

RISE PROGRAMME IN INDONESIA

Contribution to Improving
the Quality of Learning

Preface



Over the course of five years, RISE Programme in Indonesia carried out 16 distinct pieces of research all over the country. These include 9 studies on teacher reform, 5 studies on educational innovations, 1 study on the impact of computer-based testing on the national exam, and 1 study on learning during the COVID-19 pandemic. We ran a large study, collected primary data from 85,000 respondents, and implemented learning laboratories with four local governments. We published 17 working papers and more than 200 follow-up publications from policy briefs, infographics, videos, blog posts to podcast episodes.

There are three points to note from RISE Indonesia's extensive efforts:

First, we leveraged our rich, contextual expertise and experience to identify critical issues in the Indonesian education system. Most importantly, we were able to work closely with the government, from the Minister of Education, Culture, Research, and Technology himself to local governments across Indonesia. By ensuring that our research topics are demand-driven, we could balance the mandate to contribute to the global body of knowledge with ensuring that our work is relevant to Indonesian policymakers.

Second, our team used a wide array of methods that could best answer different research questions. In addition to our RCTs and quantitative methods, we are especially proud of our six-month ethnographic research as well as our two-year longitudinal teacher diary study.

Finally, our research strategy was driven by real-world problems. Instead of offering new programs, we focused on identifying fundamental, deep-rooted constraints that are generally overlooked.

RISE Indonesia has shown that high-quality evidence, participatory engagements with policymakers, and a focus on real-world problem solving can bring about reform. The challenge now is to match the scale of the problem to how we can apply these methods to a still developing country with three time zones and speaks 762 languages. We're on the right track, but we're not there yet.

The system is massive, with 3 million teachers and 69 million students at primary and secondary levels. It is highly decentralized, meaning that 500+ local governments can autonomously set their own education policies. And without specific recovery policies, the significant learning loss due to prolonged school closures will likely worsen the learning crisis. We intend to continue working with policymakers on these issues, together with any global partners who share the same concerns.

Sudarno Sumarto, Team Leader of RISE Programme in Indonesia

Overview

RISE Programme in Indonesia is part of a global initiative that conducts research in education to support the improvement of student learning. In Indonesia, RISE examines **teacher reform at the national level** (Reform Area A, comprises 8 studies) and **education policy innovations at the district level** (Reform Area B, comprises 7 studies). During the COVID-19 pandemic, one study was added that examines **the impact of the pandemic to students' learning**.

RISE research activities in Indonesia are carried out in 2017–2022. Throughout its implementation, RISE partners with several local governments, which also serve as its learning laboratories, to design, evaluate, and adapt their education policies to be more effective in improving the quality of education. The four partners are the Governments of the Province of Jakarta, the City of Yogyakarta, the District of Kebumen, and the City of Bukittinggi.

RISE Programme in Indonesia is managed by The SMERU Research Institute, in partnership with the Amsterdam Institute for Global Health and Development and Mathematica (headquartered in New Jersey, USA).

A1 | TEACHER RECRUITMENT

Teacher assessments, such as the Teacher Competency Test, confirm the low competence of Indonesian teachers. The 2018 Programme for International Students Assessment (PISA) results also shows a number of qualities of Indonesian teachers that may hinder learning.

One attempt to improve teacher quality is to **enhance the quality of teachers recruited**. What is the landscape for teacher recruitment in Indonesia? What are the factors that prevent teacher recruitment from attracting good quality teachers? How does the civil servant recruitment system affect the quality of public school teachers? This study identified the factors that influence teacher recruitment to understand the underlying issues that hinder the recruitment of quality teachers in Indonesia.



Study findings

- The division of authority for teacher recruitment between ministries and between the central and local governments is incohesive.
- Getting good teachers into the pool of recruited teachers is difficult to actualise since the process is held hostage by political economy interests of certain parties (politicians, ministries, education agencies, school principals, and teacher associations).
- Many teachers view their primary identity as civil servants rather than educators.
- The current teacher recruitment process, which is part of the general civil servant recruitment, prioritises insight of nationalism and general knowledge rather than teaching skills.
- Many prospective teachers believe that the teaching profession requires minimum skills; they think they can always start as an honorary teacher and later be appointed as a civil servant.

Publication



“The Struggle to Recruit Good Teachers in Indonesia: Institutional and Social Dysfunctions” working paper



“Strategies to Improve Indonesia’s Teacher Recruitment Process” policy note



“Teacher Recruitment in Indonesia: Institutional and Social Dysfunctions” infographic



“Political Dimension of Teacher Recruitment” blog



“Civil servant recruitment makes Indonesian teachers to be of low quality” blog

A2

SELECTION CRITERIA OF THE PRE-SERVICE TEACHER TRAINING (PPG)

Teacher candidates or novice teachers with less than five years of teaching experience in Indonesia must take a one-year **pre-service teacher training programme (PPG)**. Since the number of seats in PPG is limited, candidates are screened through admission selection and tests.



Therefore, candidates who attend the programme are supposedly highly qualified as they have passed the selection and tests, and are envisioned to become high-quality teachers. This study investigated whether admission criteria into a teacher training programme can predict teacher performance in Indonesia.

Study findings

The pre-service PPG admission criteria can be used to predict teacher candidate's performance at the end of the programme, but they do not predict performance in the classroom.

Publication



“Selecting Teachers in Indonesia: Predicting Teacher Performance using Pre-Employment Information” working paper



“Improving the Quality of Teacher Education Delivery in Indonesia” policy note (only available in Indonesian)

A2

EVALUATION OF THE PRE-SERVICE TEACHER TRAINING (PPG)

The 2005 Teacher Law mandates that every teacher must have a minimum qualification of a bachelor's degree. After completing an undergraduate degree, teacher candidates can attend the **pre-service teacher training programme (PPG)** to obtain a teaching certificate and hence receive teacher allowance. However, the number of seats in PPG is limited. Only those who passed the admission selection and tests—holders of Bachelor of Education or other undergraduate degrees—can attend the programme. This study examined to what extent the quality of pre-service PPG graduate teachers, who are certified and are viewed as professional, differs from their counterparts who graduated from the same university but did not participate in the programme.



Study findings

- PPG has no impact on teachers' professional knowledge as measured by standardised scores in content knowledge and pedagogical content knowledge tests.
- PPG shows no impact on test-score performance in numeracy and literacy of the students taught by teachers who graduated from PPG.
- The lack of variability in PPG effects partly reflects a poor design and fragmented implementation of the programme.
- Teacher candidates' primary motivation to participate in the pre-service PPG is to obtain a teaching certificate and hence receive teacher allowance, while improving teaching competence is their second motivation.
- Teacher candidates who hold an undergraduate degree in primary school teacher education (PSTE) find the pre-service PPG's first-semester courses monotonous and repetitive to the ones they studied in the PSTE programme.
- The capacity of teacher colleges who administer pre-service PPG varies greatly, resulting in diverse quality of the programme's implementation and graduates.

Publication



“Updates on the Results of Pre-Service Teacher Professional Education (PPG) Programme Evaluation Study” infographic



“Improving the Quality of Teacher Education Delivery in Indonesia” policy note (only available in Indonesian)

A2

STORIES OF BEGINNING TEACHERS

During the early years of teaching, novice teachers experience a transition from teacher education to first teaching experience, the formation of self-identity as teachers, and the most improvement in teaching skills compared to the following years. This study recorded **novice teachers' experiences and challenges in their first years as teachers**. The challenges met by novice teachers during this period provide insights for teacher education stakeholders in formulating policies that support novice teachers to thrive early in their careers.



Study findings

Novice teachers must struggle alone in their early years on the job. They feel incompetent; feel tensions when dealing with individual student differences; and have difficulties preparing lesson plans, building trust with parents, maintaining professional relationships with their colleagues, and overcoming resource barriers.

Publication



“A Policy Lens on Becoming a Teacher: A Longitudinal Diary Study of Novice Teacher Professional Identity Formation in Indonesia” working paper



“Challenges Encountered by Novice Teachers in the First Years of Teaching” infographic



“Stories of Beginning Teachers” blog series



“Breaking out of the comfort zone: how Indonesia can better support career development for civil servant teachers” blog



A3

TEACHER PROFESSIONAL DEVELOPMENT

For more than four decades, Indonesia has carried out a variety of teacher professional development (TPD) programmes, yet the outcomes have fallen short. This study investigated the causes of the failure of these attempts by examining the effectiveness of the government's most recent TPD reform, **the Continuing Professional Development or PKB**, and identified the factors that influenced the programme's effectiveness. The study focused on primary school teacher training.



Study findings

Some essential features of effective TPD are missing in PKB as it

- has not targeted teachers based on years of experience;
- has not followed up with teachers with post-training activities;
- has not incorporated teaching practice through lesson enactment; and
- has not built upon the teacher's existing practice.

Our system-level analysis points out that merely improving the technical aspects of TPD would be insufficient given the Indonesian education system's lack of coherence surrounding teacher quality.

Publication



"Systemic Constraints Facing Teacher Professional Development in a Middle-Income Country: Indonesia's Experience Over Four Decades" working paper



"The competence of Indonesian primary school teachers is substandard, and the government's measures to improve it has been imprecise" blog



"Teacher Professional Development in Indonesia: Technical and Systemic Constraints" infographic



"Dissemination of In-Service Teacher Professional Development (PKB) Research Findings" video



"Four Decades of Teacher Professional Development in Indonesia: One Step Forward, Two Steps Back" blog

A4

IDENTIFYING AND REWARDING TEACHER PERFORMANCE



Teacher absenteeism rate in schools in remote, underdeveloped regions remains high, resulting in low-quality education in the said regions. This study investigated three interventions that linked community-based monitoring to a government allowance for teachers working in remote areas in Indonesia. Can community-based monitoring improve the quality of education in remote areas? Which of the three interventions succeeded in increasing teacher attendance in schools and had an impact on improving student learning outcomes?

Study findings

The first intervention, the social accountability mechanism or SAM, gives local community members a role to evaluate individual teachers according to a pre-agreed scorecard every month, without any supplementary allowance scheme. The second intervention is SAM with supplementary allowance conditional on teacher attendance as recorded on camera (SAM+Cam). The third intervention is SAM with supplementary allowance conditional on teacher scorecard evaluations (SAM+Scorecard).

All three interventions succeeded in improving teacher attendance in schools as well as student learning outcomes. The improvement of the SAM+Cam intervention is significantly higher than those of the SAM or the SAM+Scorecard interventions.

Publication



“Scores, Camera, Action? Incentivizing Teachers in Remote Areas” working paper



“What Changed? Exploring Teacher Incentives, Social Accountability, and Student Outcomes in Indonesia” blog

A5

EVALUATION OF THE NATIONAL EXAMINATION

Cheating reduces the signal value of exam data and it might shift the focus of teachers and students away from learning. This study evaluated the impact of **computer-based testing (CBT)** on national exam scores in junior secondary schools in Indonesia, exploiting the phased roll-out of the programme from 2015 to 2019.



Study findings

- Test scores decline dramatically after the introduction of CBT with school-level means declining by 0.4 standard deviation. Schools with response patterns that indicate cheating experience an increased drop in their test scores.
- Scores rebound within two years after introducing CBT, suggesting that barriers to cheating provide incentives for learning.
- There is evidence of spillover effects from CBT within districts. Cheating declines more in schools that have not yet switched to CBT if more schools located in the same districts make the switch, suggesting that CBT not only eliminates cheating but makes it less socially permissible.

Publication



“From Cheating to Learning: An Evaluation of Fraud Prevention on National Exams in Indonesia” working paper

A6 | TEACHERS UNION

This study analyses whether teachers' union leaders have expertise over education policy—specifically policies that affect teachers, beyond labour relations—and how that expertise (or the lack thereof) might help to explain why teachers' unions have a limited scope of policy influence. It centres on a detailed analysis of national-level policy changes in Indonesia from 2005–2020, focusing on how PGRI, the largest and oldest teachers' union in Indonesia, was involved in policy decisions.

Study findings

PGRI has a room for improvement to influence the shaping of education policy since they are still developing their expertise in substantial learning matters.

Publication



"Exploring the Politics of Expertise: The Indonesian Teachers' Union and Education Policy, 2005-2020" working paper



B1

SOCIOCULTURAL DRIVERS OF LOCAL EDUCATIONAL INNOVATIONS

What drives educational innovation to emerge at the local level? This study examined three highly innovative districts in Indonesia to answer this question and understand how the innovations relate to the socio-cultural context of each district.

Study findings

Three aspects of the socio-cultural context significantly determine how local innovations are defined and implemented in each district: the norms of trust among community members; tradition, or lack thereof, of collaboration at community and elite levels; and people's participation. The three aspects are results of the embodiment of social norms within a district's social networks.

Based on the findings, districts can establish innovation exchange connections to learn from each other. This move will also inform the central government to be cognizant of local differences when crafting national education policies.



Publication



"Sociocultural Drivers of Local Educational Innovations: Findings from Indonesia" working paper



"Sociocultural Drivers of Local Educational Innovations: Findings from Indonesia" infographic

B1

POLITICAL ECONOMY OF LOCAL EDUCATIONAL INNOVATIONS

This study examined the political determinant of learning-enhancing policies in a decentralised political system. The analysis focuses on how the variation in the discretionary power of district heads on employment decisions in the state bureaucracy explains the differences in local education policies in Indonesia.

Study findings

Institutional constraints on the discretionary power of district heads indeed matter for education policies. Such a constraint is necessary for the development of the bureaucratic capacity required for the local governments to pursue learning-enhancing policies. To some extent, a visionary leader committed to learning may compensate for the lack of bureaucratic capacity to pursue learning-enhancing policies. Yet, a dependence on the personal commitment of elected public officials faces the risk of a policy reversal by the seceding leaders unless a clear mechanism to ensure the sustainability of the policy is put in place.

Check the publication on RISE's website (rise.smeru.or.id).



B2 | SCREENING HONORARY TEACHERS IN BUKITTINGGI



Civil servant teachers are recruited through the centrally administered civil service test. Meanwhile, contract-based teachers are recruited by schools through a varied and non-standardised selection process. Together with the Bukittinggi City Education Agency, RISE developed a selection mechanism for measuring the ability of contract teachers that correlates with student learning outcomes. This test measures teachers' cognitive, non-cognitive, and teaching skills. The study also measures the teachers' teaching effectiveness in relation to students' learning outcomes.

Study findings

There is a significant and positive correlation between teacher competence in numeracy and student numeracy achievement. Furthermore, teacher teaching practice assessed through a lesson demonstration positively correlates with student achievement.

However, teacher competence in literacy and student literacy outcomes shows a significant but negative relationship. The same pattern is also evident in the correlation between teachers' portfolio assessment and student learning achievement. The negative correlation in literacy measurement may be due to the difficulties experienced by the teachers in Indonesia to translate their knowledge into practice since there is no specific subject for Indonesian language and reading comprehension learning.

Check the publication on RISE's website (rise.smeru.or.id).

B2

IMPACT OF THE ZONING-BASED STUDENT ADMISSION POLICY IN YOGYAKARTA

The zoning-based new student admission policy has been implemented since 2018 in Yogyakarta City. One primary objective of the policy is to ensure students have equal access to education services. This study examined the impact of the school zoning system implementation on the learning of junior secondary students in Yogyakarta.

Study findings

- The number of students from middle to lower economic status admitted into public junior secondary schools increases.
- Allocation of student admission in public junior secondary schools before and after the enforcement of the zoning system can be divided into 4 groups.

Group 1/Never Access: Students whose domiciles are far from school and whose UASDA* scores are low can never get admitted into public junior secondary school before and after the zoning system.

Group 2/Lost Access: Students whose domiciles are far from school and whose UASDA scores are high cannot get admitted into public junior secondary school after the zoning system.

Group 3/Gained Access: Students whose domiciles are close to school and whose UASDA scores are low can get admitted into public junior secondary school after the zoning system.

Group 4/Always Access: Students whose domiciles are close to school and whose UASDA scores are high can always get admitted into public junior secondary school before and after the zoning system.

*Grade 6 leaving exam

- Learning benefits of the zoning system among students vary by the above groups.

Group 1: Neutral/Unaffected

Group 2: Learning outcomes assessment scores decreases significantly

Group 3: Learning outcomes assessment scores increases but insignificantly (math 0.13 s.d., Indonesian 0.11 s.d.)

Group 4: Learning outcomes assessment scores decreases significantly

Publication



“Who Benefits and Loses from Large Changes to Student Composition? Assessing Impacts of Lowering School Admissions Standards in Indonesia” working paper



“The impact of school zoning system in state schools on teachers and students” blog



“How Indonesia Attempts to Address Inequity in Access to Quality Education: The Case of Junior Secondary Schools in Yogyakarta” blog



“Impact of the School Zoning System to Student Learning Outcomes in Yogyakarta” infographic



“Why Low-Performing and Poor Students in Yogyakarta Do Not Go to High-Quality Junior Secondary Schools, Even if They Could” blog



B2 | PARENTAL INVOLVEMENT AND LEARNING GAINS IN KEBUMEN

A diagnostic study by RISE in Kebumen showed that parents in this district generally did not get sufficient information from schools regarding their children's learning progress. In addition, parents with low levels of education are less confident in supporting their children to study at home. RISE collaborated with the Kebumen District Education Agency and carried out a 15-month programme called "Improving Parental Involvement in Children's Education" began in February 2020. This programme was implemented in 65 primary schools spread across 13 sub-districts in Kebumen District. During this programme, parents and student guardians received information in the form of a monthly learning progress letter written by the teacher along with a leaflet containing ways for parents to be actively involved in their child's education.



Study findings

- The information delivered to parents every month increased parental involvement at home and fostered more communication between parents and school.
- Parents' low capability to assist their children and the lack of right support given by teachers to students during learning from home hindered the impact on learning outcomes.
- The programme's positive impacts on parents and teachers did not translate into improved student numeracy test scores.

Publication



"Does Higher Parental Involvement Lead to Learning Gains? Experimental Evidence from Indonesia" working paper



B2

GIVING SCHOOLS AND TEACHERS AUTONOMY IN TEACHER PROFESSIONAL DEVELOPMENT IN JAKARTA



Studies show that if teachers were given the autonomy to choose the professional development they preferred, they would be more motivated to continue to develop their teaching skills. Recognising the importance of teacher and school autonomy in teacher professional development, the DKI Jakarta Provincial Education Agency is reforming the existing teacher professional development system, which was previously assignment-based. RISE contributed to this endeavour by supporting the Agency in creating a system that gives schools and teachers more autonomy to develop their professional skills. The new system emphasises the vital role of principals in encouraging teachers to be more active in developing their teaching skills.

Study findings

- Low-motivated teachers are at risk of not participating in any professional development activities when the new system that gives autonomy to teachers is introduced.
- School leadership is crucial in directing low-motivated teachers to use their autonomy to develop their teaching skills. School principals can use their agency to motivate teachers to be more engaged in professional development.

Check the publication on RISE's website (rise.smeru.or.id).

B3

DIFFUSION OF DISTRICT EDUCATION POLICY INNOVATION

Regional autonomy provides space for local governments to innovate and design policies inspired by regional contexts. This study seeks to understand the evolution process of district education policies and how these policies can spread to other regions. We conducted a nationwide survey of the local education offices to get a complete insight into two specific education policy implementations: contract teachers' incentive and student financial assistance. We believe this research will assist in improving our understanding of local agencies' learning process and the dissemination of future successful policies.

Check the publication on RISE's website (rise.smeru.or.id).



COVID-19 PANDEMIC AND STUDENT LEARNING LOSS

The Indonesian education system was severely impacted by the COVID-19 pandemic, with some regions implementing school closures for more than 18 months, **transforming the learning practices during the pandemic**. Students, particularly at the lower level and outside big cities, are often unable to swift into online learning due to inadequate facilities. This study aims to measure the impact of the disruption on learning outcomes. We assessed nearly 17,000 primary (in Bukittinggi) and junior secondary school students (in Yogyakarta) immediately after schools reopened.



Study findings

We found large and significant learning losses in both cities, primarily driven by initially higher-performing students. A simplified curriculum and higher parental involvement in student learning succeeded in mitigating the magnitude of the effects for students with lower initial ability.

Publication



“Learning Loss or Learning Gain? A Potential Silver Lining to School Closures in Indonesia” insight



What Policymakers Say about RISE



RISE Indonesia works closely with the central government and several district governments to investigate the root causes of education problems. Through a series of research, RISE supports the formulation of evidence-based education policies to be more focused and match the context of the problem.

"Research plays a great role as the basis for formulating public policies that can meet the people's needs today and help prepare for future challenges. I greatly appreciate the efforts made by RISE as the Ministry of Education, Culture, Research, and Technology's partner in encouraging policy research in the field of education. I believe the four RISE studies that will be presented today [on RISE Programme in Indonesia's Webinar] will help the Ministry and local education agencies evaluate the policies that have been implemented. The results of the evaluation will serve as a guide for the formulation of more targeted regulations and policies."

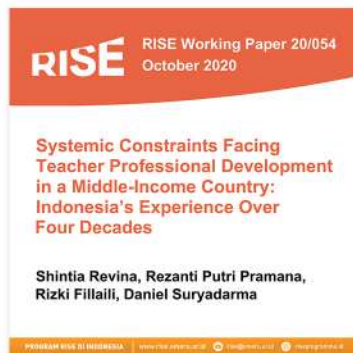
**Nadiem Anwar Makarim, Minister of Education, Culture, Research,
and Technology of the Republic of Indonesia**

"We will definitely take into account RISE's research results in the formulation of educational policies in Yogyakarta. Hopefully our collaboration will become an example for other regions in the policymaking process. Habitually, the policymaking processes include minimum references. With the research carried out by RISE, we will be able to generate evidence-based policies."

**Budi Santosa Asrori, S.E., M.Si., Head of the Education
Agency of Yogyakarta City**

Our Publications

RISE research results are published on its website, social media, and other media outlets and are accessible by policymakers, the research community, and the general public.



Working paper



Policy note



Insight



Infographic



Video



Podcast series
(only available in Indonesian)

Website rise.smeru.or.id

Instagram [@riseprogramme.id](https://www.instagram.com/riseprogramme.id)



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