How Teacher Reforms in Decentralised Indonesia Can Promote Learning Gains ?

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RISE PROGRAMME IN INDONESIA

smeru RESEARCH INSTITUTE

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MATHEMATICA Policy Research

Presentation Agenda

- Introduction

- Research Agenda of RISE Programme in Indonesia

  - *Reform Area A:* National Teacher Reform

  - *Reform Area B:* Decentralisation and District Innovation

Introduction:
Teacher Reforms as a Main Focus (1)

- Access to education increased significantly. Average net enrolment ratio (APM) approaches 100%

- Indonesia spend 20% of budget on education and a half of it is allocated for teacher salaries and other benefits

- Teacher-student ratio is 1:15, which is lower than some OECD countries

Introduction:
Teacher Reforms as a Main Focus (2)

- Yet, reaching OECD learning levels will take a long time

- By 2015, the average result of the teacher competency test (UKG) was 53.02, below the minimum competency standard (SKM) of 55.

- Only seven provinces reached this standard (MoEC, 2016).

RESEARCH AGENDA of RISE PROGRAMME IN INDONESIA

Research Focus:
Two Large Scale Reform Areas

1. Reform Area A: National Teacher Reforms

A system-wide, national reform with the goal of improving teacher quality that will affect how teachers are hired, recruited, managed and incentivised.

2. Reform Area B: Decentralisation and District Innovations

Innovations germinating at the district or sub-system levels, and their potential to scale-up to other districts or nationally.

REFORM AREA A:
NATIONAL TEACHER REFORM

Five Components of National Reforms

Teacher Distribution

Teacher Recruitment

Teacher Professional Development

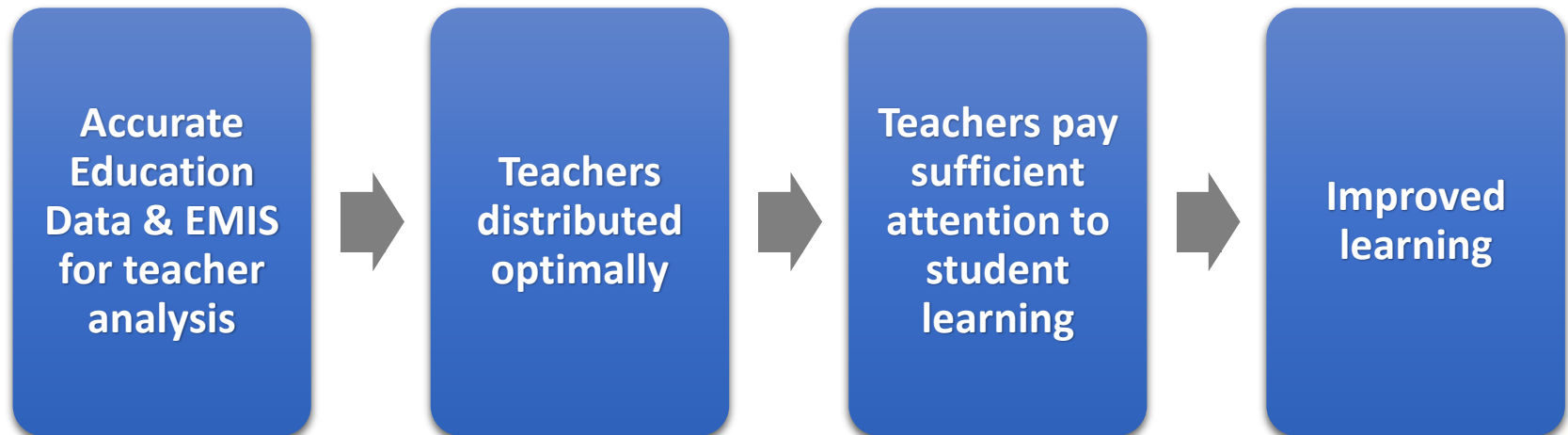Incentives and Teacher Performance

Computerised Student Assessment

Teacher Distribution

Background : Inequality in teacher distribution across regions

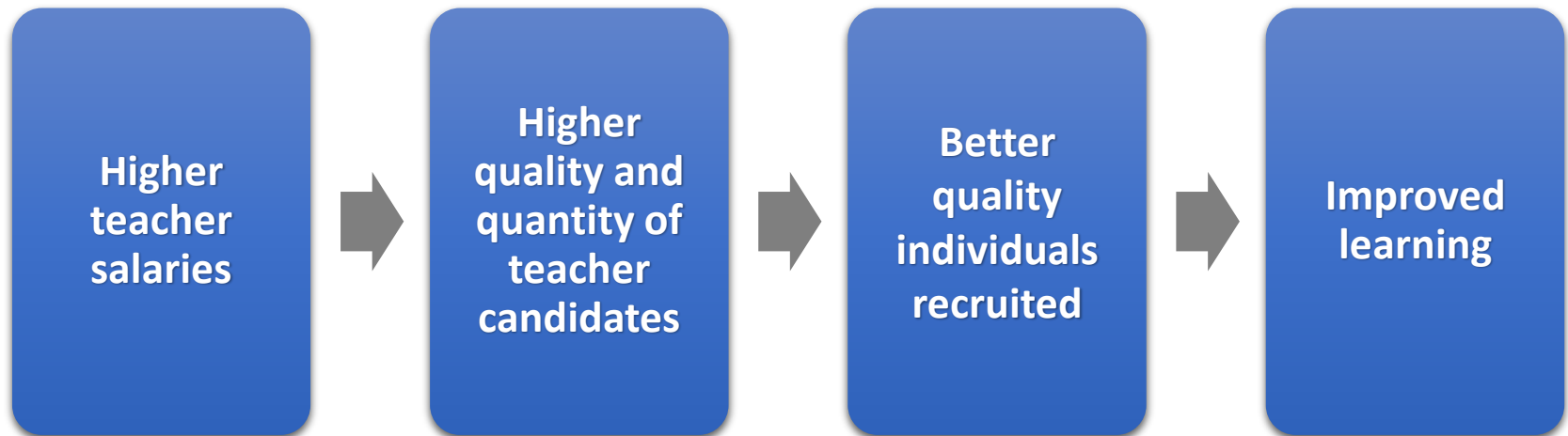**Hyphothesis 1** : Education Management Information System (EMIS) will support a more optimal distribution of teachers

Approach : Descriptive analysis and qualitative assessment based on contribution analysis and political economy analysis

| Accurate Education Data & EMIS for teacher analysis | → | Teachers distributed optimally | → | Teachers pay sufficient attention to student learning | → | Improved learning |

Teacher Recruitment

- **Background** : The need for better quality teachers
- **Hypothesis 2** : Increased salary of teachers will make the profession more attractive and better quality individuals will be recruited to improve learning.
- **Approach** : *Difference in Difference* Method, Political economy analysis

Higher teacher salaries → **Higher quality and quantity of teacher candidates** → **Better quality individuals recruited** → **Improved learning**

Teacher Professional Development

- **Background** : Many teachers do not meet the competency standards
- **Hypothesis 3** : Professional development training of teachers who perform poorly on the nationwide teacher competency test will improve their competency
- **Approach** : Design of Discontinuity Regression, descriptive analysis before and after the implementation of the intervention

Remedial training program → **Improved teacher competency test** → **Students learn from qualified teachers**
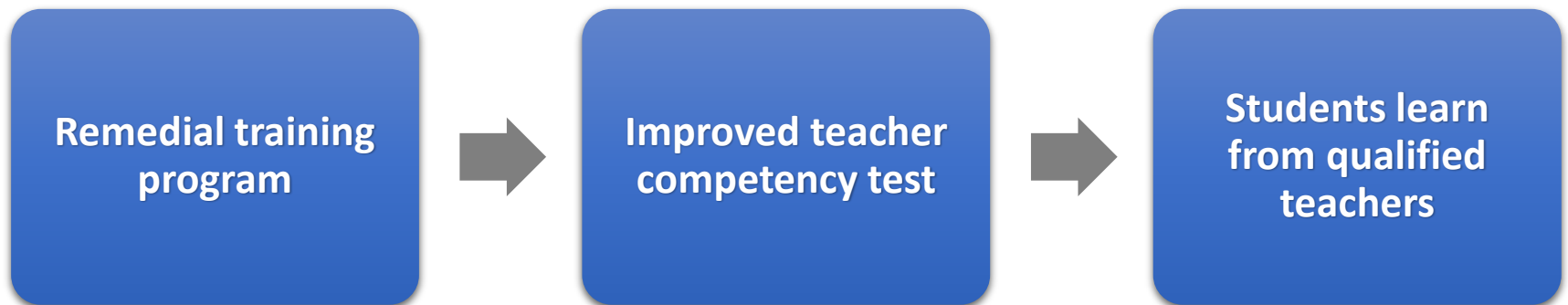
Incentives and Teacher Performance

- **Background** : Incentives for teachers have not been fully based on performance. Community engangement in the learning process and supervision of teacher performance is still limited.
- **Hypothesis 4** : Incentives based on teacher performance and community involvement will improve teacher quality and learning.
- **Approach** : *Multi-arm Randomised Controlled Trial*

Incentives for performance and community engangement → **Improved teacher efforts Community supports learning** → **Improved learning**

Computer-based National Exam

- **Background** : National exam based on the conventional system provides the chance for individuals to cheat.

- **Hypothesis 5:** Computer-based Testing minimises the tendency for cheating and generates actual test results. This encourages schools and teachers to improve professional development to improve learning

- **Approach**   : *Randomised Controlled Trial*

| Computer Based Test (CBT) | → | Represent actual learning outcomes | → | Improved school and teacher performances | → | Improved learning |
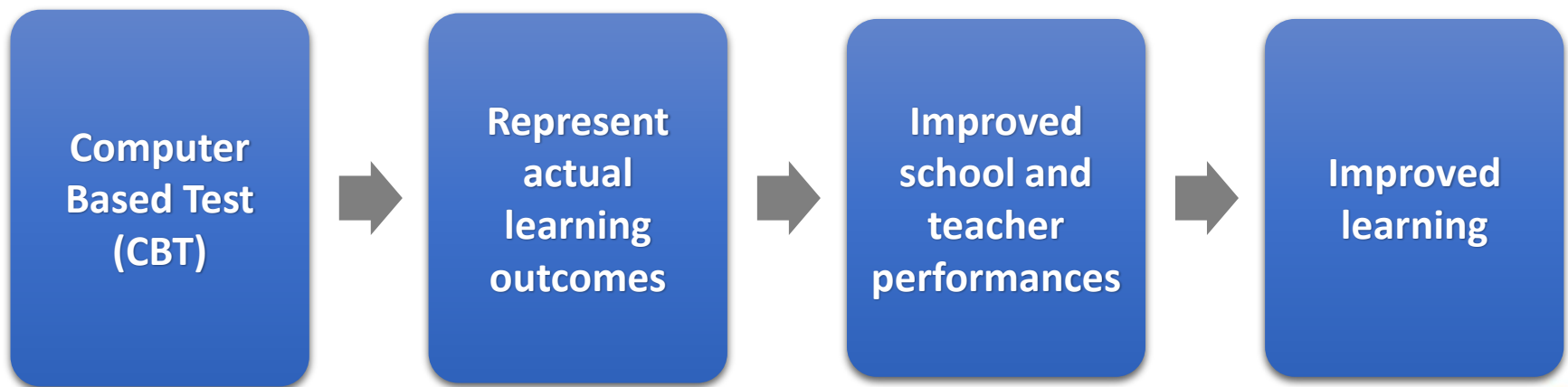
REFORM AREA B: DECENTRALISATION AND DISTRICT INNOVATION

Decentralisation System and District Education Policy

- The system of decentralisation provides space for local governments in teacher management

- Some districts develop innovations

3 Components of District Innovation Research

"Learning Laboratories"

- Detailed data collection for better understanding of district innovations, interaction with central policies, school experience and effects on learning

Features of district policies that are successful in improving learning

- Analysis of district education policies in the 20 most improved and 20 least-improved districts

How and why innovations spread?

- Analysis of the emergence and spread of district innovation

District Innovation: Implementation at School Level

- **Background** : Some local governments are innovating in primary services, including education

- **Hypothesis 6** : Schools that implement these innovations have improved quality of the learning process

- **Approach** : *Value Added Model* and qualitative study

District education innovation policy	→	School implementation of educational innovation	→	Increased quality of learning processes in schools	→	Improved learning
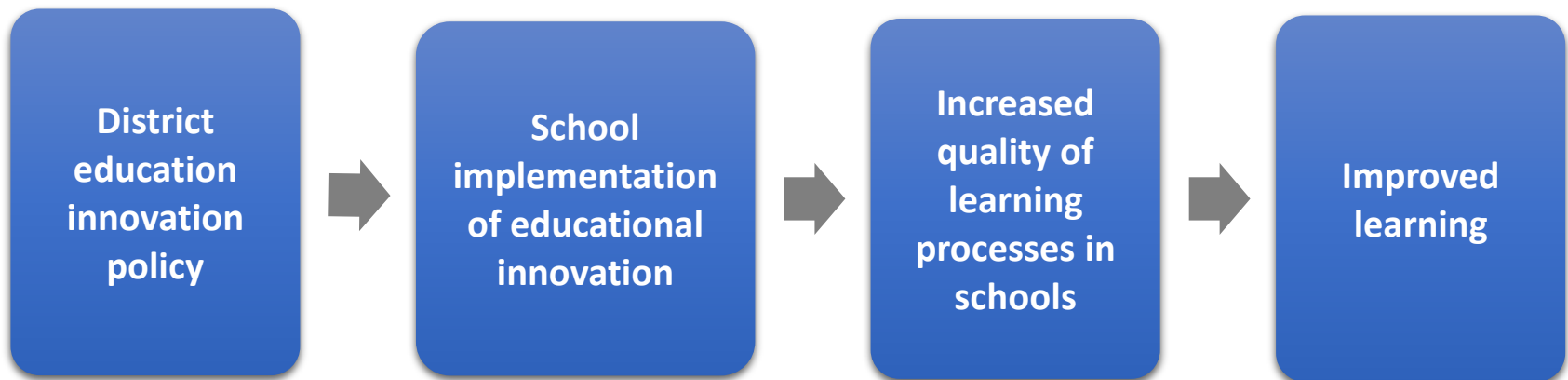
Understanding District-level Policies that Lead to Success or Failure Across Districts

- **Background** : The variance in district education performances.

- **Hypothesis 7** : Differences in educational performance that are influenced by district initiatives in innovation

- **Approach** : Deductive analysis, analysis of factors of success and failure

| Variance in district performances | → | District education innovation affects performance | → | Increased quality of education in innovative areas |

Understanding How Education Innovations Spread

- **Background** : Variation in district educational innovations

- **Hipotesis 8** : District educational innovations that successfully advance learning will be replicated by other districts or nationally adopted

- **Approach** : *Policy Diffusion Analysis*

Variance in district educational innovations	→	District innovations that successfully promote learning will spread	→	Spreading of success in district innovations will improve learning

Theory of Change

National teacher reform

Ministry of Education and Culture		Other ministries	
Distribution	Recruitment	Professional Development	Rewards and Incentives

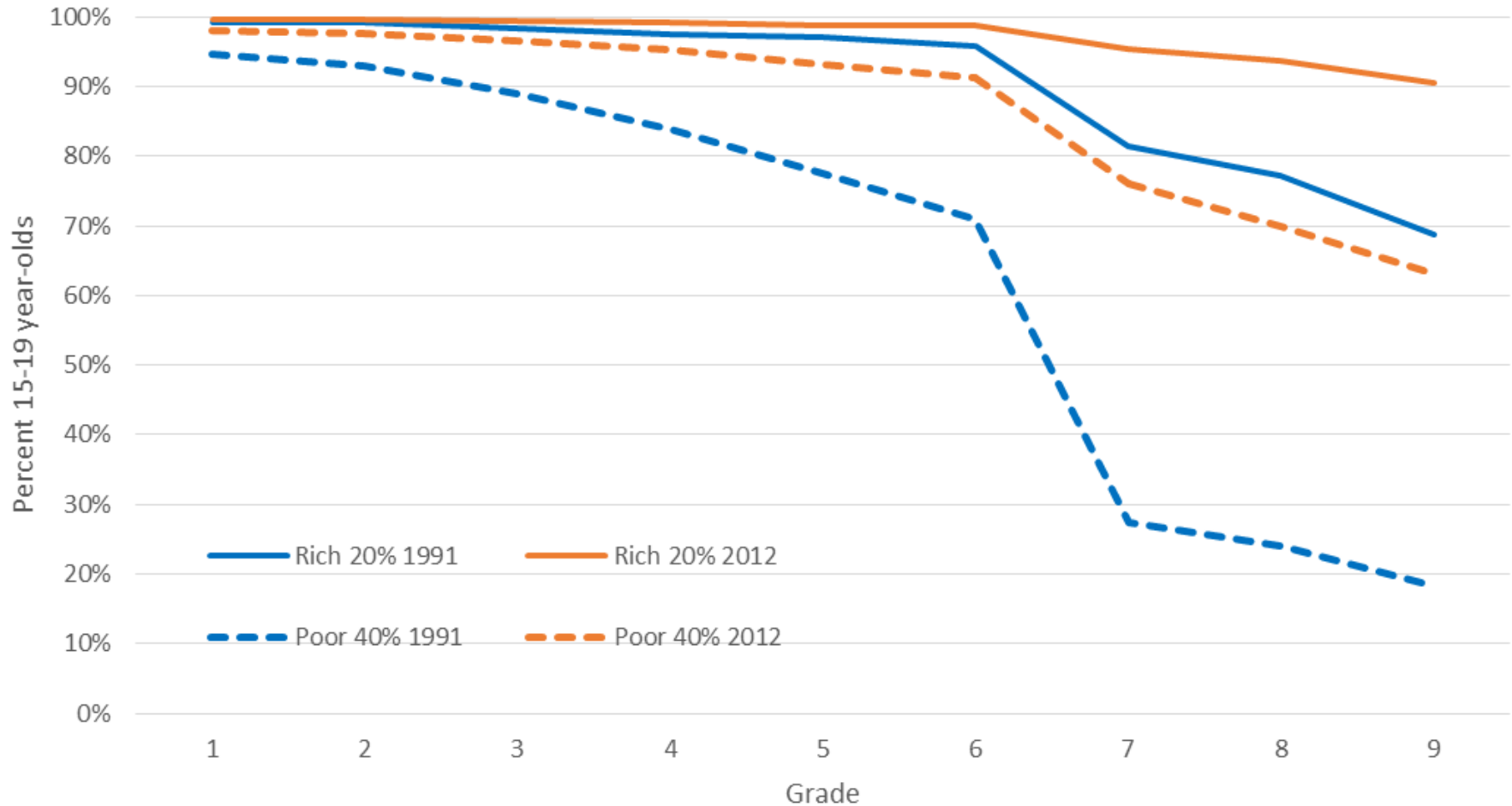|	Distribution	Recruitment	Professional Development	Rewards and Incentives
Reforms	EMIS to better match needs, sanctions for non complying districts	Higher salary, higher standards	Remedial Training	Incentives for performance, Community engangement
Short-Term Outcomes	Teachers distributed optimally	Better quality individuals recruited	Improved teacher knowledge	Improved teaching efforts, Community supports learning
Long-Term Outcomes	Students received attention to learn	High-quality teaching	Teachers apply knowledge in classroom	Students receive learning support at school and at home

Context: Political economic environment, External factors such as student health and nutrition, school environment and security, local cultural context, community education levels & participation, geographical conditions, infrastructure, level of economic development, etc.

Inform and Support

Scalling up of innovations

Funding : Technical Assistnce

Evidence of improved learning outcomes linked to policy changes

Regional Innovation

District-1	District-2	District-3

Improved Learning

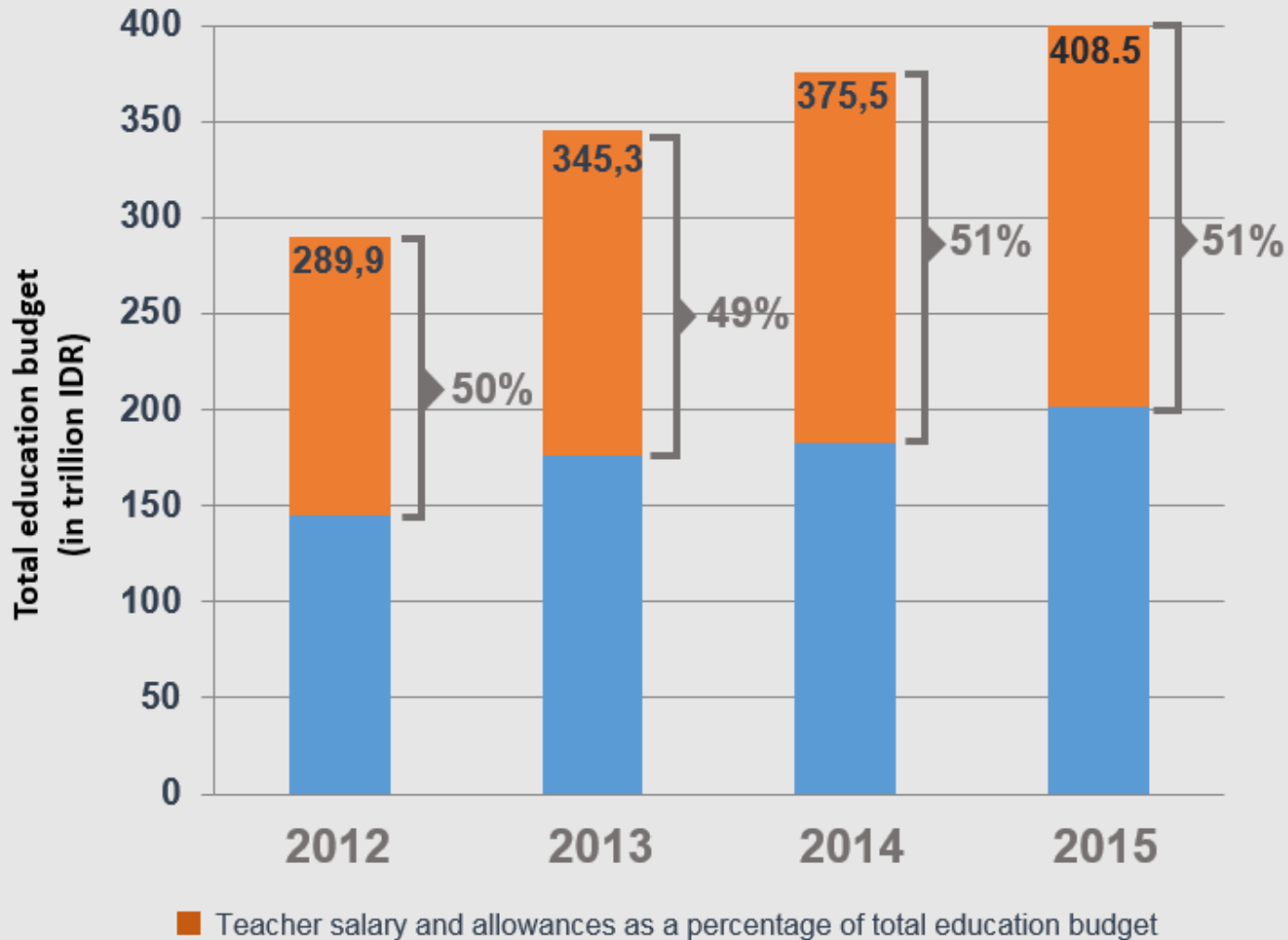# Appendix

Major Attainment Improvements over the Last 20 Years

20 Percent of National Budget Devoted to Education

Teacher salary and allowances as a percentage of total education budget

Reaching OECD Learning Levels Will Take Generations

Legend: Math, Reading, Projection: Math, Projection: Reading, OECD Average: Math, OECD Average: Reading

Source: World Bank, *World Development Report 2018: LEARNING to Realize Education's Promise*