both school and non-school actors, regardless of whether the school principal signed a performance contract. For the standards that the school management team had direct control over, positive effects were found from either receiving the self-evaluation alone or receiving it with the performance contract (0.03 SD for both). For standards controlled by school and non-school actors, a positive effect was found only when schools received both interventions (0.03 SD). Receiving the self-evaluation alone was also found to improve the proportion of fully achieved management standards (0.03 SD).

Self-evaluations had a positive effect on schools with low management capacity at baseline. While schools with high managerial capacity at baseline did not see a statistically significant impact from the self-evaluation, schools with low capacity saw a statistically significant positive effect in terms of achieving National Education Standards (NES) directly under their influence (0.04 SD) (Table 3). This result was not surprising because managerial capacity at baseline was determined by how effective schools were at managerial tasks such as having institutional vision, goals, and work plans. Thus, schools categorized as having high managerial capacity were arguably already good at managerial tasks and did not benefit from undertaking the self-evaluation. In contrast, schools with low managerial capacity gained new knowledge about their strengths and weaknesses that could help school leaders to prioritize and plan better and ultimately achieve a higher proportion of the national standards.

Adding soft performance contracts had a negative effect on schools with low management capacity. When the performance contract was added to the self-evaluation, schools with low managerial capacity saw a statistically significant negative impact on the proportion of NES standards they achieved that were under the influence of the school management team (-0.03 SD). This negative effect neutralized any positive effect of the self-evaluation. One potential explanation for this finding is that low-capacity schools may have set unrealistic or hard-to-achieve targets in terms of meeting the National Education Standards.

However, performance contracts had a positive impact on schools with high management capacity. In the case of schools with high management capacity, adding the soft performance contract to the self-evaluation had a statistically significant positive effect on achievement of NES domains directly under the influence of the management team (0.04 SD).
WHAT WERE THE LESSONS LEARNED?

Lessons on strengthening school-based management were drawn from the results of the intervention and the team’s experience supporting the Jakarta government. These included:

Developing a simple, objective, and effective self-evaluation tool for schools can make it easier for them to create a strong school plan. The current self-evaluation tool is quite complicated since it covers more than 150 standards. Even though it helped low-capacity schools improve their performance, a complicated self-evaluation can make it more challenging for schools to identify which issues they should prioritize in their school plan.

Both the local government and school leadership need to have a good understanding of any new school-based initiatives for them to be effective. Local governments play a central role in overseeing and disbursing funding to schools in Indonesia. The central government can support this role by providing good information to local authorities on new initiatives to improve implementation. In the case of the National Education Standards, school leaders should understand the importance of creating strong school plans and budgets so schools can effectively use government grants to achieve the education standards.

The use of a web-based filing system can be especially helpful in large education systems. Jakarta already has an online platform that allows schools to submit their development plans, while at the national level, all public and private schools in Indonesia can access a new electronic quality assurance instrument to conduct self-evaluations. Both the Jakarta and national governments are moving towards linking school planning and self-evaluation tools into unified electronic platforms. With more than 250,000 schools in Indonesia, the development of linked online platforms for conducting self-evaluations and submitting school plans will make it easier for school management and government authorities alike to monitor school progress and results.
Overall, these results support the idea of expanding the use of electronic self-evaluations to all schools.

**CONCLUSION**

Many countries are implementing school-based management reforms and giving more authority to principals, teachers, parents, and local communities to try and improve education services. Indonesia began decentralizing its education system almost 20 years ago, but conferring schools with more authority and funding hasn’t automatically led to higher-quality service delivery or improved learning. Institutional reforms are also needed, and the Special Administrative Region of Jakarta has been a pioneer of such efforts. Supported by REACH, Jakarta tested two school-based initiatives: electronic self-evaluations and soft performance contracts. The use of self-evaluations helped schools with low managerial capacity in their efforts to achieve National Education Standards, while it did not negatively impact high-capacity schools. The use of soft performance contracts, in contrast, had a positive effect on high-capacity schools but a negative impact on low-capacity schools. Overall, these results support the idea of expanding the use of electronic self-evaluations to all schools, and in fact, the Jakarta government is moving to link such a tool with its existing online school planning and budgeting system. The mixed result of the performance contracts underscores the important role of school management capacity in school-based management reforms. For such reforms to work, principals, teachers, parents, and the local community must have the information and skills needed to do their jobs, whether they are running a school, teaching students, or providing oversight—to achieve the common goal of giving students a better learning experience.


**PHOTO CREDITS:**

Cover: Students at a secondary school in Jakarta. Photo courtesy of World Bank.
Page 6: School managers participate in a three-day training on how to rate schools based on NES indicators. Photo courtesy of World Bank.

**RESULTS IN EDUCATION FOR ALL CHILDREN (REACH)**

REACH is funded by the Government of Norway through NORAD, the Government of the United States of America through USAID, and the Government of Germany through the Federal Ministry for Economic Cooperation and Development.

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