# **Lessons from INOVASI**

Mark Heyward









Australian Government

### The 'wicked hard' problem



Indonesia has improved access – close to 100% in primary schools

But learning outcomes are poor; Indonesia has a *learning crisis* 

- PISA results are weak and falling: 70% of 15 year-olds do not have foundational skills in literacy, numeracy and higher-order thinking needed for further study or work
- INOVASI found that :
  - 47% of grade 4 children are not yet reading independently
  - 25% of grade 3 children in INOVASI partner schools are not yet able to read words
  - 85% say they 'love to read' but they don't have access to appropriate books

After forty years and \$5 billion of development assistance, why does the learning problem persist?

INOVASI is using an adaptive, PDIA approach to find solutions

The aim is to find out what works to improve learning outcomes in primary schools and use this evidence to inform policy



## What is INOVASI?



#### INOVASI

• Phase I is a four-year partnership between DFAT and Gol

#### **INOVASI** builds evidence

- of what works and what doesn't work to improve children's learning outcomes
- at classroom and system level
- through pilots, partnerships and small studies

#### **INOVASI** works with

- primary schools in both regular and Islamic systems (SD and MI)
- 17 districts in four partner provinces
- 20 NGO partners, including NU Ma'arif and Muhammadiyah
- national government: MoEC, MoRA, Bappenas (with TASS)

#### INOVASI focuses on three main policy issues

literacy, numeracy, inclusion

## What have we found out?



## Literacy: exploring the problem

- Four problems identified: teaching methodology, curriculum, mother tongue... and books
- Teachers do not have the knowledge and skills to teach literacy in the early grades.
  - INOVASI teacher survey: low average scores (out of 100): 45 in North Kalimantan, 48 in NTT, and 56 in NTB.
  - the instrument was based on international tests for grade four children
  - the lowest scores were in the domain of interpreting and integrating ideas.
- Teaching of reading
  - is not covered well in pre-service training
  - *is not part of the current curriculum* for early grades
- National policy supports use of mother tongue to transition to Bahasa Indonesia in early grades, but...
  - No agreed methodology, curriculum (KD), guidelines or materials
  - Teachers are unsure about the policy or practice, parents are ambivalent
  - Most children enter school not yet fluent in Bahasa Indonesia

#### **Books & reading culture**

Are children motivated to read?

- INOVASI surveyed 4,772 children in three provinces and found that they 'love to read'.
  - 85% in North Kalimantan, 94% in NTB and 91% in NTT
  - A 2012 UNESCO study found that the level of motivation to read among Indonesian children was as low as 0.001 our findings contradict this!
- Children are highly motivated to read but are unable to do so due to the lack of attractive, age-appropriate books in schools and villages.
- Government approval processes prevent schools from procuring appropriate books
- Publishers do not yet supply books to remote regions

#### Piloting a solution

- Cluster-based continuing professional development
- Teacher pre-service and inservice training
- Book supply (traditional and digital) / village and school libraries
- Partnerships with nongovernment organizations
- Policy development at district, province and national levels
- Co-funding/multi-source
- Community engagement



#### The best results come from a comprehensive approach



- A 'One Size Fits All' approach doesn't work. Remote and disadvantaged regions need different support. NTT increased scores 2,5 time, although this is still behind more developed regions.
- The comprehensive approach in Bulungan involved many actors (government, community and private sector). This had a larger and quicker impact. After one-and-a-half years, the level of literacy in Bulungan was higher than the average in East Java.

Source: INOVASI, 2019

## Numeracy: exploring the problem

- PISA results show that
  - junior-secondary students fail to grasp the mathematical concepts used in real-world problems
- INOVASI found that
  - teachers in the mid-primary grades (3–4) struggle to understand and teach concepts relating to fractions and division
  - children struggle with basic concepts
- Numeracy
  - is not covered well in pre-service training
  - is not covered well in curriculum for early grades
- Does the curriculum move too fast?
  - International experience suggests the mathematics curriculum in many systems moves too fast (Pritchett and Beatty 2012)
  - Children in early grades are not given the opportunity to acquire a solid understanding of number or the ability to think mathematically
  - The curriculum focuses heavily on calculations and not on 'making meaning'; it is too abstract

#### Piloting a solution

- Cluster-based continuing professional development
- Teacher pre-service and inservice training
- Simple concrete aids for early grades
- National curriculum revision
- Revision of national assessment



### Inclusion: exploring the problem

- Most disabled children are excluded from mainstream schooling or drop out early
- Community attitudes hold children back
- Government policy is supportive but not yet well informed or well implemented
- Teachers can learn to identify special needs among their students
  But they tend to label children with mild learning delays as 'disabled'.
- Teachers don't have the skills to manage differentiated learning tasks among children with diverse ability levels in their classrooms.
  - This is a prerequisite for successfully integrating special-needs students.
  - It is also a prerequisite for multi-grade and good practice in all classrooms
  - The one-size-all curriculum does not allow for differentiation

#### Piloting a solution

- Cluster-based continuing professional development
- Teacher pre-service and inservice training
- Introducing multi-grade and differentiated learning
- National piloting of an app to identify children with special needs (based on functional rather than medical indicators)



## INOVASI's PDIA journey



#### What have we learned about PDIA?

- Traditional approaches have failed
  - One-size-fits-all, 'best practice' approaches haven't worked in Indonesia
  - Top-down cascade training approaches haven't worked
  - Teachers can learn new approaches, but cannot sustain them without a supportive system (curriculum, assessment, supervision), and a cultural shift (from seeing education as knowledge transmission, to knowledge construction)
- Teachers need
  - *technical* training, *political* support, and *cultural* shifts to make sustained changes to practice
  - Ability, Authorization, Acceptance
- Local solutions to local problems
  - The first step is to make the problem matter; Indonesia has a learning crisis but it is not well recognized
  - Indonesia needs to find its own solutions; solutions vary with the local context
- The way forward
  - Building on trust: co-designed and co-funded pilots to support accelerating reform under a new minister
  - Creating systemic change to support continuous improvement; building in a problem-oriented approach to policy development



Innovation for Indonesia's School Children Australia Indonesia Partnership



# Knowledge to practice Evidence to policy

