Measuring learning progress in Indonesia:
Ways to answer the challenges

Rahmawati

GAML5
October 2018
Hamburg, Germany

Coloured by number of pupils

34 provinces
514 districts
17,504 islands
652 local language
300 ethnic groups

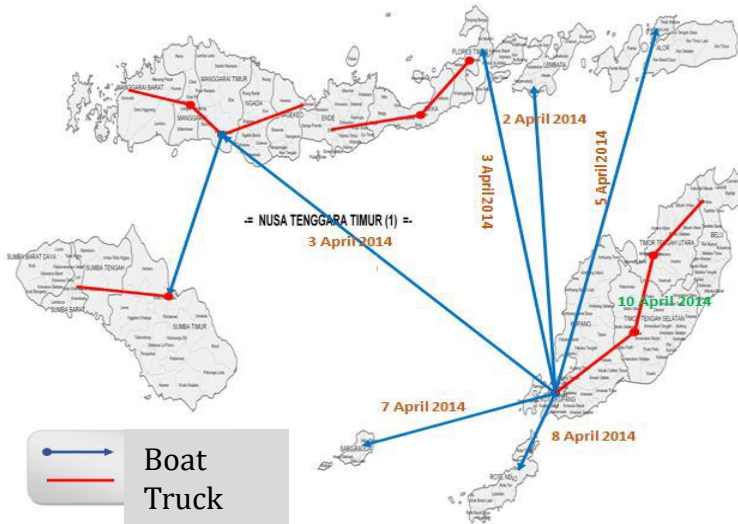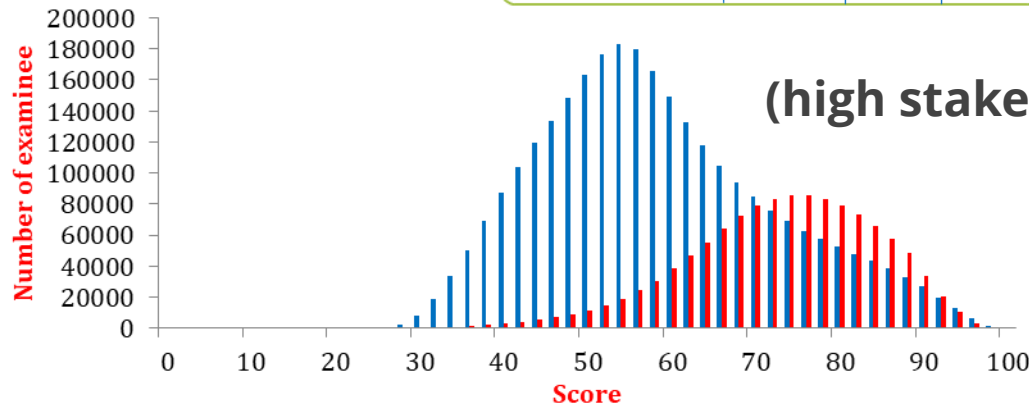|	schools	pupils	teachers
kindegarten	88,381	4,605,809	329,102
special school	2,070	121,244	24,657
primary school	147,503	25,618,078	1,586,127
junior secondary school	37,763	10,145,416	622,781
senior secondary school	13,144	4,659,542	294,872
vocational school	13,236	4,682,913	276,099
islamic kindegarten	27,865	7,791,691	79,475
islamic primary school	24,765	1,956,722	235,024
islamic junior secondary school	17,201	3,279,584	239,372
islamic senior secondary school	8,038	3,933,545	118,049
TOTAL	**379,966**	**66,794,544**	**3,805,558**

2

- **Assessing million students, with diverse geographic situation.**
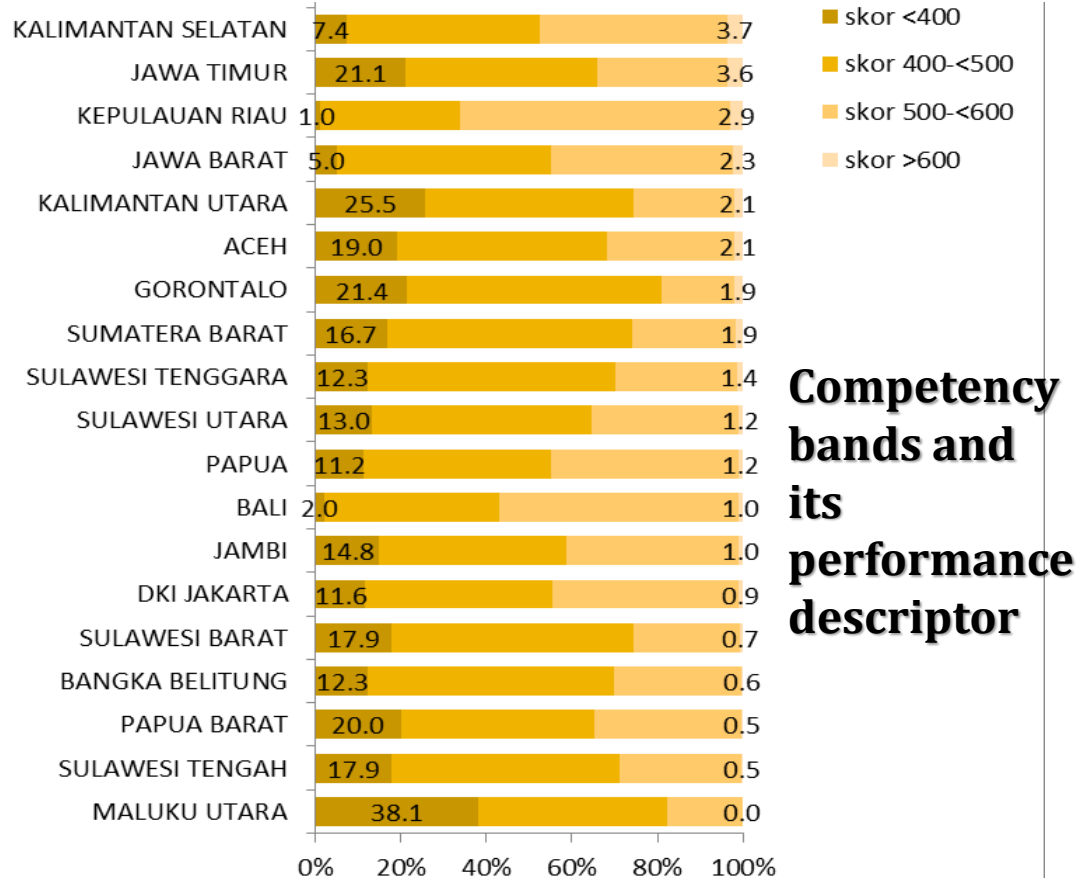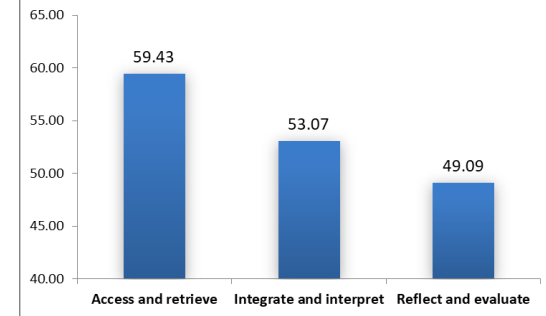

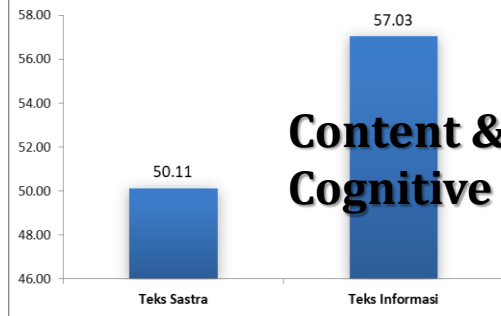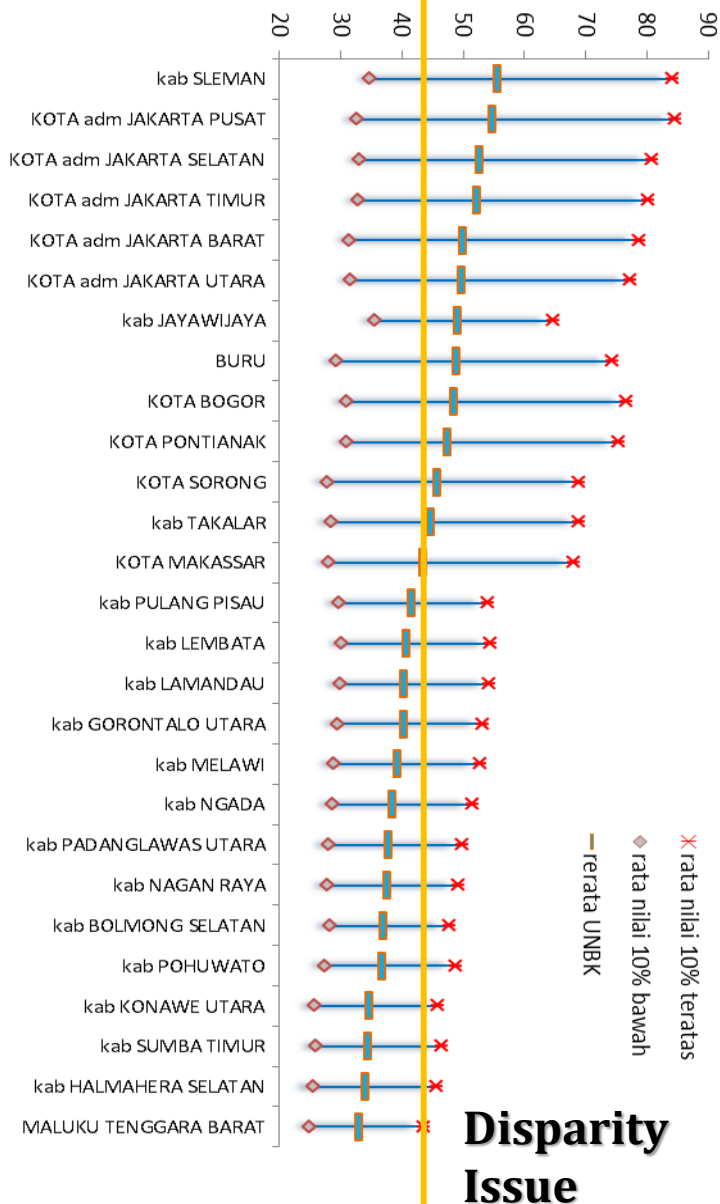*Illustration of exam paper distribution in one province*

Large Disparities on Abilities (needs broader range of measurement)
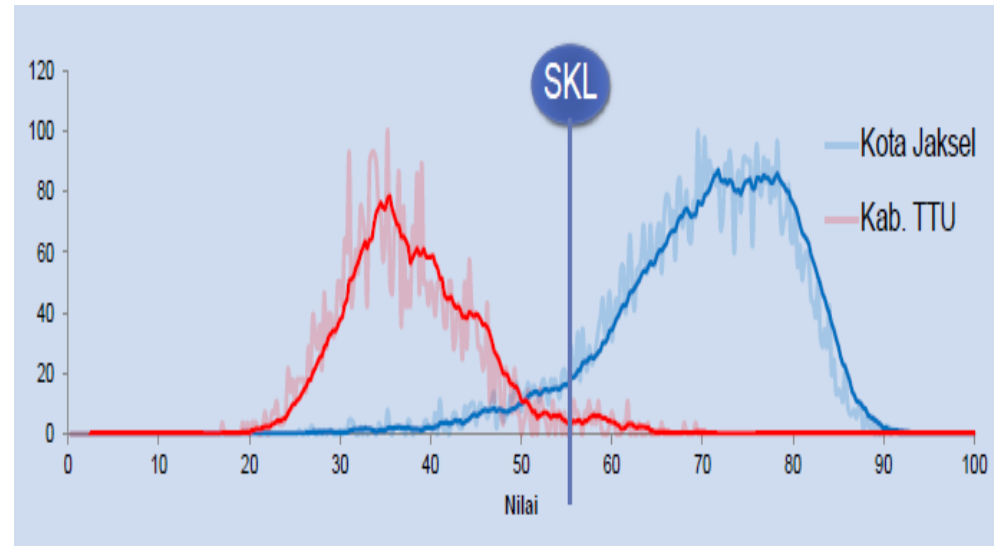
	Number	Mean	SD
■ IIUN Tinggi	2876040	57.42	13.92
■ IIUN Rendah	1218641	72.07	11.09

Motivation vs Validity (high stake assessment leads to low integrity)

3

Grade 12	National exam and National standardized school exam **(census, annually)**	Bahasa Indonesia, Math, English plus 1 subject of program study (15 choices for high school and 198 choices for vocational school-100 % from national center). Civic, religion (75% district)
Grade 10	AKSI **(survey, 2020, piloting 2018)**	Reading, writing, math, physics, biology, chemistry, background questionnaire
Grade 9	National exam and National standardized school exam **(census, annually)**	Bahasa Indonesia, mathematics, science, English (100% from national center) civics, social science, religion (75% district)
Grade 8	AKSI **(survey, 2019- piloting 2017)**	Reading, mathematics, science (computerized test, multi formats), background questionnaire
Grade 6	National exam and National standardized school exam **(census, annually)**	Bahasa Indonesia, mathematics, science (multiple choice + essay). 25% items from national center, 75% from district
Grade 4	AKSI **(survey, 2016)**	Reading, mathematics, science, background questionnaires
Grade 1-3	Literacy and Numeracy **(project based survey)**	Reading, writing, basic math (individualized test)

4

Example of assessment Results

Content & Cognitive

Disparity Issue

Competency bands and its performance descriptor

National Examination

Since 2015 the test blueprint explicitly stated cognitive level for all subjects. Since 2018, 10% of the items turn in to constructed response format. Since 2015, gradually the test administration has been switching to computerized based test.

AKSI

Since 2017, AKSI grade 8 and 10 moved to computerized based assessment. Test blueprint also changed by introducing technology enhanced items format. This format influences the performance descriptor (for example in reading: students are able to navigate)

Final school exam

Since 2017, final school exam based on standardized test blue print. 75% items developed by district, while 25% anchor from national center. The item format is no longer multiple choice only, but 10% of the items are constructed response.

80 — Students can interpret implicit meaning of literary passages by integrating information within passage.

60

40

In 2015, national exam majority done by paper and pencil.
However, in 2015, we were starting to determine minimal number of higher order thinking skills items

Kutipan puisi berikut untuk mengerjakan soal nomor 22 s.d. 24. Bacalah dengan saksama!

...
Mamma,
Burung dara jantan yang nakal
yang sejak dulu kau piara
kini terbang dan telah menemu jodohnya
Ia telah meninggalkan *kandang* yang kau buatkan
dan tiada akan pulang
buat selama-lamanya
...

(*Surat kepada Bunda tentang Calon Menantunya*, Rendra)

Makna lambang pada kata yang bercetak miring (*kandang*) dalam penggalan puisi tersebut adalah ....

A. sangkar dengan hiasannya
B. rumah dengan perabotannya
C. rumah dengan aturannya
D. kurungan dan hewannya
E. penjara dan aturannya

% students score> 80

KABUPATEN YAHUKIMO
KABUPATEN MAMBERAMO...
KABUPATEN PEGUNUNGAN...
KABUPATEN MIMIKA
KABUPATEN JAYAWIJAYA
KOTA JAYAPURA
KABUPATEN TOLIKARA
KABUPATEN NABIRE
KABUPATEN MERAUKE
KABUPATEN KEPULAUAN YAPEN
KABUPATEN PUNCAK JAYA
KABUPATEN MAPPI

Students can interpret the message of a unit by integrating information from multiple screens.

600

500

400

Text 2

Text 1

In 2018, AKSI introduced reading unit with hyperlink, multiple screen and interactive screen.
These kind of stimulus make the performance descriptor elaborate the navigation skills within the descriptor.

UNESCO INSTITUTE FOR STATISTICS
GLOBAL ALLIANCE TO MONITOR LEARNING

2019, developing digital reading assessment for primary school students

2018, developing automatic item generation to reduce item writers' workload. The aim is to get more critical thinking items

2019, elaborate financial, civics and moral domain into AKSI grade 10

2018, capacity building on developing collaborative problems solving assessment

2017- recent, developing automatic essay scoring to be able to assess essay items in large scale assessment. Encourage students on critical thinking

9

Thank you!

Rahmawati@Kemdikbud.go.id

Center for Educational Assessment

Agency of Research and Development

Ministry of Education and Culture

Indonesia