

PREPARING A GENERATION FOR THE 21<sup>ST</sup> CENTURY

The case for improving early grade literacy and numeracy in Indonesia



PENDIDIKAN DAN KEBUDAYAAN

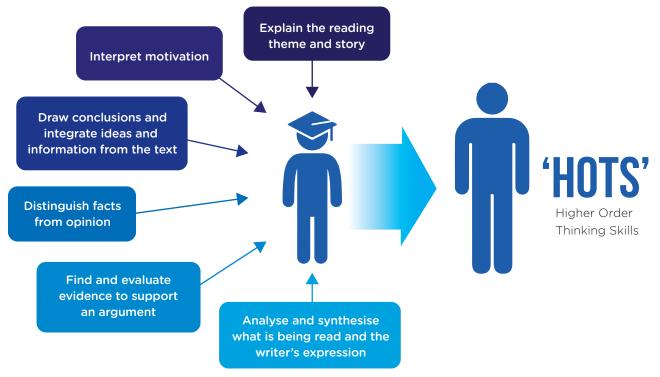
Australian Government

## WHAT IS THE PROBLEM?

Indonesia has made considerable improvements in access to basic education. Government spending has doubled over the past 15 years, and enrolment in primary education is almost 100%. Despite more children having access to learning opportunities, this has not yet resulted in better learning outcomes. International and national tests comparing student knowledge and skills in basic literacy and numeracy show that Indonesian students underperform compared with their regional and global peers.

When it comes to building and sustaining a national literacy movement in a country with great geographic and cultural diversity, challenges abound. Many Indonesian children in grades one to three are failing to grasp the basics of reading, leading to a range of learning issues in later primary school and early high school.

## BEING LITERATE IS NOT JUST ABOUT AN ABILITY TO READ WORDS. OTHER FOUNDATIONAL SKILLS INCLUDE THE ABILITY TO ALSO:



With these abilities, Indonesian children can grow into adults with 'HOTS', or higher order thinking skills – the ability to conduct strategic reasoning, problem solving and critical thinking. These are core skills for the 21st century.

## The story behind the data

The Innovation for Indonesia's School Children (INOVASI) program, an Australia – Indonesia government partnership, is seeking to understand what does and doesn't work to improve student learning outcomes in diverse schools and districts across Indonesia.

2018 baseline data<sup>1</sup> from across INOVASI partner districts in East Java, North Kalimantan, West Nusa Tenggara and East Nusa Tenggara paints a picture of learning outcome quality.

Data was collected using a Student Learning Assessment (SLA) tool. The SLA measures student literacy learning outcomes and covers math and Indonesian language tests for first to fifth grade students. It is designed to primarily evaluate the effectiveness of both INOVASI and KIAT Guru's education interventions.

<sup>1</sup>As at January 2019, INOVASI is implementing 47 education pilots; 27 of which are implemented by grant partners. This infographic information refers to baseline data collected from INOVASI's own pilot partner schools. This is separate to data collected from INOVASI grantee partner schools, although the trend is very similar.



Basic literacy skills are **very low.** In many partner districts, most children failed the basic literacy test, particularly those in grade one. When comparing scores by gender, boys were consistently lower than girls.





Word and syllable recognition were consistently the lowest scored basic competencies amongst students who did not pass the test, followed by letter recognition. Again, grade one students scored lowest, particularly those in NTT. From those students who did not pass the basic literacy test, average % rate for basic competencies

Province	Letter recognition	Syllable recognition	Word recognition	
NTT	58%	70%	78%	
NTB	22%	30%	35%	
North Kalimantan	24%	37%	46%	
East Java	10%	12%	18%	

For those students who did pass the basic literacy test, they completed an additional literacy comprehension test. The average scores out of 100 from this test were quite low, particularly in reading comprehension:

Province	Students' average literacy comprehension scores out of 100			Cognitive domain				Competency	
	All	Female	Male	Information retrieval	Ability to make straightforward inferences	Interpret and integrate ideas and information	Writing Dictation	Listening compre- hension	Reading compre- hension
NTT	47.4	48.2	46.1	51.9	37.7	31	58.8	62.5	36.6
NTB	61.7	64.1	59.1	65.9	50.8	46.5	73.8	64.8	55.3
North Kalimantan	65.6	65.8	65.4	75.7	59.8	48.9	73.9	79.7	61.9
East Java	71.0	73.4	68.4	73.2	58.3	57.7	84.5	70.5	61.6

**Use of mother tongue language is an additional challenge for improving literacy outcomes**. In Bima and East Sumba where INOVASI is implementing language transition pilots, almost 92% of children surveyed speak Mbojo in Bima, and 83% speak Kambera in East Sumba.

When comparing the basic literacy test fail rates of those students who use a local language at home, and those who use Bahasa Indonesia at home, it is clear that **those using Bahasa Indonesia at home are less likely to fail basic competencies in literacy.** 

High numbers of parents agreed that reading skills are very important, and that their children love to read. On average, students read at home 1-3 days per week. However, parental perspectives on reading and reading activities with their children at home highlighted **common key areas of concern**: Parental perspectives on reading and reading activities with children at home:

	North Kalimantan	NTB	NTT	East Java
Reading skill is very important	95%	96%	88%	95%
Age-appropriate reading materials are available at home	<b>49</b> %	50%	27%	62%
Children are seen reading at home	87%	86%	74%	84%
Conduct reading activities together with children	51%	50%	40%	45%
Children are taught to read at home	85%	78%	63%	77%
Children read smoothly	17%	31%	13%	61%
Access to books outside school (taman bacaan, library)	6%	3%	7%	3%





Basic numeracy skills were lowest in NTT. When comparing scores by gender, **boys** were consistently lower than girls.



In Sumbawa and Sidoarjo where INOVASI is implementing numeracy focused pilots, 40% and 24% of children respectively claimed that **math is their most difficult subject.** 

More students in NTT failed the basic numeracy test compared to other INOVASI partner districts, at a **rate of**  For those students who did pass the basic numeracy test, they completed an additional numeracy comprehension test. The average scores out of 100 from this test were quite low, particularly in the application of math knowledge and concepts:

Province & District	Students' average numeracy comprehen- sion scores out of 100			Content domain			Cognitive domain		
	All	Female	Male	Whole numbers	Geometry	Fraction/ decimals	Knowing	Applying	
NTT	29.6	30.0	29.3	29.7	24.2	30.1	31.6	7.4	
NTB	45.9	46.9	45.0	46.9	41.3	28.0	47.5	17.6	
North Kalimantan	40.5	42.2	39.0	38.8	39.5	24.1	40.8	20.5	
East Java	51.5	53.1	50.0	52.9	46.7	32.9	54.6	17.8	

%

To learn more about the INOVASI program, our education pilots, and what we are doing to improve education quality and learning outcomes for early grade students in Indonesia, you can visit our website, Facebook, YouTube, or digital educator community of practice. Perkantoran Ratu Plaza Lantai 19 Jl. Jend. Sudirman Kav. 9 Jakarta Pusat, 10270 Indonesia Tel: (+6221) 720 6616 Fax: (+6221) 720 6616



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